

For Private Circulation Only



The Corrugator

OFFICIAL MAGAZINE OF FEDERATION OF CORRUGATED BOX MANUFACTURERS OF INDIA

October - December 2018



SPONSORS

PLATINUM SPONSOR

MAIN SPONSOR

DIAMOND SPONSORS

GOLD SPONSORS

SILVER SPONSORS

BRONZE SPONSORS

SUPPORTING ASSOCIATIONS

47th Conference of Federation of Corrugated Box Manufacturers' of India

CORRUTECH EXPO

Host & Organizer: SOUTH INDIA CORRUGATED BOX MANUFACTURERS' ASSOCIATION

WAY FORWARD
For Corrugated Packaging

30th November - 2nd December 2018, Chennai Trade Centre, Chennai

SPONSORS

PLATINUM SPONSOR

MAIN SPONSOR

DIAMOND SPONSORS

GOLD SPONSORS

SILVER SPONSORS

BRONZE SPONSORS

SUPPORTING ASSOCIATIONS

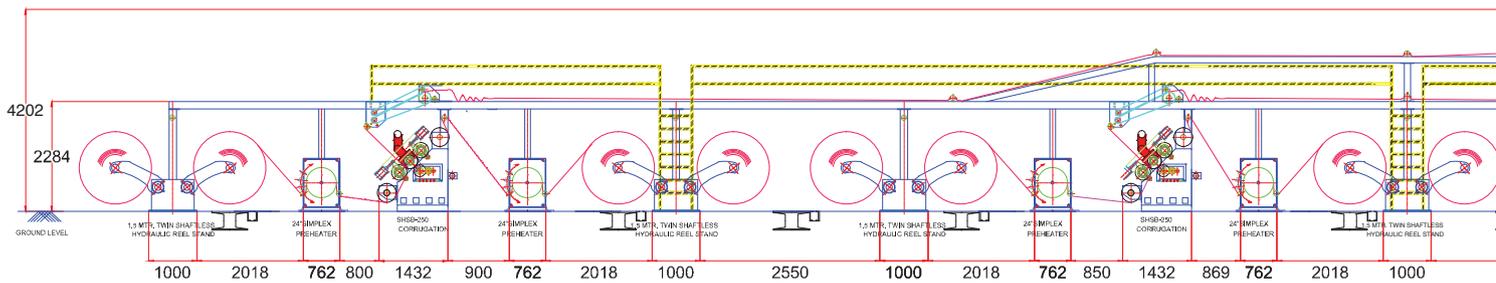
India's Most Trusted Manufacturers of Automatic Board Plants

Nearly 230 Plants Installed



Plant Installed at
Cholan Gears and Packaging,
Chennai

Plant Production Capacity: **3Ply - 900mt. / Month – 5Ply 1800mt. / Month**



Delivering Value to Corrugated Box Manufacturers

The Strength of SUNUP

Our Manufacturing Units are equipped with world-class CNC Machines, that make every part of our Plant with quality and performance that stands out from the rest.



CNC Flute Roller Regrinding Services at our Manufacturing Plant.



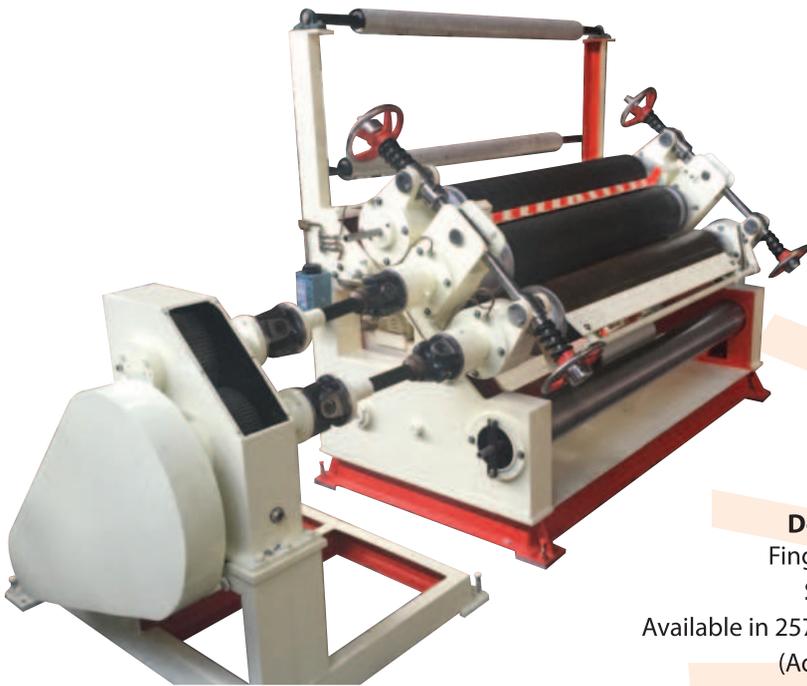
SUN-UP (INDIA) PACKAGING MACHINERY CO. PVT. LTD.

Plot No. R-268, TTC Industrial Area, Thane-Belapur Road, Rabale, Navi Mumbai - 400 701 | Tel.: +91 22 2769 0782 / 2760 6187 / 6514 1212
Mobile: +91 98210 45985 | Email: sunupindia@mtl.net.in | rsbhurjee@rediffmail.com | www.sunup.in / www.sun-upindia.net



Always Ahead Than The Extant...

SETTING STANDARDS *in* HI-PERFORMANCE CORRUGATED MACHINES



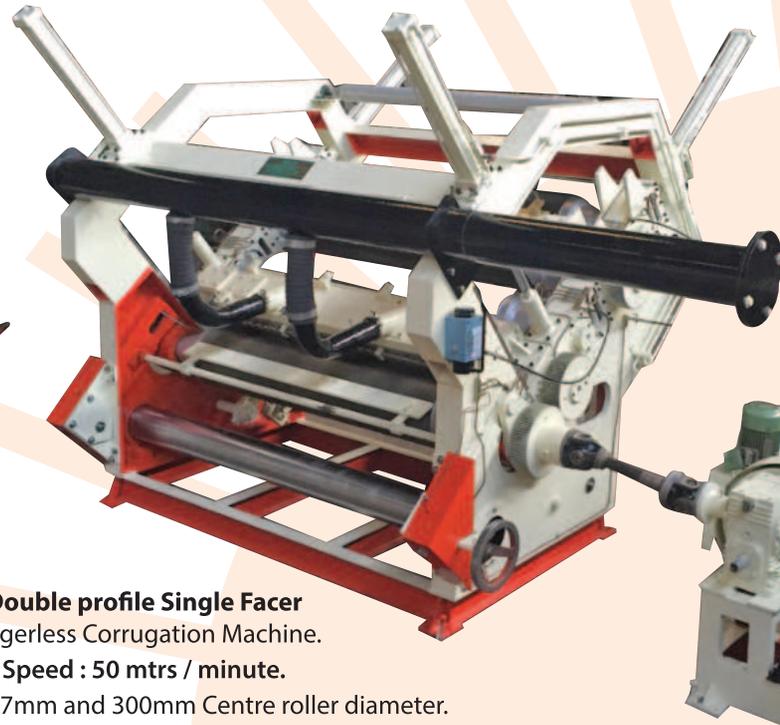
High Speed Single Facer

Steel Body Corrugation Machine with
Oil Dip Gear box system - Mechanical Type.

Speed : 40 mtrs / minute.

Available from 210mm to 300mm
Centre roller diameter.

(Pneumatic model also available)

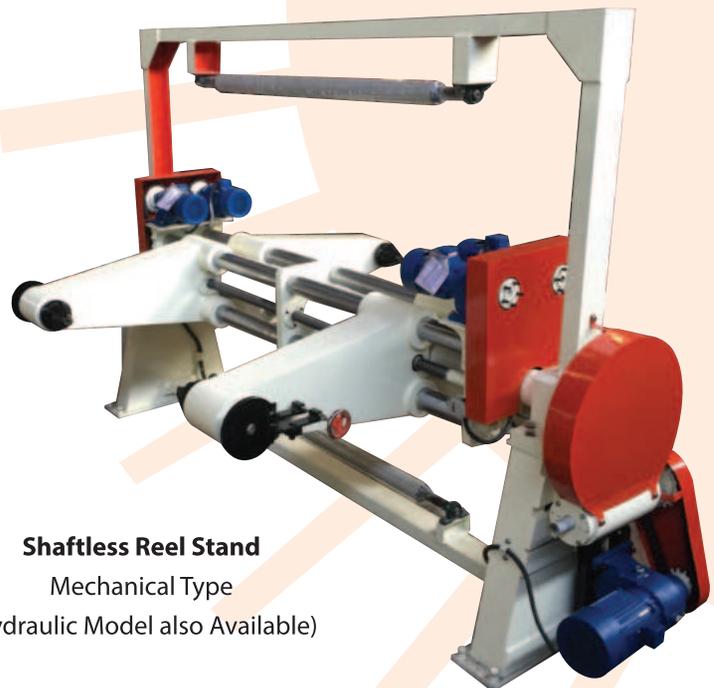


Double profile Single Facer Fingerless Corrugation Machine.

Speed : 50 mtrs / minute.

Available in 257mm and 300mm Centre roller diameter.

(Adopter model also available)



Shaftless Reel Stand

Mechanical Type

(Hydraulic Model also Available)



Devinder Singh Bhurjee

+91 98210 93645

dsbhurjee@gmail.com

During over two decades of experience, we continue to "stay ahead than the extant" offering sound solutions to box makers in India and across the world.

With machines that are designed to perform.

From pre-sales service to installation and prompt after - sales service our relationship with our customers evolves into an ever lasting bond.

As the future unfolds, we look forward to strengthening our technological skills and building machines that will exceed the expectations of our customers and stand at par with international standards of excellence.

Servo Digital Sheet Cutter



Automatic Flap Gluer



We make all Profile Flute Rollers
A,B,C,E,F,G, K - and any special flutes
to suit your requirements



SUN-UP (INDIA) MACHINERY CO. PVT. LTD.

Manufacturing Unit : Plot No. A-354 T.T.C. Industrial Area, M.I.D.C. Mahape, Navi Mumbai - 400 701. Dist. Thane
Tel. : +91 22 2778 2112 / 86551 31315 / 22 2578 4819 / 2577 0822 / 6796 9666 • Fax : +91 22 2578 5985
Email : sunupindiamachinery@gmail.com / info@sun-upindia.com / raunak@sun-upindia.com

**SUPPLY ALL TYPES OF
MACHINES AND SPARE PARTS**



5-ply auto plant



HYDRAULIC REEL STAND



SINGLE FACER



AUTO FEEDER

**CHAIN FEEDER PRINTER
SLOTTER DIE CUTTER**



**SEMI-AUTOMATIC
STITCHER**



**LEAD EDGE FEEDER PRINTER
SLOTTER DIE CUTTER**



**AUTOMATIC FOLDER
GLUER**



**THIN BLADE
SLITTER SCORER**



**LEAD EDGE FEEDER
ROTARY DIE CUTTER**



**COMBINED
ROTARY SLOTTER**

AMC INDUSTRIAL DEVELOPMENT COMPANY LIMITED



MCFG Box Maker



SYKM-H FLEXP BOX MAKER
(VACUUM TRANSFER, TOP PRINTING/BOTTOM PRINTING)



PAPER SLITTING MACHINE



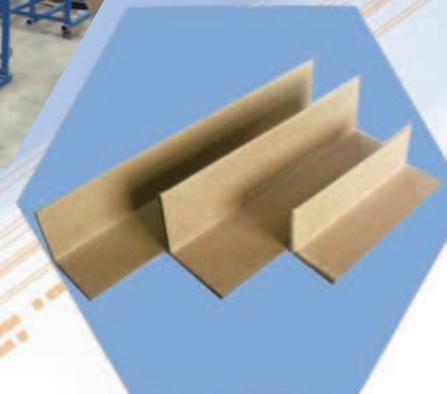
EDGE PROTECTOR MAKING MACHINE



SYKM-M FLEXP BOX MAKER
(VACUUM TRANSFER, TOP PRINTING/BOTTOM PRINTING)



SYKM-L FLEXP BOX MAKER
(STANDARD)



**ADD:Room 208,Building2,No.777 Fuhai Road,
jiading District,shanghai,201899,china.
Mobile:+86 135 8581 3132
Whatsapp:+86 135 8581 3132**

**FAX:+86 21 33250551
E-mail:sales.amc.sh@gmail.com
WEB SITE:www.amcindustrial.com
www.amchoneycomb.com**

Plus Energy Energize your future



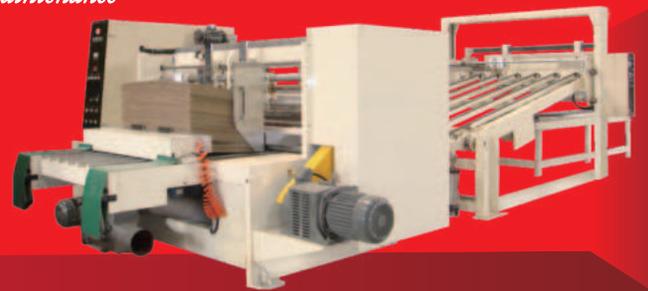
FLEXP Printing Machine
(TOP Printer)CNC Series



Semi-Auto Gluer (Box making machine)
SG Series

Company Profile :

PLUS ENERGY MACHINERY CORP. was found in 1995, we specialize in FLEXP PRINTER MACHINE making and corrugated carton total solution for plant equipment. The high-quality and high-efficacy is our goals. Each product is developed to easy operation and maintenance for user; we continuously improve technology of case-making equipment, integrated safe issues, heavy-duty mechanism and the latest technology into a whole solution in order to enhance the performance and capability of machinery.



Automatic Rotary Die Cutter Machine
RDC Series



Automatic Rotary Slotters
& Scorers SC Series



PLUS ENERGY MACHINERY CORP.
No.535, Sec. 1, Nanbei Rd., Wandan Hsiang,
Pingtung Hsien 91344, Taiwan
TEL : +886 8 7777208 FAX : +886 8 7777209
E-Mail : info@plus-energy.com.tw
www.plus-energy.com.tw



For Private Circulation Only

The Corrugator

OFFICIAL MAGAZINE OF FEDERATION OF CORRUGATED BOX MANUFACTURERS OF INDIA



OWNER

Federation of Corrugated Box Manufacturers of India

138, Mittal Estate No. 3, M. VasANJI Road, Andheri (East), Mumbai - 400 059.

E-mail: admin@fcbm.org

www.fcbm.org

Please address all correspondence to Editor

Mr. Ashok Vyas

On-Line Packaging Pvt. Ltd.

Vile Parle - E, Mumbai
ashokpyas@gmail.com

Co-Editor

Mr. Haresh Mehta

Design & Production:

Print Links

Bldg. H-4,
Flat No. 2 (Lawn side)
Jankalyan, Bangur Nagar,
Goregaon (West),
Mumbai - 400 090.
Tel.: 2877 2702 / 2890
email: greycells.nani@gmail.com

Printed at:

Rajesh Printouch, Mumbai

Content Highlights



13 – DBF Vs RCT – Which is better for your Just Right Packaging?



21 – How Machine Setting is important to stay competitive



31 – Differences in Cutting Die Construction Between Folding Carton and Fluted Material



61 – Here's How You Can Make Your Primary Packaging Stand Out



44 – FCBM News



67 – Paper Packaging to Continue on High Growth Trajectory

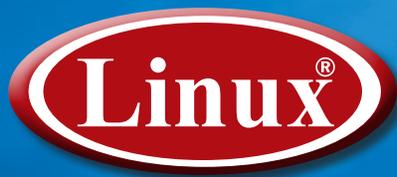


77 – Don't underestimate the mighty Corrugated Food Containers

87 – Industry News

103 – Product Profile

115 – Events



New

Crush Resistance Tester

Latest Innovation from Linux



Features :

- The machine has Servo based control system capable of highly accurate precise load measurements and rapid data acquisition.
- High-stiffness and precision alignment from a linear bearing and integrated column design for more accurate results.
- The integral user interface consists of a control console with large, positive action cap sense keypad, allowing test to be performed at the touch of a button.
- Machine can be operated through PC and Control Panel.
- Used modern design idea of mechanical and electrical integration.
- Report is directly printed from the built-in Thermal printer
- A group of 12 test can be performed for report.
- Data management is easy. Users can create their own specific identification numbers and view data at any time. Stored data can be re-displayed or printed as a table, histogram, or a control chart.
- Accept or reject validation.
- Average of test results on report.
- Programmable User Name, Product Name, vender/ Customer Name, Codes, Lot Number etc.
- Auto Calibration in 5 simple steps.
- Overload protection (Preset)

LINUX CRUSH TESTER SERVO SUPREME MODEL

“Linux” Servo Crush Tester are designed for performing Ring Crush Test (RCT), Edge Crush Test (ECT), Flat Crush Test (FCT), Pin Adhesive Test (PAT), Concora Medium Test (CMT), Corrugated Crush Test (CCT) and other general compression tests, on a variety of materials like paper, paperboard, etc.

These multi-functional equipments incorporate Servo Control System which drives the compression platen steadily along the guide track to compress the specimen.

Specifications:

- **Measuring range (Optional):** 500 kgf
- **Measuring Unit:** kgf, lbf & N
- **Least count:** 0.1 kgf
- **Deflection least count:** 0.01 mm
- **Accuracy:** $\pm 0.4\%$ FS
- **Test speed:** 12.5 mm/min (changeable)
- **Location Speed:** 200 mm/min
- **Platen Size:** 130 X 130 mm
- **Space between compression plate:** 100 mm
- Supplied with attachments for testing RCT, ECT FCT. Other attachments at extra cost.
- **Power:** 0.75kw, 220 VAC, 50Hz Single Phase.

Standards:

Conforming to various National and International Standards



Instrumental in Your Success

An ISO 9001:2008 Company

Linux Machines Incorporation

Plot No. 3, Ahad Industrial Complex, Near Bharat Gears Ltd.,
Bholenath Nagar, P. O. Dawla, Mumbra, Thane - 400612
Tel. No. : +91 88794 97458 / 68 / +91 88791 47556 / 54
Email: machines.linu@gmail.com | sales@linuxmachines.in | info@linuxmachines.in

www.linuachines.in

THE EDITORS' PAGE



Ashok Vyas



Hareesh Mehta

The Last quarter of 2018 has been as event filled as the previous months. What was triggered by Mr. Pradip Bosmaya in the end 2017 when he took over as President – continued its momentum till end November 2018.

Among the various activities organised in this quarter are: UPCBMA – Kanpur Chapter organized a Seminar.

MPCBMA Participated in Global Pack Exhibition at Indore.

And the quarter ended with the grand 47th FCBM Conference organised by SICBMA at Chennai.

We welcome Mr. K. Arunachallam as the New FCBM President of 2018.

This issue features some highlights of these events

The year ended with the incoming President's first event - the FICCI AGM at Delhi.

FCBM's participation in many exhibitions organized by other industry associations has helped to create awareness on the advantages of using corrugated boxes for packing fruits, vegetables, agro products, etc. Further, FCBM's participation in exhibition organized by our Armed Forces

highlighted use of corrugated packaging in Defence supplies – an application not so well propagated till now.

On the economic front, India did well in the ranking of Ease of Doing Business'.

Repeating last year's huge success, India, once again, made a huge jump of 23 places on World Bank's Ease of Doing Business to secure 77th rank – indicating India commitment towards business-related reforms.

From the implementation of the Goods and Services Tax (GST), Insolvency and Bankruptcy Code (IBC), labour laws reforms to electronic trade documentation, several big and small reforms made India advance to the 77th place in the global ranking.

The rationalization of GST continues. As expected reduction of products brings cheer to one and all an we hope it will trigger growth and boost general economy.

India's efforts towards reducing time and cost of trade by the electronic sealing of containers, upgrading of port infrastructure, and submission of electronic documents with digital signature also won big for the country.

The 'MSME Support and Outreach Program' to support the growth of small businesses in the country, announced by the Central Government comes as a good news for our industry.

The Government has taken 12 decisions for the small industries which are like Diwali gifts for the sector.

This issue also features interesting articles, Product Profile and Industry News as usual.

The New Year promises to be vibrantly active with various industry events slated during the year. FCBM is likely to participate in PrintPack, Sino Corrugated 2019, and other exhibitions.

Let us look forward to a vibrant, happy and prosperous 2019 for all of us.



DOWN THE MEMORY LANE.



Pradip Bosmaya

This is the last issue of The Corrugator 2018 in which my message will be featured. Our magazine has always been dear to me and I have always been appreciative of how the magazine has evolved into a publication of international standard.

As I completed my tenure at the 47th FCBM Conference at Chennai – my memories went back to the day that I took over the reins of FCBM at Pune. It was a moment of exhilaration and apprehension. Exhilaration on heading the FCBM – with which I have been intensely associated for years and apprehension for the Herculean task ahead.

Thanks to the unstinting support extended by all the Office Bearers, Managing committee, Past Presidents and the members of this fine Federation, I hope I have been able to implement the goals I had set for myself.

Looking back at the year, some significant events have left a lasting impression on me.

To help our industry grow and to keep corrugated packaging at the forefront, our New Markets Development Committee chaired by Shri Milan Dey participated in several prominent exhibitions in different parts of the country.

Seminars & Workshops Committee helmed by Shri Ramkumar Sunkara and ably supported by his Vice Chairman, Shri Amit Jain, planned and executed the 2-day Comprehensive Course in Corrugated Packaging in 7 regions across India, which saw a combined attendance of more than 550 participants.

Our R&D Committee chaired by Shri Ankkit Agarwal brought out Federation firmly in to the digital age with the release of the Corru-Converter App and the FCBM Connect App which got a formal launch at the Chennai Conference. This new App will help members to Connect, Engage and Collaborate with each other and also to promote business.

Under the aegis of our R&D Committee, KeCBMA are setting up their new Lab.

Our Membership Drive Committee chaired by Shri Amit Jain came up with innovative ways to increase our membership strength.

All in all it has been an eventful year.

Friends, I am indeed thankful to all the Regional Presidents who have not only extended their whole-hearted support but always involved me in their meetings and the functions, providing me an opportunity to meet and interact with their members.

I also share the success with all our Past Presidents and the Managing Committee Members who have stood by me supporting all my endeavors.

I am also thankful to our able Executive Secretary Ms. Sudha Menon and her team for their hard work.

My Heartiest Thanks to one and all.

As the new year dawns and the new team gets to work, I am sure FCBM will set more milestones in its march towards new horizons for the corrugated box industry.



PRESIDENT'S MESSAGE



K. Arunachallam
President

Greetings to one and all !!

Dear Readers,

At the outset I want to express my gratitude to all members of FCBM, for entrusting me with the responsibility of leading our Federation as President during this year. I am both honoured and excited with this opportunity.

As members of FCBM - which indeed is the 'Family of Corrugated Box Manufacturers of India', we have to move in unison to fulfil the goals and aspirations we will set for ourselves this year.

By way of our technical programmes, new market development programmes, R & D activities amongst others I want to reach out to each and every member spread across the length and breadth of our country.

Our mutual interactions in our various programmes, at annual conferences and these days even on digital platforms like our newly launched FCBM Connect App will strengthen our bonds and demonstrate our commitment to our work in the industry and our confidence in the future of our industry.

My predecessor Shri. Pradip Bosmaya had set high-performance records that has made my tenure challenging and taking inspiration from his work I will spare no efforts in making our Federation an industrial body that others will look to emulate.

Another very popular programme initiated by Shri Pradipbhai and very aptly conducted by our Seminar and Workshop SubCommittee - Full -time Comprehensive Course in Corrugated Packaging a 2-day course, has been very well received by all our members. We are continuing with the same and it gives me great pleasure to inform all of you that we will be having our next course on 4th & 5th January in Ahmedabad, Gujarat. The response from GCBMA had been very encouraging.

Along with your enthusiastic participation in all the activities of our Federation as well as our regional associations I would also seek your support to increase our membership base. I look forward to engaging with each one of you and to draw on your expertise to set yet another benchmark in the history of our Federation, this year.

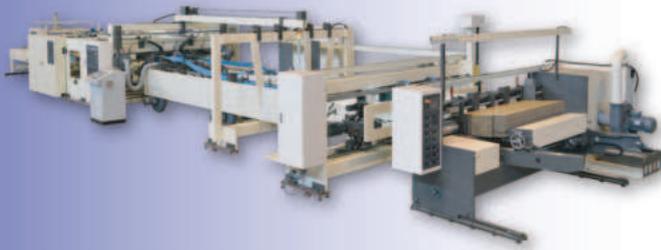
I have tried to infuse some new members within the subcommittees. In order to harness the energy of our talented and dedicated young corrugator members I have tried to give adequate representation to youth with a healthy blend of experienced minds. I am confident they will deliver on every count. Please extend your whole hearted support and cooperation to them.

Finally, with a slew of state elections concluding, I hope there is a general upswing in our economy and we will all gain by momentum building up in the Indian industry.



Professional Paper Recycling Equipments & CORRUGATOR BOX MAKING

www.godswill.com.tw



Fully-Auto Folder Stitcher & Gluer

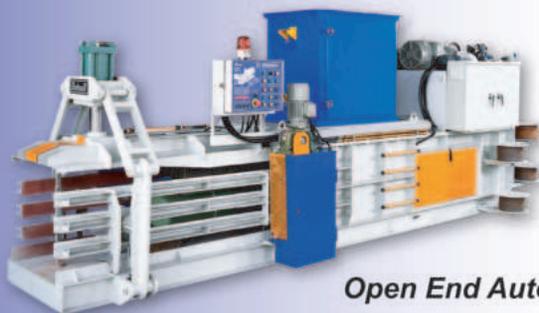
- Stand Alone with Feeder
- In Line with Flexo



Semi-Auto Stitcher & Gluer
Servo motor with HMI



**Fully-Auto Prefeeder &
Semi-auto Prefeeder**



Open End Automatic Baler



Semi-Auto Twin Head Stitcher
Servo motor with HMI

We have been devoting ourselves to manufacturing
high quality machine since 1987.
Our major customers are from 80 countries around the world.



Godswill

GODSWILL PAPER MACHINERY CO., LTD.

No. 88, Shenzhou N. Rd., Shengang Dist., Taichung City 429, Taiwan

Tel:+886-4-2526 8912 Fax:+886-4-2527 8683

E-mail:service@godswill.com.tw

Youtube:www.youtube.com/user/godswilltw

BF Vs RCT – Which is better for your Just Right Packaging?

Just right packaging

- You think choosing the right corrugated box can be relatively simple task?
- Size up the product you want ship –
- Select an appropriate box,
- Put your product into it,
- Pack it with cushioning material if required,
- And ship it away to customer.
- But, is it that simple - NO
- Do you need 3 ply or 5 ply or 7 ply?
- What should be the flute profile? Should it be A or B or C or E flute.
- What strength properties should we define?
- Should we define weight or bursting strength or stacking strength or some thing else.
- Defining these parameters become little confusing.

Box Strength

- What is the difference between the Bursting strength and Stacking strength of corrugated box?
- Do these both parameters tell you the same thing about the box strength.

Bursting strength

- Bursting strength of the corrugated box measures the pressure in Kgs per sq.cm or PSI to burst the liners of the corrugated board.
- It measures the ability of the box to withstand rough handling.
- It is reflective of rough conditions encountered in the distribution network or environment.

Stacking strength

- Although a box can with stands rough handling, it might fail under stacking load.
- This can lead to a damage ranging from a single box to the collapse of an entire palletized load.
- Bursting strength parameter is preferred if the distribution channel clearly favors single parcel shipment.
- If the shipment is unitized, truck loads, shipped through a network of warehouses then stacking strength is favored.
- In recent times the supply chain has become increasingly automated and most products are shipped on pallets – which means the only load or pressure on the box is from stacking.



Ram Kumar Sunkara
Chairman – R & D Committee, FCBM

- Multiplying the stack load by safety factor that represents the environmental conditions the box will encounter gives the compression strength of the box.
- The environmental factors determining the safety factor are:



- Stacking strength is defined as the maximum compressive load in kg's that a corrugated box can bear over a given length of time, under given environmental/distribution conditions with out failing.
- If your main concern is your boxes being crushed in transit, use stacking strength as performance standards and not BS
- Storage time under load,
- Relative humidity under load,
- Pallet patterns,
- Overhang and pallet deck board gap,
- Excessive handling.



TRUSTED QUALITY
BUDGET PRICE
LONGER LIFE



MaxDura International Co., Ltd.
 SINCE 1979

WELCOME TO SINO CORRUGATED

Booth N5A120
08~11 APRIL 2019



NO-CRUSH WHEEL



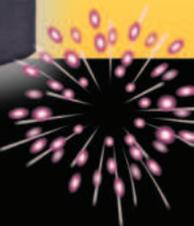
FEEDER WHEEL



DIE CUTTING ANVIL COVER



WAREHOUSE IN INDIA
india@maxdura.com



Box Compression strength - BCT

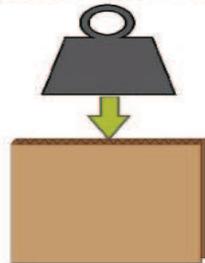
- Box compression strength is a function of:
- Box perimeter,
- Average Edge crush test value – ECT,
- Corrugated board caliper,
- Depth or height of the box,
- Length to width ratio of the box.
- Except ECT, all others are mechanical dimensions of the box.
- ECT is a parameter that depends on the material input.

Namely paper quality

Edge Crush Test Value - ECT

- ECT measures the force in kilo newtons per meter or pounds per inch required to crush a sample of corrugated board standing on an edge.
- ECT is regarded as an indicator of box compression strength. Higher ECT leads to higher BCT.

Edge Crush Test



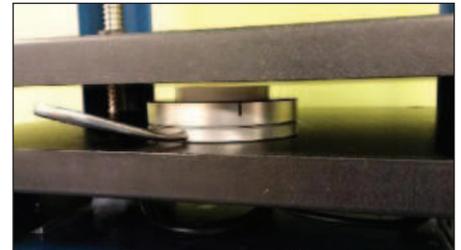
- ECT of the board addresses the storage and warehouse requirements more than the bursting strength of the board.
- ECT also provided cost savings to the shipper.
- ECT specified board can be made from a variety of basis weight for liners and a variety of calipers for the medium giving wider choice resulting in cost optimized corrugated board.
- ECT of the board is related to Ring crush test value of paper.

BF and RCT of paper

- BF (Burst factor) of paper determines the bursting strength of the corrugated board.
- Bursting strength of corrugated board depends on
- BF of paper used,
- Basis weight of paper used.
- Product of BF and basis weight gives bursting strength.
- Higher bursting strength means higher BF or higher basis weight requirement of paper.
- Basis weight is produced to contain a specific amount of fiber per unit area of paper.
- BF is produced using certain quality of fiber. Higher BF produced from long fiber while lower BF produced from short fiber.
- Hence right combination of basis weight and BF leads to desired bursting strength.
- ECT corrugated board is produced using paper that is manufactured to a ring crush specification.
- The ring crush values of liners and medium that make up the combined corrugated board are used to predict the ECT value of the board.
- The basis weight or burst factor of this paper is not critical since the only defining characteristic is the paper's ring crush value.

RCT of paper

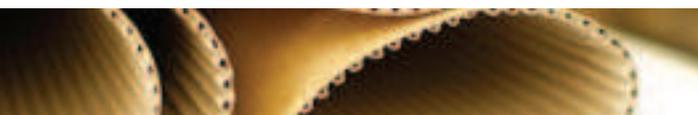
- RCT is measured in force (Kg's or kN/m) of paper in the cross machine direction.
- The test is performed using a sample 6" x 0.5" strip of paper that is placed into a fixture to form it into a ring shape.
- A compression test is then performed on the sample ring of paper.

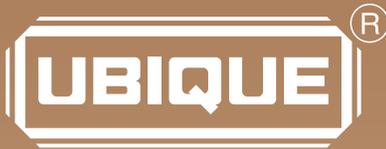


BF paper and RCT paper

- To produce bursting strength based board we need paper manufactured to burst factor.
- To produce ECT based board we need paper manufactured to RCT values.
- There is a difference in the manufacturing of these two grades of paper.
- Basic paper making principals and equipment are same.
- Both types of paper can be made with the same raw material on the same equipment.
- Process and machine adjustments are made to produce these two different grades of paper.
- Also chemical proportion used are different in two grades.
- The significant difference is in the speed of wire mesh on fourdrinier table and stock velocity in head box while producing these two grades.
- The wire mesh on the fourdrinier table is slowed to almost match the stock velocity from head box. This helps in more fibers to align in the cross machine direction resulting in getting required RCT of paper.

Contd. on - 19





The Widest Range of Testing Equipments,

Saurashtra – a trusted name in Testing Equipments

Pioneers in the development of testing equipments, Saurashtra has etched for itself a premier position in the field of testing of packaging materials and packages. Since over 25 years, Saurashtra continues to enjoy the trust and confidence of manufacturers and users of packagings as well as leading institutes and laboratories. Today there are over 7000 satisfied customers in India and abroad using equipments of Saurashtra.

With a wide range of equipments for scientific and accurate testing of paper, paperboard, corrugated boards & boxes, Saurashtra stands out as a single window for testing equipments - ably supported by technical backup and prompt service.

Now, Saurashtra also offers equipments for testing plastics and other packaging materials as well as engineering and automobile industry.

Figures Speak for Precision and Performance !

- Over 50 Years of Experience in Corrugated Packaging
- Over 40 Years Experience in Testing Equipments
- Over 15000 Equipments Supplied in India
- Over 200 Equipments Supplied in International Market
- Over 7000 Satisfied Customers in India and Overseas
- Over 2000 Customers in 400 cities being offered after-sales-service across India

Other Equipments available

- Specimen Cutter for GSM, Ring Crush & Edge Crush Tests
- Specimen Maker (Flutter) for Concora Medium Test
- Dart Impact Tester
- Torque Tester
- Air Permeability Tester

All Digital Models are also available with Integrated Computerised Touch Screen Control Panel

Box Compression Strength Testers



Measures ability of the container to resist external compression loads during transit and storage. The ultimate test for determining overall quality and performance of the packages.

Available in:

UBC1M/1T - Digital Model

UBC1M/1T-P - Microprocessor based Digital Model

UBC1M/1T-TS - Fully automatic with computerised touch screen control panel Model

Bursting Strength Testers



Available:

2-in-1 Type, Paper Tester & Board Tester in Various models like Dual Pressure gauge model, Digital economy model, Fully Automatic Digital Model, Fully Automatic Microprocessor based Digital Model, Fully Automatic with computerised touch screen control panel.

Two-in-One Digital Economy Model Paper & Board Tester

- Two Diaphragm Seats
- Digital Indication of readings
- Peak Hold facility
- Manual Clamping

Crush Tester



Useful for determining Edge Crush, Flat Crush, Pin (Ply) Adhesion of Corrugated Board and Ring Crush and CMT of Paper and Paperboard.

Available in:

UCR - Digital Model,

UCR-P Microprocessor based Digital Model

UCR-TS Fully automatic with computerised touch screen control panel.

Conforming to National and International Standards

Puncture Resistance Tester

Gives reliable indication to evaluate fabrication factors along with material values in a composite fashion.

Available in:
UPR - Analogue Type
UCR - DIGITAL
 Microprocessor based Digital Model



COBB Tester

Determines water absorption/penetration (cobb value) of paper and paperboard as specified in standards.



Model: UCOB

Substance Indicator

Measures directly substance of paper, paperboard and other materials in terms of G.S.M.



Caliper Thickness Gauge

Measures Caliper thickness of variety of materials.

Available:
UCTG01 & UCTG01-D
 With 10mm capacity and least count of 0.01 mm
UCTG001 & UCTG001-D
 With 1mm capacity and least count of 0.001 mm
UCTG002-D
 With 20mm capacity and least count of 0.001 mm



Internal Ply Bond Tester



To Determine the Internal Bond Strength of Paper, Board and Laminates

Model: UIBST Microprocessor based Digital Model supplied with Sample Preparation Station as per the standards.

Sample Cutter



Model: USC for preparing various paper samples for GSM, RCT etc...

Introducing PAPER MOISTURE INDICATOR

Moisture content is most critical parameter in Paper, Paperboard, Corrugated Board, all Paper products, Solid fibreboard etc...
 UBIQUE Paper Moisture Indicator is an ideal equipment to determine percentage of Moisture Content Present. UBIQUE has introduced a reliable latest technology and equally trust worthy as other UBIQUE testing equipment.

Product Code: U2100



Crush Tester – Signature Model

Our Signature Model Crush Tester is the most advanced Crush tester offering the widest range of crush tests. The new customized Operating Interface offers unparalleled features for the for the delicate tests on the machine.

The machine offers the following tests:

Standard Tests:

- Ring Crush Test of Paper
- Flat Crust Test of Corrugated Board
- Edge Crush Test of Corrugated Board
- Operator Defined test (Customizable test)

Optional Tests:

- Corrugated Crush Test (requires Sample Fluter)
- Corrugated Medium Test (requires Sample Fluter)
- Pin Adhesion Test
- Score quality Test



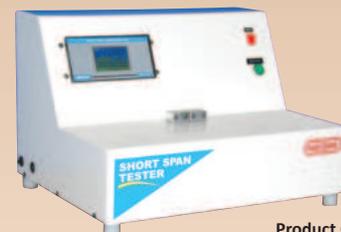
UCR-TS-SN

Short Span Compressive Test (SCT)

The material characteristic “compressive strength” can be determined with high accuracy using SCT because of the buckling stability provided by short test lengths of material is more reliable over traditional testing methods (Ring Crush Test, Corrugated Crush Test or Linear Crush Test).

Due to these technical advantages, recently SCT is being increasing referred worldwide. Many international paper testing laboratories recommend using the SCT to predict the final characteristics of boxes.

UBIQUE Short Span compression tester offers an easy and intuitive interface for the SCT test.



Product Code: USCT

Marketed by:



SAURASHTRA SYSTOPACK PVT. LTD.

CIN-U33123MH1998PTC113502

102 & 104, Shilpin Centre, 40, G. D. Ambekar Road, Wadala, Mumbai - 400 031, India.

Phone: +91 22 6736 4343 ● Fax: +91 22 6736 4300 ● E-mail: info@saurashtra.net ● www.saurashtra.net



High Quality and
High Productivity



Made in Taiwan

LI SHENG **CHL**

自動平板模切機 AUTOMATIC FLAT BED DIECUTTER

- User-Friendly Operation
- High Accuracy
- Comprehensive Safety Guard
- Minimal Trouble
- 操作方便
- 高準確性
- 全面性安全設備
- 低故障率



▲ **LS-1050SF**



▲ **LS-1450**
LS-1670
LS-1450S
LS-1670S



▲ **LS-1670SW**

立盛機械股份有限公司
LI SHENG MACHINERY CO., LTD.

412 台灣台中市大里區工業10路23號

No. 23, Gungye 10th Rd., Dali Dist., Taichung City 412, Taiwan

Tel : 886-4-2491-5955

Fax: 886-4-2491-3902

www.honor-machine.com

E-mail: honorls@ms49.hinet.net

886-4-2491-5955

- When the wire mesh on the fourdrinier table is traveling at a much higher velocity than the stock velocity from head box it helps in more fibers to align in the machine direction resulting in getting required BF of paper.

RCT of paper

- Today paper mills are manufacturing paper grades to higher RCT values.
- They are able achieve higher RCT at much lower basis weight.
- There mills today who are producing high performance paper. That is paper having high ring crush values.
- Such paper grades can help to achieve higher BCT values at lower basis weight and lower BS thus reducing the cost.

ECT of Board

- The corrugated board can be basis weight specified along with Bursting strength and ECT, or
- It can be only ECT specified.
- The latter boards have cost optimized performance if BCT is important.
- Let us take an example of 3 ply "C" flute board made to different ECT values. Correlation between ECT (kN/m) and BS (Kg/sq.cm) is shown

3 ply "C" flute board having ECT = 4 kN/m			
Normal RCT paper			
Property	Case 1	Case 2	Case 3
ECT	4.08	4.04	4.00
BS	8.31	7.83	7.26

High RCT paper			
Property	Case 1	Case 2	Case 3
ECT	4.08	4.01	4.00
BS	6.61	6.14	5.78

3 ply "C" flute board having ECT = 5 kN/m			
Normal RCT paper			
Property	Case 1	Case 2	Case 3
ECT	5.05	5.02	5.04
BS	10.81	9.61	8.89

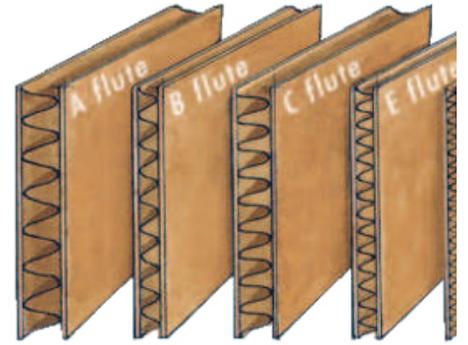
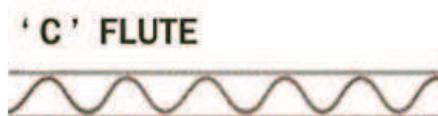
High RCT paper			
Property	Case 1	Case 2	Case 3
ECT	5.08	5.05	5.06
BS	9.01	7.85	7.32

3 ply "C" flute board having ECT = 6 kN/m			
Normal RCT paper			
Property	Case 1	Case 2	Case 3
ECT	6.04	6.06	6.01
BS	12.73	10.91	10.73

High RCT paper			
Property	Case 1	Case 2	Case 3
ECT	6.07	6.02	6.02
BS	11.16	9.34	8.67

3 ply "C" flute board having ECT = 7 kN/m			
Normal RCT paper			
Property	Case 1	Case 2	Case 3
ECT	7.07	7.06	7.04
BS	14.32	12.84	12.03

High RCT paper			
Property	Case 1	Case 2	Case 3
ECT	7.01	7.03	7.03
BS	12.85	10.63	10.41



Observation		
ECT in kN/m	Difference between minimum and maximum BS for same ECT	
	Normal RCT Paper	High RCT paper
4.00	14.39%	14.46%
5.00	21.60%	23.02%
6.00	18.65%	28.72%
7.00	19.04%	23.39%

Conclusion

- We see that one can achieve required ECT value and hence required BCT (Box compression strength) for wide range of BS values.
- The range in BS difference ranging from low 14.39% to high 28.72%
- This means a corrugated box manufactured to ECT requirements will cost less than box manufactured to BS requirements

Ramkumar Sunkara of P. R. Packing Service, Pune is an encyclopedia of corrugated packaging and he is the most sought after consultant and speaker in the industry.

He has conducted many seminars across India at various Regional Centres of FCBM.

He is presently the Chairman of Seminar & Workshop Committee of FCBM.





India's Foremost and Largest Stockist of
IMPORTED KRAFT LINER

- Virgin Kraft Liner Paper
- White Top Kraft Liner Paper

Always Ready Available
Any GSM - Any SIZE - Any QUANTITY

Sourced from the largest and most respected mills worldwide.

—●—
The Largest Kraft Paper Reel Bank In India
Centrally Situated Warehouse In Vapi, Gujarat
Rate Stability Promise

Available Small Diameter Reels for Normal Reel Stand

—●—
R. R. Paper Products

117, Laxmi Plaza, Laxmi Industrial Estate, Link Road, Andheri (W), Mumbai - 400 053

Tel.: 022-66950127/26316435/8291292147 | Fax : 022-66950128

Email: rrpaperproductsmumbai@gmail.com | Web: www.rrpaperproducts.net

How Machine Setting is important to stay competitive

It is important to always remember that machine setting be up to date so that we can stay competitive in a very busy market

This month, I am going to discuss an important machine calibration setting known as the “Time and Register” calibration. This calibration identifies and defines the relationship between the mechanical settings on the Machine Dials or LED monitors on our Flexos and Rotary Die Cutters and the calibration set backs on printing plates and register numbers on cutting dies. It enables the box plant to have a calibrated relationship with the tooling suppliers that results in better managing and reducing the time required in setting up the new orders.

The “Timing” part of the calibration refers to the process of zeroing the gear train. This enables the crews to open and close the press in the same set position all the time. For the newer presses that are servo driven, it allows the servomotors to accurately locate the entrance position of the lead edge of the sheet at each section at the same position consistent with each order. The sections that I am referring to are:

1. The Feed Section.
2. The Print Stations. (From 2 to 6)
3. The slotting and scoring section. (On the large machines where the cylinder circumference is over 86 inches or 2.0 meters, we generally have tandem slotter sections)
4. The Die Cut Section.
5. The Folder Entrance Section just before the folding rails in Flexos.

For those machines that are gear driven, we have all experienced the problem of the gears “bumping” heads as we close the sections. The gear heads on one section bump the gear heads on the next section preventing the crews from properly closing the section. This takes time, frustrates the operators and adds costly time to the set up process. Normally,

the machine operator then takes a large screwdriver or crow bar and rotates one of the two gears by hand until the gear heads line up. Only then, can he close the two sections.

To properly ZERO the press or gear train, the crews must first close all the sections of the press. You then indicate the outside dial on each section to line it up with the zero mark on the indicator. Each manufacturer has its own method. Always start with the feed section dial first. All the timing dials should read the same when finished. If they are not, loosen the timing dial and indicate the dial until it is lined up with the zero mark on the side frame (while the machine is closed). Do this on every section until all the timing dials read “zero”.

From now on, the crews must change their methods! They must be sure that the timing dials always read zero before they close the press after the printing plates and cutting dies are properly mounted. Supervisors should always be checking this activity.

This will not only enhance the performance of the gear train, reduce set-up time but it will enable the gear train to last longer.

We now are going to discuss the second part of this calibration process and that is



Dick Target
“On Target Consultants”

“REGISTER”. This coordinates the design criteria between the printing plates and the print cylinders. It also coordinates the design criteria between cutting dies and the die drum.

The proper zero point on every print cylinder is located exactly two inches or 50.8 mm from the mounting strip on each cylinder. This identifies the point at which the lead edge of the corrugated sheet touches the print cylinder every time on every order, regardless of machine speed. Now, what are the steps required to coordinate this effort.

Build a set of test printing plates with an arrow mounted on the Mylar. See sample #1. The tip of the arrow will be exactly two inches or 50.8 mm from the mounting strip. Mount two of these test plates on each print cylinder in the press. This assures parallelism. Ink up all the print



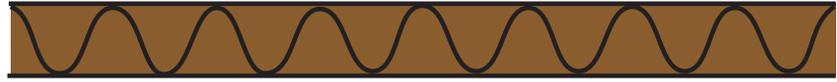
Sample # 1.





Aryan Packaging Products Pvt. Ltd.

A-Flute

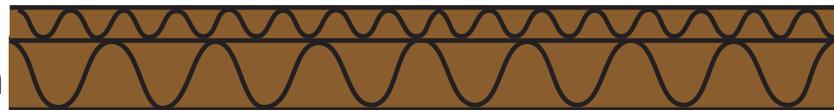


B-Flute



AB-Flute

7.5 to
7.8 mm



**" We offer Sheets manufactured on a
state of the art , modern**

European FOSBER automatic 5 ply corrugation line "

Maximum width : 2400 mm

Maximum Length : 4500 mm

Flutes : 3 ply or 5 ply , A+B Flute

Board Height : ~ 8.0 mm

Paper Gsm's : 80 to 400



Aryan Packaging Products Pvt. Ltd.



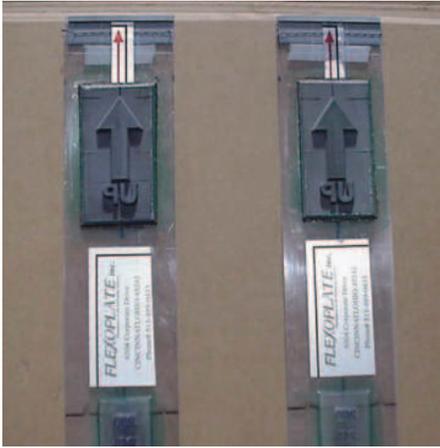
info@aryanpaper.com



+91 260 2452959 / 960



Plot No. 1B,2,3 & 4, Survey No. 322/1+2+3+4, Moti tombadi,
Vapi - karwad Road, Gujarat - 396195 (India)



stations, each having a separate colour so that we can properly identify each print station during the test.

Be sure the gear train has been properly zeroed according to my instruction in this article and close the press.

Send the several sheets through. Adjust the register on each print station until the tip of the printed arrow is just touching the lead edge of the sheet. See sample #2. Make sure that the tip



is just touching the “lead edge”. At this point adjust the register dial on each print station and make it read ZERO. If the print station is servo driven, go into the control center and adjust it so that the register reads ZERO. Do this on every print station until complete. The print stations are now calibrated.

Meet with your plate suppliers and instruct them to establish the zero point on each printing plate so that the zero point is EXACTLY two inches or 50.8 mm from the lead edge of the

printing plate. Not close but EXACTLY!!

If this is properly done, then the crew can set every order the same. The gear train should read ZERO and the print register will read ZERO on every order on every print station. For all of your existing plates, mark every printing plate with the corrected print register number and use that for the next time you run that printing plate. The adjusted register number on existing plates will always be greater than zero.

We know have to consider the Die Cut Section. We need to locate and identify the zero row of bolt holes on the die drum. It is quite simple. Mount the calibration-cutting die on the cylinder over the scribe line that is located over the center of a row of holes or on a row of boltholes that is next to a scribe line that is located between two rows of holes. Either one works. Paint a yellow stripe over the zero row of holes.

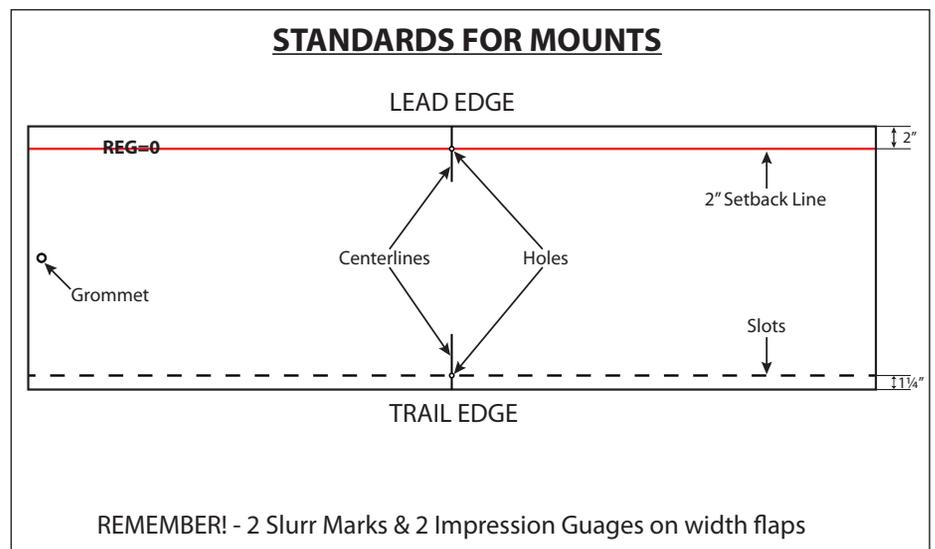


Sample # 2

Now, mount the calibration-cutting die (Sample #3) so that the chevron is located directly over the zero row of holes or the yellow stripe. (The calibration-cutting die is set so that the chevron touches the line drawn between the centerline of the first row of mounting holes. Run several sheets through the press and locate the chevron arrow directly on the lead edge of the sheet. Index the registration dial so that until it reads ZERO. For servo driven die cut sections adjust the readout to read zero when the chevron is over the lead edge of the sheet. The die cut section is now calibrated.

NOTE: The zero registration on the cutting die is the distance from the centerline of the first row of boltholes to where the product begins. (Not the first knife) Take that number and subtract it from the circumference of the die drum. That is the zero registration number that will be used in setting up the order.

The slotted section: Index the slotted section knives so that the lead edge knife cuts a known dimension on the sheet. (The lead slot) The second knife or the trailing knife should be the length of the lead slot plus the body of the box. Index the dial so that the measurement reads the actual distance. Do the same for servo driven slotted sections. Save the settings. The slotted section is now complete.



Sample # 3

Contd. on - 27





Put the Seal of Quality on Your Packaging

Trust Linux



Comprehensive range of Testing Equipments for measuring :

- Bursting Strength
- Box Compression
- Edge Crush
- Ring Crush
- GSM / Substance
- Puncture Resistance
- Water Absorption (Cobb)
- Moisture Content
- Tensile Strength
- Rub Proofness
- Tear Strength
- Stiffness Strength
- Caliper Thickness
- Drop Resistance
- Vibration Resistance

Testing is an integral part of Quality and Quality Assurance that of success.

In a competitive world, it is the Quality Assurance that sustains business and wins customers.

Participating as your partners in your endeavour is Linux – makers of Quality Testing Equipments.

Linux Testing Equipments, incorporating the latest innovative technologies, help you to assess the properties of raw materials as well as finished packages.

In a short span of twelve years, Linux has earned the trust and confidence of leading manufacturers and users of packaging, across India.

Your needs for package testing equipments will continue to drive our initiative and product innovations.

An attestation of our customer - centric approach.



Bursting Strength Testers

Bursting Strength is a widely used measure of resistance to rupture in various packaging materials like Paper, Paperboard, Corrugated board, Nonwovens, Textiles, Geotextiles, Films, Tissues etc.

Models :

- Standard ● Super ● Double head ● Eco Digi
- Micro digital ● Micro print ● Micro PC
- Available in two measuring ranges : 0-5 to 0-75 kg/cm².



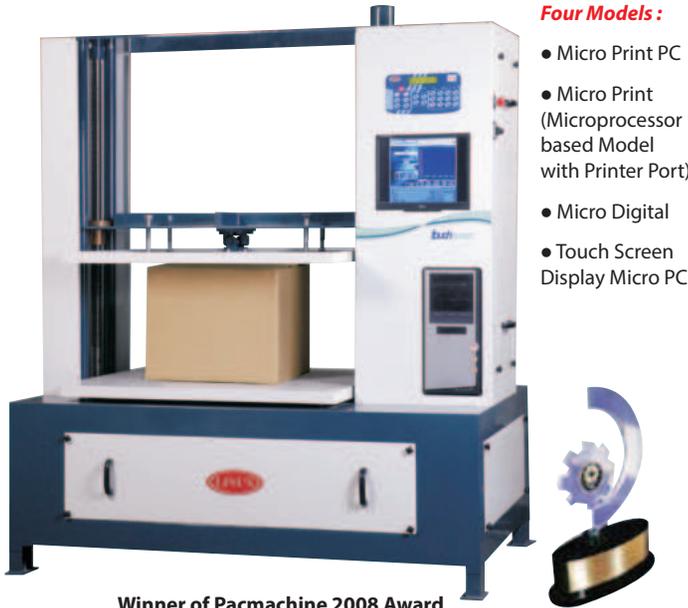
GSM (Substance) Tester
Electronic model with 5 sample size measurement



Equinox Moisture Meter
Hand held Digital Moisture Meter imported from Germany for instant moisture results.



Compression Tester



Winner of Pacmachine 2008 Award

Four Models :

- Micro Print PC
- Micro Print (Microprocessor based Model with Printer Port)
- Micro Digital
- Touch Screen Display Micro PC

Compression Strength of a Box, Container, Tube, Drum, Bottle etc., gives a reliable indication of the overall performance of the package - besides indicating its ability to resist external compression loads during transit and storage.

Linux Compression Tester – MicroPC Touch Screen Model is an Indian Industry First and can be used for testing of Packages for stacking load, transit load bearing capacity.



Tensile Tester

Suitable to test tensile strength of paper, films, foils, rubber etc. Available in capacities ranging from 1gm. to 1000kgs. Various tests like tensile, adhesion, peel (90/180 degree) can be performed.



Tear Tester

Measures the force required to tear multiple sheets of paper



Puncture Resistance Tester

Five different scales to analyze materials of variable thickness.



Cobb Tester

Determining water absorptiveness of papers, boards etc.



Crush Tester

For testing paper, corrugated board and its components as well as performing compression tests on small packages.

Suitable to measure : Flat Crush Test (FCT), Ring Crush Test (RCT), Edgewise Crush Test (ECT), Pin Adhesion Test (PAT), Concora Medium Test (CMT) and Corrugating Crush Test (CCT).

Winner of Pacmachine 2006 Award



Rub Tester

To measure the rub proofness of prints on paper or board. Can also be used to measure colour transfer from printed or coated materials during rubbing.



Short Span Compression Tester (Sct Tester)

Equipment designed to perform Shot Span Compression Test and determining the compression strength on Fluting Medium and Test Liner papers within the grammage range of 100-400 g/m2 units.

Sutherland Ink Rub Tester (Micro Digital)

Sutherland type rub tester for ink rub test is a new type testing machine designed to measure scuffing or rubbing resistance.

All Linux equipments conform to National Standards (IS, FCBM) and International Standards (TAPPI, ASTM, ISO, BS, AS/NZ, SCAN, DIN, etc.)

Calibration traceable to National Physical Laboratory.



Instrumental in Your Success

An ISO 9001:2008 Company

Linux Machines Incorporation

Plot No. 3, Ahad Industrial Complex, Near Bharat Gears Ltd.,

Bholenath Nagar, P. O. Dawla, Mumbra, Thane - 400612

Tel. No. : +91 88794 97458 / 68 / +91 88791 47556 / 54

Email: machines.linu@gmail.com | sales@linuxmachines.in | info@linuxmachines.in

www.linuachines.in

WE RETURN YOUR MONEY, if we cannot prove it.

META-CHEM brings you the import substitute paper water-proof chemical, for the first time in the country. It performs even better than the imported chemical, resulting in far higher water resistance and increase in burst strength of the coated paper, **AT ONLY A FRACTION OF THE COST.**



Box during shower test - 30mins. under bathroom shower.



Box after shower test.

Special features:

- The chemical can be supplied transparent or lightly coloured in various shades as per requirement.
- Application is simple
- High coverage
- Superior water-proofing properties
- **Non toxic, food grade**
- No change of properties between (-)45 deg. C to 150 deg. C.
- **Environment friendly - The coating is bio-degradable and coated paper can be recycled directly**
- Coating is flexible - does not crack on folding

Comparative Properties:

	Plain paper	coating - ml/sq. mtr.			
		10	15	20	30
B/F	14.9	16.5	17.6	18.2	19.47
Cobb value	35.0	19.0	15.5	8.5	2.5
Gloss	18.36	18.26	18.17	18.2	18.28
GSM	147.5	148.5	149.0	149.5	149.5

Applications:

- Water proofing of corrugated boxes for packing of :
 - Fruits, vegetables, flowers
 - Tea, ice cream, butter, milk powder, paneer, cheese, Dahi.
 - Bidi, cigarette, tobacco, soap
 - Garments, fabrics, yarns
 - Fish, meat and other frozen food exports
 - Electronic and electrical goods
 - Any other moisture sensitive product
- Multi-wall paper bags for packing of moisture sensitive products
- Electrical insulation paper coating
- Anti-fungal coating for soap wrapper
- Export packing requiring recyclable water proof coating
- Fabric coating for Raincoat, Tarpaulin, Car cover, etc.

We also manufacture and supply Oil & Grease Resistant Paper Coating chemical with "Bio-degradable & Recyclable Food Grade" property.



Meta-Chem Chemical Industries

Plot no. C-11, Unit - 4, NICE,
Satpur, Nasik - 422007, Maharashtra, India
Tel: (0253) 6603493; Telefax: (0253) 2353327;
E-mail: metachem1@bsnl.in; info@metachempaints.com

Contd. from - 23

So, we have now calibrated the press and we need to follow up with the crews so that they use this method.

The new process is:

1. Finish the existing order.
2. Open the press.
3. Mount the new printing plates.
4. Mount the new cutting die.
5. Make sure the gear train indicators are all on zero. Close the press.
6. Put all the print cylinder registration dials on zero.
7. Set the slotter section according to my instructions.
8. Set the zero register number on the cutting die for the die cut section.

The set up procedure is now complete and accurate. Verify the registration and run the order.

Note: This procedure is still necessary for servo driven presses as the tooling that we use does not always have the same registration numbers or zero registration numbers. Remember: In our industry we always share tooling between plants, machines and with competitors.

Also we must run our plants so that we minimize cost and maximize profits. Our Flexos and Rotary Die Cutters must generate \$500.00 @ hour in order to pay the bills and be profitable. That equals \$8.34 @ minute. My question now is: how many extra \$8.34 minutes do we waste on every order set up? 10 setups per shift. 10 x 2 (two shifts) x a 5-day week x 4 weeks in every month. [(10x2) x 5] x 4 = 400 set up minutes wasted @ month. That equals \$3336.00 times 12 months per year, which equals \$40,032.00 lost revenue annually.

Pay attention to the details!!

As always: Enjoys your job!!

Dick Target, owner of "On Target Consultants" based in Lower Gwynedd, Pa., has been in the corrugated industry for over 35 years.

He teaches Flexo and Die Cutter Calibration "Short Courses" for TAPPI several times each year.

Dick Target also writes for Corrugated Today and International PaperBoard Magazines.

The Readers will recall that he is a regular contributor to our magazine.

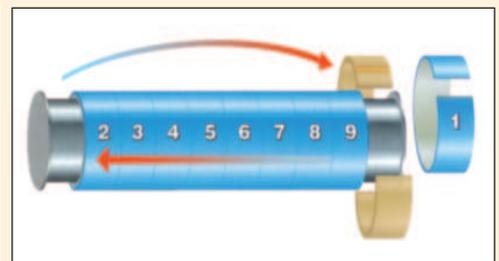
This article is printed in this issue with the permission of the author.

*He can be reached at:
dicktarget@gmail.com*



Expand the Capabilities of your Printer Slotter or Flexo Folder Gluer with Dicar® ANVILOK III Glue Lap and Hand Hole Systems

- Boltless Anvil Covers for standard steel cylinders
- Patented Dual DuroMeter lock, with non-exposed fingers
- Fiberglass backing for flexibility, ease of use and lighter weight
- Fibreglass backed



Marketed by:

SAURASHTRA SYSTOPACK PVT. LTD.

102 & 104, Shilpin Centre, 40, G. D. Ambekar Road, Wadala, Mumbai - 400 031, India.

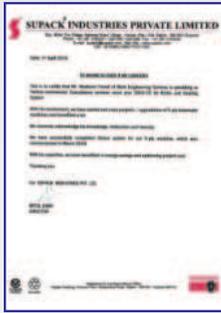
Phone: +91 22 6736 4343 ● Fax: +91 22 6736 4300 ● E-mail: info@saurashtra.net ● www.saurashtra.net





MARK ENGINEERING SERVICES

Your Partner In Thermal Audit & Consultancy Services



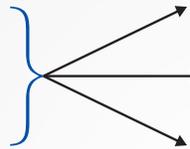
BOILER CONSULTANT



THERMAL AUDIT

To Study Boiler, Heating System:

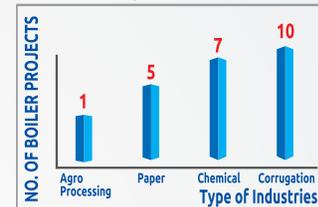
- ▲ Generation Area
- ▲ Distribution Area
- ▲ Utilisation Section
- ▲ Return/Recovery Area



Provider Report For:

- Energy Conservation
- Overcome Bottleneck
- Modification/Altration/Up-gradation

#23 Boiler Projects (Industry wise)



CONSULTANCY SERVICES (PROJECT MANAGEMENT)

- ▲ Boiler and heating Projects
- ▲ From Concept Stage to Plant Commissioning
- › Design & Selection of
 - Boilers, Thermic fluid Heaters, Layout Design, etc.
- › Piping Design
 - Steam & Condensate Recovery System
- › Supervision Of Erection & Commissioning



ENGINEERING SOLUTION

- ▲ Boiler Capacity Trials, Efficiency Checking & Tuning
- ▲ Steam Trap Checking
- ▲ Trouble Shooting Of Heating
- ▲ Feasibility Study, Calculating boiler capacity for expansion.
- ▲ Machine Automation for Heating Systems



HIGH PERFORMANCE
KRAFT LINER BOARD
☆☆☆☆☆

www.astronpaper.com



We are 2nd recipient of
FSC Certificate of India in our Trade

BEST
TECHNOLOGY
FOR BEST
RESULTS

Astron Paper
The Complete
solutions for packaging



- ✓ Multi layer kraft liner with triple wire: 18 to 45 B.F. with high RCT
- ✓ Top white kraft liner with high brightness
- ✓ Range of GSM – 140 to 450
- ✓ Finish Deckle: 3800mm



 **astron**TM
PAPER & BOARD MILL
Excelling with Innovation

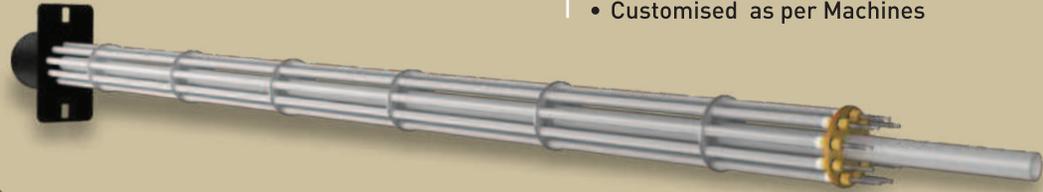
ASTRON PAPER & BOARD MILL LTD.

D-702,7th Floor, Ganesh Meridian, Opp. Gujarat High Court,
Sarkhej Gandhinagar Highway, Ahmedabad - 380 060 Gujarat.

Ph.: +91 79 40081221 | M.: 99090 24945

Email: marketing@astronpaper.com | marketing.astronpaper@gmail.com

- Pioneers in Corrugation Industry Heating
- Long Life – Consistent Performance
- Best Quality – Value for money
- Faster availability (24 hours)
- Customised as per Machines



When it comes to efficiency in heating, leading, corrugated box manufactures have come to rely on Hotron. Endowed with a rich technological expertise backed by 45 years of experience in the field, Hotron have developed a range of electrical heaters with exceptional features, specially suited for corrugation machines.

Hotron means “electrical heating & control too”

- Electrical Tubular Heaters
- Infra Red (I.R) Heaters
- Zonal Heaters
- Power Saving Heater Control Panels
- Drying Systems

Hotron Heaters offer features that make them stand apart:

- STURDY SPIRAL RESISTIVE WINDING in 80/20 or Kanthal with resultant low level specific load.
- Ideal “INSULATION” – imported MGO powder having high melting point, high thermal conductivity and high electrical resistance.
- S.S.Studs – long lasting, prevents frequent burning.
- Proper Assembly of unit prevents frequent burning.
- Proper assembly of unit having flanges and Strong Central Support. Prevents sagging
- We also manufacture Infra Red (I.R.) Glass heaters for high speed imported corrugation machines

Salient features of Hotron Control Panels:

- Saves power by correct monitoring & control.
- Proper control enhances life of the heater.
- Better safety & protection system.
- Panel mounted indicators & meters indicate status and performance of heaters.

**We manufacture
CORRUGATED SHEETS
DRYING SYSTEM which
enables faster, easier,
convenient & most
economical drying
mechanism so as to
achieve very good
quality corrugated boxes**

**We shall be
pleased to offer
free technical advice
and recommend
most ideal heaters
for your
Corrugation Machines**

Differences in Cutting Die Construction Between Folding Carton and Fluted Material

The differences in cutting die construction between folding carton and fluted material are subtle, but significant. As much as we desire to standardize the tooling, differences in either carton stock or fluted board require the need for more flexibility on the part of the toolmaker. The single most important consideration should be the condition of the equipment being used to convert those materials into value-added products. The maintenance of the diecutting press is of utmost importance when designing and building tooling. The lack of proper maintenance may hinder the cooperative effort of the toolmaker and the converter.

The dieboard or plywood remains basically 5/8 of an inch (15.875mm) thick. It should be noted that in the Bobst manual, page D-2, Bobst recommends 3/4 inch (19.05mm) die base be used in certain situations. While there may be circumstances when this is a good idea, most dies are currently being built using the standard 5/8 inch die board.

It is always revealing to watch diecutting presses run in order to gain an understanding of just what is taking place between the cutting die and the stock being converted. One gains great respect for the modern diecutting press which creates tremendous pressures and demands on the tooling and the stock.

Because of today's ever increasing demand for increased efficiency, high speed diecutting is pretty much a given. This has prompted dramatic changes in tooling requirements over the last few years. Tolerances are tighter, and the need for precision is significantly greater than just a few short years ago.

One of the questions that came out of the IADD Technical Seminar in California during the last part of January 1997 was: What effect does flute variance have on die life? While it is not possible to know for sure what the questioner meant by

flute variance, let us assume that this is in reference to the various types of fluted board: B flute, C flute, E flute, F flute, etc.. The answer is: Relatively little. The fact of the matter is that correct package design, and the type and condition of the converting equipment, will have a greater impact on tooling than the different types of corrugated board.

Even though I am a toolmaker and have been at this for over thirty years, the fact remains that I have never run a diecutting press, and am therefore at somewhat of a disadvantage as I write and speak about diecutting. A diecutting pressman is much more qualified to address these issues. However, I offer some insight into the subject, because I have tried over the years to befriend as many diecutting pressmen as possible. I have done this for two reasons; first, I respect their knowledge and ability, and second, I recognize that they are a major source of information if I want to learn all I can about diecutting.

A classic example of this occurred a few years ago when I was called into a meeting of pressmen and supervisors in a foam converters plant. As questions were addressed to me, I would turn to the press operator, (whom I realized was very knowledgeable about her job) and encourage her to answer the question.



John T. Gordon,
Jonco Die Co. Inc., Minneapolis, MN, USA

What amazed me was that their press operators already had the knowledge needed to run their presses and solve their diecutting problems, yet human nature is such that the organization felt compelled to call in an "expert" (in this case, me). Despite the fact that I did not run presses, I was considered an authority. In this particular instance, all I did was direct the questions to the real authority. This is by no means an isolated incident. Over the course of my more than thirty years in the business, I have seen this scenario play itself out many times. What lesson can we learn from this? Perhaps it is that we need to take the same type of "partnering" approach with our employees, as we do with our suppliers.

For the purposes of this article, I would like to address the four elements that must be considered in a discussion of cutting die construction as it applies to folding carton versus fluted material. These four elements are: the cutting rule, the creasing rule, ejection rubber, and creasing counterpart.

The Cutting Rule

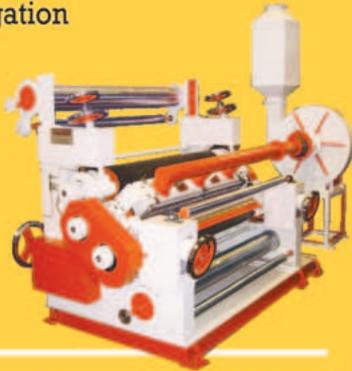
While there are always exceptions, a general "rule of thumb" within the diecutting industry is that folding carton dies are constructed using 2 pt. cutting rule, whereas corrugated dies are constructed with 3 pt. cutting rule. Small fluted

Contd. on - 35



Switch to world-class **Corrugating** to match the quality of your

High Speed Corrugation
Machine
Fingerless Model



Rotary Creaser Slotter Machine



Single Facer Paper Corrugation Machine



Semi-auto High
Speed Stitching
Machine



Double Profile
Corrugation
Machine
Fingerless Model



Thin Knife Slitter Scorer



Shaftless Reel Stand



3/5 Ply Paper Corrugated Board Making Plants

Dilip S Shah's

SUPER CUT

**Manufacturers &
Exporters of**

- 3/5 Ply Paper Corrugated Board Making Plants
- Flexo Printing Machines
- Flat Bed / Rotary Die-cut Punching Machines
- Complete range of Packaging Machineries for Paper Corrugated Box Industry

& Printing Technology

Packaging Projects

Side Flap Pasting Machine



Semi-auto Gluer



Flat Bed Diecut Punching Machine



High Speed Printer Slotter/ Die Cutter & Stacker



Flexo Paper Printing Machine
Two Colour



Rotary Die Cutting Machine



Flexo Board Printing Machine
Four Colour



Fully Automatic Flute Laminator



SUPER CUT INDUSTRIES

Manufacturers & Exporters of Paper Corrugated Board & Box Making Plant

F-5, Nandjyot Ind. Estate, K. A. Road, Safed Pool, Sakinaka, Mumbai - 400 072. INDIA.

Tel.: 91-22-28560049 / 28500052

E-mail.: supercutindustries@gmail.com • Website: www.supercutindustries.com

Integrated Automatic Corrugation Gum Circulating System

The Advance Starch Glue Preparing Technology



58, G.I.D.C., V. U Nagar, Anand, Gujarat,
INDIA. Pin. 388 121

Phone : +912692236357, +912692239495.

Mobile : +919824018853

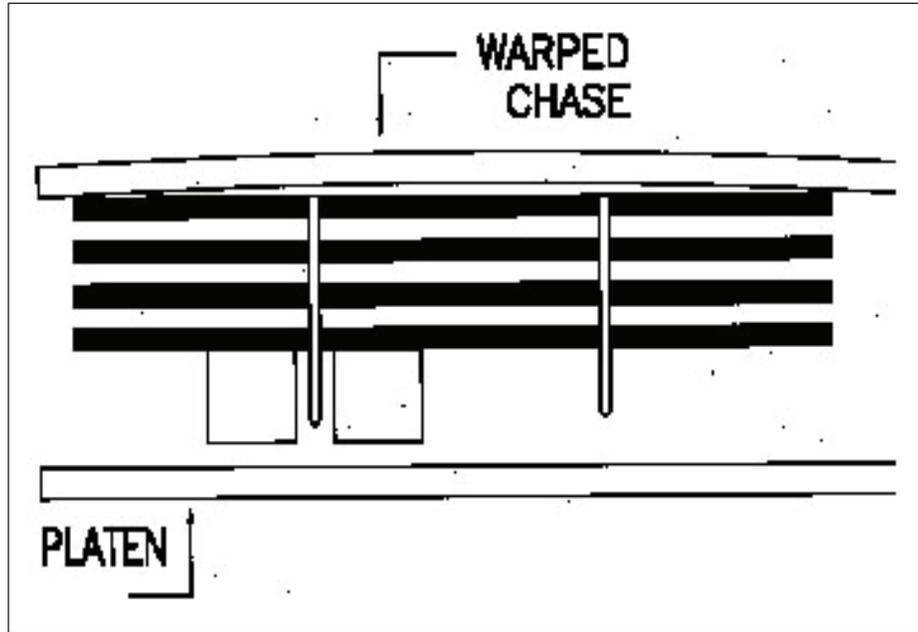
Web : www.npmachinery.in

E-Mail : info@npmachinery.in, prakash@npmachinery.in, npmegum@yahoo.co.in

board responds well to 2 pt. cutting rule, and if the condition of the press allows, we prefer it.

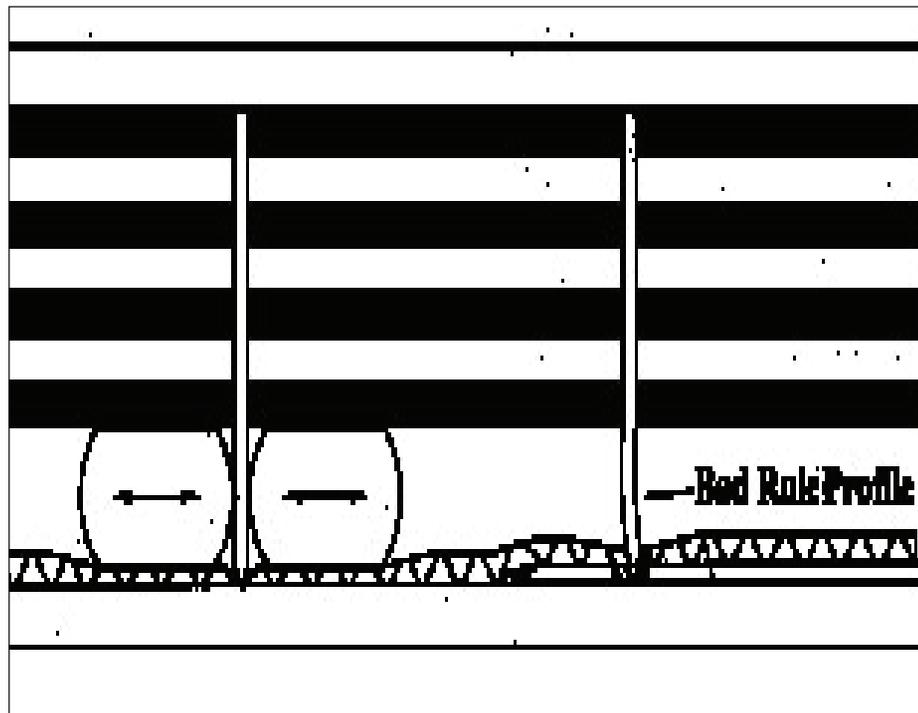
If a press is not level or if the chase plate is warped or bowed, (Figure 1)

The type of rule used for a small fluted board job should be determined early in the process, and with full knowledge of the condition of the press.

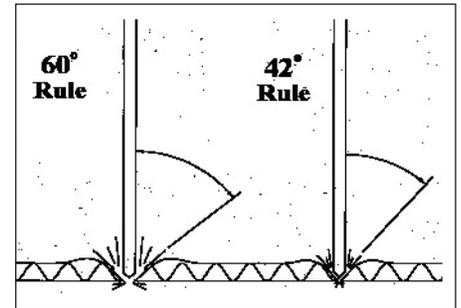


it may be necessary to use 3 pt. rule because the uneven cutting conditions can cause the rule to be flattened after the first few impressions and 2 pt. cutting rule may bend over. (Figure 2)

High speed diecutting requires cutting rule that consistently cuts cleanly, with minimum pressure, allowing for maximum throughput of the press. As a result of this requirement, steel rule manufacturers have tightened their tolerances and created



new products to help the toolmaker. One example of such products is 42 degree beveled rule, a variation from the more common 60 degree (American Standard) or 52 degree (European Standard) beveled rule. (Figure 3)



Forty-two degree rule is an attempt to duplicate the advantages of long bevel or faceted rule. It has long been known that when diecutting thick material, the secondary bevel, which makes the blade thinner, will allow for easier penetration of the stock and improve ejection of the diecut parts. Some dies are being built today using 42 degree rule. A number of converters like it and are convinced it helps; others say they see little or no difference. It depends on the application and the particular needs at the time. A good illustration of this can be found in our experience making tooling to cut gaskets. A few years ago when for health concerns, asbestos was removed from all gasket material, gasket makers found the replacement material difficult to cut and experienced dramatically shortened die life. We spent a considerable amount of time experimenting with both hardness and bevel of rule. In this particular instance, we achieved a fair level of success using extra hard, steeper beveled rule.

Late last year we toured a major Japanese steel rule manufacturing facility. The production processes were so advanced and automated, that one could not help coming away impressed. Our first impression was that they were shaving the rule, but upon questioning, we were informed that the rule was being ground. The advent of precision, high speed grinding with heat treating on the fly, and the resultant availability of very



COLD GUM MIXING MACHINE

The Advance Starch Glue Preparing Technology



58, G.I.D.C., V. U Nagar, Anand, Gujarat,
INDIA. Pin. 388 121

Phone : +912692236357, +912692239495.

Mobile : +919824018853

Web : www.npmachinery.in

E-Mail : info@npmachinery.in, prakash@npmachinery.in, npmegum@yahoo.co.in

precise ground rule gives toolmakers and converters options that did not exist just a few short years ago.

Let us consider for a few minutes the cutting of paper in a platen diecutter. The knife blade enters the stock and cuts. It cuts almost all the way through the paper and then “bursts” it apart. The last bit of separation is not a cutting action at all, but rather, a “breaking apart” of the fibers that hold the sheet together. While the degree of bevel may, or may not, be a critical factor for most applications, the sharpness of the cutting rule will always be a critical factor in successfully diecutting any material.

Diecutting fluted board presents unique challenges. Fluted material consists of a flat liner, then a wavy medium and then another flat liner. These three are held together with starch, which is applied at the corrugator during the corrugation process. As with carton stock, it is imperative that the cutting rule be sharp, because the rule will first cut the initial liner, then the medium and then it will begin to cut the last liner, finally “bursting” it apart. (Just as we observed above when we talked about diecutting carton stock.)

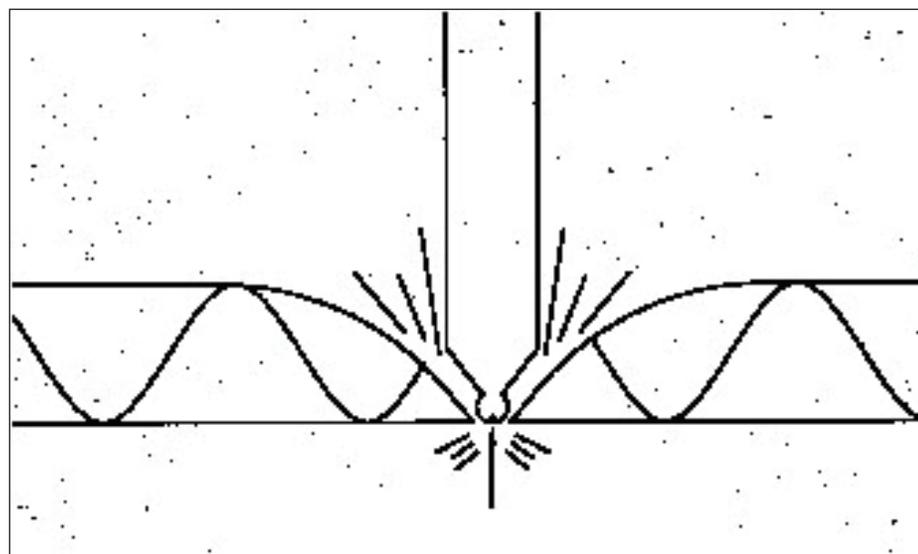
Dull, damaged, or flattened knife will cause damage to the stock and create excessive dusting or angel hair. (Figure 4)

This becomes critical if the cartons being produced are for food or pharmaceutical

products. Electronics packaging also requires extreme cleanliness. In fact, most of the boxes manufactured today require clean diecutting. In an effort to minimize dusting, rule manufacturers offer various coatings. These coatings are effective in some applications. Once again, we emphasize the need for level presses and good maintenance programs to keep diecutting equipment in excellent running order. This is a necessary discipline if the diecutting process is to reap full benefit from the technological improvements of modern diecutting tooling.

A number of years ago, rule manufacturers introduced shaved rule. This was met with considerable enthusiasm within the industry.

The advantage for the manufacturer is obvious, with the potential for increased production, and the ability to hold tighter tolerances. The advantage for the converter is less clear cut. We know from our experience in manufacturing tooling for corrugated, carton, and the specialty markets, that there are a lot of materials that require the use of ground edge material as opposed to shaved edge. Whether the rule is ground edge or shaved edge, the most significant factor is that it must be sharp, and the best way to achieve this is to ensure that the press platens are well maintained, and level enough to kiss-cut.



This material was first presented at the April IADD Technical Seminar in Chicago. The presentation was designed to address the questions raised during the January IADD Technical Seminar in California. The first of a 3 part series.

This article is reprinted with permission from the International Association of Diecutting and Diemaking's monthly magazine, The Cutting Edge, August 1997.

The IADD is an international trade association serving diecutters, diemakers and industry suppliers worldwide. IADD provides conferences, educational and training programs, a monthly magazine, online resource library of 660+ technical articles, industry experts to answer technical questions, publications and training manuals, recommended specifications, online used equipment marketplace, videos and more. IADD also co-presents Odyssey, a bi-annual trade show and innovative concept in technical training featuring a hands-on Techshop where training programs come alive in an actual working diemaking and diecutting facility inside the exhibit area. Visit www.iadd.org or call 1-815-455-7519 for more information.



GUM CORRUMIX - The Glue Kitchen

The Advance Starch Glue Preparing Technology

We, GUMCORRU MACHINES, The Pioneer manufacturer of Glue & Adhesive Processing Machinery is having a wide and quality making experience Since 1988. Because of grant support of our valued customer providing them complete Glue preparing solution and improving quality standards and their satisfaction of our after services offered, we have been accepted as the reputed suppliers in corrugation Industries. YOU NEED, WE SUPPLY.



First time in India.
Our successful installations.



2214, G I D C, V U Nagar, Anand, Gujarat India.

Phone : +912692236357, +912692239495.

Mobile : +919824018853

Web : www.npmachinery.in

E-Mail : gumcorru@gmail.com

A unit of N. P. Machinery & Equipments.

More than 100 Successful
Installation Across India.



AS 009 - Semi Auto 2 pcs. Box Stitcher



AS 016 - Semi Auto Stitcher
AS 016A- Semi Auto Stitcher with Servo Drive



Optional Available:
Auto Wire Feeder for 30kg Coil

AS 027 - Semi Auto Gluer



AS 2009 S/G - Fully Auto Stitcher / Gluer



TCM

TCM - Made in Taiwan

High Speed Automatic & Semi-Automatic Stitching and Gluing Machines

Salient Features of TCM

Two Piece Box Stitcher AS 009 with (servo drive)

- 1) Made in Taiwan
- 2) High Speed Stitching
- 3) No Training Required
- 4) With Touch Screen Menu
- 5) Three minute quick order change
- 6) Single/ Double and Tie nail stitching (//////, // // // //, // // // //)
- 7) Max Sheet Size: 3000(L+W)x2 = 6000 x 2850mm
- 8) Automatic Counter Ejector

Semi Auto Stitcher

AS016A with (Servo Drive & Touch Screen)

- 1) Made in Taiwan
- 2) High Speed Stitching
- 3) No Training Required
- 4) One minute quick order change
- 5) Single/ Double and Tie nail stitching (//////, // // // //, // // // //)
- 6) Max Sheet Size: 3700 x 1515mm
- 7) Automatic Counter Ejector

Semi Auto Gluer AS 027

- 1) Made in Taiwan
- 2) Roller type gluing (continuous gluing) or Extrusion type: 2 or 3 line extrusion with PLC
- 3) Outside flap Gluing possible in Extrusion type
- 4) No Training Required
- 5) Max Sheet Size: 2740 x 1515mm
- 6) Automatic Counter Ejector

Complete Sales and Service Support by



SUPACK AUTOMATION

Pattni Bldg., Ground Floor,
Dhebar Road, Rajkot - 360001
Gujarat - INDIA

Email : sa@supack.com

Contact: Mitul A Shah

Phone: +91 281 2783331

Mobile: +91 98242 20250

Shear LINE



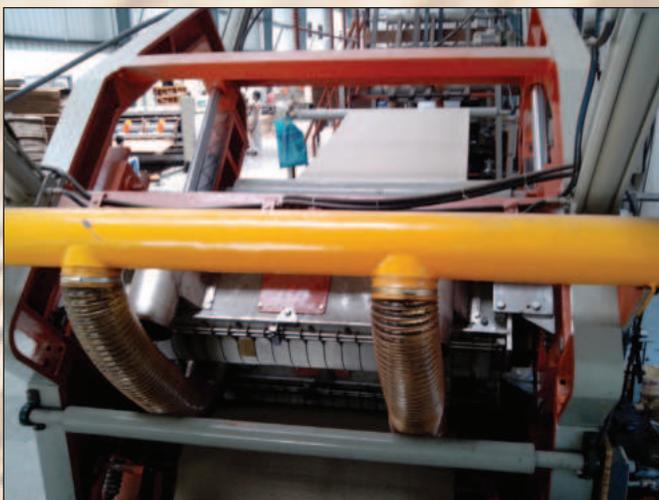
New

Fingerless Double Profile Single Facer



Superior Technical Features

- **Design Speed:** 70Mt/Min.
- **Available Sizes:** 12" [300 mm] AND 14" [350mm]
- Vacuum Suction Fingerless Design driven by heavy duty blower provides perfect flute formation
- **Pressure Roll Dia:** 305mm.
- **Twin Flute Structure:** One Flute Unit working and another ready for immediate order change.
- Heavy Duty Quick Roll Change Cassette System controlled by Hydraulic System for change of flute rolls.
- Corrugated Rolls Made of Special Alloy Steel.
- Built in Pre heating & Pre-conditioning Rollers ensures absolutely secure bonding.
- Heavy duty Hydraulic Power pack.
- Gum Circulating System.
- A. C. Drive for speed control.
- **Available Width:** 1200-2200mm.
- **Flute Profiles:** A,B,C,E, or as per requirement.



SHEARLINE MACHINES PVT. LTD.

B-6, Rupal, Shivaji Chowk, Daftary Road, Malad - East, Mumbai-400097. India
Tel:- +91 9821 031103 / 98210 54833
E-Mail: corporate@shearline.in ● www.corrugatedbox.com

MACHINES THAT MAKE BETTER BOXES *from* DOSHI



3-Colour Flexo Printer



Flat Bed Die Cutter

Super Shear Line is dedicated to the development and manufacture of innovative machines for the corrugated packaging industry.

In keeping with the trend of the industry which is swiftly switching to Automatic Process – we have developed complete In-line Corrugators, ranging from- 32” 3ply Eflute Plant to 80” 5ply Plant with Numerical Control System



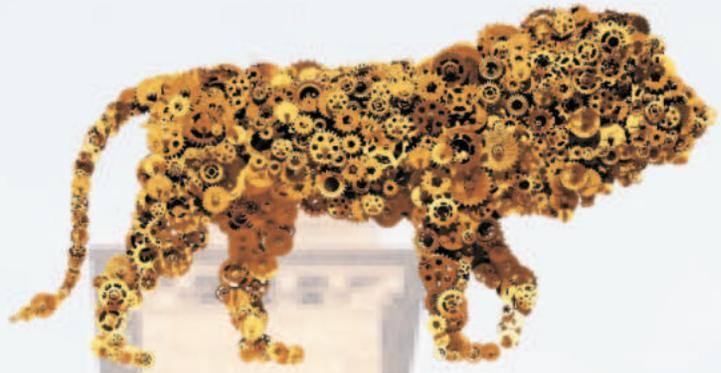
Hydraulic Waste Baling Machine



In-line Automatic Corrugating Board Plant

SUPER SHEAR LINE

B/ 305, Rupal, Shivaji Chowk, Daftari Road, Malad (East), Mumbai- 400 097.
E-mail: info@shearline.in • www.corrugatedbox.com • www.shearline.in



European technology now in india

PRODUCTS

- **ROTARY DIES**
For all corrugated cartons
- **FLAT DIES**
For folding cartons and corrugated cartons
- **STRIPPING DIES**
Pinless for folding and corrugated cartons
- **FLEXIBLE DIES**
For labels cutting
- **WOODEN CRAFTS**
3D wood puzzle and wooden clocks



MANUFACTURERS OF
LASER CUT ROTARY DIES
FLAT DIES & LABEL CUTTING DIES

We are Shakti Packaging, Morbi (Gujarat) based company engaged in corrugated box industry since 2003, as a diversification we are entering in to rotary and flat die manufacturing with European technology by laser cutting. Laser cutting machines and highly sophisticated die cutting machinery to give our customers the best possible quality.

The new technology involves innumerable number of innovative techniques to improve the die quality. Immaculate computer aided designing, precision laser cutting, optimum knife joints, perfect rule fit in the Die board, perfect ejection rubber are just a few quality features to mention.

The emphasis is on dimensional accuracy, high cutting performance and long life of the Die for more number of impressions. Technology & training, highest quality standards of raw materials, highly skilled technical man power contribute to an unparalleled perfection and innovation in Die making.

Flexible dies, a revolutionary product for cutting, creasing, perforating and embossing in the printing and packaging industry. All these processes can be done inline in a single pass, which ensures tremendous efforts and time saving.

We strive to satisfy our customer's demands and needs every time. The customer is king. The implication of this concept is very important for our management and it is adopted by the entire organization.

KESHAKA®

Corrugated Board Sheet Pasting Machine



FEATURES

- Only on one side, two hand wheels are provided in the machine for setting gum rollers and pressure rollers instead of 4 hand-wheels provided in conventional machine
- Gum and pressure-rollers automatically set on the other side of the machine. No need to set the roller on the other side.
- Gum and pressure rollers can be set in microns as desired.
- Saves time and gum and the final product dries soon because of the minimum gum application
- All rollers are balanced, ground and hard chrome placed regulating life of the machine
- All rollers are fitted with ball bearings resulting in smooth running
- Rubber seals provided on both sides of the rollers for protection of ball bearings from water while cleaning the machine after the end of shift.
- Robust construction and excellent finish.
- Available in sizes of 65", 75" and 85". Other sizes as required can be supplied on request.



Manufacturers :

KESHAKA WORKS

14, Ishwar Bhavan, 'A' Road, Churchgate, Mumbai - 400 020.

Tel.: 22040083, 25823857, 25837517 TeleFax: 022-22871412

E-mail: poddar_kamal@yahoo.com Web Site: www.keshaka.com



GCBMA AGM & Seminar

The 46th GCBMA AGM was held on 14th September. Shri Prahladbhai Patel was re-elected as President.

A Seminar on “Competing in VUCA (Volatile, Uncertain Complex & Ambiguous) World” was organised on 15th September.

Shri Nital Zaveri (CEO & Director of Concept Business Excellence Pvt. Ltd., was the speaker.

There were cultural programmes in the evenings. About 300 members attended.

Both the events were held at Ramada Resort, Kumbhalgar Rajasthan.



UPCBMA – Kanpur Chapter

Technical Seminar & Corru Expo.
UPCBMA – Kanpur Chapter organized the seminar on 3rd October, 2018 at prestigious Cawnpore club, Cantt Kanpur.

The Chief Guest was Mr. U. C. Shukla - Director MSME –Development Institute, Govt. of India, Ministry of MSME, Kanpur. Subjects covered Inventory Control:

Speaker: Mr. Amit Jain, Director, Girnar Packaging, Indore.

In his presentation he elaborated a very easy method for the space utilization and the inventory control in conventional plants. His presentation was appreciated by all the participants. Happiness & Motivational Talk:



Speaker: Mrs. Vandana Srivastawa, Director MindMiracle, Kanpur. Mrs. Vandana is a well known motivation speaker and happiness coach. In her presentation she described the techniques to remove negative feelings and create happy movement in our life.

The Seminar was presided by Mr. Naveen Jain Past president, Kanpur chapter. Nearly 125 members from Kanpur, Lucknow, Varanasi & Noida attended.

Everyone appreciated the efforts done by Chapter President Mr. Sandeep Aror and Mr. Anand Bhatia - Chapter Secretary & their team members Amithabh Tiwari, Mr. Vivek Kanodia, Mr. A.S. Dhawan, & Mr. Sandeep Pantni

Mr. S. K. Singh (Chapter past president, 2014–2016) presented the Mementoes to all Sponsors and guests., He proposed vote of thanks and invited all for cocktail and dinner.





Global Pack 2018

The New Market Development Committee, under the aegis of FCBM participated in the Global Pack – 2018 International Exhibition & Tech Summit held in Labh Ganga Exhibition Centre, Indore, Madhya Pradesh from 23rd to 25th November, 2018.

The event was supported by leading Industry associations, including FCBM and MPCBMA and SIES School of Packaging.

FCBM had a stall at the exhibition, which experienced a footfall of several hundred visitors over three days. Swatchh Bins as well as conventional boxes displayed at the stall generated a lot of interest.

FCBM also had its presence in the Tech Summit, where Shri Ram Kumar Sunkara made a presentation on Latest Trends in Corrugated Packaging. With his usual flair, Shri Sunkara held the sizable audience at the convention centre glued to his informative and educative deliberation on Smart corrugated packaging and new developments like High strength and Coated corrugated boards.



Shri Sunkara also talked about innovative usage of corrugated material for “beyond packaging” applications.

With the aim of increasing visibility of FCBM and to propagate the use of corrugated packaging pan India, our participation in the Global Pack – 2018 at the heart of India, was another step towards achieving this goal.

The event would not have been possible without the active participation of MPCBMA members, particularly, Shri Vineet Jain and Shri

Amit Jain. Shri Sanjeev Sureka, VP, Shri Aditya Modi, VP, Shri K. K. Khore, Hon. Secretary, Shri Manish Ranka, Treasurer and the entire MPCBMA Team who contributed wholeheartedly to the success of the event.

Like all other events of the FCBM organised this year, our enthusiastic and energetic FCBM President, Shri Pradip Bosmaya made his presence felt at the FCBM stall, that provided immense encouragement and motivation to youngsters and seasoned members of the corrugated fraternity to participate in future regional and national events of the federation.

The event was also attended by Shri Hemant Saraogi and Shri Milan Dey of the NMDC.





Vidarbha Division

The 3rd MC Meeting of WIMA was held at Nagpur.

Vidarbha Division of WICMA was the host.

Later the AGM of Vidarbha Division was also held.

A Seminar was also organized on Short Runs in Semi Automatic Process – A Road Map.

Shri. Ramkumar Sunkara, Shri Shridhar Prabhu and Shri. Anil Loya were the speakers.

A Citation on the Late Shri. Vinod Chowdhury was presented to his son.



Practical course in testing held on 15 to 17 November, 2018 at WICMA R&D Centre

10 students attended the course out of which 8 were members and 2 nonmembers.

Students from Kolkata, Nashik, Mumbai, Tamilnadu, Himachal Pradesh etc attended the course.



91st AGM of FICCI

The 91st Annual General Meeting of the Federation was held on the 14th & 15th December. Shri Arun Jaitley, Hon'ble Finance Minister of India Inaugurated the AGM on the 14th December, 2018. The Theme for this year's AGM was "Building New India".

The AGM was attended by Mr. B.K. Hari of FCBM.

Immediately after the Inaugural Session, an Exclusive Interactive Meeting was held with the Member-Bodies of FICCI from across the country.



The Interactive meeting was attended by Mr. K. Arunachalam the newly, elected President.

There was a Special Session on GST, Mr. Upender Gupta, Commissioner, GST Policy Wing, Central Board of Indirect Taxes and Customs, Ministry of Finance, New Delhi and Mr. Prakash Kumar- CEO, Goods and Services Tax Network, New Delhi addressed the audience.



A Rare Tribute

The bust of Late Shri. M. K. Ramasami – veteran of Corrugated Box Manufacturing industry and Founder President of SICBMA and Past President of FCBM – was unveiled at Jayant Tech Park, Chennai.

Shri. M. K. Ramasami was dedicated to the growth of FCBM and was actively involved till he passed away at 99.

A rare tribute and a great honour to a Corrugator.



Creative Ideas With Corrugated

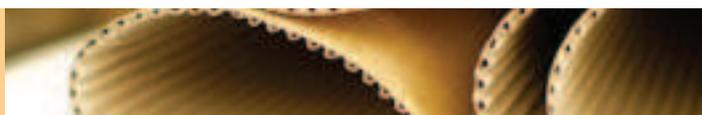


Cardboardia is an independent community of artists, performers, event managers and experts with various backgrounds from Russia, USA, UK, the Netherlands and other countries. They design, create

and experiment with both the most unbelievable and the very practical ideas in relation to the organization of public spaces and events.

Cardboardia is the world's biggest exporter of designer - made cardboard furniture, shop window displays and decorations.

For More Info Visit: Made In Cardboardia





CFM has devoted itself to corrugating roll coating techniques since founded. The comprehensive knowledge of CFM in flute profiles and HVOF spray systems enables extreme hardness and perfect coating. With the guarantee of high abrasion and corrosion resistance and impeccable precision, CFM has emerged as the leading corrugating roll manufacturer.

LITTLE PARTS, BIG DIFFERENCES!



100 MILLION EXPERT

CHING FENG MACHINERY CO.,LTD.
慶峰機械有限公司
<http://www.cfmm.com.tw>

TEL:+886-2-2680-6655(REP.); FAX: +886-2-2680-3730
ADD:No.170, Sec.1, Gan Yuan Street,Shu Lin District,
New Taipei City, TAIWAN R.O.C
E-mail:choutpei@ms24.hinet.net

Sole Selling Agent in India

JHALANI KAMLEH OVERSEAS

TEL:+91-11-2629-5700; FAX:+91-11-2629-5800
ADD:R-252, GREATER KAILASH PART-I, NEW DELHI-110 048
E-mail:jhalanikamleh@vsnl.net

High-Quality And High-Performance Inline Flexo-Folder Gluers From Mini to Jumbo Size And Rotary Die-Cutters Are Covering The World



Fast-Set FFG

Jumbo inline FFG is also available — Call us for more information

USA:
Tel: +1 855 563 5396
Em: lhead@latitudemachineryusa.com

Indonesia:
Tel: +62 21 5315 0458
Em: sales@ptfja.com
formosajayaabadi@ptfja.com
formosajayaabadi@gmail.com

Japan:
Tel: +81-3-3600-3775
Em: +81-3-3608-3976
Em: machine2@tc5.so-net.ne.jp

Korea:
Tel: +82 31 481 9911/2
Fax: +62 31 481 9922
Em: seecoi@naver.com

Turkey:
Tel: +90 216 441 0243
Fax: +90 216 441 0291
Em: kiray@kiray.com.tr

France:
Mob: +33 650 13 58 78
Tel: +33 981 02 57 14
Fax: +33 981 38 58 88
Em: michel.heuze@gmail.com

Egypt:
Tel: 0020-35 827 333 & 0020-35 860222
Fax: 0020-35 827444
Em: info@deltatradeg-eg.com

North Africa:
Tel: + 21 671857001
Fax: +21 671857080
Em:sami.sidhom21@gmail.com

UK/Ireland:
Tel: + 44 1622 873187
Fax: +44 1622 873287
Em: info@gtseurope.co.uk

Russia:
Tel: +74 95 665 4798
Fax: +74 95 665 4798
Em: gofrosys@gmail.com

India:
Tel: ++91 1126295700 & 26295800
Mob: ++ 91 9711722412
Fax: ++ 91 11 26136899
E-mail: kamleho@vsnl.com

Greece:
Tel: +302103420668 & +302103410157
Fax: +302103420668 & +302103410157
Em: info@bourmiasgroup.gr

South America:
Tel/ +54 11 4545 490
Fax: +54 11 4545 6900
Em: info@comerciodigital.us

Italy:
Tel: +39 5198 1807
Fax +39 5198 0936
Em: info@bimac-srl.it

Spain/Portugal:
Tel: +34 93 594 6217
Fax: +34 93 594 2377
Em: info@siie.com

*Global Design
Local Support*



Latitude Machinery Corp.

Tel: +886 3 497 0929 • Fax: +886 3 477 1099 • E-mail: sales@lmc.com.tw
Web: www.lmc.com.tw



Nov-30, Dec-01 & Dec-02 2018

47TH CONFERENCE OF FCBM

Experience The Future Here

[Book Now](#)

[View Schedule](#)



WAY FORWARD
For Corrugated Packaging

CORRUTECH
EXPO





47th FCBM CONFERENCE

30th November to 2nd December 2018, Chennai Trade Centre, Chennai



The Traditional Nadaswaram Welcome



While the rush for Registration of Participants continued CORRUTECH Exhibition was Inaugurated by **Hon'ble Shri. M.C. Sampath, Minister of Industries Govt. Of TamilNadu.**

The exhibition was declared open early 30th November giving maximum benefit to Exhibitors as well as visitors.





The reverberating Vedic chant marked the auspicious beginning of 47th FCBM Conference.

The 3 - day annual event marked the end of a vibrant 2018 and the beginning of yet another event - filled 2019.

Inaugural Session

The stage was set for the grand welcome to Presidents of Regional Associations. The presence of nearly all Regional Presidents further reiterated fraternal feeling among FCBM members and the true National stature of our Federation.

The Conference was inaugurated by **His Excellency Shri. Banwarilal Purohit, Governor of TamilNadu.**

The presence of Industries Minister in the morning and the Governor in the evening created a VIP aura to the event.

SICBMA proudly celebrated its Golden Jubilee in the presence of a galaxy of VIPs, dignitaries and large number of corrugated box manufacturers from across the country who were present as participants to the Conference.





Welcome Address



Presidential Address



Address by President Elect

Presentation of Awards



Mr. Greesh Sardana
Receiving Harlalka Award



Mr. K. P. Singh
Receiving Harlalka Award on behalf of
Mr. Sushil Kumar Sood



Shri B. K. Doshi Award presented to
MKB Print & Pack Solutions (P) Ltd., Kolkata



Special Achievement Award to Ram Kumar Sunkara; Milan Dey; Amit Jain; Ankkit Agarwal



We Congratulate Dr. Pallavi Manoj Patil, Partner, Pee Bee Packaging Industries, Kalyan, on her being awarded Ph.D. from Savitribai Phule Pune University.

The topic of research being related to corrugated box packaging industry, Dr. Pallavi Manoj Patil took this opportunity to thank WICMA for encouraging and supporting the research.

The area of her research and the subject of her thesis aligns with the interests of the corrugated packaging industry and the findings will be of immense value to the industry

FCBM presented a Memento to Mr. Pallavi Manoj Patil at the 47th FCBM Conference held at Chennai.





Corrustar 2018 Winners

1	Consumer Pack Manali Cartons, Chennai
2	Transport Pack Jayaraj Fortune, Guntur
3	Material / Fitments Sai Packaging Industries, Pune
4	Innovation Manali Cartons, Chennai
5	POP Display Ace Enterprises, Mumbai
6	Beyond Packaging Ace Enterprises, Mumbai

Felicitations to Veterans



Mr. Ashok Vyas receiving the Prestigious Award as The Chief Advisor to SICBMA Conference at the hands of the Governor of Tamil Nadu



Inaugural Address by the Chief Guest



K. Rajasankkar, Conference Chairman;
A. P. Amburaj & K. Krishna Reddy, Co-Chairmen
Presenting Memento to the Chief Guest



Technical Presentations

Technical Presentations and Panel Discussions encompassed a range of subjects structured around the theme



The subjects included:

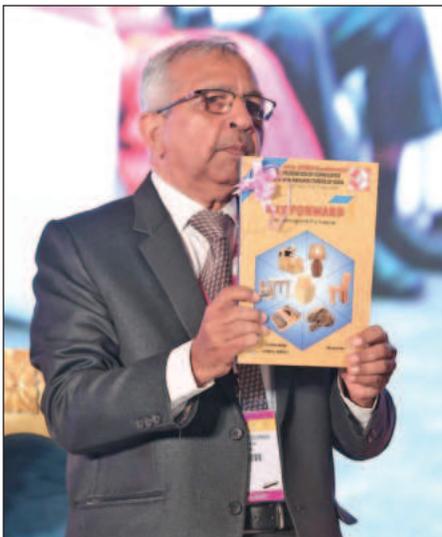
Strategies to fight low Price Competition; Weight Ratio for achieving Correct balance between Liners and Medium for optimizing Compression Strength and Cost; Square Meter costing of corrugated boxes; Advances in digital flexo plates; New age printing concept from CONPRINTA; Manufacturing cost per sq. meter or per kg cost of corrugated board; Cluster Development for corrugated box industry; Government subsidies that a corrugator can avail... And... The Way Forward for the Next Gen... And... A view by corrugated box users on 'Way Forward' for the corrugated box industry.



Profile of speakers included: Experts from Corrugated box industry; largest users of packaging suppliers to the industry etc.



Presentation of Mementoes



A colourful Souvenir was released to mark the event



Behind the success are efforts made by the Conference Team, under the advice and guidance of Mr. Ashok Vyas Advisor to the Conference

The 47th FCBM Conference was a success on many counts.

The number of participants was nearly 800 – a record by itself!

There were 13 Technical Presentations including Panel Discussions.

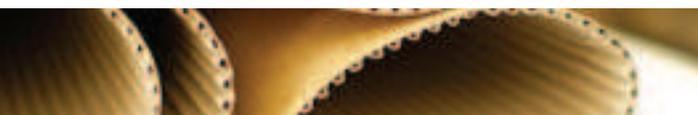
4 Cultural programmes.

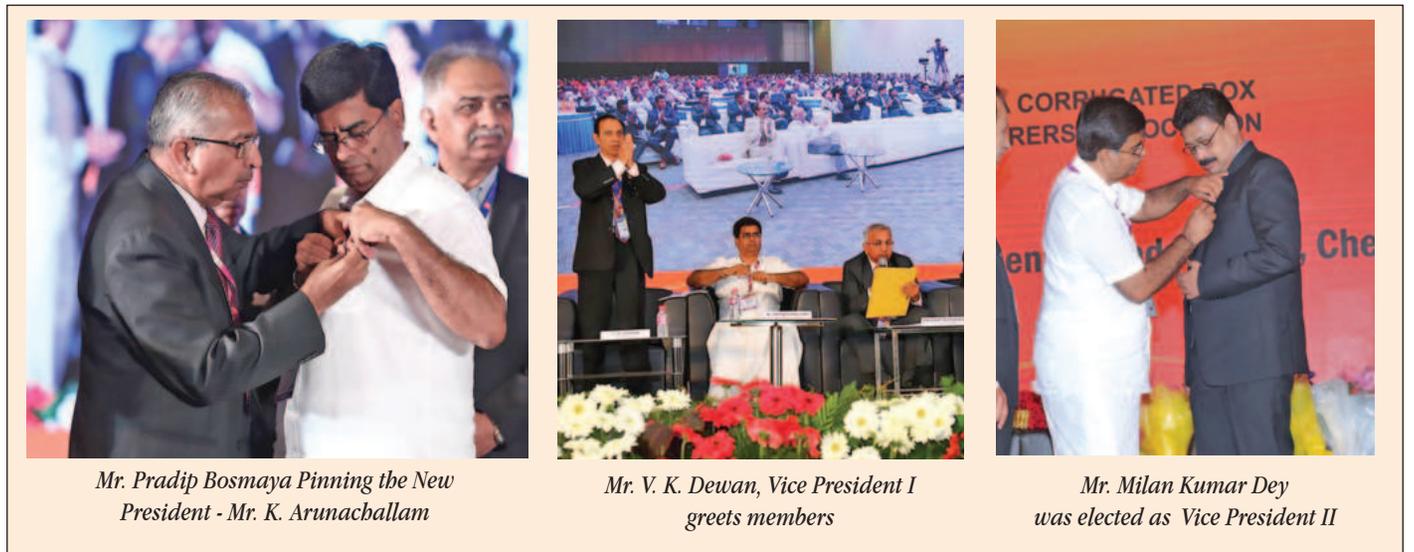
Representatives from 11 Regional Associations Attended. There were 78 stalls in CORRUTECH - the concurrent event.

The footfall at the Corrrutech was close to 3500.



Cultural Programmes





Mr. Pradip Bosmaya Pinning the New President - Mr. K. Arunachallam

Mr. V. K. Dewan, Vice President I greets members

Mr. Milan Kumar Dey was elected as Vice President II

The 46th Annual General Meeting of FCBM was held on 2nd December 2018. Mr. K. Arunachallam took over as President, Mr. Milan Dey was elected as Vice President II.

Mr. Pradip Bosmaya recalled his tenure and thanked all members for their support and cooperation.

Mr. K. Arunachallam, in his acceptance speech said that he will work hard to match the high performance record set by his predecessor and he will endeavour to make FCBM as an industrial body that others will emulate.



Team FCBM 2018-19

K. Arunachallam
President

V. K. Dewan
Vice President I

Milan Kumar Dey
Vice President II

Deenu Shetty
Hon. Secretary

Vinay Patel
Hon. Treasurer

Pradip Bosmaya
Ex-Officio





STARCH MIXING SYSTEM

CE&UL APPROVED

- ✓ Reliable
- ✓ Hi-Performance
- ✓ Low cost of ownership
- ✓ Low Investment



The full automatic starch system pioneers an entire industry
SINCE 1963

INSUN

AUTO FOLDER GLUER + DOUBLE STITCHER + COUNTER EJECTOR + BUNDLER



Semiauto Stitcher

Manufactured by
InSun Co., Ltd.

64, Hwanggeum 2-Ro, Yangchon-Eup, Gimpo-City, Gyeonggi-Do, Korea 415-843
Tel.: +82 32 564 5013, Fax:+82 31 997 5014, Email : insun@insunco.com,

India Office:

Address : Plot No. 26, Metha Nagar, M.M.C. Post, Chennai - 600 051.

Mobile : +91 98849 50600

www.insunco.com

Specifications			
Model No.	OMEGA-23 / ES-23	OMEGA-28/ES-28	OMEGA-32/ES-32
Max. Sheet size	700 x 2,000 mm	1,200 x 2,500 mm	1,200 x 2,900 mm
Min. Sheet Size	250 x 600 mm	300 x 900mm	300 x 900 mm
M/C Dimension	2,800 x 12,000 mm	3,100 x 13,000 mm	3,500 x 13,000 mm
Max. Belt Speed	200 M/Min		
Max. Stitching Speed	120 Sheets/Min (OMEGA Model) 100 Sheets / Min (ES Model)		

Here's How You Can Make Your Primary Packaging Stand Out

Corrugated Increases Efficiency and Allows You to Say More With Your Packaging

What is the packaging that is directly seen by your customers made of? If it's not already corrugated, you might be part of the minority soon. More and more businesses are switching to corrugated as their choice material for their primary packaging.

Corrugated isn't just for shipping anymore. With many different capabilities for your business to take advantage of, you can turn your primary packaging into a top marketing material easily without hurting your wallet.



Primary packaging is the packaging that touches the product, and the style and design can vary whether it's sitting on a warehouse shelf, in a retail store, or being shipped directly to the customer. However, no matter where your product ends up, the goal of your primary packaging is always the same — gaining the attention of your customer.



Your primary packaging is meant to provide protection but also communicate a message. Who are you and what does your brand represent? When customers are shopping, or they're unboxing an order, there's not a lot of time to make an impression. For potential customers roaming the aisles, you want to grab them and convince them to buy your product. For customers who have already made a purchase, reinforcing your brand can help encourage repeat orders.

Primary packaging has to be flexible to meet these demands, and what better material for the job than corrugated?

In today's packaging trends, corrugated is being counted on time and time again for its ability to check off the boxes for what businesses need.

Want Your Corrugated to Put in the Work? Consider Using it as the Material for Your Primary Packaging

If you went into a store, you'd likely see more corrugated used as displays, stands, and packaging than you used to. With the ability to print designs and colors exactly





FLEXO PRINTING

■ THE FIRST CHOICE

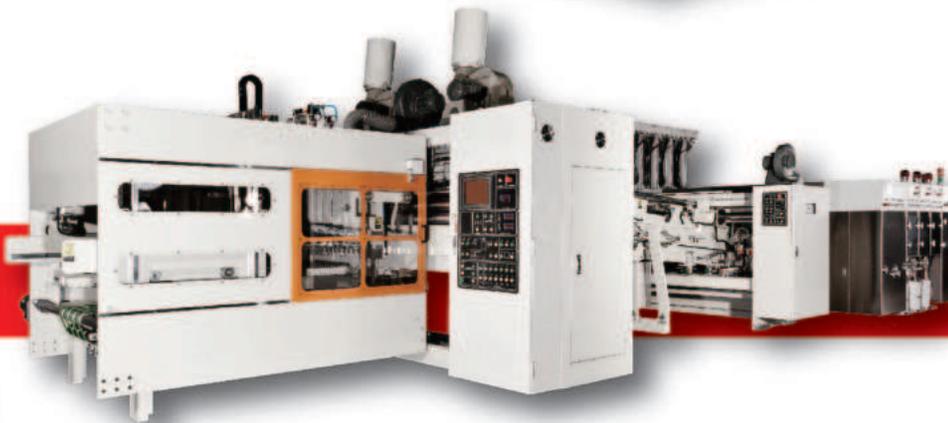
MACHINE

CORRUGATED BOARD AND BOX MAKING MACHINE

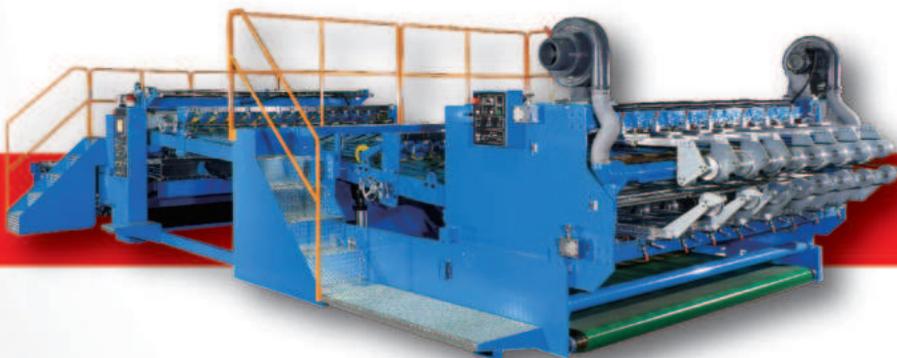


35
YEARS

Flexo Printer



Folder Gluer



Bundle Stacker



LIAN TIEW

MACHINERY INDUSTRIAL CO., LTD.

how you want them, corrugated is readily used to engage and delight customers as they shop. Advances in printing and finishing technology have made it easier than ever to have a great looking product. The e-commerce industry uses the same technology for businesses looking to make their packages stand out when they arrive on your doorstep.

While corrugated is still a leader in protective shipping packaging, marketing and brand recognition add to the ROI by helping to continue to remarket to customers once their order arrives.

But this is only one of the benefits that corrugated brings to the table as a primary packaging material. New consumer purchasing experiences are changing the way that people interact with the products they want to buy, which means that your packaging has to adapt as well. For example, more and more people are shopping and ordering the things they want online. Without that first touchpoint with your customer, it all falls on your packaging to make a good impression.

With corrugated, you can customize the material to reflect your brand to create a positive experience for whoever picks up your box.

Corrugated is also cost-effective. You won't be hurting financially to create primary packaging that delights, and it will also be easy to see the ROI once the packaging is in front of customers.

Corrugated is a relatively inexpensive material, and the switch can help you see money saved within your supply chain. Because it's such light material, it's cheaper to ship and easier to load and stock in stores. One example of this is creating shelf-ready packaging to ship directly to retailers. With corrugated containers you can also pack more efficiently, meaning you'll be able to fit more product on a truck. Maximizing the truck's capacity will decrease the number of loads needed to ship your orders, increasing the amount of freight savings!

The other benefit of using corrugated is one that we've been talking about for a while — sustainability.

Businesses are switching to corrugated as their primary packaging material because of its ease to recycle and reuse. Corrugated is one of the most recycled materials in the world, and you can even get packaging that is made of recycled material. The positives here are twofold. First, you'll be able to save money by using recycled materials. Second, you're going to increase the positive brand awareness for your business. Consumers want to see brands that care about the environment. Encouraging them to recycle your packaging, and making it easy to do so, will help strengthen the relationship with your brand and inspire them to purchase from you again.

If you want to improve your packaging, whether it's your shipping boxes or retail displays, consider implementing corrugated as your primary packaging material. Your business will be able to save money and make an impact just by making this simple switch.

Source: <https://jamestowncontainer.com/make-your-primary-packaging-stand-out/>



Portable Dog Food Packaging Which Provides A Limited Supply Of Food And A Food Bowl

Top Paw re-thinks the identity of PetSmart by introducing a new line of dog food packaging. The Top Paw dog food packaging sports a clever design, making this portable box convenient and multifunctional for dog owners. The package provides a limited supply of food and a food bowl in one. To raise brand awareness of Top Paw, it can be given away as a gift to new adopters at animal shelters. The first moments shared with your new pet is invaluable, and this precious time can be shared with Top Paw.





Folder Gluer and Stitcher Machine



Auto Flute 3/ 5 PLY Laminator

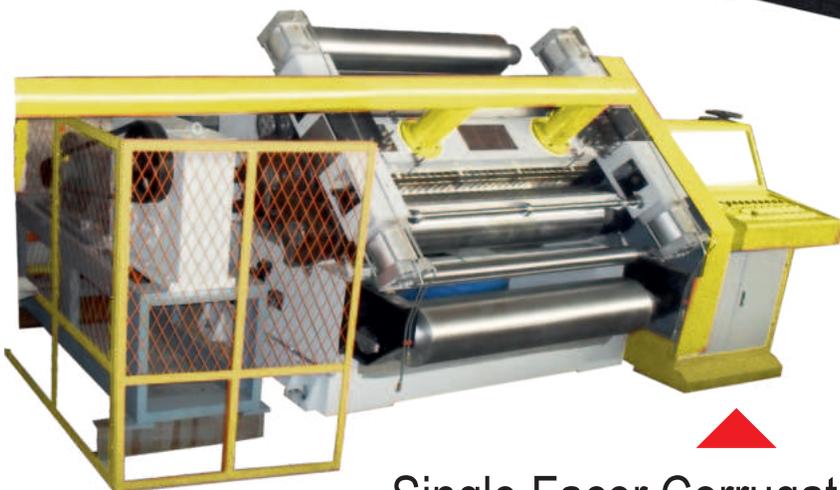


**PRINTPACK
ENGINEERS**

Producers & Importers of
Complete Corrugation Plants
& Box Making Machinery



Lead Edge Printer Slotter Die Cutter



Single Facer Corrugation Machine

5B-50, Mittal Industrial Estate, Andheri - Kurla Road,
Marol Naka, Andheri (East), Mumbai - 400 059. India.
Tel.: 91-22-2850 9034 / 2850 4740
Fax : 91-22-2850 6319

Email : info@printpackengrs.com
sales@jiyaprintpack.com
sales@printpackengrs.com
Web : www.printpackengrs.com

DualBox™

The new formula for
productivity excellence



EMBA is revolutionising box production again with its unique Ultima™ technology platform – this time with a solution that enables doubling production capacity of RSC boxes by using:

TwinFeed™ + XL Slotter = DualBox™ = 2x Output.

TwinFeed™ is an option for the EMBA 245 QS Ultima™, to enable feeding two identical sheets from 280 mm up to 520 mm in running direction in a single machine cycle.

The extended EMBA Magna XL VSC slotting unit makes it possible to make the slots on both sheets

in the slotting unit. The result: up to 30 000 boxes per hour. And there will be no tolerance variations between the boxes. It's like having two machines in one!

The DualBox™ innovation combined with the intelligent Ultima™ platform, the unique Non Crush Converting™ and Quick-Set™, makes EMBA 245 QS Ultima™ unbeatable.

We will be happy to tell you everything you want to know about productivity excellence – and doubling it – with EMBA 245 QS Ultima™.



A new revolution from your premium class supplier:
EMBA 245 QS Ultima™ with DualBox™



Berg Group

www.emba.com

Chiran Sastry - Sales Director, South Asia, Cell: +91 94404 80524, Email: chiran.sastry@emba.com

EMBA Machinery India Office # 505, 5th Floor, Shri Yash Towers, Above Canara Bank,
ECIL X Roads, Kushaiguda, Hyderabad - 500 062, India. Tel: +91-40-27130313, Website: www.emba.com

Paper Packaging to Continue on High Growth Trajectory

The mega projects announced recently by JK Paper, Emami, and Naini will add at least 500,000 tonnes of packaging board capacity in premium category, thus matching the pace of forecasted double-digit growth in packaging paper and board, where the demand is slated to reach at 9.7 million tonnes by FY19 growing at CAGR 8.9 percent. APP's plan to add about 1.4 million of packaging capacity in AP if takes off, the production figures of the segment would be even closer to the actual or projected demand.



Close to double-digit demand growth in packaging paper and board segment was consolidated, to some extent, by the addition of over a million tonne high-end capacity (SBB, SBS, high-end duplex, etc.) by top 5-6 players alone in the last 4-5 years.

Close to double-digit demand growth in packaging paper and board segment was consolidated, to some extent, by the addition of over a million tonne high-end capacity (SBB, SBS, high-end duplex, etc.) by top 5-6 players alone in the last 4-5 years.

All along, medium and small sized mill have been adding significant capacities on the kraft paper front to offset the increasing demand. The momentum is to continue awhile and the mega projects announced recently by JK Paper, Emami, and Naini will add at least 500,000 tonnes of packaging board capacity in premium category, somewhat matching the pace of forecasted double-digit growth in packaging paper and board, where the demand is slated to reach at 9.7 million tonnes by FY19 growing at CAGR 8.9 percent as per a study. APP's plan of about 1.4 million tonne mammoth project in Andhra Pradesh, if realized, will add fillip to bridging the demand-supply gap in remarkably small time frame.

Packaging Paper and Board Growth: More Than It Looks Like

In recent 5-7 years, the overall demand growth and growth in actual production have hardly been covered exhaustively by various official data and figures shown by various research agencies. Nevertheless, considering their stand, the actual production of the Indian paper industry in FY18 stands roughly at over 16 million tonnes, 4 percent of global 400 million tonnes. Many will contest this figure and peg it at a higher number with their tentative data! Seeing the segment-wise movement, packaging paper and board, growing with highest CAGR, contributes roughly 50 percent of the total production, standing at over 8 million tonnes for FY18.

If we closely inspect the official or widely-accepted figures, the demand movement of packaging paper and board segment, though highest, is not a double-digit as claimed by many industry insiders.

In recent 5-7 years, the overall demand growth and growth in actual production have hardly been covered exhaustively by various official data and figures shown by various research agencies.

As per one prominent research agency, demand for packaging paper and board segment is expected to grow at a CAGR of 8.9 percent and reach 9.7 million tonnes in FY19, which actually means that the actual demand in FY18 must be pegged at 8.89 million tonnes. Consequently, with an actual production of over 8 million tonnes, there is a demand-supply gap of about 0.9 million tonnes, which is another paradox if we take the creation of over a million tonne demand annually in the packaging paper and board segment

Contd. on - 71



Creating Value For Our
Customers Leading Industry
Development Trends

19 year-experience in vacuum transfer technology research and development
21 year-manufacture-process of rigorous and dedication



TOPRA GT

Flexo printer Slotter Die-cutter

Top Printing
Gear Drive
Vacuum Transfer



APSTAR HG2 FFG INLINE

**Flexo Printer Slotter Die-cutter Inline
with FFG**

Bottom Printing
Gear Drive
Vacuum Transfer
Full Automatic Inline Solution



TOPRA FD 821 FFG INLINE

**Flexo Printer Slotter Die-cutter Inline
with FFG**

Quickset Top Printing
Fully Servo Drive
Modular design Scalable

GUANGDONG DONGFANG PRECISION SCIENCE & TECHNOLOGY CO. , LTD.

Add: No. 2, Qiangshi Road, Shishan Town, Nanhai District, Foshan City Guangdong Province, China.
Tel: +86-757-86692362 Fax: +86-757-86695481 Email: df-india@vmtdf.com Post code: 528225

[www. vmtdf. com](http://www.vmtdf.com)

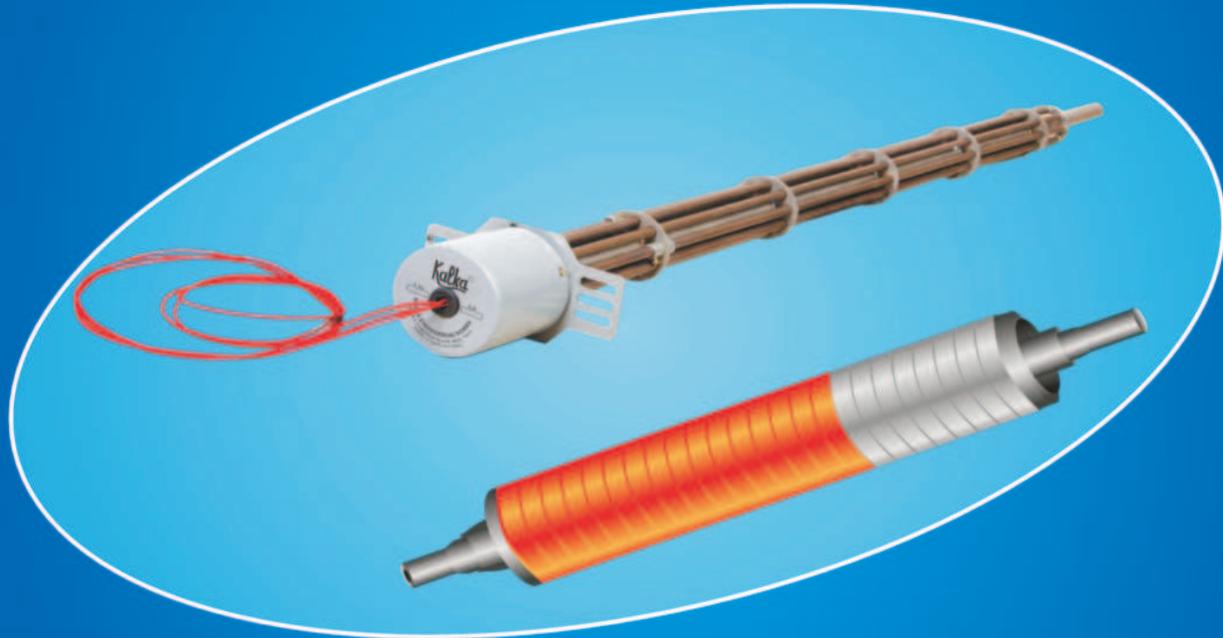
Kalka®

Industrial Heater Solution



Kalka Engineering Works

(An ISO 9001:2008 Certified Co.)



11mm & 13.5 mm Straight Tubular And Zonal Heating With Temperature Controller System

Our Experience of 30 Years in heating industry help us to understand your heating requirement and give us edge to offering you a solution for heat & power saving.

ZONAL HEATING SYSTEM

Saving of Electricity Consumption.

Easy to install and easy to maintain.

No need of separate machine for small and big sizes thus a big saving in small investment.

Reduce wear and tear of machine by avoiding unnecessary heat.

TUBULAR HEATING SYSTEM

Insulated with Magnesium oxide Powder

Insulated powder is compressed by swager for long life

Tube used are SS 304/ Incoloy tube

80/20 Nichrome alloy wire from U.K. for Element

PANEL BOARD WITH TEMPERATURE CONTROLLER

Temperature controller helps in reducing electricity consumption & wastage by automatically switch off the heating after reaching at desired temperature

LPG HEATING SYSTEM

We manufacture & maintain our high quality by using high quality materials, which guarantees that the system works even under extreme conditions for a longer period

Kalka®

Kalka Engineering Works

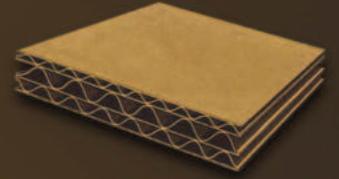
Mfr. of: All Kinds of Industrial Heaters

WZ – 396A, Shakurpur village, (Shakur Basti) Near Char Khamba Chowk, Delhi, India – 110034

Mob.: +91 93111 42683 / 93111 42684

Email : indianindustrialheaters@gmail.com | Website : kalkaheater.com

Stiff, Dry & Flat Boards in less than 1 hour



Trouble Free Adhesives

- Board moisture drops to 10% in less than 1 hour in manual plant
- Get higher compression
- Run Corrugation machine at full speed in auto plant
- Consistent quality products for trouble free operations



AMYLODEX
Private Limited

Reg. Off: 302, S.V. Sumitra Apts.,
Sumitra Nagar, Kukatpally,
Hyderabad - 500 072. Ph : 040-23060334
E : info@amyloDEX.com

Kolkata Branch

Tentulkuli Village & P.O, Howrah Dist.
West Bengal - 711 409.
Ph : 08017468003, E : kolkata@amyloDEX.com

Salem Branch

219/1, Sivasami Mill Compound,
Puthur, Iiteri Road, Nethimedu, Salem
Tamilnadu - 636 002.
Ph : 09043283923, E : salem@amyloDEX.com

Delhi Branch

D-23, Phase I, Okhla Industrial Area,
New Delhi.
Ph : 089899907744, E : delhi@amyloDEX.com

Vasai Branch

Mahalaxmi Industrial Estate, Near Setco Chemicals,
Gala No. 6 - 1,2, Off Sativali Road, Waliv Phata,
Vasai - East, Palghar, Maharashtra, 401208
Ph : 9908528678, E : vasai@amyloDEX.com

growing with a double-digit CAGR (as is the general perception, and which seems valid too), roughly in the range of 12-15 percent.

Why this disagreement? The cause of the duel or contradiction in the estimates is mainly because the sample of the study is not extensive and doesn't cover the actual production figures and capacity additions of many mills and clusters. As is known, in the packaging paper and board segment, the large players focus usually on the high value added packaging paper and boards such as FBB, SBB etc., while the smaller companies address low value added segments such as kraft paper and board.

Essentially, the packaging paper and board segment is witnessing the fastest growth figures, both in terms of demand and capacity creation, more probably at a double-digit. However, to corroborate this double-digit CAGR, we have to canvass exhaustively all small and medium-sized mills making low-end board and karft paper, apart from big mills producing high-end packaging boards, because both demand and production figures appear to be brisk and vigorous towards the lower-end of the segment. Also because, the Indian market has only recently started showing its preferences toward packaging, and the orientation is more toward quantity than quality. Having said that, the growth in the high-end packaging can't be discounted and is even brisker than the lower-end!

Recent Capacities: Displaying Remarkable Growth

In the last 5 years, the high-end packaging board has seen some 1 million tonne capacity addition led by the giants of the Indian paper industry, viz. ITC, TNPL, Emami, Century, and few others. Karft paper and board segment too witnessed a swift capacity addition, much more than in the high-end board and value-added duplex board variety. As per the available figures, for the overall packaging paper and board segment, growing at CAGR 8.9 percent, the demand is expected to reach 9.7 million tonnes in FY19. Standing at actual production of over 8 million tonnes today and with recent mega projects worth over 500,000 tonnes announced by JK Paper, Emami, and Naini along with ongoing fast capacity additions in small and medium-sized karft and duplex board mills, the demand-supply gap is going to be minimized much beyond what it's now. Besides, if the initial reports of APP setting up close to 1.4 million tonnes (of packaging grade capacity in Andhra Pradesh in the next 2.5 years) is to be believed, the total packaging segment capacity in India would realize a never-seen-before height and the demand-supply gap would drop down drastically to a manageable level.

Moreover, if we work these figures (as reported by various market research agencies) on the premise that actual production in India is always lower

than the actual demand, the figure of total expected demand in FY19, viz. 9.7 million tonnes is again a bit lopsided or erroneous as the actual production even now seems to be way beyond the projected demand. Roughly 60 percent of the production within the packaging paper and kraft segment is contributed by kraft mills or low-end packaging product manufacturers, which comes to be around 5.8 million tonnes of overall 9.7 million tonnes demand. If we consider two large kraft producing clusters, such as Morbi-Vapi in Gujarat and Meerut-Muzaffarnagar in UP, the production easily crosses 5 million tonnes (based on Paper Mart's own calculation and corroborated by leading mills in these areas), which glaringly questions the expected demand figure.

Matter-of-factly, the expected demand, actual demand, actual production, and CAGR, all are on the higher side than what appears in most of the research and surveys. The figures on the higher-end packaging side seems commensurate with or close to the actual ground figures as the data collection is easy with large mills (which are few and wide), for instance, the demand of board to be around 4 million tonne out of 9.7 million tonne in FY19.

Growth Driving Factors: Unceasing and To Gain Further Momentum

Packaging segment and its growth have given the Indian paper industry much needed breather when the its growth



Contd. on - 75





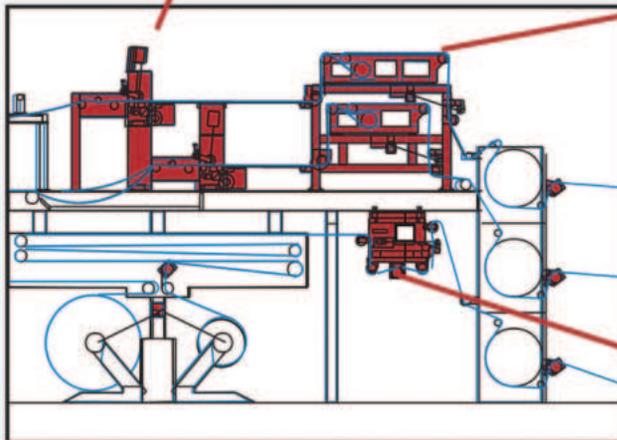
Automatic Web Alignment + Tension Control



CORRALIGNER



TENSION MASTER



ELTRAC

The **original** Bridge System Solutions

For Quality &

ELCorruMatic® TCCM – Total Corrugator Control Module

For any query, please contact :

Amit Kumar Gupta

Mobile : +91 9727725120

E-mail : akgupta@erhardt-leimer.com

Website : www.el-corrugated.de

Dhwanil Mehta

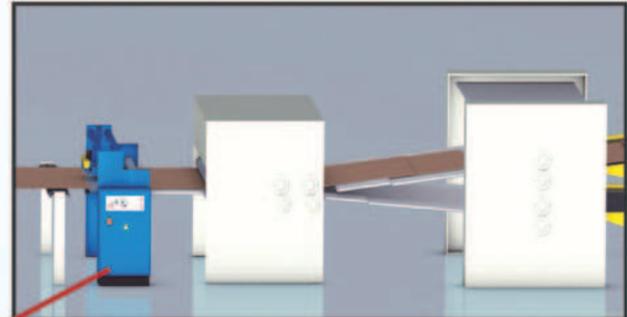
Mobile : +91 8347008823

E-mail : dsmehta@erhardt-leimer.com

Website : www.el-corrugated.de



TRIM MASTER



Slitter Scorer Positioner for pre-print & brown board applications

The TRIM MASTER is designed for dry end applications in front of the Slitter Scorer. Its core function is to minimize edge trim in the Slitter Scorer. This is achieved by sensing board edges or pre-printed lines and shift the Slitter Scorer with a hydraulic unit to correct incoming misalignment mistakes. Thus, constant trim reduction results in waste savings.

- ▶ **Higher Corrugator Productivity**
- ▶ **Improved Board Quality**
- ▶ **Increased Profit**

The ***original*** Pre-print Application Solutions

Productivity

ELCorruMatic® CSM – Corrugator Speed - and Splice Module

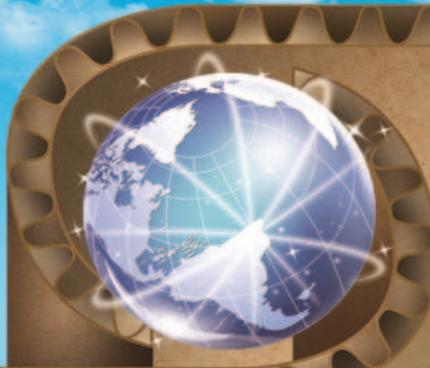
Erhardt + Leimer (India) Private Limited
Survey No. 252/1, Sari, - Village,
Sarkhej - Bawla Highway, Ahmedabad - 382 220. India
Tel.: +91 2717 610400 • Telefax: +91 2717 610452
E-mail: sales-in@erhardt-leimer.com
Website: www.erhardt-leimer.in



Excellent!

攜手共進 · 行銷全球

Create The Greatest Future



明暉國際集團
MING WEI GROUP



明暉紙器機械股份有限公司
MING WEI PAPERWARE MACHINERY CO., LTD.

明暉紙器機械股份有限公司
MING WEI PAPERWARE MACHINERY CO., LTD.
台中市沙鹿區清泉里清泉路1號
No. 1, Qingquan Rd., Shalu District,
Taichung City 433, Taiwan
TEL: +886-4-26153117
FAX: +886-4-26154017
www.mingwei.com

E-mail: mwcold@ms15.hinet.net
總經理 簡福全 General Manager Mr. Chien Fu Chuan
手機 Phone Number: +886-988087539

明暉機械(東莞)有限公司
MING WEI MACHINERY (DONGGUAN) CO., LTD.
東莞市大朗鎮富民工業區

Fu Min Industry Area, Da Lang Zhen,
Dongguan City, Guangdong Province, China
TEL: +86-769-82979100 (代表號)
FAX: +86-769-82979110
E-MAIL: mwdg999@163.com

總經理 劉季紅 General Manager Ms. Ellie Liu
手機 Phone Number: +86-18826809854

業務副總 張正偉 Vice Marketing GM Mr. Steven Chang
手機 Phone Number: +86-18822956762

山東明暉包裝機械有限公司
SHANDONG MING WEI PACKAGE MACHINERY CO., LTD.
山東省海陽市海陽經濟開發區珠海街8號

8, Zhuhai Street, Economic Development Area,
Haiyang City, Shandong Province, China
TEL: +86-535-3206388
FAX: +86-535-3206377

www.qdmingwei.com
E-mail: sdmw88@163.com

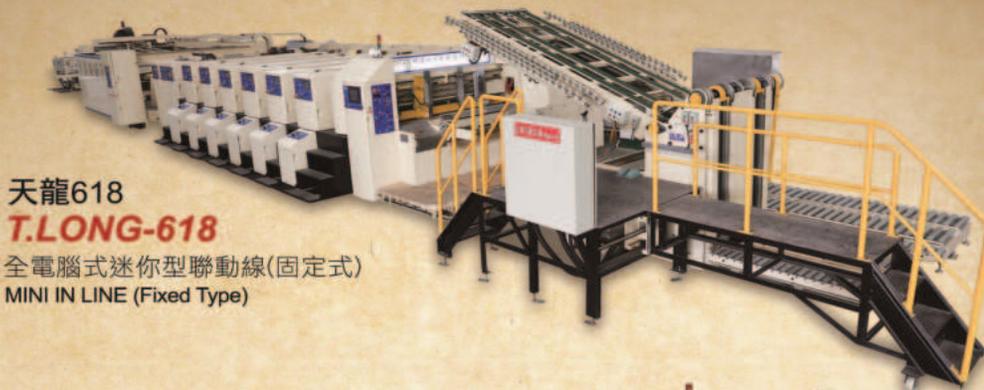
總經理 劉明德 General Manager Mr. Liu Ming De
手機 Phone Number: +86-13805326737

阿聯酋(杜拜)明暉分公司

DUBAI BRANCH
P.O. BOX 26985 DUBAI U.A.E
TEL: +971-4-2270354, 2288061
FAX: +971-4-2246572
E-mail: mwzhaoguang@hotmail.com
Manager Mr. Zhao Guang
Phone Number: +971-50-+6457615

印度明暉分公司

India office - Pune
G102, Empire Estate, Chinchwad, 411 019,
Pune, Maharashtra, India
TEL: +91-20654 01122
E-mail: mingwei.india@gmail.com
Vice General Manager Mr. Su
Mobile: +91-8698320316



天龍618

T.LONG-618

全電腦式迷你型聯動線(固定式)
MINI IN LINE (Fixed Type)



天龍1號/2號

T.LONG-1/2

全電腦式
印刷開槽糊摺合機(雙軌式互換系統)
Computerized Flexo Printer Slotter Folder Gluer
(Options: Side Tracking System)



MAX-300

高速瓦楞紙板機
High Speed Corrugator Line



Essentially, the packaging paper and board segment is witnessing the fastest growth figures, both in terms of demand and capacity creation, more probably at a double-digit.

was slackening on account of W&P and newsprint facing severe growth rate retardation in the past. A number of factors such as increased urbanization, requirement of better quality packaging of FMCG products marketed through organized retail, and increasing preference for ready-to-eat foods have catapulted the growth of the paper packaging segment to what it is now.

The figure of total expected demand in FY19, viz. 9.7 million tonnes is again a bit lopsided or erroneous as the actual production even now seems to be way beyond the projected demand.

The new sustainability driven approach to adopt products which are leaving the least environmental footprint has given yet another push to paper-based packaging. Greener planet and the concept of eco-friendliness is now inspiring people and businesses alike to give a fresh look at the paper, which till recent times faced mordant criticism on account of being anti-forest, which was not true at all. The consumer companies are now increasingly replacing their hazardous packaging alternatives with paper-

Digital literacy and internet penetration is yet to reach its optimum and the market opportunities is yet to be capitalized. For instance, the e-retail market in China is 40x the size of the e-retail market in India.

A number of factors such as increased urbanization, requirement of better quality packaging of FMCG products marketed through organized retail, and increasing preference for ready-to-eat foods have catapulted the growth of the paper packaging segment to what it is now.

based packaging. This trend is to give tremendous marketing edge to the paper-based packaging in times to come.

Online and off-line retail marketing popularized the concept of distance-shopping, which warranted the safety precautions for the good to be sold, bought and transported at distance, and which necessitated the use of packaging, mostly paper based. Moreover, e-Commerce has organised the retail market substantially, which also is reason to adopt uniform and



standard packaging practices giving a fillip to packaging requirements. It will further increase!

The e-commerce space in India, over the last few years, has grown undoubtedly, it is yet to achieve the potential as has happened in other countries and there is immense unexploited potential. Digital literacy and internet penetration is yet to reach its optimum and the market opportunities is yet to be capitalized. For instance, the e-retail market in China is 40x the size of the e-retail market in India.

Source: Paper Mart Oct. – Nov. 18





ISO9001:2000版 认证企业

CHAOCHANG TECHPACK



DAF-PrintSTAR
Printer Slotter Die Cutter



DAF-SUPERINT
Printer Slotter Die Cutter
with Varnisher & Dryer

Expertise, Dedication & Commitment

SHANGHAI CHAOCHANG TECHPACK MACHINERY CO., LTD.

Add: No. 158, Wanzhong Rd. Fengxian Dist. Shanghai, 201406, China

Tel: +86-13917556856 Fax: +86-2157543333 www.chao-chang.com Email: chaochangprinter@techpackmachinery.com

Don't underestimate the mighty Corrugated Food Containers



For starters, they help fend off germs



It's a secret
superhero
and a foodie's
best friend



Producing
corrugated
cardboard requires
heating paper to
over 180 degrees
Fahrenheit, which
kills off bacteria



For nearly a century, cardboard
boxes have been food
producer's best friends



Better still, they help
ward off spoilage



What's their secret?



Contd. on - 83



since 1955

AN ISO 9001 : 2015 CERTIFIED COMPANY

Now say **Good Bye** to Washboarding, Warpage &
Black Lines on Kraft Paper.

Moisture Resistant Adhesive for improving board's
Compression Strength, Bursting Strength, Edge
Crush Test, Flat Crush Test and other parameters.

100 % FIBER TEAR GUARANTEED
(NO DELAMINATION)



 sales@indianadhesive.com / info@sanjayadhesives.com

 9820085095 / 9819112161 / 9820840569

 www.indianadhesive.com / www.sanjayadhesives.com



sales@indianadhesive.com



since 1955

VIJAY CHEMICAL INDUSTRIES

Experience the best ..

MEET THE WORLD CORRUGATION STANDARDS

Introducing Premium Range of Improved Neutral pH Starch Adhesive for better output.

- o. Enjoy Board Quality on manual / semi automatic plants which is at par with boards made on automatic plants.
- o. Enjoy Immediate drying (No sun drying required in any season).
- o. No drop in Bursting Strength even during winters or rainy season.
- o. Enjoy increment in C.S, E.C.T, F.C.T and other quality parameters.

NO ADDITIONAL CHEMICAL OR MACHINE REQUIRED !



www.viaychemicalind.com

Feel free to contact us on +91 9820085095 / 9819112161/9820840569

Design For India

JETS300 CORRUGATED BOARD PRODUCTION LINE

Width: 2000mm/2200mm/2500mm
Design speed: 300m/min
Tailored length: 90~100m



What ? is the condition ?

Dry paper, Indian paper moisture 6-8%, less than average 9-11%, even lower in dry season.

Low strength of paper.

High moisture in rain reason.

Soulution-“Design for India”

More solution to be continue.....



J.S. CORRUGATING MACHINERY CO., LTD.

J.S. Machine India Branch: A 403, Dream Apartment, Plot 14, Sector 22, Dwarka, New Delhi-110077

J.S. Machine India Pvt. Ltd.: Plot No.628, Sector III Pithampur, District Dhar (M.P.) India-454775

Tel: +91 7389901217; +86 13807121003

Contact: Mr. Adam Wang; adamwangzy@gmail.com

Website: www.jspackmach.com





J.S. Machine India

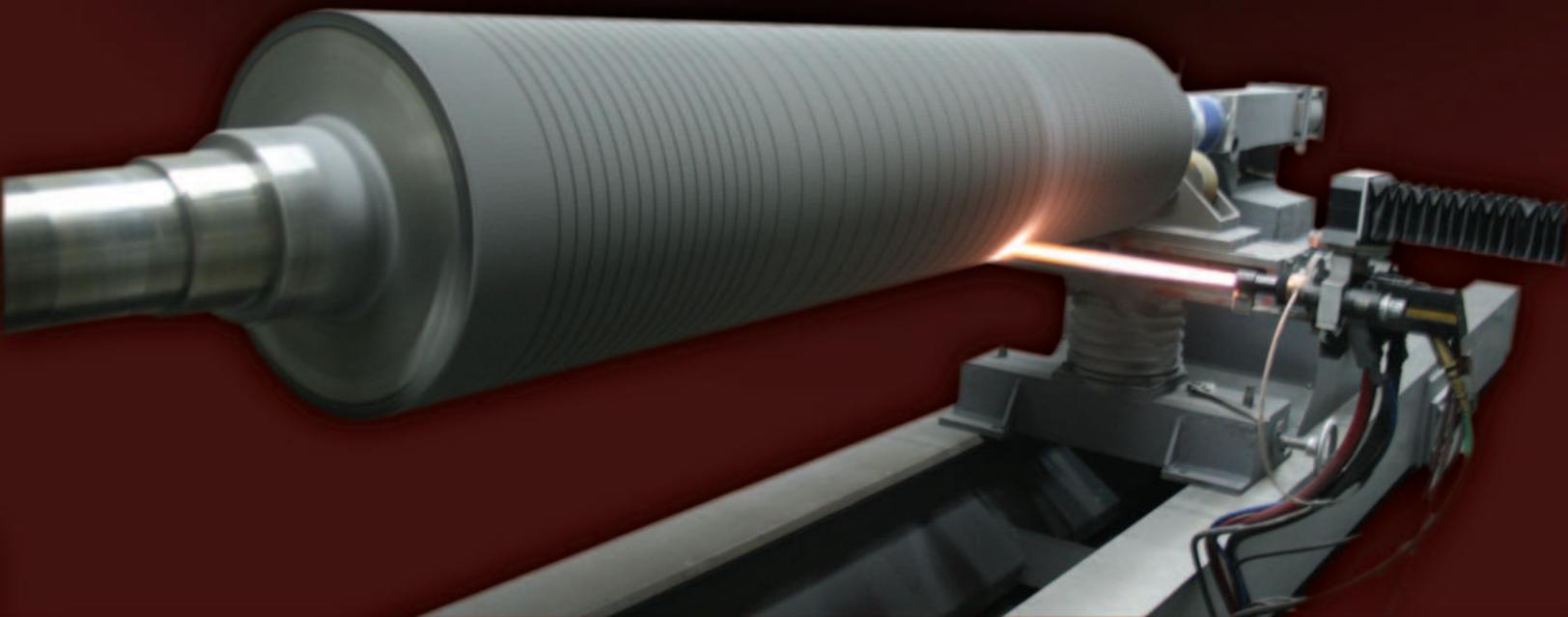
PRODUCTION & **in** INDIA
SERVICE BASE

MANUFACTURING UNIT:

1. **Repair** and **manufacture** rolls for corrugating machines
2. **Tungsten carbide** and **NiCr-Cr3C2** coating are optional

SERVICE UNIT:

Promptly spare parts supplying is supported by newly-built spare parts center
Local engineers' timely and overall service is around you all the time.



J.S. MACHINE INDIA PRIVATE LIMITED

Factory address: Plot No.628, Sector III, Pithampur District Dhar(M.P.)-454775

Office address: No.302, South Pride Building, 8/3, South Tukoganj, Indore-452001

Mr. Adam Wang Tel: +919311656580; +8613807121003

E-mail: adamwangzy@gmail.com

Mr. Arun Maheshwari Tel: +91 9165268131; +91 9229363555; +91 8719968300

E-mail: connect.arunkm@gmail.com

SPECIAL ADDITIVES

for Water Proof Bonding of Fruit and Vegetable Boxes



Actual testing under FEFCO-9 (EU standard) is much tougher. A 20 mm 3 ply board with cuts on top and liner is hanged in water with 250 grams weight. The board needs to hold its bonding even after 24 hours to be certified as FEFCO 9 compliant.

Corrugated boxes used for packing Fruits and Vegetables need to have water resistance bonding. These Fruits and Vegetables release moisture and water droplets after being packed and transported. There will also be condensation of water when transported in freezing temperatures. This will result in corrugated box absorbing moisture. And this moisture would

percolate to starch bonds with in box . Unless these starch bonds are water resistant, adhesive joints will absorb water and become soft. Compression values go down substantially and box will collapse crushing product.

Special additives will help Corrugated Box to achieve water resistant bonding. CP-88/LV additives are manufactured in India under permission from Dor Chemicals Israel. Apart from water resistance additives will give increased compression values and preserve CS achieved. Dosage of these additives are is in the range of 1-1.5 % of liquid adhesives.



AMYLODEX
Private Limited

Reg. Off: 302, S.V. Sumitra Apts.,
Sumitra Nagar, Kukatpally,
Hyderabad - 500 072. Ph : 040-23060334
E : info@amylodex.com

Kolkata Branch

Tentulkuli Village & P.O, Howrah Dist.
West Bengal - 711 409.
Ph : 08017468003, E : kolkata@amylodex.com

Salem Branch

219/1, Sivasami Mill Compound,
Puthur, Itteri Road, Nethimedu, Salem
Tamilnadu - 636 002.
Ph : 09043283923, E : salem@amylodex.com

Delhi Branch

D-23, Phase I, Okhla Industrial Area,
New Delhi.
Ph : 089899907744, E : delhi@amylodex.com

Vasai Branch

Mahalaxmi Industrial Estate, Near Setco Chemicals,
Gala No. 6 - 1,2, Off Sativali Road, Waliv Phata,
Vasai - East, Palghar, Maharashtra, 401208
Ph : 9908528678, E : vasai@amylodex.com

and protect delicate produce from getting bumped and bruised in transit



And since they're lightweight, cardboard boxes are inexpensive and fuel-efficient to ship!



Cardboard boxes are also recycled between uses,



In a national study by the Paper and Packaging Board...



which can help to minimize chances for cross-contamination



68 percent of consumers said they were most likely to buy something in a paper or cardboard package



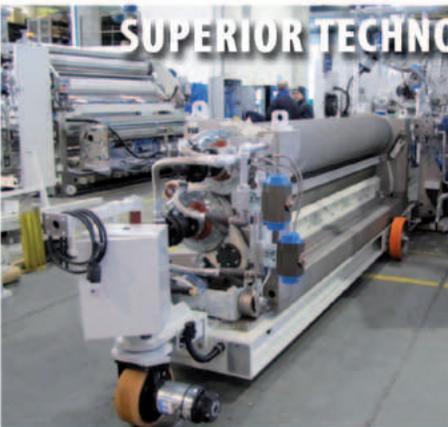
if given the choice between paper and plastic





agnati
impianti per cartone ondulato
corrugating machinery

INNOVATION IN CORRUGATED FOR TOTAL QUALITY & SAVING



SUPERIOR TECHNOLOGY COMBINED WITH SUSTAINABLE SOLUTIONS

- Higher Performance
- Higher Reliability
- Perfect Quality
- Lower Energy Consumption
- Lower Costs of Ownership
- 24/7 Service



ADVANCED CORRUGATORS - AUTOMATION SYSTEMS - CORRUGATING ROLLS - SPARE PARTS & SERVICES

100% made in Italy  **Technology & Style**

BP Agnati S.r.l. - Via Lecco,72 20059 Vimercate (MB)- ITALY

T +39.039.6087.1 F +39.039.6087.221 W www.bpagnati.com E info@bpagnati.com

Spare Parts: F +39.039.6082.554 E ispare_parts@bpagnati.com

Service : T +39.039.6087.215 E customer_service@bpagnati.com >>>always on +39.039.6087.247

Sole Selling agents for: India - Bangladesh - Nepal - Sri Lanka - Maldives

HIC SALES INC. India

Ph. +91 9915454444 E-mail: hicsale31@yahoo.com



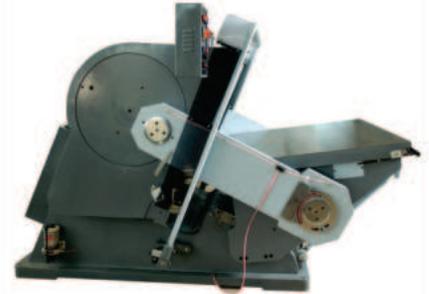
Innovative, Economic Solutions...



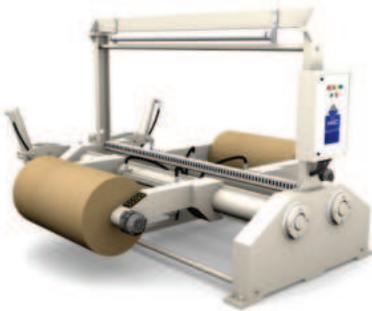
FINGER LESS SINGLE FACER



DOUBLE FACER

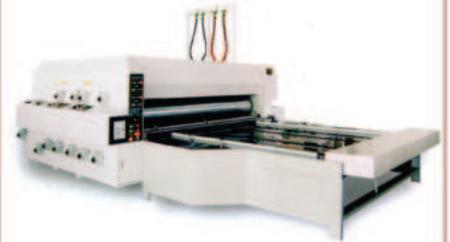


DIE CUTTING & CREASING MACHINE



SHAFTLESS HYDRAULIC MILL ROLL STAND

**Corrugated
Board
& Box Making
Machines**



FLEXO PRINTER



India's Fastest Double Wall Automatic Corrugator Plant
with Design Speed of 150Mtr per Min.

'India's Fastest 5 Ply Combined Automatic Paper Corrugated Board Making Plant with
Production Speed of 150 Mtrs per Minute Running at M/s: Aggarwal Corrukrafts Pvt Ltd.

HIC MACHINERY CO.

Near Verka Milk Plant, Verka, Amritsar - 143501 Punjab (INDIA)

E-mail: hicmcs2@gmail.com, hicmco1@yahoo.com

Off: +91 183 2263041 Sales: 95018 51111, 95010 17222, 95016 45555, 95016 25555

Service: +91 95015 73333 / 95015 93333 / 95010 87444 Elec. Service: 95010 89444

www.hic-corrugated.com



GUM POWDER PLANT FOR PASTING & DEXTRINE

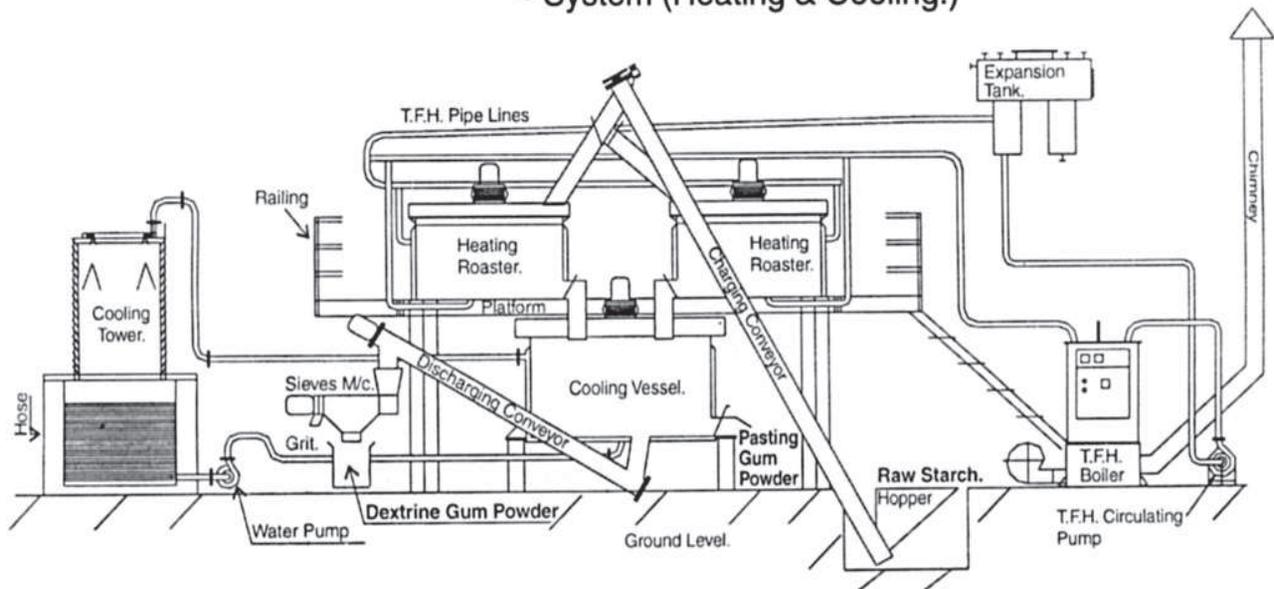
PLANT CAPACITY : 2 Tones / 4 Tones Per Shift

Feature:

- Increases Production Capacity.
- Decreases Fuel Consumption.
- High Mixing & Roasting Capacity.
- No Explosion Hazards.
- Controls Dusting Of Powder
- low labour Cost.
- Fast & Easy
- Charging & Bag
- Filling System
- Immediate Transferring
- System (Heating & Cooling.)

OTHER PRODUCTS.

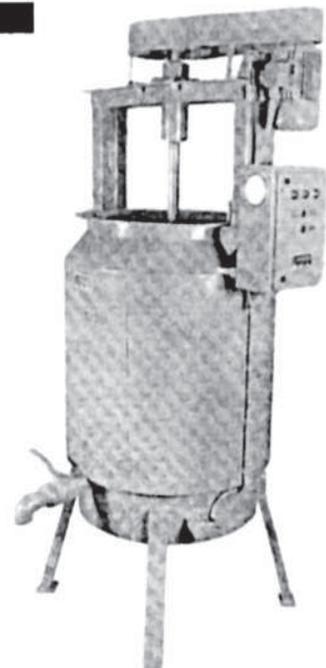
- Liquid Gum mfg. Plant
- Gum Cooking Vessel.
- Synthetic Resin Plants.
- Fast Cooling System.



GUM MIXING (COOKING) VESSEL

Total solution For Cooking the Gum from powder Adhesives

- APPLICATION :**
- To boil Glue
 - To Cook Gum / starch
- ADVANTAGES :**
- Easy to operate.(Unskilled person can operate)
 - Lower Labour cost / maximum time saving.
 - Produces best quality products.
 - Reduces consumption of gum.
 - No pollution.
 - Low wastage of Raw Material and product.
 - Reduces cost of Inventories.
 - Minimize the cost of production.
- FEATURES :**
- Compact Unit.
 - Long Life
 - Lowest Maintenance.
 - No consumption of heating oil.
 - No electrical Hazards.
 - Highly Homogeneous Mixing Efficiency.



N P MACHINERY & EQUIPMENTS

58, G.I.D.C., Opp. Rajasthan Marbles, Vitthal Udyog Nagar,
V. V. Nagar-388 121. Anand, Gujarat,
PHONE : (02692) 236357, 239495 TELEFAX : (02692) 236357
E-MAIL : npmegum@yahoo.co.in npmachinery@sancharnet.in





FEFCO's workshop on 'Corrugator: the heart of our business'

The FEFCO one day workshop took place on 20 September 2018 in the Van der Valk hotel, Brussels airport. This year the Production Committee focused on the "Corrugator: the heart of our business" from a technical perspective. The event attracted 118 attendees, providing a good balance between corrugated manufacturers and suppliers. The day featured presentations from the main corrugator suppliers, BP Agnati, BHS, BW Papersystems, Fosber and Mitsubishi. They all shared ideas and perspectives over new developments and possible retrofits to existing equipment, which provide longer maintenance windows and improve performance and reliability. To run a corrugated machine you need raw materials, paper and starch being the largest in terms of volume. Participants heard an inspiring speech from Peter Gerard, Smurfit Kappa Group who explained the challenges facing paper producers and his thoughts on the way forward. A special focus of interest for all participants was moisture content, which changes over time in storage and transport. Stefan Schroder from Crespel & Deiters explained the essence of starch as a material and how to effectively control the starch operation on the corrugator. Steve Parr from Smurfit Kappa showed the audience the added value of predictive

maintenance to improve the reliability, maintainability and uptime of the corrugator operation. Diego Compaired, Saica, elaborated on the opportunities that arise if you upscale the control of the corrugator by moving from manual to automation. The FEFCO workshop provided an excellent overview of what is available on the market and what the future may bring. Participants appreciated the workshop and look forward to attending the next edition.

Source: <http://www.fefco.org>

Corrugated packaging market to increase: Forecast

Trends such as e-commerce, digital print and sustainability drive ongoing growth.

The corrugated packaging market is set to grow from around \$315 million in 2017 to more than \$380 million by 2023, as trends such as e-commerce, digital print and sustainability drive ongoing growth, according to a new market study from Smithers Pira.



Overall, demand is likely to increase by around 3.5 percent to 4 percent annually over the medium term, reaching a total of about 181 million tons by 2023, worth over \$380 billion at 2017 prices, according to The Future of Corrugated Packaging to 2023.

Two technologies are having a marked impact on the market, in the form of e-commerce and digital printing. The nature of e-commerce packaging favors the use of corrugated board as a major medium and it is now estimated that upwards of \$20 billion worth of corrugated materials are used in this sector as a whole. The major sectors making use of e-sales systems include consumer electronics, books and media products, fashion, and toys, hobby, and sports equipment.

Not unrelated to this trend is the growing adoption of digital printing in corrugated applications. The flexibility of run lengths, savings in set-up costs, the ability to personalize either relating to brands, regions, stores or individuals, and the level of quality now available through the latest technologies all combine to create a 'perfect storm' of growth opportunities for converters and printers.

Conversely, the advent of e-commerce, especially in the grocery sector, is likely to have a slight negative impact on retail-ready packaging (RRP) usage, as e-sales do not require any RRP systems. Furthermore, the innovation in e-commerce systems – such as subscription box services and meal kits that offer direct-to-consumer delivery of specialist food using a weekly or monthly subscription model – will have an additional, though slight, impact on the RRP market.

The sustainability of corrugated board as a packaging medium improves its prospects in competing with alternative materials. The growing influence of "Millennials" and "Centennials" as a marketing cohort with very distinct demand for environmental protection, such as an indication that 85 percent of them in Europe would pay 12 percent more for sustainably packaged goods (DS Smith research), will no doubt

Contd. on -91

Turnkey Engineering Solutions to the Corrugated Packaging Industry

Vacuum absorption fingerless type high speed
single facer machine group



Single facers also available in finger type economic models from 1200 upto 2500mm widths in electric, hot oil and steam heating system.



High speed PLC based fully auto 4 color printer slotter with
rotary die cutting, lead edge feeding system:



Also available in
Lead Edge Feed,
Kicker feed and chain
feed systems without
PLC in various
sizes.

AUTOMATIC CORRUGATED PAPERBOARD PLANT



We offer high quality 3 ply, 5 ply and 7 ply
automatic corrugated paperboard plant with widths from
1400mm upto 2500mm and production speeds from 60 mtrs.
upto 250mtrs/ min. in various flute combinations as per customer's choice.

Contact: Randeep Sharma | +91 98672 08454

Flotech Machineries Pvt. Ltd.

A-275, TTC-MIDC Mahape, P. O. Ghansoli, Navi Mumbai - 400 701 (India)

Telefax: +91 22 2778 0209, 2778 0212

E-mail : cartonmachineries@gmail.com • flotech2002@yahoo.co.in

www.flotechmachineries.com



Flute Roller Regrinding Facility at our Mahape Navi Mumbai Unit



FLOTECH takes pride in being the First in the Western Region of India to offer CNC Flute Roller Regrinding services at its Mahape, Navi Mumbai facility.

The maximum flute roller diameter and flute length that can be done on the machine is 410mm and 2200mm respectively.

This machine can do grinding of all hardened alloy steel material including imported 48 Cr.Mo. and 52 Cr.Mo.

QUALITY
SINCE
1965



INNOVATION
THROUGH
PRECISION

Salient Features:

- Pneumatic Clutch & Spring Operated Brake.
- Brake itself works as Fail-Safe-Brake.
- Pneumatic Plate-Lifter (Optional).
- Variable Speed Control (Optional)
- German "Make-Ready" Steel Cutting Plate (Optional)
- Micrometric Pressure Adjustment.
- Frame Drilled for Chaseless Die.
- Automatic Lubrication.
- Any Special Accessories on Request.



www.sondengg.com

Excellence that is Internationally Recognized

EVEREST

PLATEN ABOVE THE PLANET

Wide Range:

25"×36" 28"×41" 35"×47" 40"×55"
45"×65" 55"×76" 55"×86" 65"×110"

Next 65"×126" Under Process



EVEREST-GIANT
65" x 110"

About SOND

Our Group is a well established business of more than 45 years. We are engaged in the manufacturing of superior quality EVEREST brand heavy duty Cutting & Creasing Platens. We pride ourselves in being a pioneer manufacturers of large format Platens for the domestic and international market. Our Machines have been exported to various countries worldwide and enjoy a large degree of notoriety in the international market. The Machines have been duly approved and certified with the European CE Standards. EVEREST brand Machines are designed to cut, crease and emboss Paper, Solid Boards, Corrugated Board, Micro Flute, Rubber, Linolieum, Plastic, Leather etc., with the use of a FLAT DIE. The body structure is so designed to withstand the heaviest loads, while maintaining unsurpassed cutting precision. These Machines are designed to give maximum years of reliable services.



Manufacturers & Exporters

SOND ENGINEERING WORKS
SOND ASSOCIATES (ENGG.) PVT. LTD.

442/8, G. T. Road, P. O. Golden Temple, AMRITSAR - 143 006 (INDIA)

Phone : +91 183 2585735, 2583636, 2589845.

Mobile : +91 98158 04604, 95923 63636, 92573 63636

E-Mail : sondexim@gmail.com | support@sondengg.com

Authorised Dealers – in Maharashtra : M/s. PRINTPACK ENGINEERS: MUMBAI, M: +91 98200 85047 – Mr. Harish Sheth.

Tel.: +91 22 2850 9034 / 2850 4740 | Fax: +91 22 2850 6319 | Email: info@printpackengrs.com / sales@jiyaprintpack.com

www.printpackengrs.com / www.jiyaprintpack.com

contribute to the success of corrugated packaging over the medium term.

However, the restrictions that China has imposed on the importation of waste materials from January 2018 are likely to hamper the recycling industry over the short term, with new standards that restrict the contamination rates.

The most important influences on corrugated demand originate among end users, be they retailers, brand owners, marketers or consumers themselves. These myriad factors vary from one market sector to the next, and include many demographic factors such as ageing populations affecting healthcare markets, urbanization driving demand for processed foods and household appliances, to bulk handling systems in industrial applications such as chemicals.

These factors at the end-user level combine to produce a mixed bag of growth opportunities for each market in each region, overall providing the growth prospects for the whole industry.

The data and analysis in *The Future of Corrugated Packaging to 2023* is the combination of extensive primary and secondary research moderated through a Delphi Technique. A comprehensive primary research program of telephone interviews spanning the whole global value chain for corrugated board was conducted. This was supported with the output of in-depth secondary research of mill and converter outputs, company reports, trade statistics, conference presentations, press releases and trade press. The two are combined in *The Future of Corrugated Packaging to 2023* in expert analysis and over 350 easy-to-reference tables. Click the link provided for more information on this new market study: <https://www.smitherspira.com/industry-market-reports/packaging/corrugated-packaging-to-2023>

<https://www.bxpmagazine.com/article/forecast-corrugated-packaging-market-increase>

DS Smith launches customised Digital Printing

Seen as a response to the tailored online customer experience offered by larger retailers, the service is timed to help e-retailers over Black Friday weekend and then the Christmas period.

Part of DS Smith ePack, the digital printing service has an order lead time of five days – which it says is 25 days quicker than any alternative currently on the market.

Isabel Rocher, head of e-Commerce Solutions at DS Smith, said: “The latest update to our DS Smith ePack platform is aimed at providing a level playing field so that smaller e-tailers can offer the same service and level of personalisation that larger e-commerce companies can. With one of the biggest days in the retail calendar rapidly approaching, we’re committed to helping smaller retailers achieve a competitive edge against the bigger players, during Black Friday and beyond.

“Personalisation of packaging is a developing area, but one we know significantly enhances end user experience. Our bespoke printing service enables customers to produce small batches tailored for specific events or promotions, to print bespoke vouchers or coupons, or individualised messages or images on the outside of each box. The five-working-day turnaround means greater responsiveness,

which is aimed at providing a great experience for their own customers. We’re very proud to be able to help companies make strides forward in this area.”

Source: www.packagingnews.co.uk

Genus: Driving kraft growth and creating capacities

New Delhi Based kraft paper manufacturer Genus Paper is pumping big bucks as it aims to provide options to the Indian Corrugators to take advantage of the expected boost in Indian consumerism.

The quality of Genus kraft paper is among the best in the North region.

Kailash Agarwal, MD of Genus Papers is bidding big on the ecommerce boom and potential plastic bans. “The packaging has a huge potential in the coming years. There has been several bans on the use of plastics. As more and more government agencies implement ban on plastics, the demand for paperbased packaging will increase.

“The way packaging is growing, according to my understanding, kraft paper will grow at a rate of 9% CAGR. If the growth happens at the same rate along with the consolidation, we may see ourselves with the capacity of 1-million tonnes in the next five years.”

Source: *Internet*



Contd. on - 95





Auto feed Four Colour Flexo
Printing, Slotting & Creasing Machine



Semi - Auto Gluing Machine



Flute Laminator



Chain Feed Rotary Creasing
& Slotting Machine



Chain Feed Rotary Die Cutting Machine



- Regd. Office** Tulasi House, # 6-4-6, Arundelpet 4/5, Guntur-522 002, Andhra Pradesh, INDIA, Ph : +91 863 2290289
Mobile : +91 90101 76655, www.donghai.in / www.tulasigroup.com, Email : contact@donghaimachinery.com
- North India** IQBAL BHAGAT, Mobile : +91 96666 46302, Email : iqbalbhagat.s@dieharddies.com
- Delhi** Email : umamahesh.narisetty@dieharddies.com, Mobile : +91 96661 01547
- Gujarat** Email : mohammadali.shaik@dieharddies.com, Mobile : +91 96666 55640
- Maharashtra** Email : revanth.mamidibathula@donghaimachinery.com, Mobile : +91 95534 41333
- South India** G. SRINIVASA RAO, Email : srinivasarao.ganta@dieharddies.com, Mobile : +91 90100 41399
- Karnataka** Email : prabhakar.ppv@dieharddies.com, Mobile : +91 96666 59218
- Telengana** Email : anjaneyulu.b@dieharddies.com, Mobile : +91 90101 68882
- AP & Odisha** Email : anjaneyulu.v@dieharddies.com, Mobile : +91 96666 46315

A unique combination
of expertise & innovation

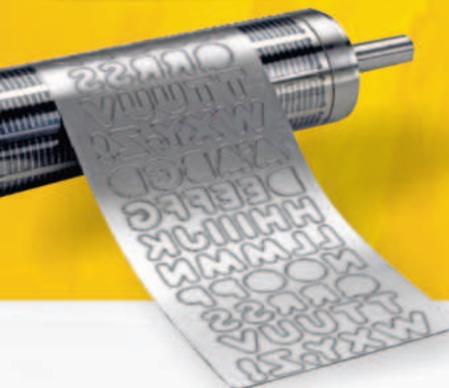
DIEHARD

Manufacturers of Laser-cut Flat & Rotary Dies, Stripping Dies, Flexible Dies for Labels, Embossing Dies, Braille Embossing Dies & AccuBraille

Dies with German Technology now in ... India

Products

- **Steel Flexible Dies**
For labels cutting
 - **Rotary Dies**
For all corrugated cartons
 - **Flat dies**
Stripping dies
Blanking Dies
Pertinex Counter Dies
Special-Steel Counter Plates
For folding cartons & e-flute cartons
 - **Accubraille Strips**
Braille Embossing Blocks
(Male & Female)
 - **Flat Dies**
For labels cutting
 - **Embossing Blocks**
Foiling Blocks
3D Embossing Blocks
- Fluted Dies**
For embossing & foiling with
single impression



Perfect solution for label industries

Technology

"Diehard Dies" is a full-fledged biggest Die-shop in India with advanced German technology. The company's Engineers & Technicians are trained in Germany on CAD software, Laser cutting machine, automatic and semi automatic Die making machinery.

The new technology involves innumerable number of innovative techniques to improve the die quality. Immaculate computer aided designing, precision laser cutting, optimum knife joints, perfect rule fit in the Die board, perfect ejection rubber are just a few quality features to mention.

Raw Materials

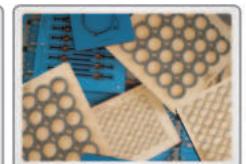
Rotary plywood shells, flat plywood, cutting & creasing steel rules, ejection rubber, special-steel counter plates, embossing Die plates and other accessories are imported from Europe.

Quality

The emphasis is on dimensional accuracy, high cutting performance and long life of the Die for more number of impressions. German technology & training, highest quality standards of raw materials, highly skilled technical man power contribute to an unparalleled perfection and innovation in Die making.

Service

Quality & performance is only the means of communication we progressed with so far. 'Diehard' is ready to cope up with all the requirements of clients. We have the commitment and resources to meet these challenges. Round the clock Service & Support will be given to the customers



Diehard Dies Pvt. Ltd.

Tulasi House, # 6-4-6, Arundelpet 4/5, Guntur-522 002, AP, INDIA

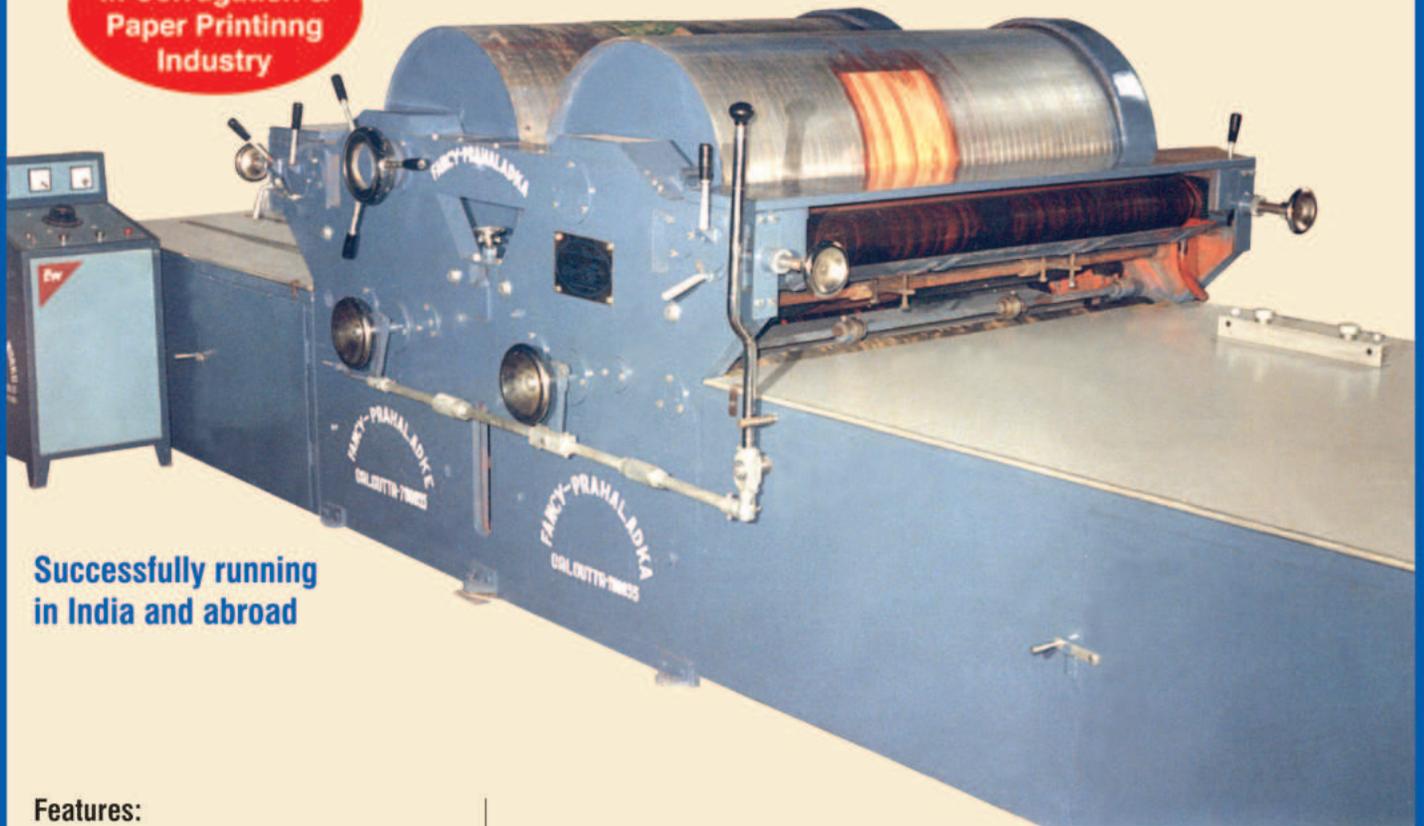
Phones : +91 863 2224947, 2223254 | Mobiles : +91 90 10 04 13 99 / 96 66 64 63 02 / 98 48 61 63 44 | Fax : +91 863 2221161

Email : contact@dieharddies.com, sales@dieharddies.com | Website : www.dieharddies.com

Fancy - Prahladka

Sheet Fed Flexo Graphic Printing Machine

A Revolution
in Corrugation &
Paper Printing
Industry



Successfully running
in India and abroad

Features:

- Most modern and versatile
- All controls of feed paper are grouped together and placed within easy reach of the operator
- Smooth and low noise operation
- Reliable After Sales Service

Advantages:

- Easy to operate
- Sharp and clear printing
- No folding of paper and board required

- Small sizes can be printed in double and triple ups
- Negligible job setup time
- No drying time required
- Low ink consumption
- Reduces ink, electricity cost substantially
- Variable speed drive
- Can operate both with spirit-based and water-based inks

We also Manufacture:

- Roto Gravure Printing Machine
- Flexo Graphic Printing Machine
- Slitting Machine
- Corrugated Sheet Dryer
- Lamination
- Printing, Packing & Allied Machinery



Marketed by:

PUSHPA ENTERPRISES

55B, Kali Temple Road, Kolkata - 700 026.

Tel.: 2455 4452 / 5182

Fax: 91-33-2455 5182 / 4452

E-mail: pioneerpackaging@vsnl.com

Website: www.fancyprahladka.com



Manufactured by:

FANCY ENGINEERING WORKS

5, Bireswar Dhole Lane,
Kolkata - 700 035.

Tel.: 2577 6286 / 7981

How Corrugated Boxes Support Omnichannel Sustainability

As reported by Fibre Box · October 1, 2018

Supply chain operations are changing quickly to accommodate new technologies and fulfill the promise of increased efficiency, accuracy and cost-effectiveness. Whether products are shipping to retailers, OEMs, e-tailers, or direct to consumers, customer satisfaction depends upon a highly efficient distribution channel that delivers the right product to the right destination at the right price – and in pristine condition.

positive reputations as stewards of the environment.

Corrugated boxes have always been the predominant shipping container trusted to transport all kinds of products from manufacturer to DC to wholesaler and retailer. The retailers have played a leading role in building corrugated recovery for recycling to an amazing 90 percent of production – enormously better than any other packaging material on the planet.

The success of commercial and industrial corrugated recovery is owed in part to their operational circumstances. Retailers, especially, take in a lot of boxes – so their volume of used corrugated has justified

installation of compacters and balers to maximize material recovery and economics. They are accustomed to earning revenue for the sale of their old corrugated containers (OCC) and reducing their waste disposal costs as a result, in addition to supporting their own sustainability goals.

Now, e-commerce is changing the distribution of products and moving more of them directly to consumers, sometimes bypassing brick-and-mortar retail destinations.

Consumers see more corrugated boxes coming into their homes – what they may not understand is that this does not represent an increase in packaging waste.

The fact is, while more boxes are now visible to consumers, showing up on their

doorsteps, less corrugated is being used to deliver products to retailers. The amount of corrugated packaging being produced is quite stable and still below its 1999 peak production volume. So the good news is, the growth of e-commerce is not increasing the amount of corrugated going to waste.

Why is this important? First – when considering sustainability, corrugated packaging is truly a guilt-free and responsible choice. Ninety percent of it is successfully recycled to make new paper products and that has been true for several years. As the corrugated recovery rate consistently exceeds that of all other packaging materials, the industry's overall environmental footprint also continues to improve. This has been demonstrated in continuous life-cycle assessments, which are available online to provide total transparency and demonstrate the integrity of the studies' conclusions.

Meanwhile, the accelerating transition from traditional retail to omnichannel distribution shifts the placement of some responsibility for corrugated's end-of-life disposition; now that consumers are receiving more boxes, it's more important than ever for them to recycle at home. Fortunately, 96 percent of Americans have access to corrugated recycling programs.

Those programs – whether managed by municipal and county governments, or by private enterprises – are handling more OCC that comes direct from households. Consumer education to minimize contamination and encourage proper collection will enhance the economics of recycling for those entities.

Businesses can help by making sure they use boxes with the Corrugated Recycles imprint and by reinforcing the message wherever they can, building the use of recyclable packaging into their own sustainability efforts and brand communications.

Source: https://www.mmb.com/article/corrugated_packaging



In today's circular economy, every portion of the supply chain bears a measure of responsibility for sustainable business operations. Consumers want to feel good about their purchases and businesses are increasingly focused on doing the right thing to earn their trust and to deserve

Contd. on - 99

ESTD. 1965
No Wonder
We are No. 1...



HIGH SPEED
 SINGLE FACE
 PAPER
 CORRUGATING
 MACHINE

Corrugated Board & Box Making Machines

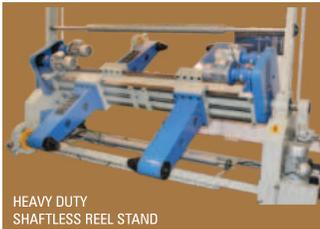
Made in india



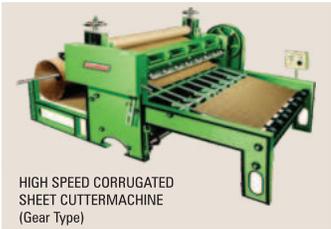
HEAVY DUTY
 SINGLE FACE PAPER
 CORRUGATING
 MACHINE
 (BUSHING)



DIGITAL SERVO
 ENCODED
 SHEET CUTTING
 MACHINE



HEAVY DUTY
 SHAFTLESS REEL STAND



HIGH SPEED CORRUGATED
 SHEET CUTTER MACHINE
 (Gear Type)

KRISHNA®
 Since 1965



HIGH SPEED
 FINGERLESS
 SINGLE FACE
 PAPER
 CORRUGATING
 MACHINE



HIGH SPEED
 DOUBLE PROFILE
 PAPER CORRUGATING
 MACHINE



HEAVY DUTY
 PLATEN DIE
 CUTTING &
 CREASING
 MACHINE



ECCENTRIC
 SLOTTING
 MACHINE



REEL TO
 SHEET
 CUTTING MACHINE



4-BAR
 ROTARY CREASING
 & CUTTING MACHINE



AUTOMATIC 3/5 PLY PRODUCTION LINE

Manufacturers & Exporter
SHREE KRISHNA
ENGINEERING WORKS

Plot No. 121, Road No. 9, Near Prime Co-op bank,
 Udhana Udhog Nagar, Udhana, Surat-394210 (Gujarat) India

Tel : + 91 261 2280000

Cell : + 91 9374454445 | 9925895354 | 9974671437

Email : shreekrishna_surat@yahoo.co.in
 krishnaengg64@gmail.com

www.shreekrishnaengineering.com



FLEXO PAPER
 PRINTING MACHINE



BOX STITCHING
 MACHINE

PRODUCTS PORTFOLIO

- Single Facer Corrugating Machine
- Sheet Cutter
- Sheet Pasting Machine
- 4-Bar Rotary Machine
- Overhang Eccentric Slotter
- Combined Rotary Slotting (RS-4)
- Flexo Paper Printing Machine
- Printer Slotter/Diecutter
- Platen Die Punching Machine
- Auto Feeder For Pasting Machine
- Box Stitching Machine
- 3/5/7 ply Automatic Plant



SHEET PASTING
 (GLUING MACHINE)

**3/5/7 PLY CORRUGATED CARDBOARD
PRODUCTION LINE**



Manufacturers & Exporter

SHREE KRISHNA ENGINEERING WORKS

krishna®

Since 1965



FINGERLESS
SINGLE FACER



HYDRAULIC
MILL ROLL STAND



COMPUTER
SHEET CUTTER



ROTARY
SLOTTER
MACHINE



FINGERLESS
SINGLE FACER



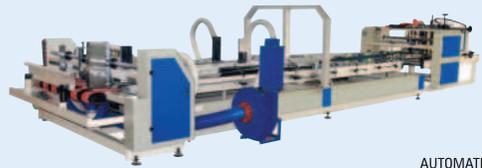
ELECTRIC MILL
ROLL STAND



CHAIN FEED PRINTER
SLOTTER/DIE CUTTER



AUTO FEEDER
VACUUM SUCTION



AUTOMATIC
FOLDER GLUER



SEMI AUTO FLAP
SLUER PRESS TYPE



THIN BLADE SLITTER
SCORRER MACHINE



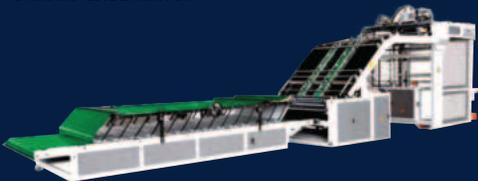
HIGH SPEED FLEXO PRINTER SLOTTER/DIE CUTTER (LEAD EDGE)



SEMI AUTO FLAP GLUER

CORRUGATED BOARD & BOX MAKING MACHINES

AUTOMATIC FLUTE LAMINATOR



SEMI AUTO FLUTE LAMINATOR

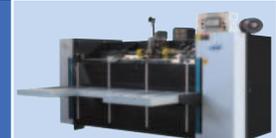


ROTARY SLOTTER MACHINE

Plot No. 121, Road No. 9, Near Prime Co-op bank,
Udhana Udhog Nagar, Udhana, Surat-394210 (Gujarat) India
Tel : + 91 261 2280000 | Cell : + 91 9374454445 | 9925895354 | 9974671437
Email : shreekrishna_surat@yahoo.co.in | krishnaengg64@gmail.com
www.shreekrishnaengineering.com



SERVO
STITCHING
MACHINE



SEMI AUTO STITCHING MACHINE



"JYOTI"

One stop for non stop stitching

Prime

WIRES PVT. LTD.

Manufacturers of :

"JYOTI" Brand Stitching Wire

"JYOTI"
Brand Stitching Wires



Be it a Box stitching Wires or Book Stitching Wires, we at **Prime Wires Pvt. Ltd.** thoroughly understand your packaging business and its deadlines. Therefore, to help you grow and stay ahead of the competition, we've been manufacturing world-class stitching wires with a sense of urgency for more than 17 years, offering the widest range, the highest quality and the best price.

At **Prime Wires Pvt. Ltd.**, every client is important and every order- small or big-is given top most priority. So whatever the volume of business, we give equal attention to the minutest detail and deliver in shortest time.

Why "JYOTI" stitching wires make more business sense • A complete range of high quality stitching wires
World class coating, winding & tensile strength • Prompt delivery & easy price.
Huge manufacturing capacity • Customized & innovative solutions.



G.I. STITCHING WIRES



RUST-RESISTANT STITCHING WIRES



PURE BRASS / COPPER STITCHING WIRES



BOOK STITCHING WIRES FOR AUTO STITCHERS



BOOK STITCHING WIRES FOR MANUAL STITCHERS



BOX STITCHING WIRES FOR AUTO STITCHERS

Manufacturers of : "JYOTI" Brand Stitching Wire

Prime
WIRES PVT. LTD.

Unit No. 12/13/113, Jay Chamundeshwari Ind. Complex Bldg. No. 2, Survey No.54, Naikpada, Village Waliv, Vasai (East), Thane - 401208. • Ph: 99678 88837 / 93230 23024 • Tele Fax: +91 22 2888 7841

E: primewirespl@gmail.com • info@jyotistitchingwires.com

www.jyotistitchingwires.com

Not All Corrugated Boxes Are Created Equal

For most of us, the term “corrugated boxes” makes one think of a brown paper board material with rippled channels that resemble ribbon candy between two pieces of paper. Paper boxes should be relatively easy to label, right? WRONG! Unlike writing papers and paper labels where print quality is crucial and standards are higher, corrugate is not as controlled.

Today, you will find Corrugated containers can vary order to order because they are typically made from recycled materials and the percentage of recycled content can change. All sorts of contaminants like glue, ink and much more can be found in recycled corrugate making it challenging to find the right type of label adhesive to bond to a box.



Then you add to that issue the fact that certain corrugated materials are specially coated with finishes to hold up better in moist conditions. Waxed or varnished coatings have low-surface-energy (LSE) that makes it really hard to label. The newer generations of cardboard boxes require more rigorous label adhesives that can bond to a wider variety of finishes.

Many box labels are applied using blow-on or tamp-on automatic application equipment that calls for adhesives with quick stick, aka high initial tack. Furthermore, corrugate can be exposed

to both high and low temperatures when left in shipping containers. Some may also have to deal with moisture and frost accumulated in storage freezers. On top of all this, some box labels are wrapped around corners or over box flaps so that the label flexibility may be critical.



EIM offers a variety of paper and plastic Shipping and Box Labels label products for cardboard and corrugated. Some come with Rubber Hot Melt Adhesives that offer great initial tack, but they can absorb contaminants and degrade, plus they do not handle high heat well. A broader selection of box labels come with Acrylic Adhesives that work in a wider range of temperatures and are less affected by contaminants, but certain ones may not have the best quick stick features or perform as well in moist conditions.

We always recommend testing labels for cardboard and corrugated, but it is important to remember that corrugate suppliers can change the content of box materials without notice. Unfortunately, it may be hard to find a single label material to solve the all the variables in box labeling. If you have shipping and storage box requirements, contact our Label Experts for assistance.

Source: <https://barcode-labels.com>

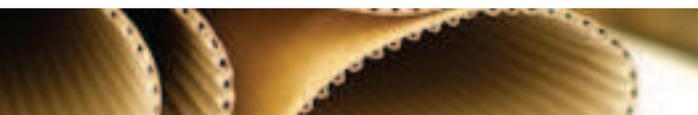
SUN Automation Group Announces Partnership with Suba Solutions to Represent SUN's Innovative Solutions in India



SUN Automation Group®, a leading global provider of innovative equipment to the corrugated industry, is pleased to announce a partnership with Suba Solutions to provide equipment and parts and support its customers in India.

Suba Solutions headquartered in Chennai, India, specializes in value-added solutions for the folding carton packaging and corrugated packaging industry. Founded in 2003 initially as an offline UV curing manufacturer, the company shifted its focus to machine trading in early 2005. Today, Suba Solutions has over 900 machines installed throughout India, Sri Lanka, the Middle East and Africa. Suba's territory in India for SUN Automation Group includes Southern States of Tamil Nadu, Karnataka, Kerala, Andhra Pradesh, Telangana, and Pondicherry.

At the helm of Suba Solution's management are four dynamic professionals, each heading separate product divisions and supported by over 90 colleagues situated across India. Of the partnership, Director of Suba Solutions Mr. C Naresh said, “This partnership will increase Suba Solution's value proposition to its customers in India by offering them SUN Automation Group's world class solutions and exceptional customer service and support for the corrugated industry.”



OUR WATERBOND INKS - A PERFECT MATCH FOR YOUR SUBSTRATE



Corrugated Boxes... love the feel of our inks!

- Our inks run at speed of 50 to 250 box per minute on high speed TCY machine
- Designed to run on any paper without shade variation • Smooth and consistent printability
- No foaming even at high speed runs • All our inks are lead and heavy metal free
- 100 % food grade inks • Good mileage • Inks can be diluted up to 100% • Cushion kept for dilution
- Our inks are odourless • Rapid drying and good opacity

▶ **WATERBOND PREMIUM**

Very high strength. High gloss. Superior mileage.

▶ **WATERBOND SUPER**

Offers good strength and gloss. Suitable for automatic machines.

▶ **WATERBOND ECO**

Economical ink for semi-automatic machines.



SEVEN 11
SEVEN - 11 INDUSTRIES

Survey No.: 703/15 & 16,
Plot No.: A2/11, Daman Ind. Estate,
Opp. Somnath Mandir, Somnath Road,
Village Dabhel, Daman - 396 210. India.

Tel: +91 260 2240128 / 2242713
Fax : +91 260 2241645
Email : info@seven11industries.com
www.seven11industries.com

“We are thrilled Suba Solutions is adding our products to their portfolio of solutions for the corrugated industry in India,” says Greg Jones, Vice President Global Sales & Aftermarket. “SUN is perfectly poised to meet the high demand for corrugated packaging technology in India in a way that reduces costs while enhancing efficiencies.”

About SUN Automation Group®

SUN Automation Group® is a global industry leader providing corrugated box plants with innovative equipment for feeding, printing and converting. The wide range of products are proven solutions for increasing production, efficiency, and profitability. With 24/7 on-site technical support, SUN Automation is known for its exceptional service and care.

Source: /news.thomasnet.com

Exports of Indian grapes to China to rise by 200% by '20, states APEDA

Agricultural and Processed Food Products Export Development Authority (APEDA), in association with PHDCCI, recently made a prognosis, stating that the exports of Indian grapes to China are likely to increase by 200 per cent, both in quantity and value terms, by 2020. Currently, the estimated exports of Indian grapes to China are pegged at 600 metric tonne.

“APEDA is making efforts to expand its export market to China. The collective

efforts of Ministry of Commerce and Industry, Government of India, through APEDA, in association with the grape-growing states, and the National Research Centre for grapes is making efforts to improve the quality of fresh grapes. The promotional schemes of the Central and state governments will boost the export of Indian grapes and other tropical fruits,” the statement added.

APEDA and PHD Chambers of Commerce and Industry, the organisers of the RBSM, elaborated that India was the fruit basket of the world and provided a large number of varieties of high-quality and tasty tropical fruits.

Borthakur informed that India was among the first 10 countries in the world in the production of grapes. The five major producers of grapes are Italy, France, Spain, the United States and Turkey.

Major grape-growing states are Maharashtra (81.22 per cent of the total production and highest productivity), Karnataka, Telangana, Andhra Pradesh, Tamil Nadu and the north-western region, covering Punjab, Haryana, western Uttar Pradesh, Rajasthan and Madhya Pradesh.

APEDA has been instrumental in promoting quality agri-products. As per its mandate, the authority has provided support for the required infrastructure across the country in terms of pack houses with post-harvest treatment facilities and a centre for

perishable cargo agro complex at major airports. This has helped the industry to increase their exports of quality produce up to a large extent.

Considering the requirement of food safety and traceability by importing countries,

India has taken number of measures by strengthening the backward linkages in the production supply chain, setting up of required infrastructure in terms of pack houses and post-harvest treatment facilities, which has enabled to get market access for fruits in various countries in the past.

After the BSM and field visits to vineyards in Nashik, it was expected that exports will rise to about 1,000 metric tonne (MT) (approximately \$2.60 million) this year, and reach a level of 2,000 MT, approximating a value of \$5.2 million by next year.

Fruits and vegetables are increasing packed in corrugated Boxes – which have displaced wooden containers. Increase in exports will inturn boost the demand for corrugated.

Source: <http://www.fnbnews.com>

Genus: Driving kraft growth and creating capacities

New Delhi Based kraft paper manufacturer Genus Paper is pumping big bucks as it aims to provide options to the Indian Corrugators to take advantage of the expected boost in Indian consumerism.

The quality of Genus kraft paper is among the best in the North region.

Kailash Agarwal, MD of Genus Papers is bidding big on the ecommerce boom and potential plastic bans. “The packaging has a huge potential in the coming years. There has been several bans on the use of plastics. As more and more government agencies implement ban on plastics, the demand for paperbased packaging will increase.

“The way packging is growing, according to my understanding, kraft paper will grow at a rate of 9% CAGR. If the growth happens at the same rate along with the consolidation, we may see ourselves with the capacity of 1-million tonnes in the next five years.”



Since 1995

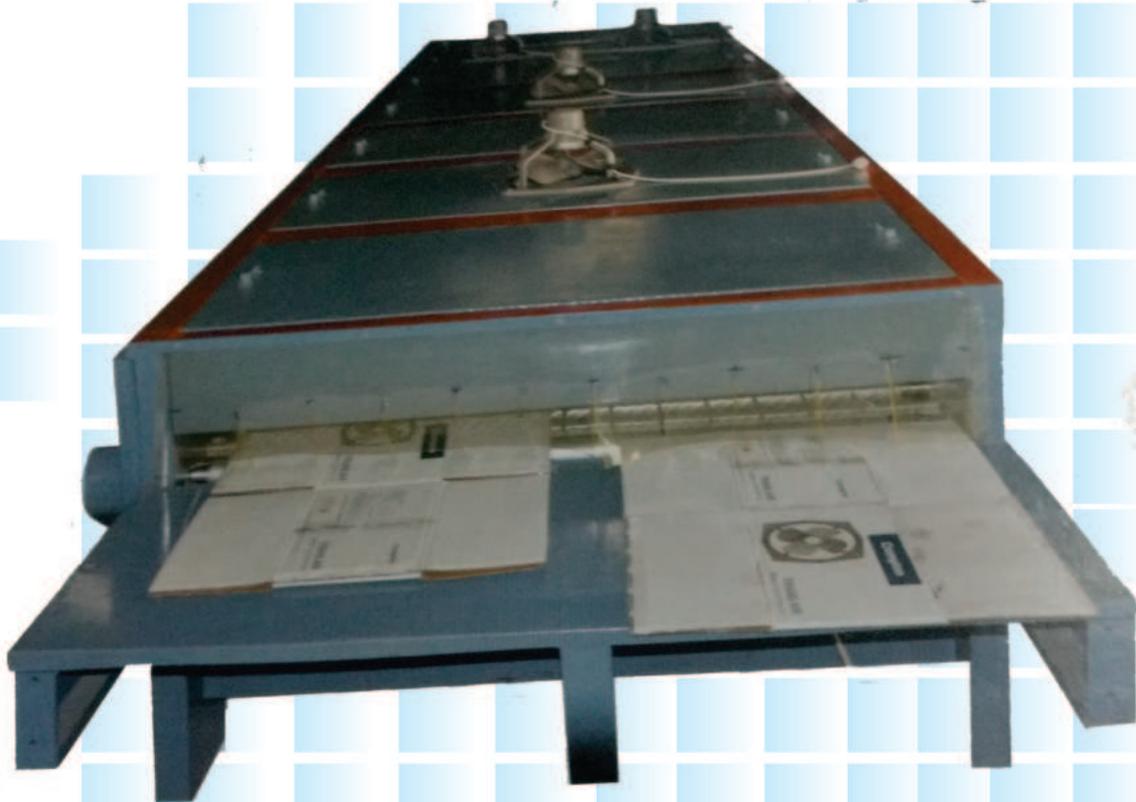
PERFECT HEAT PRODUCTS & PLASTICS

Manufacturers of : ALL TYPES OF INDUSTRIAL HEATERS

Plot No. 4804/2, Plastic Zone, G.I.D.C., SARIGAM - 396 155. Dist. Valsad. (Gujarat)

Mo. 09824132078, 093740 62751 Email : perfectheatproduct@gmail.com

Web Site : www.perfectheatproducts&plastics.com



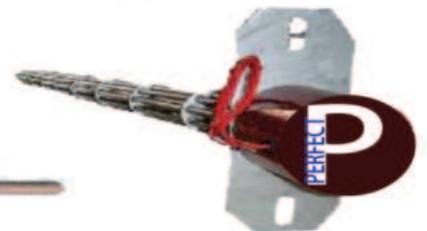
Corrugated Box or Sheet Dryer System

Note : Electricity consumption required in the machine is 3 Phase.

FEATURES : The special features of this machine as follows :

1. The machine is specially manufactured for corrugated box and sheet drying purpose.
2. The speed of conveyor in the machine is variable due A C drive installed in the machine.
3. The three digital temperature controller installed in the machine for controlling the heat in the heating chamber.
4. Heavy and good quality of electronic/Electric goods in the panel and heater used in the machine
5. The machine is manufactured by very heavy fabrication

Corrugation Machine Heaters



Product Profile

CORRFLEXO

Knives & Slotter Spares

The Company offers

CBN and Diamond Grinding Wheels

Abrasive Cubic-Boron-Nitride (CBN) and diamond wheels ideal for use with steel alloy slitting blades. Grain size adjustable to suit application requirements.

No-Crush Wheels and Feed Rollers

Engineered polyurethane crush-less wheels and rollers manufactured to precise OEM tolerances, for greater control over machine speed and with excellent wear resistance and dimensional stability.

Resistant to chemicals, impact, extreme temperatures and are inert in the presence of ozone and oxygen.

Upper and Lower Cross-cutting Knives

Manufactured in solid steel or inlaid with rigid steel alloys for longer life and cleaner, more precise cutting.

Available in Chrome Steel (solid), M2 HSS (solid or inlay), Super-Cobalt HSS (inlay), Powder Metallurgy HSS (inlay), Tungsten-Carbide (inlay).

Gold Titanium Slotting and Bottom Knives

In addition to steel alloys, high-performance knives coated in Gold Titanium-Nitride (TiN) are available - the micro-ceramic coating lowering the coefficient of friction thus increasing blade life by 300% or more.



Grinding Wheels



Gold Titanium-Nitride Slotting Knife



Bottom Knife



No-Crush Wheels

New SUN EZ-Covers Eliminate the Need to Stock Spare Feed Rolls

The SUN EZ-Covers consist of a core and a set of replaceable covers. The unit's intuitive design allows replacement without involvement of maintenance personnel. The product minimizes the cost associated with crating, transportation, inventory and handling.



Original Press Release:

Replaceable feed roll covers reduce labor and significantly reduce downtime, costs associated with changing feed rolls

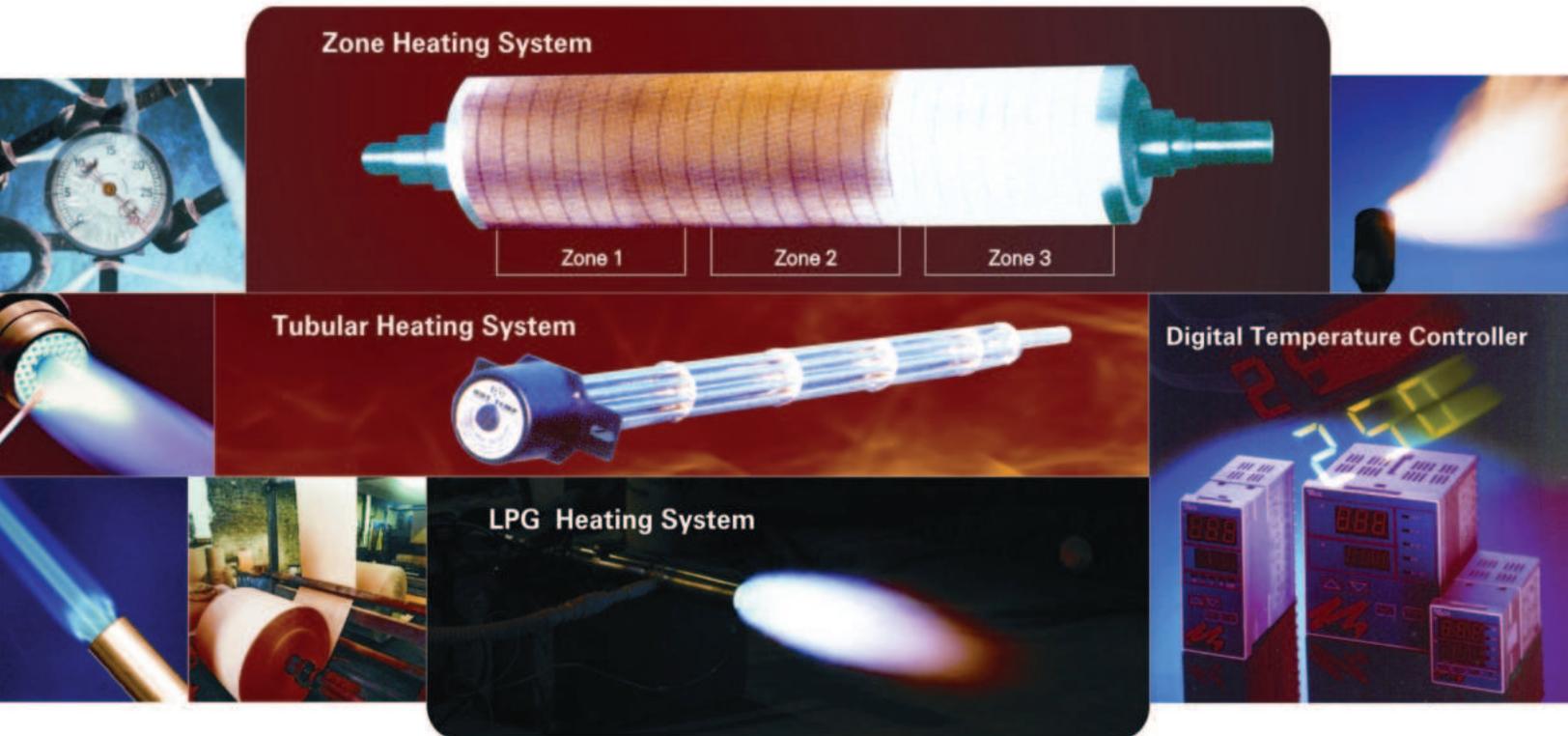
SUN Automation Group, a global leader in providing innovative solutions to the corrugated industry, has introduced its latest advancement; SUN EZ-Covers, at Corrugated Week 2018 in Indianapolis, IN. The new patent-pending feed roll covers are replaceable in ~10 inch wide sections without removing the roll from the machine, enabling installation by one operator.

Their innovative engineers worked tirelessly to develop this unique and groundbreaking solution with our customers' needs in mind said President of Sun Automation Group.

Contd. on - 109



India's Most Trusted Name in Energy Efficient Heating Technologies!



Hot-Temp Heating Systems

REDUCE YOUR ELECTRICITY BILL FOR CORRUGATION HEATING MACHINE UP TO 40% !

To know how Call SHIVANSH JHINGAN -09810014426; ASHU JHINGAN -09818437434

Zone Heating System

- Drastic reduction in electricity consumption while corrugating smaller size paper widths.
- Zero blister formation at the edge of the fluting ensuring a high quality 2 ply output.
- Capital Savings by eliminating the need of buying different sizes of corrugation machines .
- Longer machine life and less wear & tear of rollers by avoiding unnecessary heating.
- Reduction in over all electricity load.

Tubular Heating System

- Electricity savings due to usage of Precision-wound resistance wire, sized by a computer program resulting in uniform heating
- Higher durability and longevity due to stainless steel sheath material frame
- Greater operator safety due to Coil Insulation
- Lower break-down times due to easy replaceability of the heating rods

LPG Heating System

- Zonal heating option now available for savings in LPG consumption.
- Ideal alternative heating solution where electricity is not available.
- Convenient installation and operations.
- Excellent service network.

DIGITAL TEMPERATURE CONTROL PANEL ENHANCES RESULTS OF ALL ELECTRIC HEATERS BY REDUCING ELECTRICITY CONSUMPTION AND WASTAGE!

Over 5000 Heating installations for 2000+ Box manufacturers across India.

ELECTRO HEAT ENGINEERS

81/1, MATIALA (NEAR ALLAHABAD BANK) NEW DELHI-110059

Ph. : 9560796671 / 9999303287

E-mail : electroheatengrs@gmail.com, ashujhingan@yahoo.com

Revolutionary box drying technology trusted by over 100 box manufacturers.



Radiant Box Drying Machine offers Indian corrugators, a distinct competitive advantage. It has brought the quality of corrugated boxes produced in Semi-Automatic Plants at par with Automatic Plants. We at Radiant are committed to bringing the latest innovations in the international corrugated box industry to the Indian box manufacturers.

Advantage Radiant Box Drying Machine

- Greater Box Strength
- Versatile Operation
- Weather-independent
- Zero Box Deformation
- Multiple Heating Options
- Optimum Space Utilisation
- Non-stop Operation
- Instant Start-up
- Minimal Requirement of Manpower

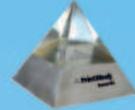


Ashu Jhingan 09818437434, Shivansh Jhingan 09810014426

RADIANT
HEATING SYSTEMS
A group company of Electro Heat Engineers

Radiant Heating Systems

81/1, Matiala (Near Allahabad Bank),
New Delhi - 110059 | Tel: 9560796671, 9999303287
E-mail: electroheatengrs@gmail.com, ashujhingan@yahoo.com



Processor of Digital Flexo Plates for Corrugated Pre & Post Print

Creative Graphics is one of the best quality processors of Flexo plates in India. We, at Creative Graphics, have been engaged in the industry as a well-known processor & supplier of high quality Flexo plates for printing since 1998.



DigiCorr Technology

We take a pride to introduce DuPont's patented technology DigiCorr first time in Asia to deliver superior print quality.



Esko CDI

Esko Result in true 1:1 reproduction, improved solid ink densities & print contrast.



Benefits:-

- High quality halftone printing & smoother tonal gradations.
- Highest accuracy and precision.
- Consistency and precision.
- Excellent ink transfer.
- Excellent print quality due to minimum dot gain.
- Extremely durable.
- Crisp text and sharp reverses.

Key features:-

- Fully equipped Pre-Press facility.
- Latest auto-control plate making systems.
- World class infrastructures.
- Ideal plates for any substrate and board.
- Availability of all thickness of plates.

We also have the capacity of processing a single plate of size 50 x 80 sq inches.

Contact Us:

NOIDA UNIT-I

Creative Graphics
F-71, Sector-8 Noida-201301
Phone:9560799001 to 04, 0120-4537650 to 667
Email:marketing@creativegraphics.net.in
box@creativegraphics.net.in

HYDERABAD UNIT-III

Tanushii Industries Pvt. Ltd.
Plot No.7-66/1/A, Ground & First Floor,
Survey No.242, Shivalayam Road, Subhash Nagar, IDA
Jeedimetla-500055, Quthbullapur circle, Hyd. Telangana
Phone:9032430949
Email:mumbai@creativegraphics.net.in

BADDI(HMACHAL) UNIT-V

Tanushii Industries Pvt. Ltd.
14 & 15, M1 Plaza, Jharmajari, Baddi,
Barotiwala Industrial Area-174103
Phone:8679700301
Email:creativegraphicsbaddi@gmail.com

MUMBAI UNIT-II

Tanushii Industries Pvt. Ltd.
101,Srishti Bld. No. 5, 1st Floor,Square Industrial Part,
Tungareshwar Phata, Sativali,Vasai,Dist.
Thane-401208(Mumbai)
Phone:9890543217
Email:mumbai@creativegraphics.net.in

CHENNAI UNIT-IV

Tanushii Industries Pvt. Ltd.
341 3rd Main Road Nehru Nagar
Industrial Estate, Kottivakkam
(OMR) Chennai-600096
Phone:9884227855
Email:chennai@creativegraphics.net.in



For more detail
Scan the QR Code or
visit us
www.creativegraphics.net.in



STATE-OF-THE-ART CORRUGATED BOARD AND BOX MAKING MACHINES



Introducing for the First Time In India
3, 5, & 7 Ply Semi-Automatic
FLUTE LAMINATOR



Please feel free to call me at 9820845598
about any of the specifications of this machine.
www.youtube.com/watch?v=B65Xw6M03Ww
www.youtube.com/watch?v=dYK4SkWJOQI

SUPER PRINTING MACHINERY CO.

OFFICE : NEAR MUNICIPAL HOSPITAL, JUNCTION OF LBS MARG,
STATION ROAD, BHANDUP (W), MUMBAI - 400078

Contact : RANJIT S GILL (9820845598)

Tele Fax : 022 - 25947454, Email : gillspmc@gmail.com

ADROIT MACHINERY

FULLY AUTOMATIC BALING PRESS



*Quality is Never An Accident. It is the result of an Intelligent effort.
There must be a will to produce a superior thing.*

Technical Specifications	
Power Capacity	30Hp Main Pressing
Final Pressing Ram	02 Nos
Operating System	By Plc Panel Fully Automatic
Compact Bale Size	18in X18in X48in (457mm X 457mm X 1219mm)
Production Capacity	4 To 5 Bales per Hour

Applications	
1	Paper Waste & other Waste Products
2	Cotton Industries
3	Spinning Mill

Salient Features	
1	High Capacity
2	Fully Automatic
3	High density bales
4	Most Profitable
5	Lowest Cost Per Bale
6	Lowest Power Consumption Per bale
7	Minimized Damage In Case Of Fire
8	Lowest Maintenance
9	Lowest man Power Requirement
10	Very Heavy Duty Structure For Long Life
11	High Pressure Powerpac As Per German technology
12	Operating System Plc Programming Panel Board.

ADROIT MACHINERY

Plot No. 278 Opp Road No. 5&6, Near Accurate W-Bridge, Kathwada G.I.D.C. Ahmedabad, Gujrat India

Tel: +91 70960 01525, +91 84014 44199

email: adroitmachinery278@gmail.com • website: www.adroitmachinery.in

The SUN EZ-Covers' intuitive design allows for replacement without the involvement of maintenance personnel and significantly reduces planned and unplanned downtime. In addition to the cost savings associated with labor and reduced disruption, SUN EZ-Covers also reduces costs associated with crating, transportation, inventory and handling since spare feed rolls are not needed. SUN EZ-Covers also eliminates the need to stock spare feed rolls and reduces replacement time from 4-6 hours to just 30 minutes.

SUN Automation Group will offer the SUN EZ-Covers as a total system, which consists of a core and a set of replaceable covers which fasten to the core. At scheduled times, worn EZ-Covers are removed and a new set installed while the core remains on the machine.

"SUN EZ-Covers are a perfect example of how SUN Automation Group innovates," says Kyger. "The SUN EZ-Covers System is truly a result of our unique "culture of listening" and I couldn't be more proud of our entire team for once again bringing a groundbreaking solution to the corrugated industry."

The HP PageWide C500 Press

The HP PageWide C500 Press delivers consistent offset print quality for a wide range of corrugated packaging applications on both coated and uncoated paper. With post-print process simplicity and the versatility advantages of food-safe1 true water-based inks, the HP C500 press streamlines your production possibilities. The C500 press

brings benefits of digital printing, with flexibility, accelerated time to market, and reduction of waste and inventory with no need to compromise on print quality.

This innovative single-pass, digital post-print breakthrough solution, helps you creating new business opportunities and new competitive advantages.

Post-print simplicity with offset print quality

- Achieve offset-quality results while printing direct-to-board and eliminate lamination.
- Print sharp text and barcodes and smooth tone transitions, with 1,200 nozzles per inch and 6-pl drops.
- Consistently produce offset print quality with innovative HP Virtual Belt Technology for accurate dot placement.
- Maintain consistent print quality with 1 million nozzles and 6X nozzle redundancy.

Digital flexibility for mainstream production with improved economics

- Build customer loyalty through better service: on-demand printing, quick campaigns, last minute changes.
- Profitably convert a meaningful part of your current jobs from analog to digital.
- Reduce inventory and waste by printing just-in-time instead of just-in-case.
- Cost-effectively print jobs in runs of one to thousands—while focusing your analog presses on the very long runs.

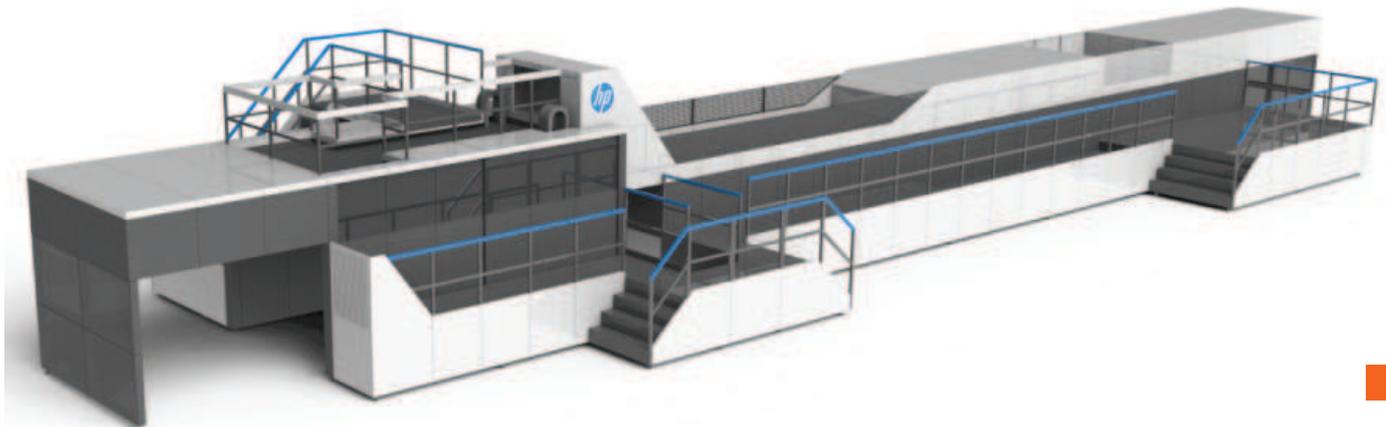
- Leverage digital to acquire new customers and new jobs for both digital and analog.

Food-safe1, true water-based ink for a wide range of packaging applications on coated or uncoated paper

- HP PageWide water-based inks are 100% free of UV-reactive chemistries, meeting stringent food packaging standards.
- Robust, trusted printing for primary and secondary food packaging, as well as sensitive products packaging - with no extra barriers needed.
- Whether coated or uncoated, you can achieve superb print quality and deliver premium-quality boxes.
- Amaze brands and enhance box value with versioning, customization, and a range of printed security features.

Simplify your digital production with solutions from a partner you can trust

- Ramp up production by taking advantage of the comprehensive service and support programs by HP, as a long-term committed partner.
- Maximize your digital production flexibility with HP One Package workflow suite, by integrating software and solutions from HP and partners.
- Drive business success by leveraging HP's scale—including brand relations, sales training, and communities.





PAP-TECH ENGINEERS & ASSOCIATES

DESIGNER, MANUFACTURER & EXPORTER OF PRECISION INSTRUMENTS FOR KRAFT LINER & CORRUGATED KRAFT PAPER, CARRY BOXES

Equipments are confirming to National Standards (IS, FCBM etc.) & International Standard (TAPPI, ASTM, SCAN)

With Advanced Technology

After Sales Service

Export to Twenty Countries



BURSTING STRENGTH TESTER



BURSTING STRENGTH TESTER (MICROPROCESSOR BASED)



MICROPROCESSOR BURSTING STRENGTH TESTER



DUAL CLAMPING BURSTING MACHINE (MICROPROCESSOR BASED)



BURSTING STRENGTH TESTER (DOUBLE PRESSURE GUAGES)



BOX COMPRESSION TESTER (MICROPROCESSOR BASED)



DIGITAL CRUSH TESTER



FULLY AUTOMATIC - BURSTING STRENGTH TESTER



PNEUMATIC PLYBOND TESTER



GANN MOISTURE METER



PUNCTURE RESISTANCE TESTER



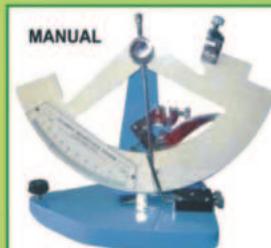
DROP TESTER (AUTOMATIC)



QUADRANT SCALE



DIGITAL GRAMMAGE TESTER CUM ELECTRONIC BALANCE



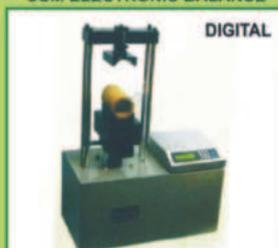
TEAR RESISTANCE TESTER



INTERNAL PLYBOND TESTER



COBB TESTER



CORE/CONE COLLAPSING TESTER



SCUFF TESTER



CONCORA MEDIUM FLUTTER

Admin office & work C-506 gurushikhar apartments nanakpura phatak post bilwa, Jaipur-302022(Raj)

CELL: +91-9351649342, 9950198012

EMAIL pkpapattech@gmail.com, pkpapattech@yahoo.co.in

Website:- www.paptechengineers.com, www.paptechengineers.com, www.paptechinstruments.com



Designed for Performance and Profitability

**First Time in India
Single Facer with S-Flute**



**Yet another First from Sun-up
S-Flute Roll for Manufacturing
Paper Cups for Hot Beverages**



Heavy Duty Waste Paper Baling Press

Bale Weight : 30 - 120Kg.
Heavily compressed bales result in huge savings



**Also offering HOTFOOT for
Double Baker in Automatic Corrugation Plants**

SUN-UP [INDIA] PACKAGING MACHINERY CO. PVT. LTD.

Office & Factory: Plot no. R-268, TTC Industrial Area, Thane-Belapur Road, Rabale, Navi Mumbai - 400 701
Tel.: +91 22 2769 0782 / 2760 6187 / 6514 1212 | Mobile: +91 98210 45985

Email: sunupindia@mtnl.net.in | rsbhurjee@rediffmail.com | www.sun-upindia.com

THE ASSURANCE OF QUALITY

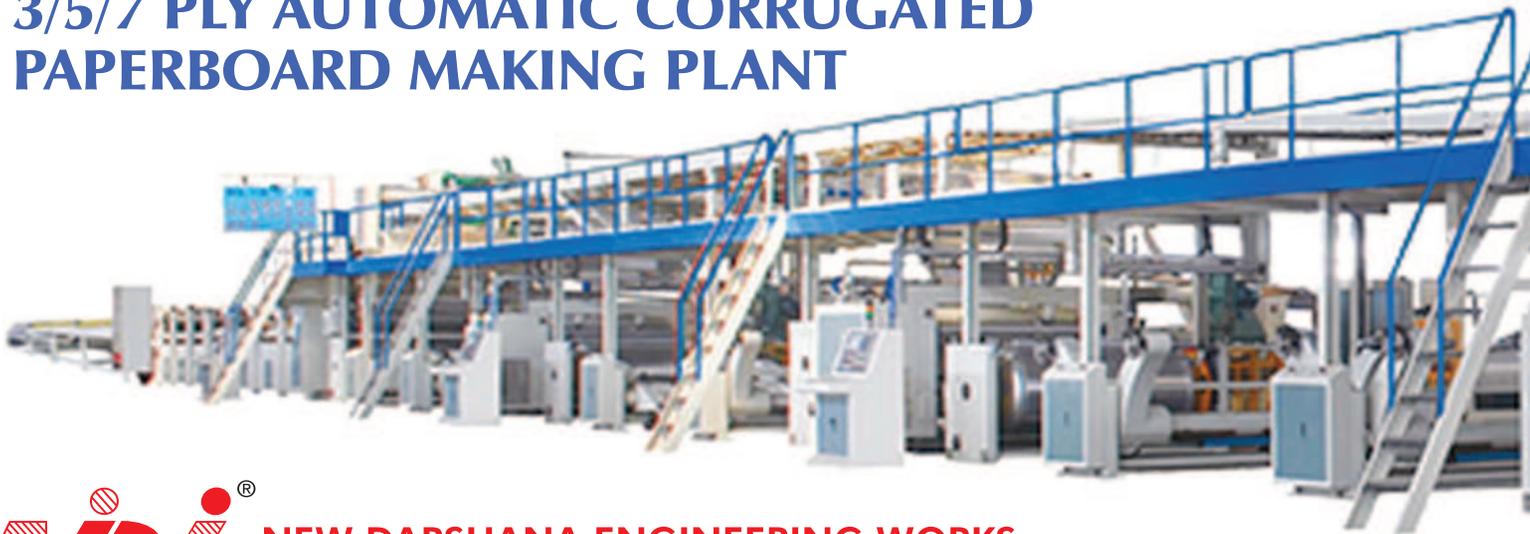
FINGERLESS TYPE HIGH SPEED SINGLE FACER MACHINE



HIGH SPEED FLEXP PRINTER SLOTTER DIE CUTTER WITH STACKER



3/5/7 PLY AUTOMATIC CORRUGATED PAPERBOARD MAKING PLANT



NEW DARSHANA ENGINEERING WORKS

12-C-1, Kothari Estate, 9 Acres, Tikujiniwadi Road, Behind Happy Valley Apartment,
Chitalsar, Manpada, Thane (W) - 400 610. INDIA

Tel.: +91 22 25892099 • Cell.: +91 98205 22070, +91 98206 38833

E-mail: virdimachinery@yahoo.co.in • Web: www.virdiengg.net

THE PROMISE OF PERFORMANCE



**DOUBLE PROFILE
CORRUGATION MACHINE**

**DOUBLE COLOUR FLEXO
BOARD PRINTER ATTACHED
WITH 4 BAR ROTARY CUTTER &
CREASER WITH CHAIN FEEDER**



Four Bar Rotary
Creasing & Cutter

Oil circulation Pump



Due to continuous improvement, the design of the machine can be changed without prior notice

2019.04

5-IN-1 MEGA EXPO COVERING
THE **WHOLE PACKAGING**
INDUSTRY CHAIN

1 PASS | 4 DAYS | 5 SHOWS

8 - 11 April, 2019 | Shanghai, China
Shanghai New International Expo Centre

#Connectingthefuture

Follow us on social media channels and use the hashtag #Connectingthefuture.



SINO
PAPER
2019

SINO
FLEXPACK
2019

CHINA
PACKAGING CONTAINER
EXPO 2019

SINO
FOLDINGCARTON
2019

SINO
CORRUGATED
2019

T: +86 21-2231 7000

E: info@reedexpo.com.cn

F: +86 21-2231 7183

Organiser



Organiser



Forthcoming Events

19 – 21 January, 2019



World Orange Festival

Nagpur - India

The 3-day long extravaganza celebrates the fruit, the city it grows in, its farmer and the community. An activity packed weekender, this festival will be complete with seminars and exhibitions for the industry, master classes with master chefs for the foodies, installations by artists for the art lovers, concerts by the greats, domestic and international acts, games and much more scattered all through the city. We welcome you, the locals and the tourists, the farmers and the traders, the children and the adults, to be a part of Nagpur's biggest celebration.

1 – 6 February, 2019



PRINTPACK India

India Exposition Mart,
Greater Noida, Delhi - India

Indian Printing, Packaging and Allied Machinery Manufacturers' Association (IPAMA), founded in 1988 and was registered in Delhi in 1991. IPAMA is an independent organisation serving the needs of the Printing, Packaging and Allied Industries in a rapidly changing marketplace. IPAMA operates from its own sprawling building with ultra-modern

facilities at NOIDA in the neighborhood of New Delhi capital of India.

IPAMA is today in the centre-stage, playing a pivotal role in the policy making of exports and imports, in collaboration with Government agencies, CII, FICCI, ASSOCHAM and FIEO.

As a registered apex body under the Societies Registration Act, IPAMA is dedicated to disseminating information on the state of the technology, market perspectives and various developments taking place around the world, relevant to the Indian Printing, Packaging, Converting and Allied Machinery manufacturing industries through its quarterly journal IPAMA Bulletin, besides holding international standards exhibitions "PRINTPACK INDIA" and National Exhibitions

IPAMA represents more than 80 percent of the graphic arts industry. With 315 Direct members on its roster, it is recognised by the Ministry of Commerce and Industry, Government of India.

12-14 March 2019



CCE International 2019

Munich Trade Fair Centre, Germany.

CCE International is Europe's only trade fair solely focusing on manufacturing and converting corrugated and cartonboard. It has firmly established itself as a specialised meeting point for this industry.

Some 150 exhibitors will welcome visitors on 5,000 sqm net exhibition space at CCE International 2019. They will present their latest technology trends, production processes, machinery and services, covering the entire production chain of the corrugated and folding carton industry, through live demonstrations.

8-11 April 2019



Sino Corrugated 2019

Shanghai New International Expo Centre
(SNIEC)

The World's Professional Corrugated Manufacturing Show

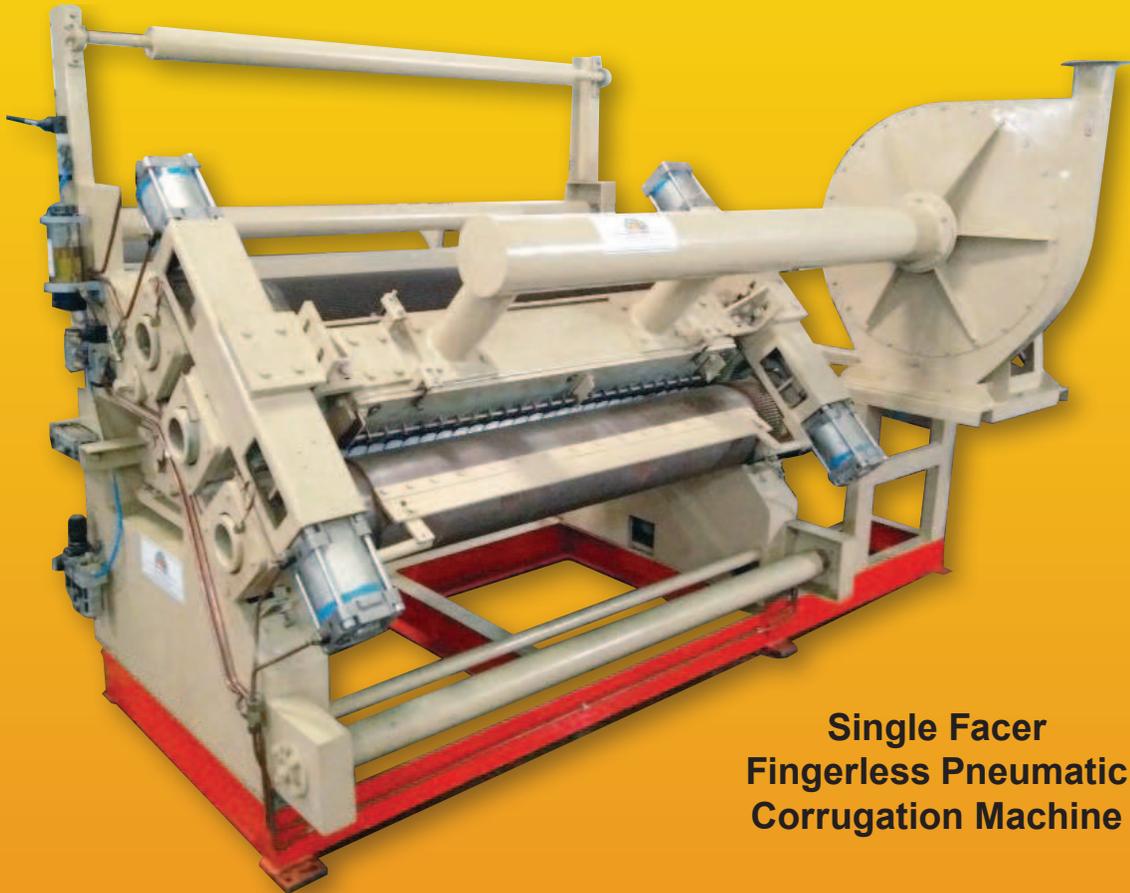
SinoCorrugated 2019 is the world's professional trade show for corrugated equipment, technologies and trends. The event is connecting the corrugated industry to the future and brings together over 1100 exhibitors and 100,000 visitors on more than 110,000 sqm exhibition space, showcasing 1,800 pieces of corrugated manufacturing equipment as well as 1,200 kinds of consumables. As a powerful and efficient channel it serves box manufacturers to make efficient purchasing decisions and to learn about new products, cutting edge technologies and market dynamics in order to enable solution for the most efficient performance within their businesses.



SUN-UP (INDIA)

PAPER BOARD MACHINERY (P) LTD.

**Manufacturers and Exporters of:
3/5 ply in-line automatic corrugated board plant and complete
range of paper corrugated board & box making machinery**



**Single Facer
Fingerless Pneumatic
Corrugation Machine**

Features:

- Vacuum Suction System provides perfect Flute Formation.
- Top Flute Roller, Pressure Roller & Glue Unit adjusted by Pneumatic System.
- Fingerless Vacuum Suction type Single Facer.

Sun-up (India) Paper Board Machinery (P) Ltd.

Regd. Office: 13, Darshan Udyog Bhavan, K. A. Road, Safed Pool, Andheri (E), Mumbai - 400 072.

Tel.: 98205 47633, 98198 33778, 98208 88718

Email: sunupenggco@hotmail.com; msbhurjee@gmail.com | www.sunupindia.net

Factory : Indian Corporation, Gala No. 33-34, Opposite Gajanan Petrol Pump,
Mankoli Naka, Bhivandi, Mumbai - 421302, Maharashtra, India



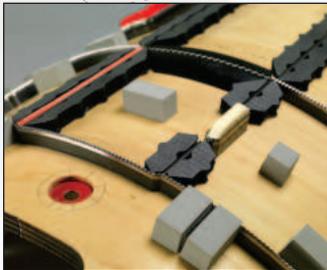
RISHABH

IMPEX PACKAGING SOLUTIONNS

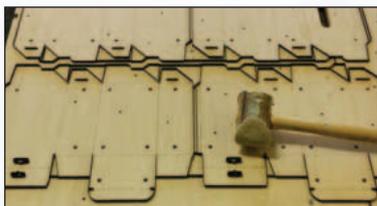
**LASER CUT ROTARY DIE • LASER CUT FLAT DIE
AUTOBENDER - RULE PROCESSOR FOR FLAT & ROTARY DIES**

A Passion for Precision

Rishabh - the Die Makers with a passion for precision - offer you custom made, hi-precision dies developed with laser technology & European raw material to give you consistent quality, accuracy and high productivity



Our highly experienced technical team along with superior quality raw materials used in each Die, ensures optimum result in output.



We manufacture many different varieties of laser cut Rotary dies & Flatbed Dies, such as Mono Carton Dies, Label Dies, Paper and Envelope Cutting Dies, Stripping Dies, Half cut Dies, Label Dies and Sticker Dies

RISHABH IMPEX PACKAGING SOLUTIONNS

Indian Complex, Building No. 54 Gala No. 8, 9 Dapode, Bhiwandi 421302

☎ 02522 662990 | ☎ +91 88790 63323 | ✉ sales@rishabhimpex.in

Die Makers to The Packaging Industry

AUTOMATIC GLUE KITCHEN NO-CARRIER PROCESS

Benefits

- Recycled wash water for glue mixing
- Viscosity detect & control technology
- High solid content & low gel temperature
- High shear mixing efficiency



椿樺化學股份有限公司
CHUEN HUAH CHEMICAL CO., LTD. (TAIWAN)
TEL: +886-7-6217177 | FAX: +886-7-6220593 | E-MAIL: sales@chdhw.com
NO.365 Daren N. Rd., Gangshan Dist. Kaohsiung 82054 TAIWAN



SinoCorrugated 2019

Booth : N3A15

Date : 8-11 April , 2019

Venue : Shanghai New International Expo Centre (SNIEC)