



Emerging Opportunities for Commercial Printers In Line Narrow Web Technologies

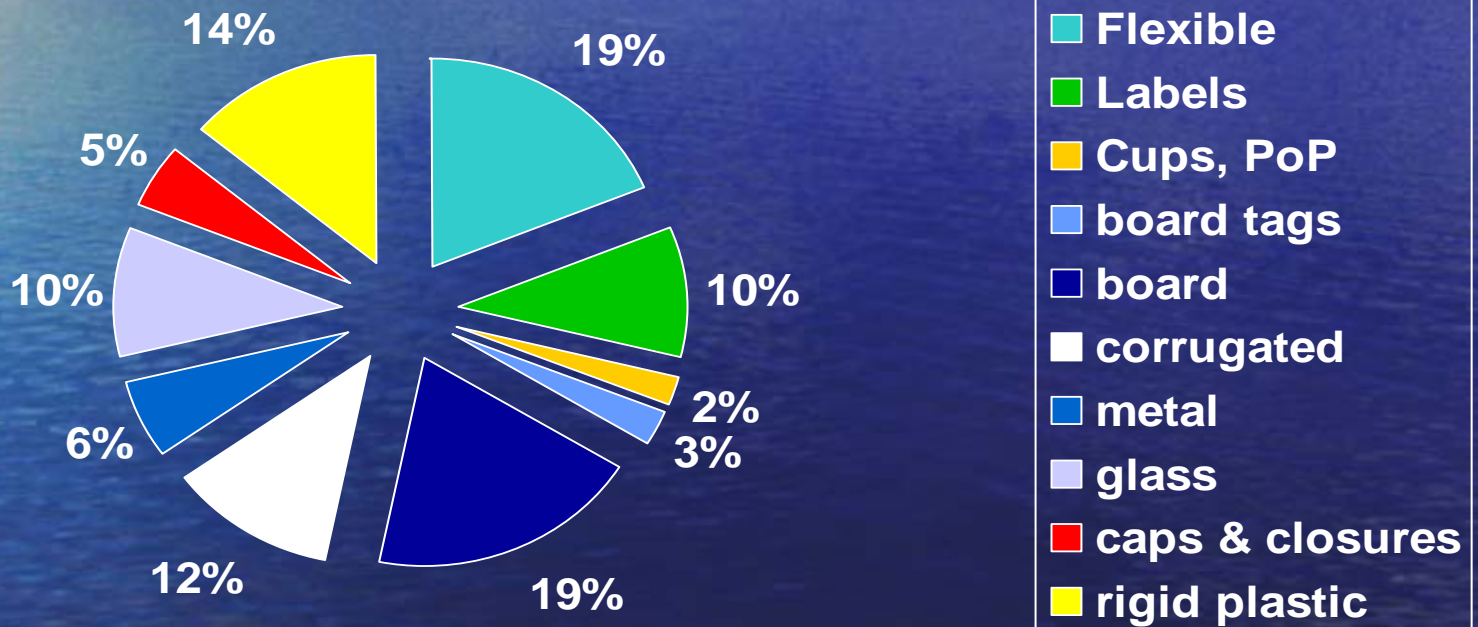
MANISH KAPOOR
FLEXO IMAGE GRAPHICS

What Does A Commercial Packaging Converter Do.....

- Board Cartons
- Flexible Packaging (Film)
- Labels
- Cups & Closures



Indian Packaging Industry Pie



How Does The Converter Do This...

- Offset is the predominant technology in India, although gravure is still growing in India with new presses and electronic engravers being imported increasing in number each year. Gravure in India is majorly used for Flexible packaging which is also growing at double digit rates.
- Flexo Printing turnover in India is still at 20 to 25% of flexible packaging turnover although growing fast with narrow web presses and also with import of wide web flexo mainly for the food processing industry.

Operations Involved In Converting These Products...

- Printing – single sided/both sides
- Varnishing
- Lamination
- Value Addition – Foiling/Screen/Embossing
- Computer Sprocket Punching
- Die cutting
- Waste Stripping

Most Common Problem Areas...

- Minimum 4 to 5 operations involved
- Raw Material is handled 8 -10 times
- Wastages incurred at every stage of Material Handling
- More Capital investment required for different machinery for various operations
- More Labor Required
- Turnaround time is more
- In Summary – NET Cost of the product is higher



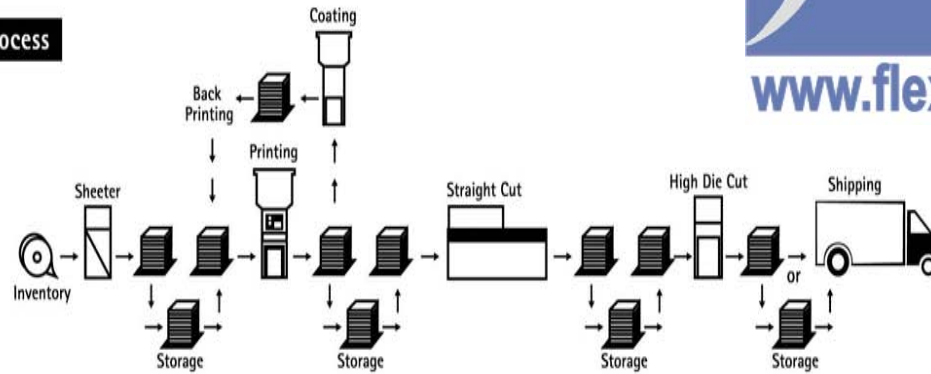
WELCOME TO THE DREAM
WORLD.....

GO INLINE – RAW MATERIAL TO
FINISHED PRODUCT IN ONE
PASS!!!

Offset VS. Flexo

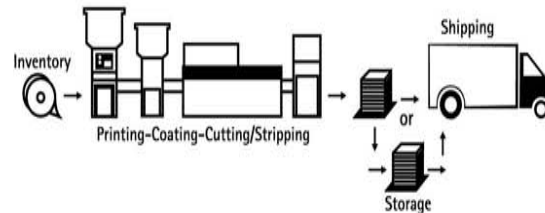


Offset Cut & Stack Process



- 13-15 Operators
- Materials handled 9-10x
- Several weeks turnaround

Single Pass Productivity-Flexo Process



- 4-6 Operators
- Materials handled 2-3x
- Same day(s) turnaround

VARIOUS SUBSTRATE CAN BE CONVERTED

- Plain paper
- Pressure sensitive stock
- Board, Metallised board
- Film (un supported)
- Film Label stock
- Foil, Metallised paper, Metallised film
- Woven cloth
- Laminates
- Etc.



Out put options

- Roll form
- Sheet form
- Fan folded
- Individual Products



Advantages



- Printing on both sides is possible with Web Turn Bar in single pass
- Delam / Relam (Printing on Adhesive side) is possible
- Printing, Lamination, Hot foil stamping, Die cutting, Slitting, rewinding are possible in line, in the same machine

Advantages



- Reduced delivery time
- Reduction in wastage, as all the printing, converting is done In Line
- Reduction in Labor, Power, Floor space
- Consistency within the same Run, and repeat orders.

INLINE

VS. Traditional

- Printing 8 colours
- Varnishing
- Lamination
- Value Addition (2/3 Ops.)
- Die cutting
- Waste Stripping
- Delivery in roll / sheet form/Individual product
- All in one machine- same pass

- Reel cutting
- Cutting
- Printing 4 colour (Front)
- Printing 4 colour (Back)
- Varnishing
- Lamination
- Value Addition
- Die cutting / cutting
- Waste Stripping
- Multiple pass / Multiple machines

FLEXO

VS. OFFSET

- Better colour consistency
 - Water less printing
 - Direct printing
 - Less wastage due to all process in line
 - Inter station dryers
 - Easy to print non porous material
 - Less project cost
- Irregular colour consistency
 - Water and ink balance
 - In direct printing
 - More wastage due to more no. of machines
 - Final dryer only
 - Very difficult to print non porous materials
 - High project cost

Opportunities Exist In...

- Labels
- Flexible Packaging – Films, Shrink sleeves
- Cartons



The Indian Label & Packaging Industry

- The Industry as a whole is growing more than twice the GDP growth rate.
- Packaging and Converting growth in India is the leading segment. It has grown from 26% of the printing industry in 1999 to about 34% of the total turnover of the industry.
- The label Industry's size including wet glue, pressure sensitive, flexible and wraparound labels in 02-03 was Rs. 18.42 Billion. It is expected that with the forecasted growth trends, the Indian label industry's turnover will surpass the US\$ 1 Billion mark in 2007-08 and up to US\$ 1.4 Billion in 2010

The Indian Label Industry

- Wet Glue labels will continue to grow at 11% but the same for pressure sensitive labels would be around 24%.
- Within pressure sensitive labels, the use of transparent and filmic labels is the hot segment. Flexible labels produced by gravure and flexography are increasing at more than 25% annually from a small base of Rs. 680 million in 02-03 to at least 3.24 Billion in 09-10
- Wet glue will decline in India to about 30% of label production by value in 2009-10 while pressure sensitive labels will rise to 65% and flexible labels will go from 4% to more than 5%.

Substrates In India – Present & Future

- India already manufactures more than 600,000 tons of plastic based films and laminates with an annual growth in capacity of 10%.
- Leading suppliers of hot and cold foils such as Kurz and API are already present in the country.
- Although India is a large manufacturer of chromo paper used for wet glue labels, the best face stock for pressure sensitive stocks needs to be imported.

Substrates In India – Present & Future

- Label stock suppliers such as Avery Dennison have had a presence in the country for more than a decade and several other manufacturers are due to set up plants in India. For the last many years Domestic manufacturers like Weldon have been producing high quality label stocks.
- World class adhesives are being manufactured in India by multinationals such as Rohm and Haas and the local manufacturers such as Jubilant Organosys.

This was just a summary on Labels...

- Huge potentials remain in the label & Tag industry alone. This industry is booming
- India is only starting to awaken to the demands of short and medium runs of flexible packaging needs. Inline presses are starting to show their effectiveness in this area.
- Ditto for cartons.
- The Boom is around the corner waiting for
YOU!!

COME TALK TO US.....



THE LARGEST SINGLE WINDOW
SOLUTION PROVIDING PARTNERS
FOR THE INDIAN NARROW WEB
INDUSTRY