

Gravure: The Process of Choice

April 23, 2008



"Best Practices & Emerging Technologies"

GAA Pressroom Conference – April 22-24, 2008

Millennium Hotel, Cincinnati, OH

Gravure-A History of Quality



1981
Gravure goes digital-first
engravings made without
film

1981

1967

1930's
Rotogravure becomes used in
packaging

1930's

1967
DR> RUDOLPH HELL
develops the electronic
engraving machine in
Germany

1914

1914
NY TIMES publishes
the first SUNDAY
supplement

1880
KARL KLITSCH tests the first
rotogravure press in England

1880

1875
GELATIN is used as a
photoresist, allowing duplication
of photography on a plate-
GRAVURE is BORN!

1875

16th Century
Chemical etching is
used to make
engraved plates

1800

1800
Intaglio printing becomes popular to
reproduce high quality pictures

1838

1838
Art of photography is
perfected



16th



"Best Practices & Emerging Technologies"

GAA Pressroom Conference – April 22-24, 2008

Millennium Hotel, Cincinnati, OH

Packaging Market

Macro factors

- While some market segments struggle, packaging is growing at about 4% annually
- Market trends are creating demand
- Technology is creating solutions & opportunities

Capital utilization & investment

- Higher utilization levels support new equipment acquisition
- Foreign competition & currency factors affect U.S. investment
- Used & retrofitted machinery market very soft



Packaging Market

*Consumers, retailers & brand owners
are continually raising the bar*

- Better quality
- Better graphics, more color...but with less material
- Shorter runs, quicker turnaround
- Packaging that delivers more than just the product
- Supply chain efficiency
- Environmental sustainability



Market Dynamics

New Requirements of the Market



Consumers are increasingly affected by packaging graphics and tend to...

- Use form, color, and packaging graphics to identify or emphasize a certain brand-easy open/close or use
- Make the buying decision at the point of sale-packaging influences this decision immensely



75% of Consumers make an informed decision at shelf



"Best Practices & Emerging Technologies"

GAA Pressroom Conference – April 22-24, 2008

Millennium Hotel, Cincinnati, OH

The Converter Quandary

Market Drivers

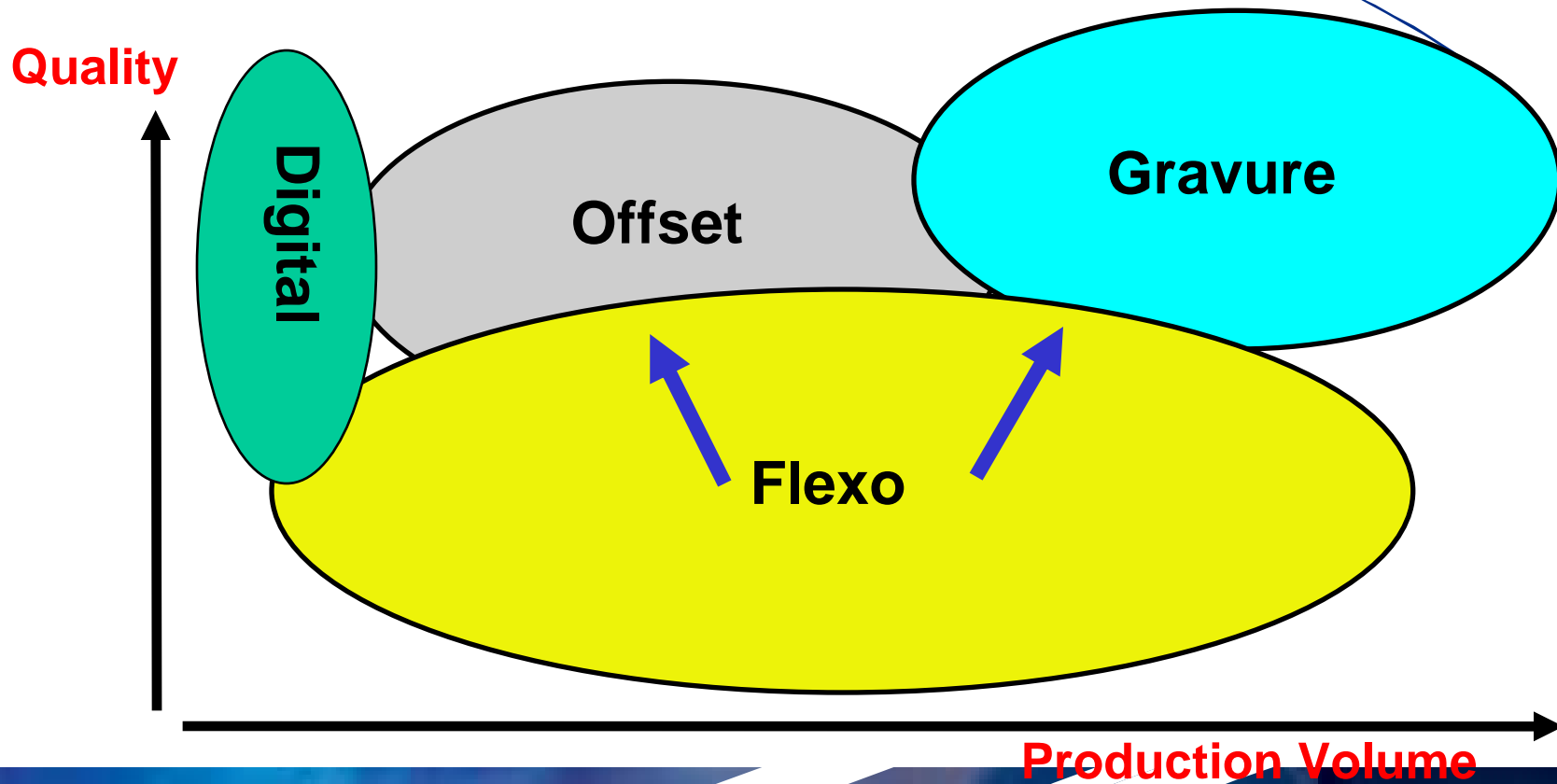
Converters are squeezed by...

- Low inflation with rising raw material costs
- Cycle time & total cost reduction;
- Capacity utilization continue to drive market with International barriers dropping;
- Quality, delivery & performance factors must be factored in with potential cost savings



Global Trends

Flexo continues its market push



Session Objectives

- How does gravure differentiate from other processes?
- Best practices and unique capabilities of gravure
- Technical and marketing issues
- Emerging Technologies will be touched on here with more focus in the afternoon breakout session

