<table>
<thead>
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<th>Title</th>
<th>Four-high towers vs stacked satellites.</th>
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<tr>
<td>Author(s)</td>
<td>Fuchs, Boris.</td>
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<tr>
<td>URL</td>
<td><a href="http://hdl.handle.net/10220/2480">http://hdl.handle.net/10220/2480</a></td>
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Four-High Towers Vs Stacked Satellites

By

Boris Fuchs
Four-high Towers vs. Stacked Satellites

Boris Fuchs, IFRA
Printing unit configurations for 4+4 printing

The combination of one arch-type printing unit and two 3/4 satellites
The combination of two six-couple towers (satellites) type A: 9-cylinder combination satellite with vertical web lead
The combination of two six-couple towers (satellites)
Type B: 9-cylinder combination satellite with horizontal web lead
Printing unit configurations for 4+4 printing

The combination of two six-couple towers (satellites)
The combination of two six-couple towers (satellites)
Type D: 10-cylinder combination satellite with horizontal web lead
Printing unit configurations for 4+4 printing

The combination of three Y-type printing units with 1 x Di-Litho and - in outline - without Di-Litho
Printing unit configurations for 4+4 printing

The horizontal web travel through 4 vertical blanket-to-blanket printing units
3.5 The vertical web travel through a 4-Hi tower
Type A: stacked H-type printing units
The vertical web travel through a 4-Hi tower
Type B: stacked arch-type printing units
Printing unit configurations for 4+4 printing

3.6 Stacked satellite printing units
Type A: Stacked 9-cylinder satellites with vertical web travel
3.6 Stacked satellite printing units
Type B: The combination of a 10-cylinder and 9-cylinder satellite
3.6 Stacked satellite printing units - Type C: The combination of a 9-cylinder satellite with vertical and horizontal web travel
3.6 Stacked satellite printing units
Type D: Stacked 10-cylinder satellite with vertical web travel
The share of colour couples of the total number of printing couples sold in the USA.
Durchschnittliche Zahl der Farbstellen pro Papierbahn bei 16-Seiten-Zeitungsmaschinen in Westeuropa

Farbwerke pro Papierbahn

Die Entwicklung der Farbkapazitäten in 16-Seiten-Zeitungsoffset in Westeuropa
Anzahl Bahnen pro Maschine

Trend

Basis: Auftragseingang im jeweiligen Geschäftsjahr

Entwicklung der Seitenzahlen für 4-Seiten-Zeitungsmaschinen in Westeuropa
Anteil der 8er-Turm (Gummi/Gummi)-Maschinen- konzepte am Gesamtmarkt

Westeuropa

16%  29%  67%  85%
90/91 90/94 92/95 93/94

Übrige Länder (ohne USA, Japan)

56%  60%  60%  89%
90/91 90/94 92/93 93/94

Marke:
MAN
Roland
The share of the presses with the 4-high tower configuration expressed as a percentage of the total of presses sold in the USA.
FOUR HIGH TOWER VERSUS STACKED SATELLITES

- SINCE DEVELOPMENT OF THE FOUR HIGH TOWER BY ROCKWELL IN 1978, THE WORLD MARKET HAS SEEN A SIGNIFICANT CHANGE IN CUSTOMER PREFERENCE TOWARD 4 HIGH:
  - AROUND 85% OF LARGE NEWSPAPER PRESS ORDERS IN EUROPE IN 1994 SO FAR ARE 4 HIGH
  - 86% OF GOSS HT ORDERS SINCE EARLY 1993 HAVE BEEN 4 HIGH
  - AROUND 90% OF GOSS UNIVERSAL ORDERS ARE NOW 4 HIGH BASED
  - RESIDUAL SATELLITE PRESS DEMAND ONLY IN MARKETS WHERE COLOUR GROWTH IS NOT YET FULLY SEEN (EG. ITALY/SPAIN)

- MODERN WEB CONTROL SYSTEMS (AS ON THE GOSS HT) USING WEB TENSION INFEED AND OUTFEED SYSTEMS, AUTOMATIC REGISTRATION CONTROL AND PRE-ANALYSED FAN OUT COMPENSATION ALREADY PROVIDE EQUIVALENT PRINT QUALITY TO SATELLITE, BUT WITH SIMPLER OPERATION AND MUCH GREATER COLOUR AND WEBBING FLEXIBILITY
### Evaluation of the printing unit configurations for 4+4 printing:

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<tr>
<th></th>
<th>Efficiency</th>
<th>Printing quality</th>
<th>Ergonomics</th>
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<td>+</td>
<td>0</td>
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<tr>
<td>Type B</td>
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<td>+ +</td>
<td>+</td>
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<tr>
<td>Type C</td>
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<tr>
<td>Type D</td>
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