



Understanding hybrid presses and opportunities

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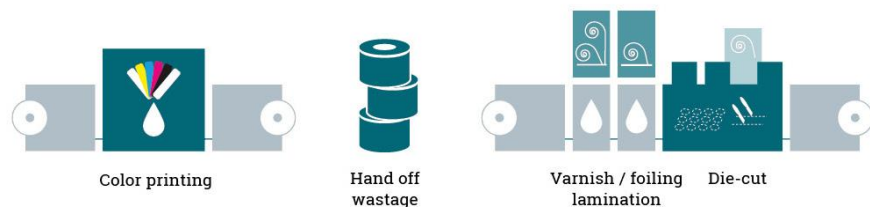
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Evolution of digital finishing and embellishing

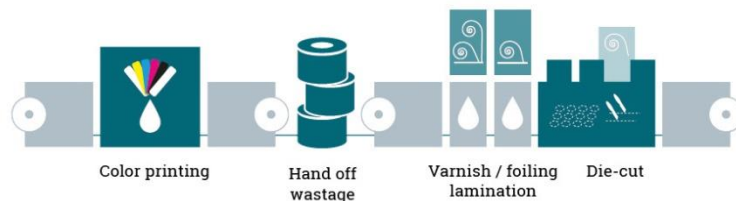
Digital standalone press with off line finishing



Started off-line with separate finishing line

Digital with near line finishing

Moved to near-line finishing....

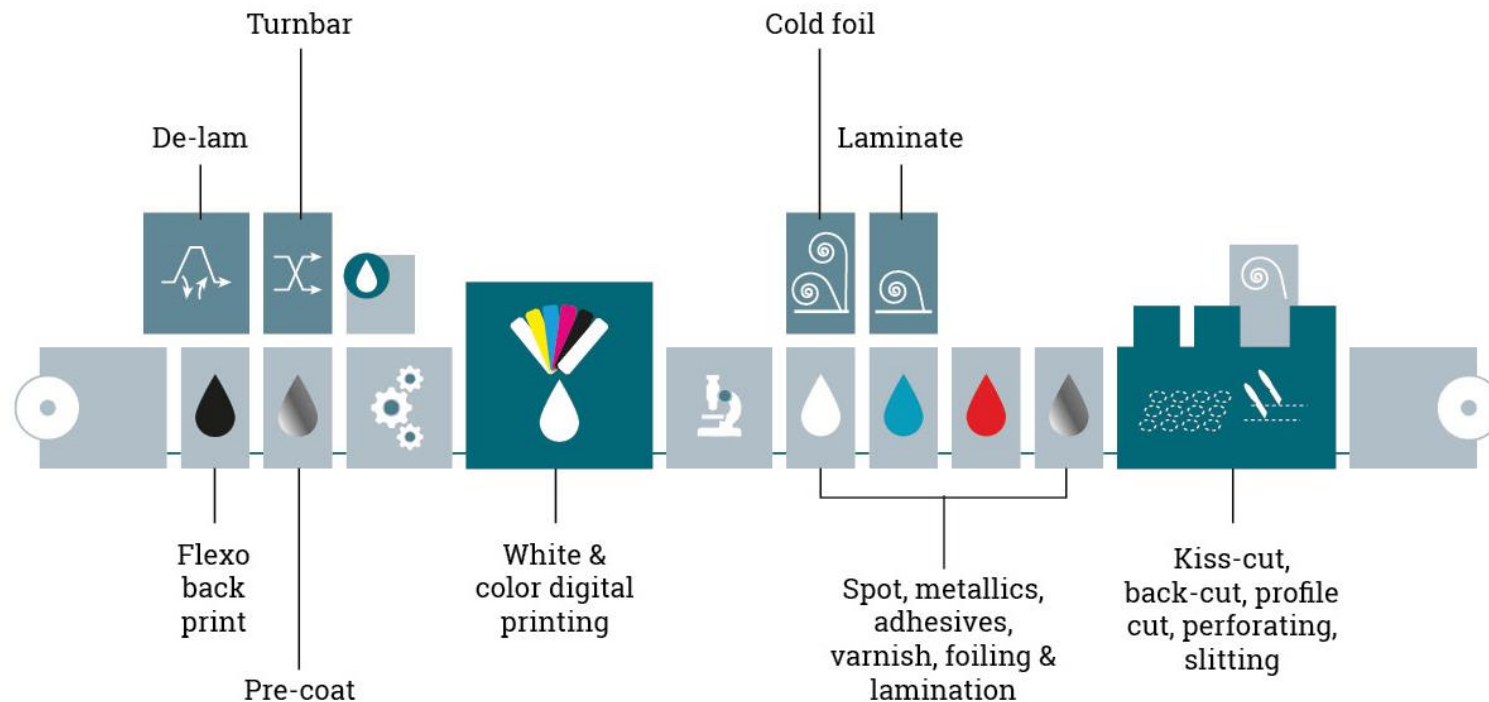


....and then to in-line finishing

Digital in-line finishing



Arrival of the hybrid analogue/digital press



A relatively complex hybrid construction with UV flexo units before and after the digital inkjet printing, and including de-lamination and lamination, turner bar, pre-coating, cold foiling, metallic printing/coating, varnishing, die-cutting, perforating and slitting

So, how do we define a hybrid press?

The most common formats of a hybrid press can incorporate:

- A minimum of a CMYK + White digital inkjet unit
- Between two and seven UV flexo printing stations (may also include a screen or offset unit)
- The flexo stations may be split before and after the inkjet unit
- Add unwind and re-wind stations
- Some machines include de-lamination and re-lamination capabilities
- Add varnishing and die-cutting as a minimum
- More complex hybrid presses can include metallic ink printing, cold foiling, hot foiling, embossing, brand protection features



How does a hybrid press provide anything new?

Put all the elements together in one (bespoke) in-line hybrid press

Link them together with fully automated set-up and changeover, computerized controls, advanced web inspection, and integrated with MIS

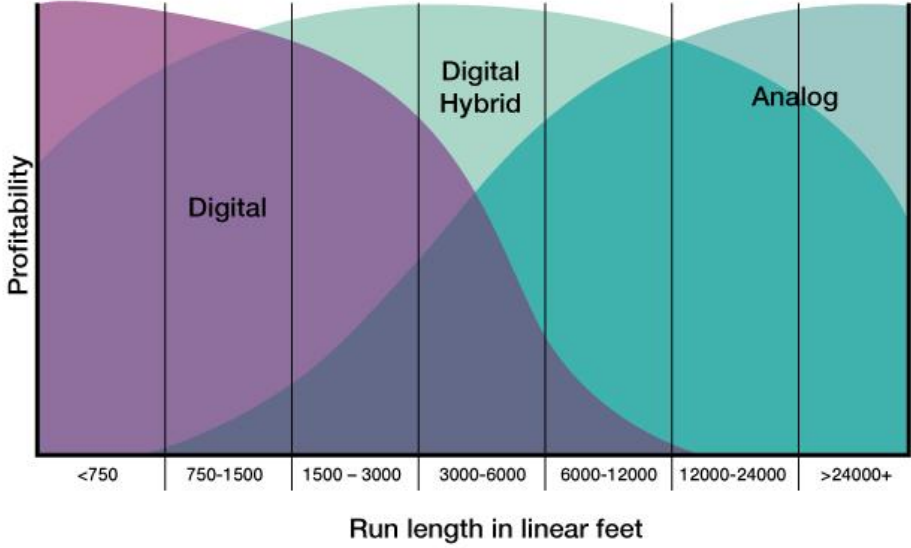
To create new products, new market applications and solutions

That are way beyond anything that current analogue or digital presses on their own can provide



They also provide a cost-effective and profitable solution for short or medium long runs

Ideal for the majority of your label needs for short to medium runs



Let's look at some common hybrid label press configurations



Gallus Labelfire 340 Hybrid



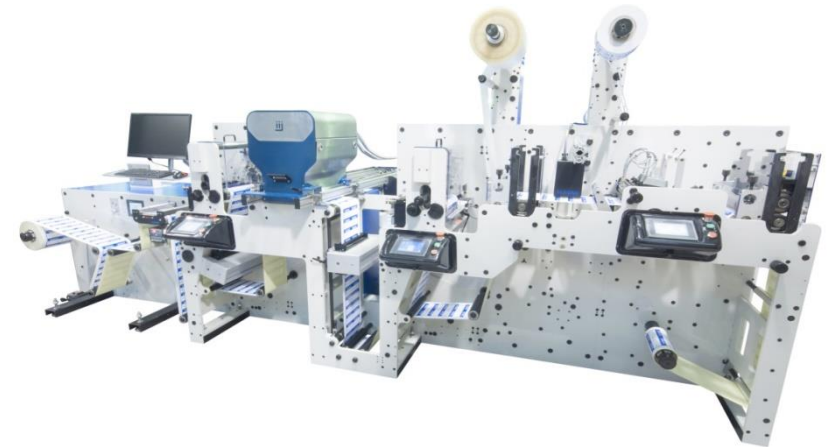
Mark Andy Digital Series HD Hybrid



Graphium FL3 Hybrid



PPSI DICEweb Retrofit Hybrid



Focus d-Flex Hi-Q Hybrid

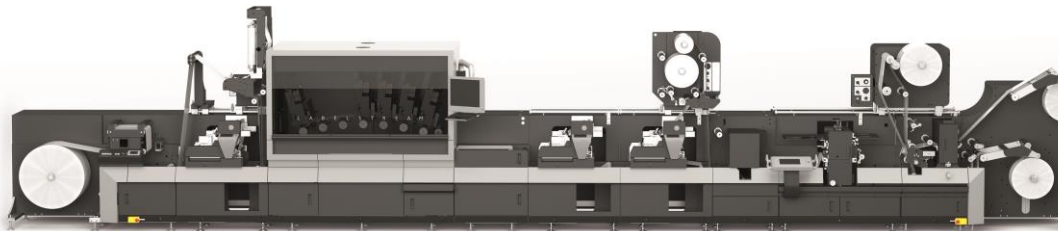
Let's look at some common hybrid label press configurations



Nilpeter Panorama Hybrid



MPS EF Symjet Hybrid



Canon Océ-LabelStream Hybrid



Omet/Durst XJet Hybrid

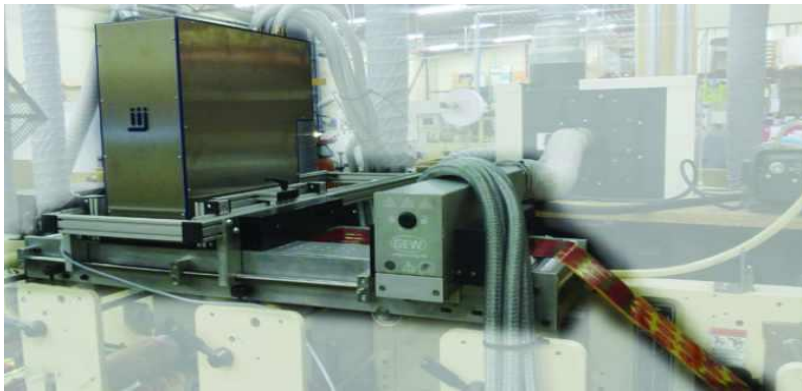
There are also retrofit hybrid label press configurations



Colordyne Technologies 3600 Series Retrofit



PPSI DICEweb Retrofit



**Industrial Inkjet Ltd ColourPrint iS
Retrofit**



IPT Digital/JFLEX 870 Retrofit

What about carton and flexible packaging hybrid press?



Heidelberg Primefire 106



Landa W10 Nanographic flexible packaging press



KBA VariJet 106 Hybrid



**Canon Océ LabelStream
4000 Hybrid**

What does a hybrid press offer the label or package printing converter?

- ‘A complete one-pass production tool’
- ‘Single pass productivity.’
- ‘More flexible and versatile capabilities’
- ‘Eliminates cost and set-up time of moving from a digital press to offline or nearline finishing’
- ‘Streamlines job data storage, workflow automation and integrated with MIS’
- ‘Suits market trend for shorter but more complex run lengths’
- ‘New opportunities for product differentiation’
- ‘One operator, one make-ready, one reel change, one web inspection, one lot of waste, and the job comes off the press ready for shipping.’
- ‘Flexibility to create and adapt designs more freely’



How do the economics and profitability of hybrid presses compare

- **‘Dramatic reduction in waste’**
- **‘Requires less set-up material’**
- **‘Minimizes overruns’**
- **‘Lower lead time’**
- **‘We’ve been able to save money’**
- **‘Higher productivity’**
- **‘Faster changeovers’**
- **‘More economical’**



A cost-effective and profitable solution for short or medium long runs

Some converter quotes:

“We expect a 20 percent saving in overall production costs and will benefit from faster start-up times, which will enable us to offer a wider product range. On a 4-color job, we expect to increase the productivity of the machine by 40 percent with faster set-ups. In addition, we will be saving around 70 percent in material waste by using digital hybrid.”

“We don’t want a separate workflow and separate cost centre models. What we need and want is all the benefits of digital printing, but all integrated with our existing flexo operation and presses.”



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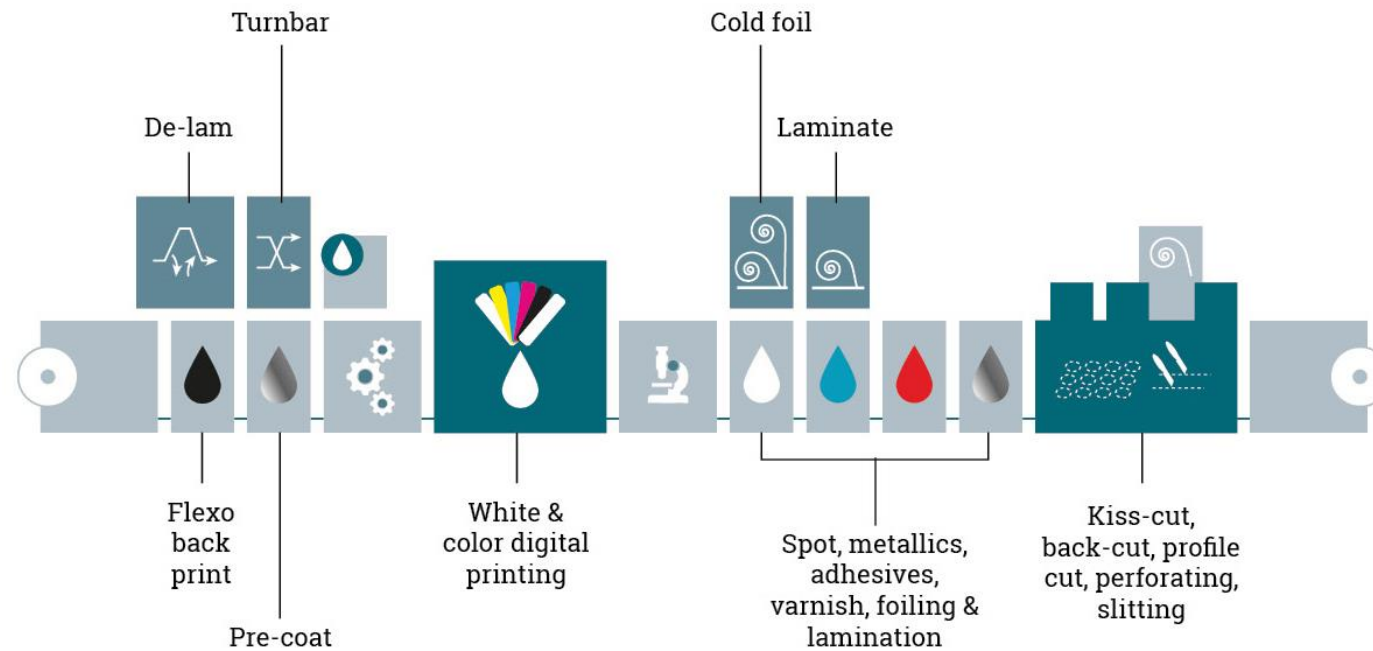
New hybrid market solutions

Flexo units are typically used in a hybrid press to cater for a growing market demand for metallic image effects, with many high-end labels now specified with printed silver, gold or other metallic ink colors.

A requirement for flexo units before the inkjet heads is often the need for good solid opaque whites or PMC spot or brand colors, often reverse-side printed.



Customized hybrid solutions can be created to meet the printing operation's specific needs and requirements in one financial investment.



Tailor-made solutions

Customized hybrid solutions can be put together that are 100% tailored to the individual printing operation or customer specific needs in one financial investment.



Special constructions

Some hybrid presses have been specifically built to create a variety of special label constructions, namely adhesive-side printed, dual layer, piggyback, peel and reveal – but where variable text, multi-versions or variations, sequential coding or numbering – are required



Hybrid installations today

Estimated total global installed base of hybrid label and package printing presses 2014 - 2018

