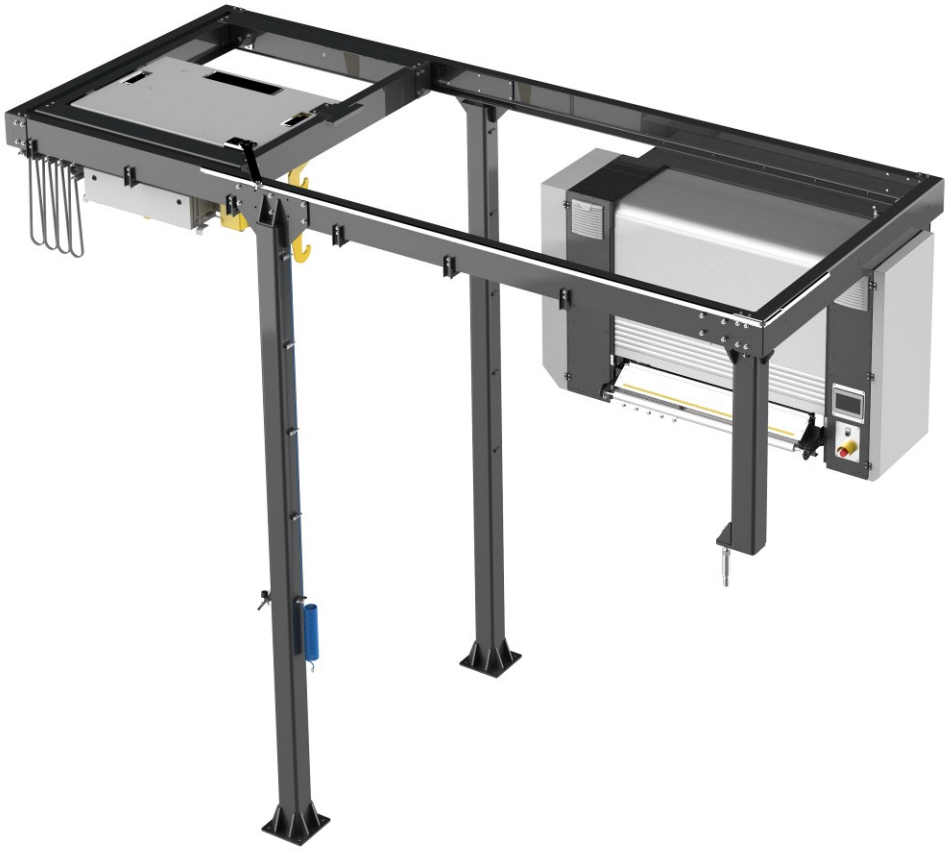
Vinfoil Micro SF110 GF
system for
offset cold foil application

2016-09-05

What is cold foil transfer (GF) ?

Cold foil transfer is a process to apply aluminium particles, from a backing film made of polyester to a paper or cardboard in a conventional offset printing press without the impact of heat. In the first printing unit an adhesive is applied to the substrate like a standard offset ink. It can be applied partially displaying very fine details or in solids. In the following printing unit the metalized layer of the cold foil is being released from the backing film and transferred to the areas of the glue covered spots on the substrate. The result is a silver or gold layer on certain parts of the printed sheet.
In the following printing units these parts can be overprinted to generate different shades in a high metallic brilliance. After overprinting the metallic areas an aqueous coating or a UV coating is applied to the sheet to protect them from scratches.



Highlights Micro SF110 GF

- Newest Bosch Rexroth motion control systems with torque control, in combination with magnetic powder clutches ensures a perfect foil web tension at any speed. No need of dancer techniques, so the foil is not damaged, resulting in a prefect printing and no dust on the printing tower
- Standard equipped with ALUS, an intelligent loading and unloading system
- Very low building high (1,29 meter, 1,54 meter with ALUS)
- Access to the printing units is optimal
- Our components are supplied by certified Dutch or German producers.
- State of the art electronic regulated magnetic powder clutches with FT locking shafts.
- Due to the compact design and the standard remote closing and opening of the chucks working platforms are not required.
- Remote closing and opening of the chucks
- Remote operated safety guard
- Foil cores till 10.000 running meters can be used (single reel)
- Speed of up to 18.000 sheets/hour is achievable (depending on press specifications, press settings, substrate, cold foil, adhesive and blankets)
- Diameter detecting for quick start up and signals for feeder stop at empty foil core
- Thickness of the foil core can be adjusted for optimal foil use
- 5 elements for web break detection are included in our delivery standard. Up to three additional elements are optionally available. A minimum distance between the reels must be ensured by the operator.
- The operation of up to 5 reels (min. width 50 mm) is included in the delivery standard of the Vinfoil Micro SF110 GF. A minimum distance of 35 mm between the reels must be ensured by the operator.

Our standard scope of delivery contains the following components:

▪ Cold foil module Vinfoil Micro SF110 GF .	1 x
▪ 3 inch FT locking shafts. Minimum foil width 50 mm	2 x
▪ Multi reels to be used	5 x
▪ Photocells for foil brake detection, mechanical positioning	5 x
▪ Ultra sound diameter measuring	2 x
▪ Thickness of the foil core to be adjusted	1 x
▪ Remote closing and opening of the chucks	4 x
▪ Electronic regulated foil tension when operating multi reels	2 x
▪ Pneumatic regulated foil tension when operating single reel	2 x
▪ Intelligent foil loading and unloading system with manipulator (ALUS)	1 x
▪ Remote diagnosis via Ethernet	1 x

Specifications Vinfoil Micro SF110 GF

Power supply/Air supply:

▪ Voltage	400 V / 50 Hz
▪ Power requirement	15 KVA
▪ Fuse protection at 400 V	32A
▪ Air supply	6 bar
▪ Air supply flow rate	25 nL/min

Compressed air quality according to ISO 8573/1

• Filtration on solid parts	class 4
• Filtration on oil	class 4
• Dry air	class 4

Measures Vinfoil Micro SF110 GF

▪ Length	2235 mm
▪ Width (module bottom)	600 mm
▪ Width (module top)	815 mm
▪ Height	1295 mm

Measures ALUS

▪ Length	5180 mm
▪ Width	2380 mm
▪ Height (measured from module top)	245 mm

Advice for ceiling height

The minimum space above the printing units of the press required for the installation of the Vinfoil Micro SF110 GF must not underrun 2000 mm.

Weights

▪ Vinfoil Micro SF110 GF	1250 kg
▪ ALUS	2000 kg
▪ Total weight	3250 kg

Specifications cold foil reels

▪ Maximum Foil roll diameter	440 mm
▪ Maximum running meters at single roll use	10.000 m
▪ Maximum running meters at Multi reel	10.000 m
▪ Maximum foil width	1100 mm
▪ Minimum foil width at Multi reel	50 mm

Specifikation reel cores:

▪ Basic material	Laminated paper core
▪ Core winding geometry	Spiral
▪ Inner diameter core according to DIN ISO 11093--4C	77,0mm + 0,3mm (3”)
▪ Min. core thickness	13 mm
▪ Moisture content according to DIN 11093--3 at 130°C	8%
▪ Radial pressure resistance	Up to 340 N/cm

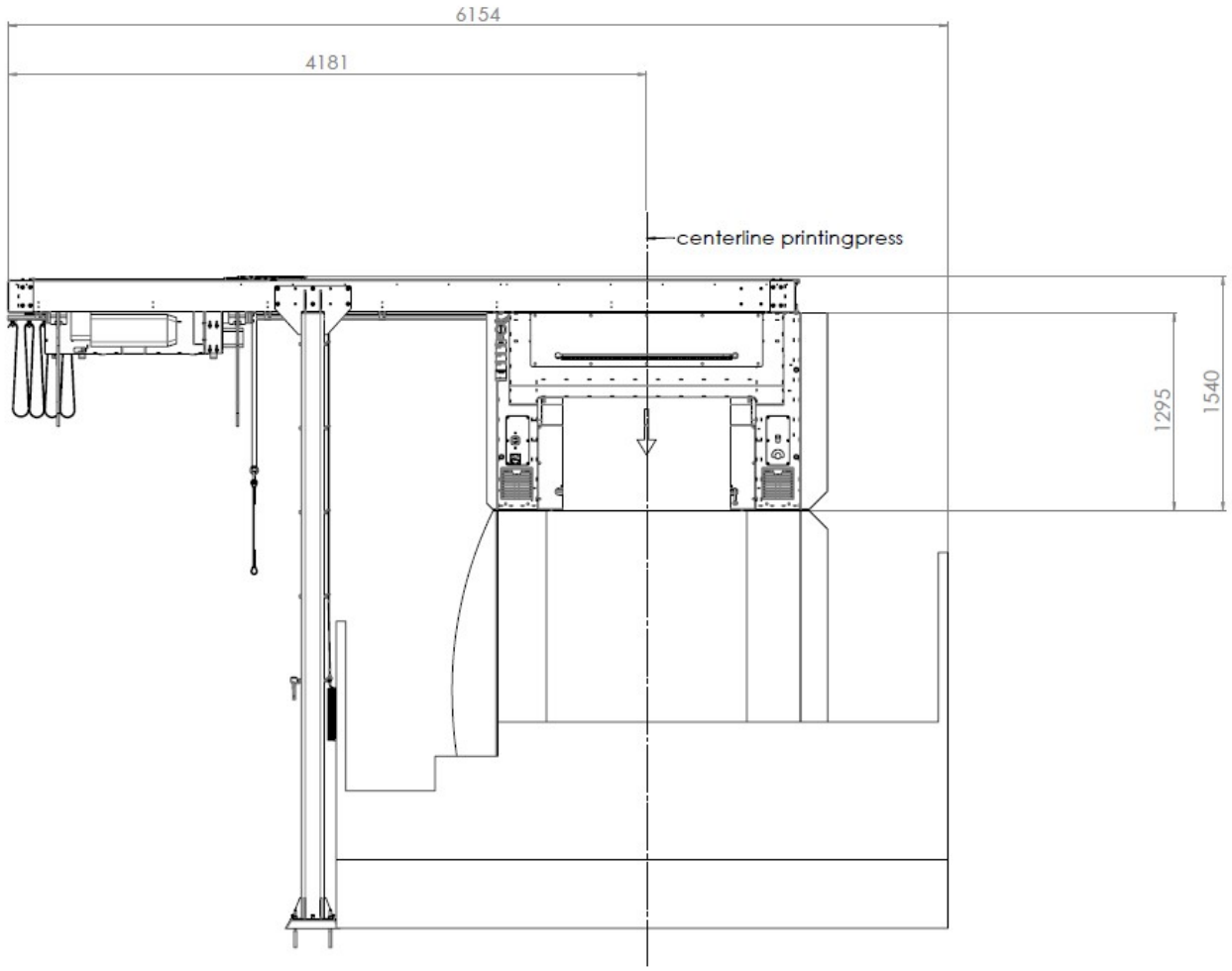
The reel core width must match the width of the cold foil reel.
When running multiple reels each reel must be rewound to a separate core.

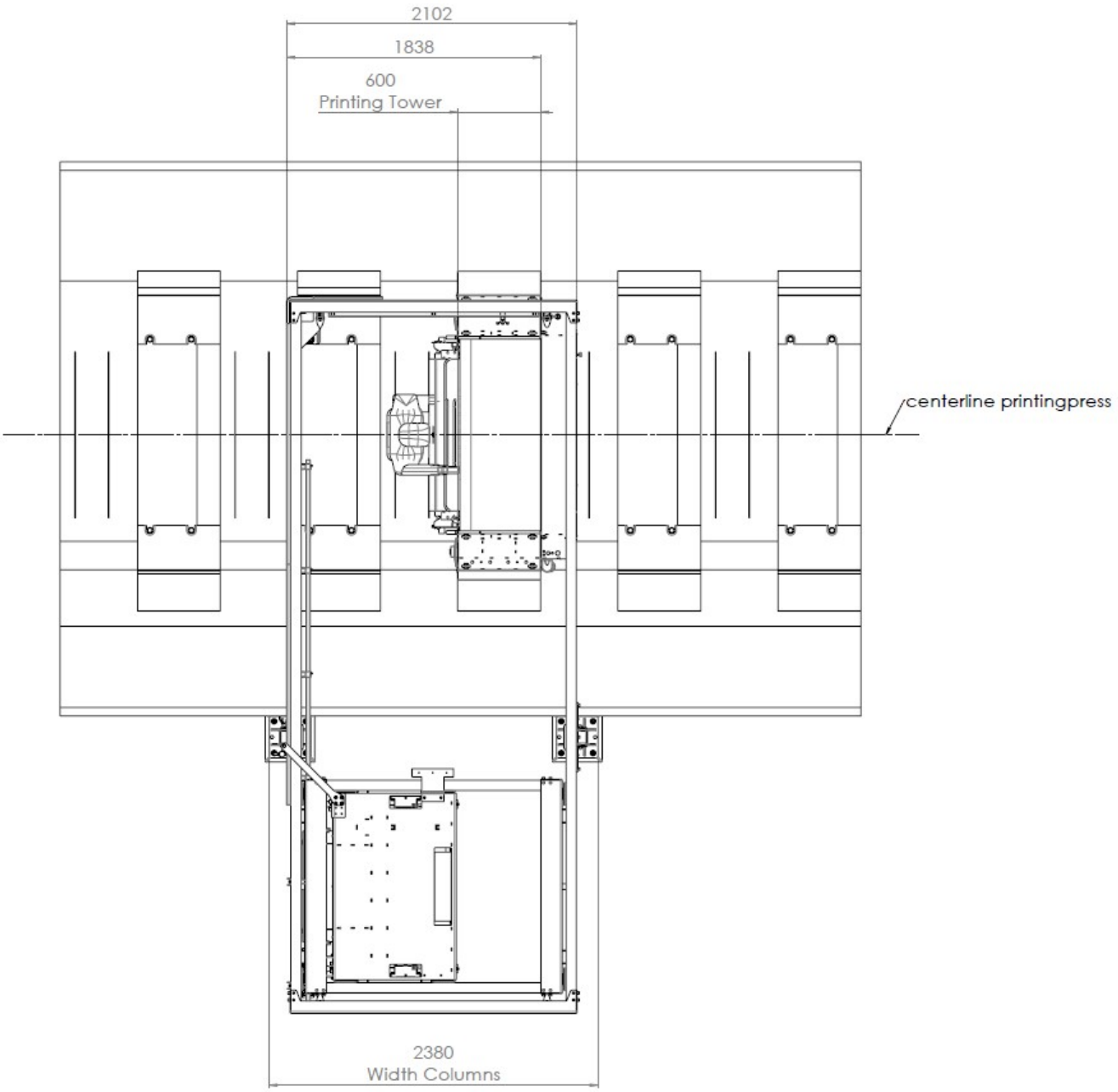
Speeds:

▪ Maximum start-up speed	6.000 sh/hr
▪ Max. speed at single roll use (depending on press specifications, press settings, substrate, cold foil, adhesive and blankets)	18.000 sh/hr
▪ Max. speed at Multi Reel use (depending on press specifications, press settings, substrate, cold foil, adhesive and blankets)	18.000 sh/hr

The machine is delivered with the European safety certificate CE.

SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE


6154
4181
centerline printingpress
1295
1540


2102
1838
600
Printing Tower
centerline printingpress
2380
Width Columns