

**Die cutting and stripping machine  
with hot foil stamping**

**model Brausse SIGNA 1050F*i***

All machines installed by Brausse Europe will have the VinTechMa label. [www.vintechma.com](http://www.vintechma.com)



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*Pictures might be slightly different from reality*

This new Brausse foil stamper is developed with the Group's vast technology support and a state of the art hot stamping solution aiming at satisfying various production needs of the majority customer groups with high quality demand, limited budget and short ROI period. While a number of latest new technologies are adopted, many proven technologies are also integrated into the product to make it reliable and trouble free.

## Highlights of Brausse 1050F*i*

- Extremely smoothly running due to the unique index box drive of the main chain
- All operating software in the local language
- Up and mobile platen are calculated by structure engineering to improve the strength and reduce the weight by better structure and higher quality casting
- Precision ground 15 mm thickness insulation plate behind the heating base for optimize heating efficiency and maintaining the temperature constant.
- Heating base designed per the Group standard technical platform with precise and fast temperature tracking and compensating system with new Group software for efficient and accurate temperature control.
- Foil control, such as foil advancing step combination setting, are automatic calculated to the most efficient stepping combination
- Motion stepping combination simulation and, hologram stamping is of the Group latest technology and provides reliable and precision foil advancing control.
- Faster foil stamping starting speed without machine interim stop for waiting impression on, subject to the set impression tonnage and machine speed
- Tension roller and foil advancing rollers each driven by 3.5KW servomotors and controlled by NEW Group software.
- New pressing roller on tension roller with easy pressure adjustment hence quick set up.
- Two pairs of waste foil ejection brush driven by 2KW servo motor controlled by new Group software for efficient waste foil rejecting and keeping foil tension constant by synchronizing the waste foil pulling with foil advancing
- Three shafts waste foil rewinding unit below the waste foil ejection brush,
- AC motor drive with inverter to control the speed and tension
- 5mm hardened stamping plate or 4 mm + 1mm Sandwich stamping plate on top of 15 mm precision ground synthetic supporting base plate with  $\pm 0.9$  mm micro adjustment in both running and cross direction for quick set up and easy make ready
- Digital strain gauge stamping pressure tonnage measuring system and displaying both the mobile platen position and pressure tonnage in color foil control screen for constant monitor and pressure adjustment convenience.

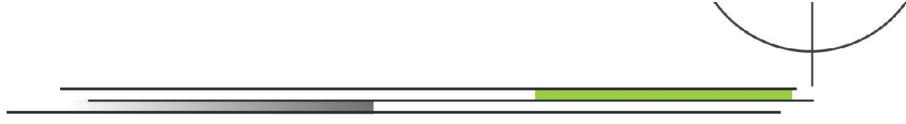
## Standard equipment

### General

- Each gripper bar can be individually shimmed to ensure very accurate and smoothly sheet transport in case of uneven chain stretching after years of production
- Gripper bar locking levers can be adjusted by micro adjustment screws
- Alloy gripper bars with a hard chrome surface made by special process
- Radiator cooling for recycling toggle drive lubrication system
- Automatic main chain greasing system
- Catwalk with safety rail
- Drawer for spare parts
- Complete lost sheets control throughout the entire machine
- Self diagnostic system with indication on a colour LCD screen
- Ethernet modem for online assistance by problems with electronics
- CE certified
- CE standard safety systems for safe operation
- Emergency stop at arm length
- Centre line system
- Machine is standard elevated 200 mm

### Feeder

- Suction head with several adjustment possibilities to handle different kind of materials
- Patent turbo spiral air blower pressing foot at feeder head
- Four pick up and four forward suck heads with angle adjustment
- Motorized side adjustment of pallet table. Pile adjustment during production
- Electrical double sheet control
- Fine air blast at lead edge for smooth thin paper transport
- Sheet slow down device of feeder belts to assure accurate position of the sheet to the front lays (electro-pneumatically adjustable)
- Synchronizing device to adjust the sheet positioning to the front lay by hand during production
- Bullet catcher on the feeder entrance
- Side lays on both sides adjustable for push and pull and for paper and carton
- Electronic side lay controls
- Four individually adjustable front lays with dial read out at the operation side of the machine
- Four electronic front lay controls by means of Omron Glasfiber Optik, adjustable two by two
- Frontmark control with adjustable density
- Photo sensor safety barrier at pallet table floor level touching point

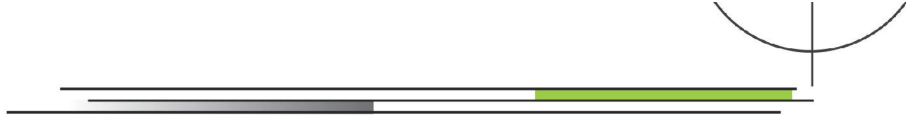


### Die section

- Precision worm gear crank toggle driving system to ensure smooth and dynamic lower platen movement
- Precision stationery upper platen
- Up and mobile platen are calculated by structure engineering to improve the strength and reduce the weight by better structure and higher quality casting
- Precision ground 15mm thickness insulation plate behind the heating base for optimize heating efficiency and maintaining the temperature constant
- Pneumatic push button die chase locking mechanism to ensure safe and operator friendly changing of the die
- Pneumatic clutch/brake for main drive system
- Servo motor drive automatic impression on/off
- Seven high precision alloy gripper bar
- High quality pre-stretched gripper bar drive chain
- State-of-art 3 cam index gripper bar drive system to ensure smooth and precise gripper bar intermittent movement
- Torque limit safety clutch to protect the index drive system in case of gripper bar crash
- Double cam driven gripper opener and front lay swing frame for smooth and accurate sheet register
- Air blasting nozzle bar for stretching the thin paper before die cutting
- Heating base with 12 heating zone each temperature adjustable individually
- Heating base designed per the Group standard technical platform with precise and fast temperature tracking and compensating system software for efficient and accurate temperature control
- Fast foil stamping starting speed without machine interim stop for waiting impression on, subject to the set impression tonnage and machine speed
- 5mm hardened stamping plate or 3.5mm + 1.5mm sandwich stamping plate on top of 15mm precision ground supporting base plate with +/-0.9mm micro adjustment in both running and cross direction for quick set up and easy make ready
- Digital strain gauge stamping pressure tonnage measuring system and displaying both the mobile platen position and pressure tonnage in colour foil control screen for constant monitor and pressure adjustment convenience
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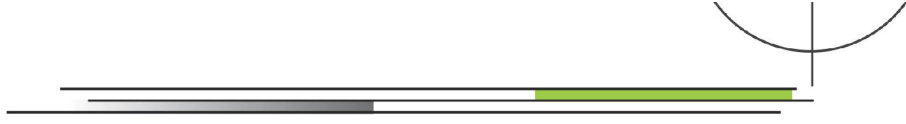
### Delivery section

- Automatic delivery with nonstop curtain. This curtain moves into the delivery to catch the arriving sheets during the pile exchange
- Five section brush brake – brake force individually adjustable
- Adjustable air blow bars to slow down the sheets
- Rear and side joggers with easy position adjustment
- Tape inserter with counter
- Photo sensor safety barrier at pallet table floor level touching point



**Standard accessories**

- One operation platform
- One honeycomb plate
- One 5mm hardened stamping plate or 4 mm + 1mm Sandwich stamping plate on top of 15 mm precision ground synthetic supporting base plate with +/- 0.9 mm micro adjustment in both running and cross direction
- One die chase with quick locking system
- One set of stamping die locking toggle

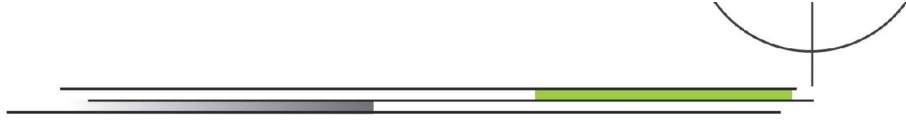


### Hot foil stamping unit

- Two servo motor (3.5KW) driven longitudinal foil advancing shafts each individually programmable for short and long foil stepping (**3rd SHAFT OPTIONAL**)
- Tension roller and foil advancing rollers each driven by 3.5KW servo motors and controlled by software, new pressing roller on tension roller with easy pressure adjustment hence quick set up
- Foil control, such as foil advancing step combination setting, automatic most efficient stepping combination calculation as well as motion stepping combination simulation and, hologram stamping is of the Group latest technology and provides reliable and precision foil advancing control
- Foil breaking control
- Two pairs of waste foil ejection brush driven by 2KW servo motor controlled by New Cube for efficient waste foil rejection and keeping foil tension constant by synchronizing the waste foil pulling with foil advancing
- Three shafts waste foil rewinding unit below the waste foil ejection brush, AC motor drive with inverter to control the speed and tension (**OPTIONAL**)
- Two servo motor (3.5KW) driven cross foil advancing shafts each individually programmable for short and long foil stepping (**OPTIONAL**)
- Longitudinal foil roll loading bracket can be pulled out and a new type of foil stamping rubber wheel is applied, easy for foil installation and adjustment of foil stamping device
- Two servo motor driven foil advancing shafts each individually programmable for short and long foil stepping (optional 3)
- Easy foil loading device, so foil can be loaded on catwalk
- 99 programmable short pull per shaft
- Free standing operation console with industrial pc, touch screen for foil advancing step setting and 12 temperature controllers for the heating with pre-heating timer
- Calculation program for optimal foil consumption
- Automatic temperature lowering system (adjustable pro zone)
- 45° turning bars for transporting the rest foil out of the machine
- Foil splitting blade for cutting the rest foil into several strokes
- Foil break detection at the platen entrance
- Automatic foil consume registration system with “end of foil” warning system
- Oil cooled foil tension shaft for optimal foil web control
- Thin paper stretching air blower with adjustment of air volume, strength per zone and start and stop timing
- Foil separating system with adjustment of air volume, strength per zone and start and stop timing
- Three shafts waste foil rewinding unit below the waste foil ejection brush.

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## Specifications

### Power / air

• Power voltage	400 V / 50 Hz
The machine is equipped with a transformer	400/230V 75KVA
• Power consumption machine cabinet	20 KW / 35 A
• Power consumption foil cabinet	40 KW / 75 A
• Air supply / consumption	6 bar / 1200 l per min

The compressed air quality must be according to ISO 8573/1

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

### General specifications

• Pile height feeder, maximum	1650 mm (incl. pallet)
• Pile height feeder with non-stop operation, maximum	1250 mm (incl. pallet)
• Pile height delivery, maximum	1500 mm (incl. pallet)
• Pile height over non stop curtain, maximum	80 mm
• Total length (incl. preloading rails)	7060 mm
• Total width (incl. operation platform)	4730-5530 mm
• Total height (incl. raise 200 mm)	2225 mm
• Total net weight	16,6 t

The lowest drive-through height between loading area and the machine installation place:

without elevation	2450 mm
with 100 mm elevation	2550 mm

The smallest width in the distance between loading area and machine installation place:

without elevation	2200 mm
with 100 mm elevation	2200 mm

### Specifications material

• Maximum sheet size	1050 x 750 mm
• Minimum sheet size	400 x 360 mm
• Processable materials	
1. Paper (depending on quality), min.	80-90 g/m <sup>2</sup>
2. Carton (depending on quality), up to (*)	2000 g/m <sup>2</sup>
3. Corrugated board (fine), up to (*)	4 mm
4. Plastic materials, like PP PE	0,6 mm
(*) admissible undulation: 4% of the sheet width	
• Minimal gripper edge	9,5 mm

### Specifications for die cutting

• Maximum die cutting size	1040 x 720 mm
• Inner size of chase	1080 x 745 mm
• Dimensions die cutting plate	1080 x 736 mm
• Maximum die cutting pressure	300 t
• Maximum mechanical speed	7500 sheets/h





### Specifications of longitudinal foil stamping unit

- Foil advancing shaft 2 (3<sup>rd</sup> as optional)
- Maximum capacity foil diameter Ø 200 mm (shaft 2)  
Ø 240 mm (shaft 1 and 3)
- Foil core diameter 1" or 3"
- Maximum foil and stamping size 730 x 1020 mm
- Maximum foil stamping speed with minimum foil width 45 mm  
(subject to paper, foil and stamping die quality as well as operator's skills)
- Foil pull length ≤ 200 mm 6000 sheets/h
- Foil pull length ≤ 300 mm 5000 sheets/h
- Foil pull length ≤ 600 mm 4000 sheets/h
- Foil pull length 600-700 mm 3500 sheets/h
- Max. mechanical speed 7500 cycles/h
- Maximum foil stamping speed with minimum foil width 20 mm  
(subject to paper, foil and stamping die quality as well as operator's skills)
- Foil pull length ≤ 200 mm 4000 sheets/h
- Foil pull length ≤ 600 mm 3500 sheets/h
- The max. mechanical speed 7500 cycles/h
- Register tolerance in running and cross direction ≤ 0,2 mm
- Minimum foil width 20 mm
- Number of heated zones 12
- Temperature range 0-200°C
- Power for heating 24 kW

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### Specifications of Cross Foil Stamping System (OPTIONAL)

- Max. Foil Width 600mm
- Min. Foil Width 25mm
- Max. Stamping Area 1020x600mm
- Max. Foil Reel Diameter Ø 200mm
- Max. Foil Pull Length 1020 mm

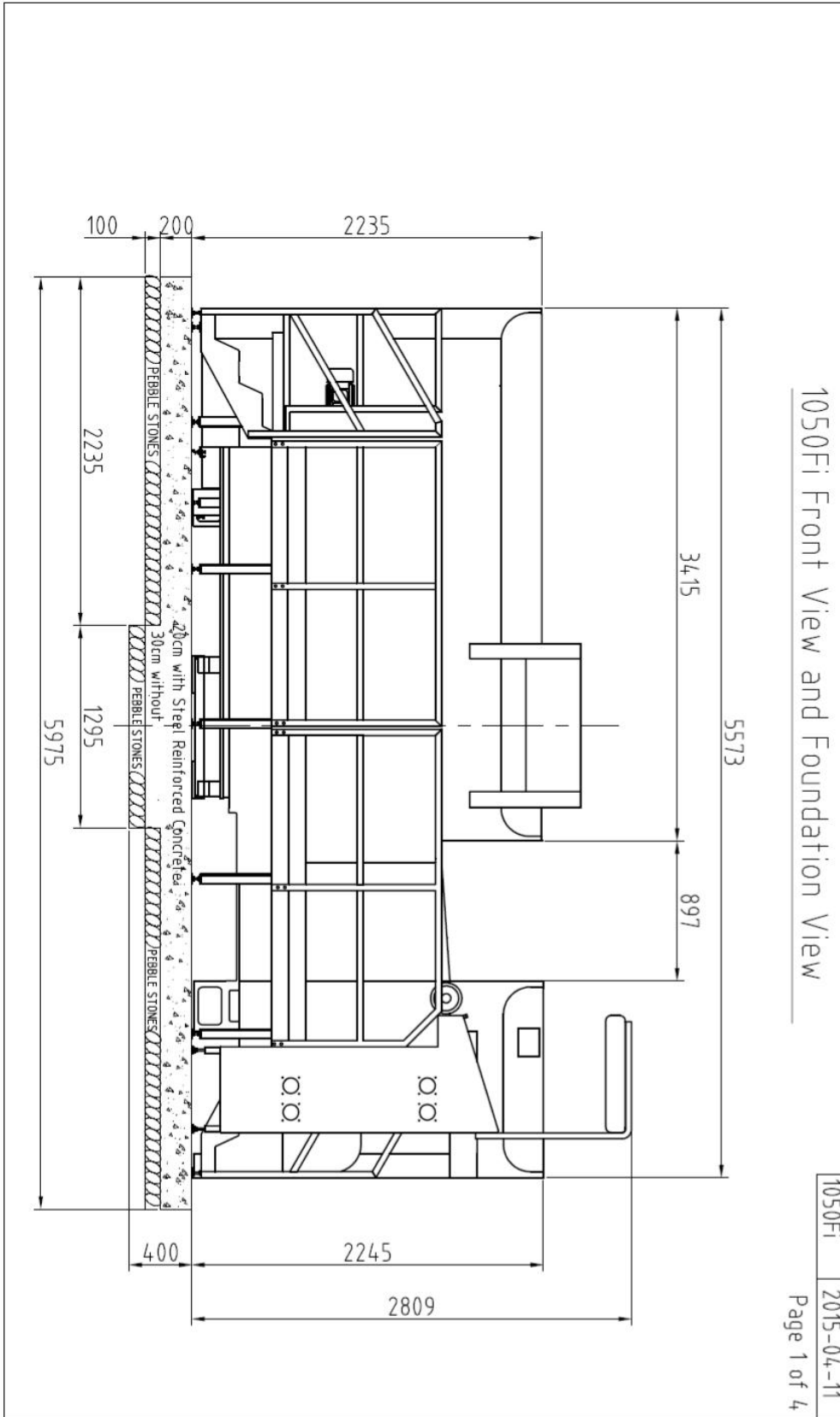
**The Brausse SIGNA 1050Fi machine is delivered with the European safety certificate CE.**

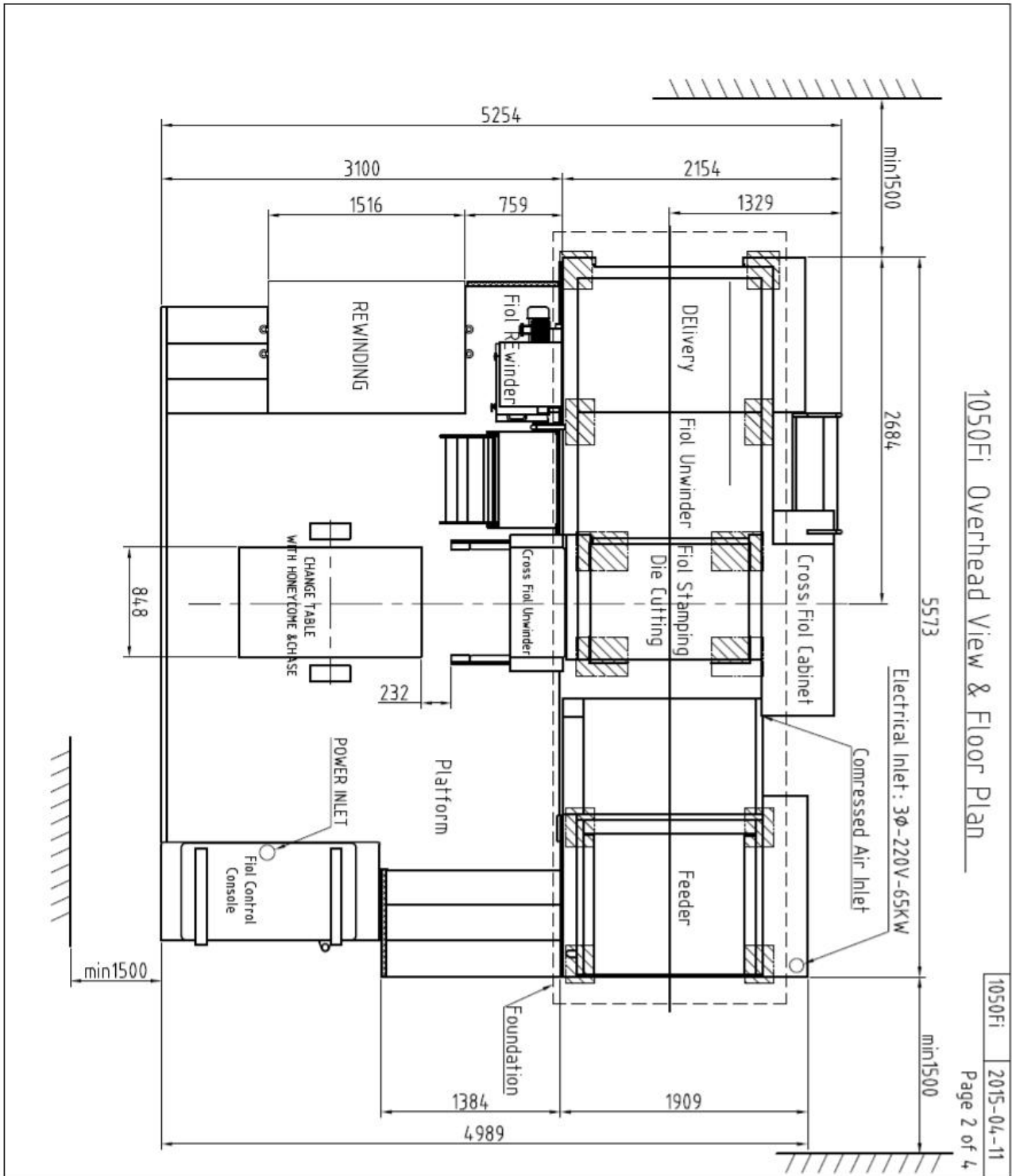
**Specifications are subject to change without notice**

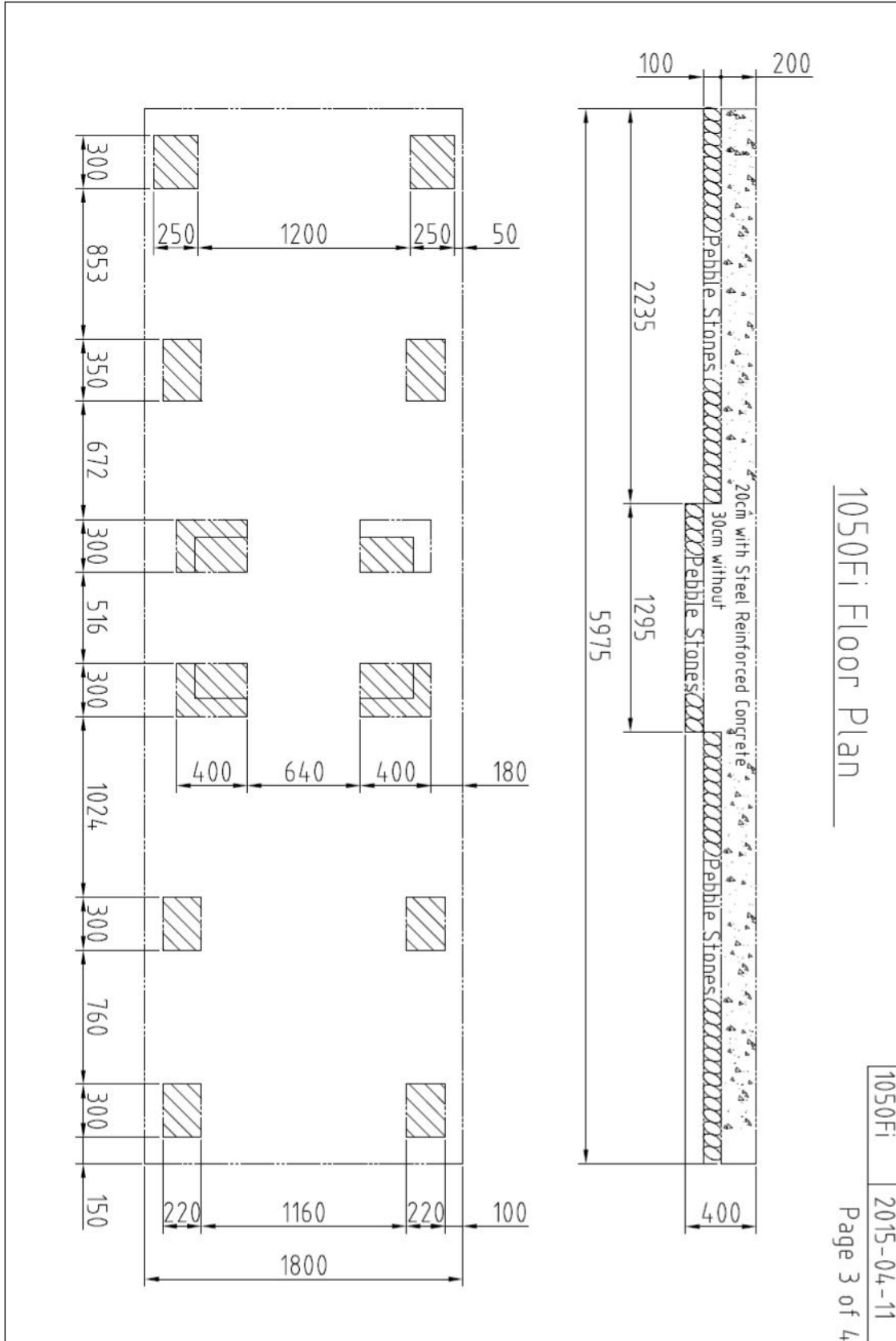
*Independent of the fact whether the machine is placed on ground level or above a cellar, or on a floor, the own oscillation of the carrying floor, including the weight of the machine, must be over 25 Hz. Only a structural engineer is capable to judge whether the floor is in accordance with the needed values, as stated in our floor plan. Only he can be responsible for this.*





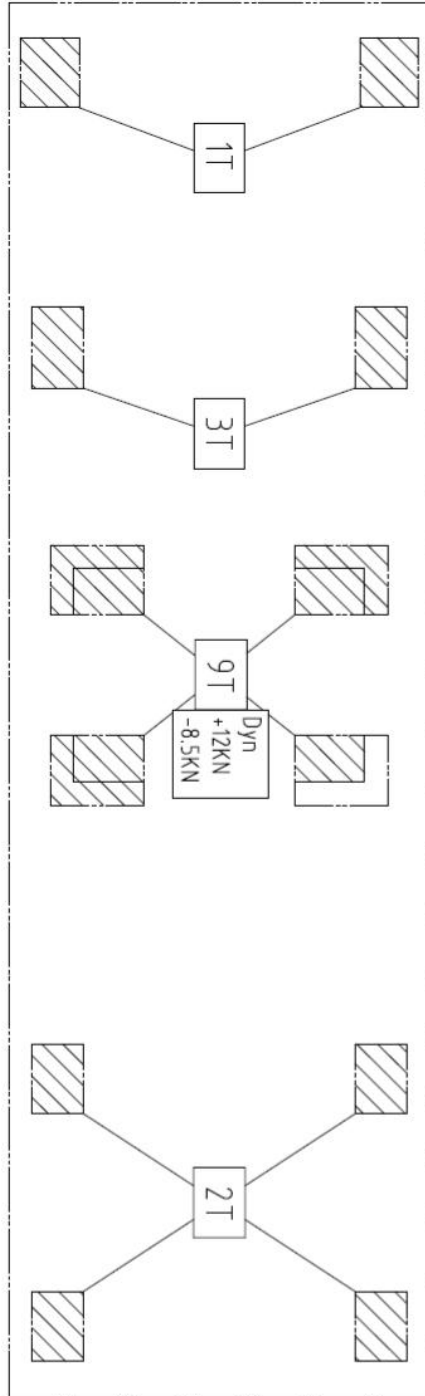








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