

# Factory filling

Plant technology for the prefabrication of frame elements

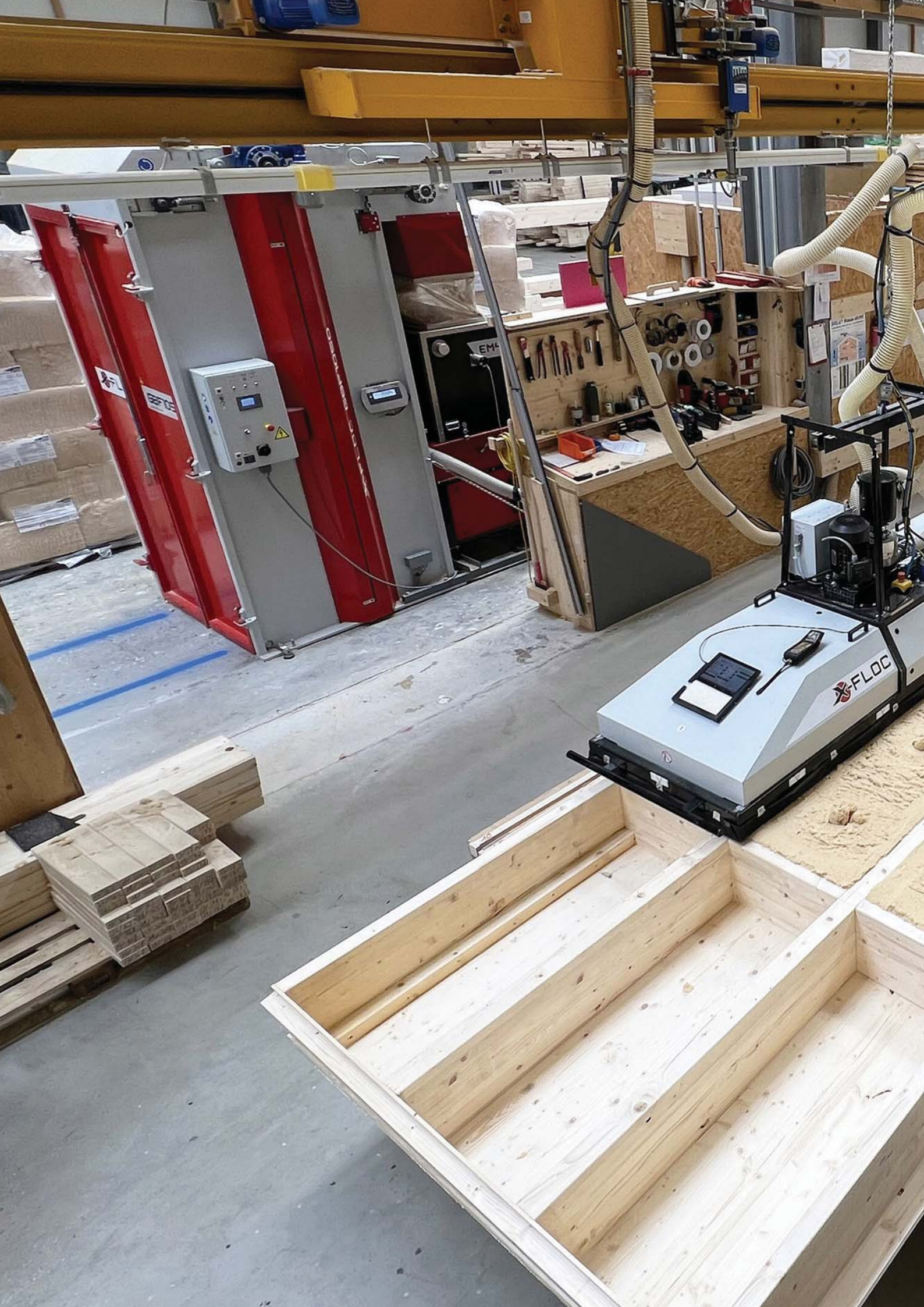


## Factory filling

Modular plant technology based on

- ▶ the injection panel EP800
- ▶ the bale conditioning machine GBF1050
- ▶ and an insulation blow-in machine of the EM400 series

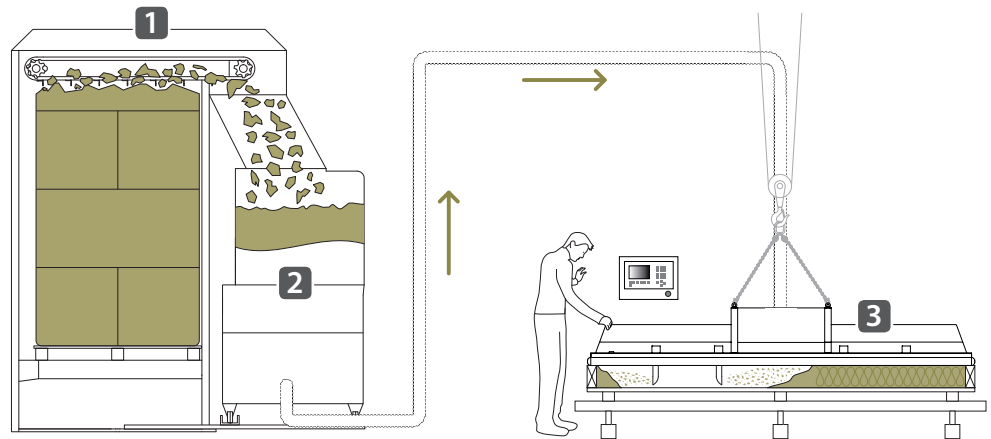




## Industrial filling technology

The automated blowing in of entire timber frame elements with loose insulation materials means greater efficiency with consistently higher performance and precision. This is why carpentry businesses, timber construction companies and prefabricated house manufacturers in particular are increasingly opting to use factory filling systems.

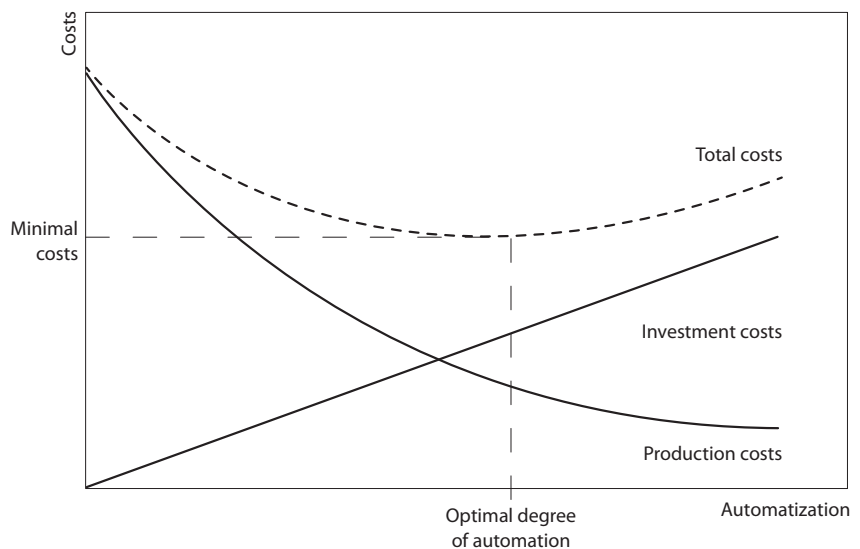
The X-Floc factory filling system consists as standard of the GBR1050 bale conditioning machine and an EM400 series blow-in machine (e.g. EM430) as well as the EP800 injection panel, which can be optionally equipped with a VS40 amplifier.



**1** Bale conditioning machine **2** Insulation blow-in machine **3** Injection panel

With the modular X-Floc factory filling system, the best insulation results can be achieved at minimum cost. The advanced level of automation and the consistently high processing quality enable the optimum use of resources and give the products industrial quality.

Factory filling systems from X-Floc GmbH can be adapted to individual customer requirements and used in small businesses as well as integrated into fully automated production lines.





**X-FLOC**

## Injection panel EP800

The basic version of the EP800 injection panel has five large blowing nozzles and four pneumatically driven material diverters with a diameter of 3 inches. Depending on the insulation material used and the desired installation density, a material throughput of well over 1 tonne per hour is possible. In order to achieve an optimum blow-in pattern with each insulation material, the height of the blow-in nozzles can be adjusted by several centimetres. The material diverters are supplied with the required compressed air at the factory. The EP800 injection panel, like the other machines in a factory filling system, is controlled by a high-quality industrial controller „Made in Germany“ and the software developed by X-Floc. After placing the injection panel on the unplanked element on one side, all that is required is to enter the dimensions (length, width, height) and specification of the insulating material. The blowing process can then be started.

### The most important advantages at a glance:

- ▶ Suitable for all loose insulation materials
- ▶ Customised to your blow-in insulation material
- ▶ Automated blowing process
- ▶ Adjustable density
- ▶ Scalable modular system
- ▶ Crane or bridge connection



### Injection panel EP800

Dimensions	approx. 3000x900x490mm*
Weight	approx. 300kg
Electrical connection cable	230V/50Hz/10A
Number of injection nozzles	standard: 5 injection nozzles
Filling procedure	by means of 5 vertical filling nozzles, height adjustable 0-6mm
Handling	practical handle for manual guidance
Control	industrial control with matching software, touch screen
Communication	via radio, alternatively wired
Pneumatic supply	via integrated compact air compressor (alternatively external)
Material compatibility	insulation material based on cellulose, wood fibre, mineral fibre, rock wool and similar
Options	quality assurance with load cells handling system LAN-to-LAN industry router line laser module
Processing capacity	300-1000kg/h depending on insulation material and application

\* Different dimensions on request.



## Bale conditioning machine GBF1050

The GBF1050 bale conditioning machine is used to process delivery bundles, which, depending on the manufacturer, consist of compressed insulation material blocks of the appropriate size or stacked insulation bales. The GBF1050 is ideal for stationary factory use, where it forms the basis for the highly efficient filling of prefabricated wall and ceiling elements with an EM400 series insulation blow-in machine plus EP800 injection panel.

The GBF1050 bale conditioning machine can be loaded with bales of compressed insulation material using a pallet truck, forklift truck or conveyor belt. The geometrically shaped milling unit, consisting of 18 milling knives, breaks up the large bale layer by layer and feeds the pre-loosened material to the blowing machine via an ejector. Thanks to the logical control system and numerous sensors used, virtually uninterrupted material transport is ensured. The weighing system of the large bale conditioning system enables precise and reproducible filling.

### The most important advantages at a glance:

- ▶ Compatible with most insulation blow-in machines
- ▶ Appropriate for big bales of cellulose, wood fibre and mineral wool
- ▶ Remarkable efficiency for thermal insulation of prefab elements

### Bale conditioning machine GBF1050

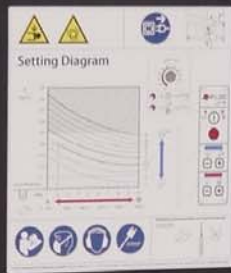
Dimensions (LxWxH)

Surface area	approx. 1452x1688x3191mm*
Total dimensions	approx. 2183x1688x3191mm
Internal dimensions for bales	approx. 1200x1200x2300mm
Weight	approx. 1220kg
Power supply	400V/50Hz/16A
Rating power	2,5kW
Production capacity	up to 5 cycles per hour (depending on the bale approx. 1500kg/h)
Shredding	milling unit
Operation	control panel

\* Data without optionally available signalling light

**X-FLOC**

**EM430**



**FLOC**  
**VS55M**

**FLOC**  
**EM430**





## Insulation blow-in machine EM430

Consistently high material throughput using proven material shredding units and powerful, durable turbine technology for air generation make the EM430 insulation blow-in machine the first choice for factory filling. The four rotating shredding shafts and two shredding shafts of the two-stage loosening unit optimally prepare any loose insulation material for pneumatic conveying and professional installation. The rotary valve transports the loosened material into the air flow of the five-stage high-performance turbine, which ensures the required material acceleration and conveying. All functions and parameters relevant for a successful blowing process can of course be taken over by the control system of the factory filling system; manual intervention is no longer necessary..

### The most important advantages at a glance:

- ▶ High air and throughput capacity
- ▶ Optimised for use in a factory filling system
- ▶ Powerful crusher and agitator
- ▶ Can be used individually or in combination with GBF1050 or GBB
- ▶ Scalable modular system

#### EM430 customised for factory filling

Dimensions (LxBWxH)	1300x1020x1800mm
Weight	427kg
Power supply	400V/50Hz/3x16A
Rated power	9,5kW
Motor power	2,0kW
Turbine power adjustable	7,5kW
Delivery pressure adjustable	max. 520mbar
Minium discharge pressure	390mbar
Air volume (nominal / measured)	490m <sup>3</sup> /h / 420m <sup>3</sup> /h
Material throughput*	max. 1600kg/h
Packaging density	max. 200kg/m <sup>3</sup>
Filling container	1,0m <sup>3</sup>
Filling height	1260mm
Dust extraction	passive (strip curtain) aktive with dust extraction
Intake / outlet connection	NW90 (3,5")
Discharge nozzle	NW90 (3,5") direct reduction possible
Hose length*	max. 150m
Rising height* without/withamplifier	max. 35m/50m
Supply air unit	high-performance turbine
Supply air amplification	external amplification (option)

All values are approximative.

\*Depending on the insulation material used and the blowing process.  
Data based on average cellulose insulation material.

X-FLOC GBF1050

## Factory filling

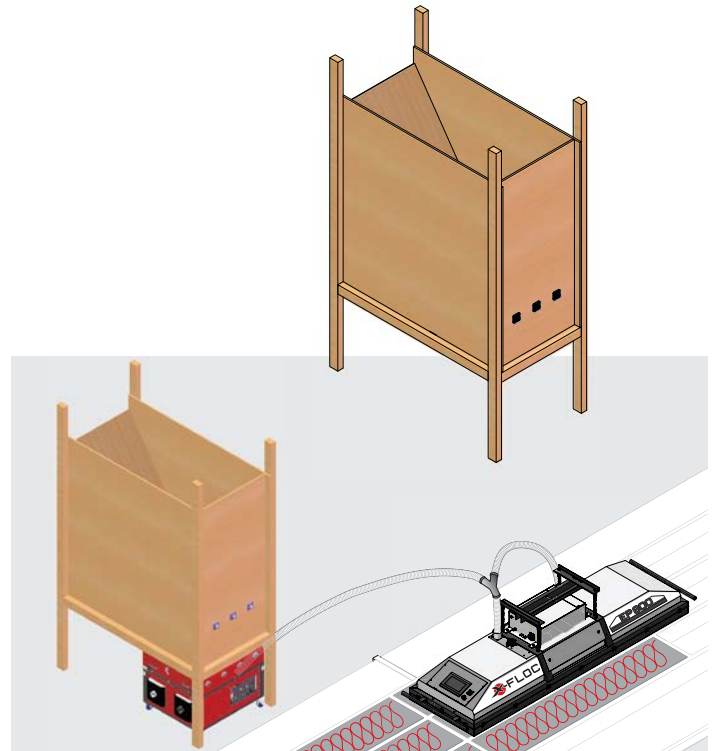
### GBB big bale bunker

The GBB big bale bunker is just right for companies that already have a suitable blow-in machine and want to process big bales without investing in an additional system. Designed as a flexible modular system, the GBB can transform an EM430 insulation blow-in machine into an efficient blowing machine with storage capacity.

The insulation material is supplied to the machine in already crushed pieces by means of attached crushing shafts and is further broken up by the machine and transported into the frame element.

#### The most important advantages at a glance:

- ▶ Loading big bales
- ▶ Extension volume for your existing machine
- ▶ Assembly kit principle
- ▶ Integrated breaking unit
- ▶ Adaptable to the respective hall geometry

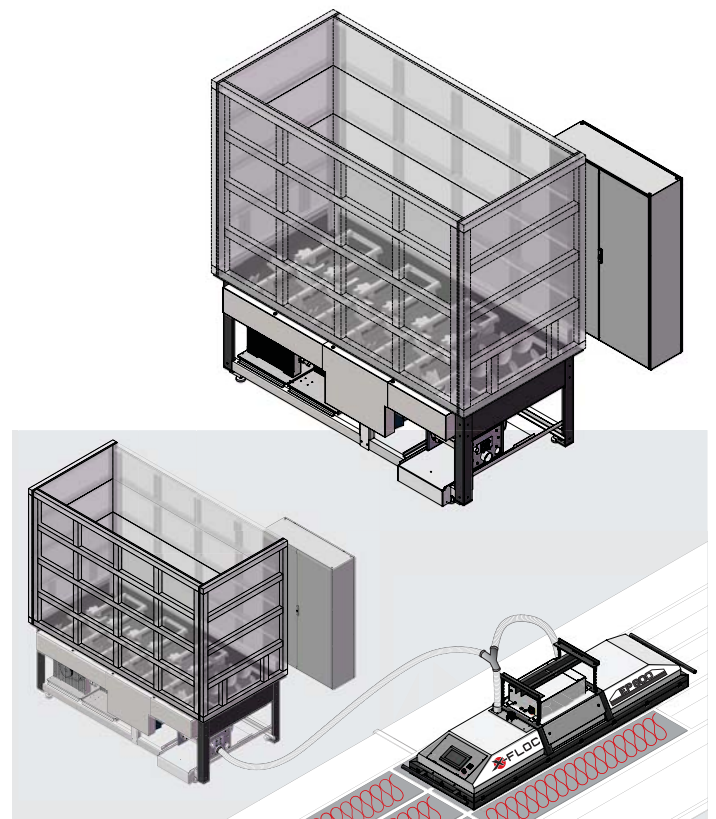


### GBA2000 Big bale shredder

For the purposeful and professional extension of our stationary plant technology, X-Floc has created the GBA2000 big bale shredder. With a storage volume of up to two big bales and the possibility to further automate the filling process by a conveyor belt, the GBA has the back of the person filling the bales. Thanks to its design, the GBA2000 allows material - even loose material - to be refilled at any time through the top-opening hatch. With its own powerful blower unit, which ensures a high air and thus throughput capacity, there is no more need for a blowing machine optimized for factory filling.

#### The most important advantages at a glance:

- ▶ Suitable for all loose or compressed blow-in insulation materials
- ▶ Automated blowing process
- ▶ Several large bales can be stocked
- ▶ Own crusher and agitator
- ▶ Own blower system
- ▶ Replaces a big bale conditioner and EM430 blow-in machine
- ▶ Scalable modular system



## Combinations

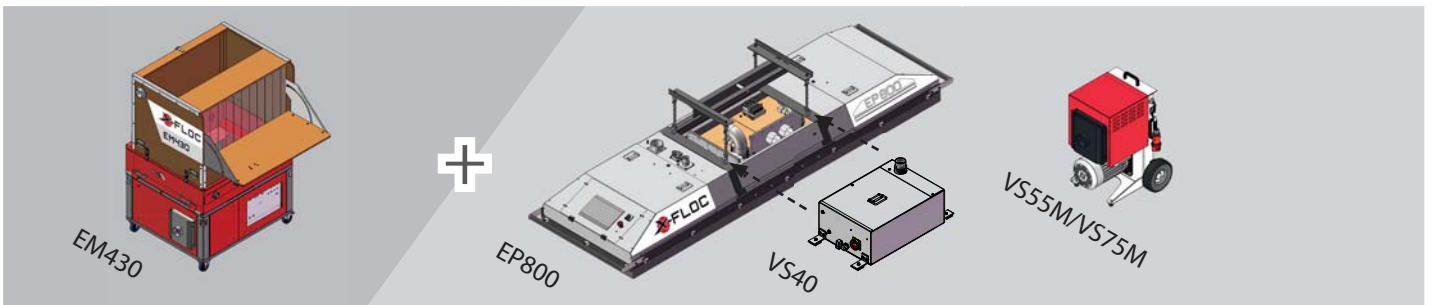
Variant ① GBF1050 + EM430 + EP800 (+ VS40) (+ VS55M/VS75M)\*



Variant ② GBF1050 + EM430 (+ VS55M/VS75M)\*



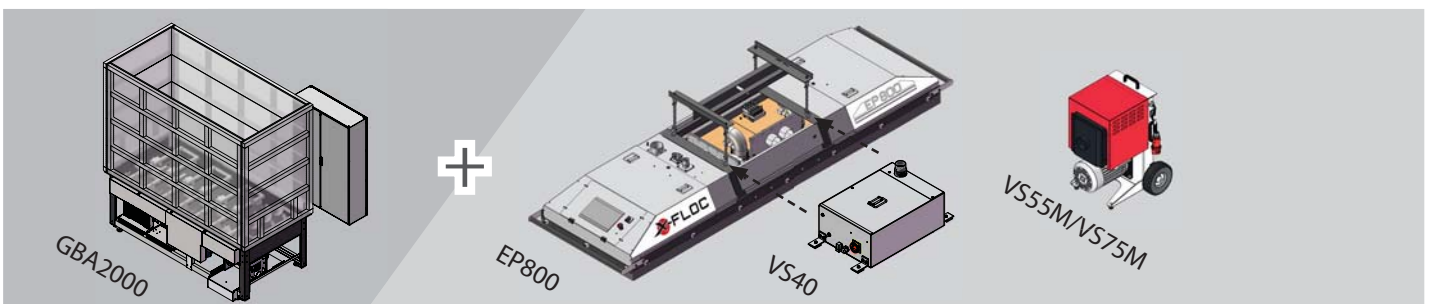
Variant ③ EM430 + EP800 (+ VS40) (+ VS55M/VS75M)\*



Variant ④ GBB + EM430 + EP800 (+ VS40) (+ VS55M/VS75M)\*



Variant ⑤ GBA2000 + EP800 (+ VS40) (+ VS55M/VS75M)\*



\* As an option, the EP800 can be upgraded with the VS40 and all variants can also be equipped with a VS55M/VS75M.



ABUS 750kg

ABUS 321

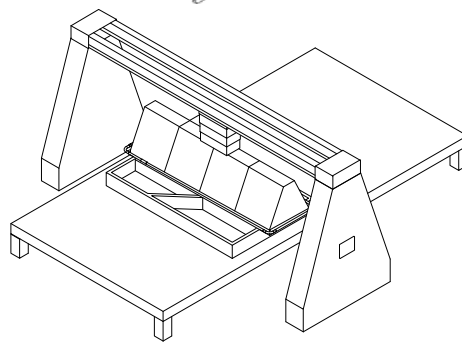
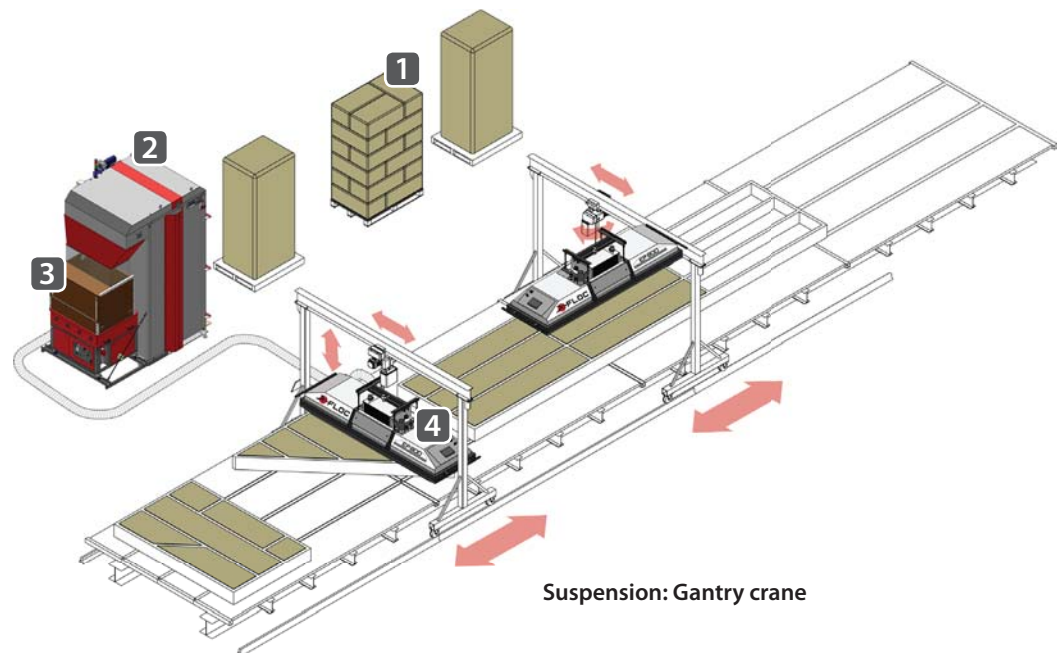
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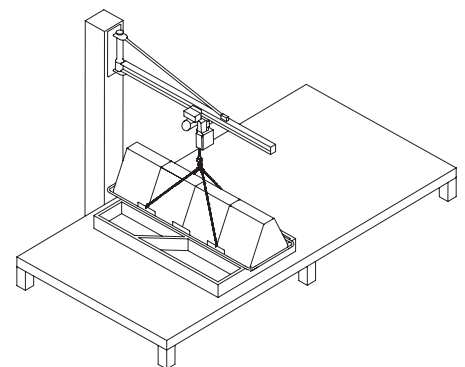
## Visibly high quality

The X-Floc factory filling system is designed for the integration into existing and new production lines. Injection panels equipped with several nozzles allow the simultaneous filling of timber frame elements of any cavity size and the system component for storing and preparing large bales ensures that the insulation material is inserted quickly and without interruption.

- 1 Blow-in insulation material
- 2 Bale conditioning machine (big bale bunker or shredder)
- 3 Insulation blow-in machine
- 4 Injection panel



Suspension: Multifunctional bridge



Suspension: Slewing crane

The wooden frame elements are filled in the factory with great precision using an injection panel, which is connected via a crane system or a bridge solution that matches the desired degree of automation. The insulation material neither dusts nor trickles. The result of the blow-in process – a seamless and diffusion-open insulation layer without thermal bridges – can be checked visually during the industrial factory filling process.



FLOC

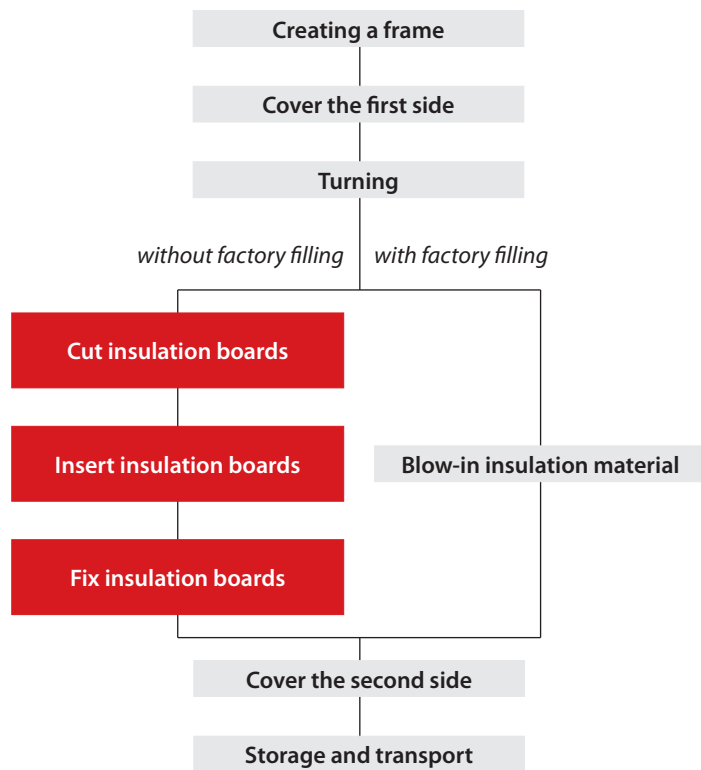
EP800

500 Xylem  
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500 Xylem  
500 Waire

Calculator



## Prefabrication of timber frame elements



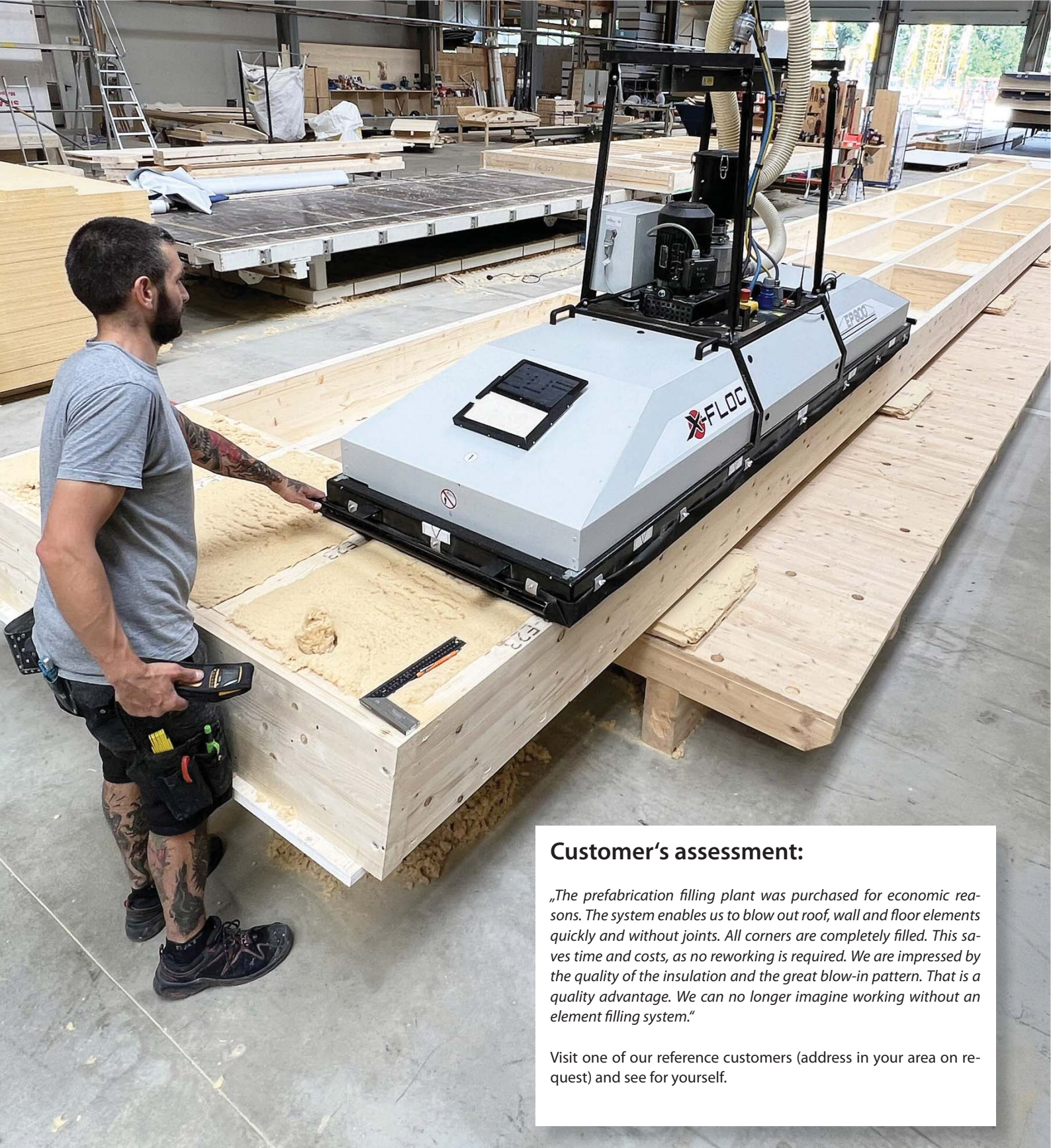
## Insulation method with maximum benefit

Modern prefabricated timber houses are characterised by a good ecological balance and a pleasant living climate. Insulation without thermal bridges reinforces both aspects and, especially when natural insulating materials such as wood fibre and cellulose are used, blow-in insulation offers both ecological and economic advantages.

Blow-in insulation is suitable for the clean filling of any building component and all cavities. There is no need to cut and install insulation boards. There is no waste or hazardous waste to dispose of and only one work step is required for all insulation thicknesses. The increasing transfer of insulation processes from the construction site to the factory allows timber construction companies in particular to significantly increase efficiency.

X-Floc factory filling systems have a modular design and can also be integrated into existing production lines. The systems are easy to operate and allow fast, uninterrupted filling of the timber frame elements with minimal labour costs. Consistently strong and reproducible insulation results are achieved using industrial filling technology.

X-Floc Dämmtechnik Maschinen GmbH offers industrial filling technology from a single source as well as competent and personalised advice, so please contact us to discuss which system components, which structure and which of the numerous options are best suited to your business. We will be happy to advise you.



### Customer's assessment:

*„The prefabrication filling plant was purchased for economic reasons. The system enables us to blow out roof, wall and floor elements quickly and without joints. All corners are completely filled. This saves time and costs, as no reworking is required. We are impressed by the quality of the insulation and the great blow-in pattern. That is a quality advantage. We can no longer imagine working without an element filling system.“*

Visit one of our reference customers (address in your area on request) and see for yourself.

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Your X-Floc representative

