

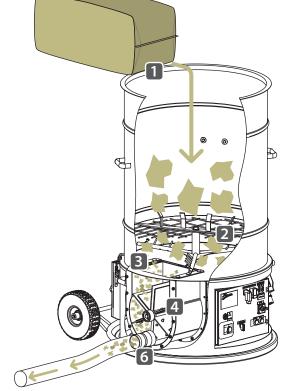


# Blow-in machines Zellofant M95 series

Always at the cutting edge of technology since 1995







# Structure and operating principle

1 Hopper and support for bags (option)

The insulation material is filled into the hopper from above. A bag support simplifies the depositing and opening of bagged goods. A shortened hopper plus a dust removal cover are also available as an option.

2 Agitator

The three-stage agitator consists of a shredding arm, a replacement grid and a rake unit.

The rotating **shredding arm universal** shreds the bale into pieces or tears up the insulation material. Welded-on disruptive elements ensure that highly compacted pieces of material are broken up and shredded.

Due to the **replacement grid** only shredded pieces fall into the **rake**, which breaks up the material ready for blowing.

The amount of material that, with the air flow, is blown into the conveying hose is regulated via the airlock speed.

Airlock feed gate (option)

For exact metering of the material quantity and uniform material flow (e.g. for spray applications and cavity wall insulation), an additional airlock feed gate is recommended.

4 Rotary airlock

The rotary valve transports the finely divided material into the lower part of the airlock. From there, it is accelerated by the air flow of the high-performance radial compressors and blown or attic blown or sprayed into the component via the outlet nozzle and the conveying line.

5 Airlock ventilation

Pressure equalisation significantly increases the material throughput and the efficiency of the airlock, while at the same time avoiding dust turbulence in the filling hopper.

6 Airlock outlet

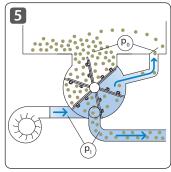
All Zellofant M95 are equipped with a NW75 (3") airlock outlet as standard. Optionally, a direct reduction to NW63 ( $2\frac{1}{2}$ ) or NW50 (2") is possible, as well as an upgrade with an outlet nozzle NW90 ( $3\frac{1}{2}$ "). This is suitable for all Zellofant rotary airlocks and can increase the output or material throughput by approx. 35%.

For more information on the many ways to customise the Zellofant M95 to your individual requirements, see **Equipment options**.









# The proven Zellofant M95 series

The Zellofant M95 is an established name among the powerful blow-in machines for professional insulation processing. Since its appearance in 1995, it has been continuously developed and equipped with useful expansion options.

One of its outstanding features is its precise controllability - the amount of material and air can be adjusted to the requirements at any time by remote control. The machine's design is optimised for mobile use and robust plug-in connections ensure safe construction site operation.

The Zellofant M95 series is available in 400V and 230V versions, as well as in various power variants to meet specific needs.



## Successful machine concept

The basis for the long-standing success of the Zellofant M95 series is the basic concept with removable filling hopper and compact machine base. This makes the machines not only easy to maintain, but also extremely user-friendly.

For example, all connections are easily accessible and the operating and control elements are clearly arranged and labelled on the front of the control box.



M95-230V



M95-2x230V



M95-400V

## Perfect for mobile construction site use

The Zellofant M95 can be easily transported even on very uneven ground thanks to its compact design and pneumatic transport trolley. By loosening the spring clip, the transport trolley can be attached and removed as required. This allows the machine to be moved effortlessly in operation, in the vehicle and on the construction site.



### Insulation blow-in machines Minifant M99 series

## Blowing methods and insulation material

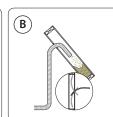
Dry injection

The different building stiles as well as types of construction require different working methods. In addition, the amount of air and pressure required for optimal processing is also depending on the insulation material, for example.

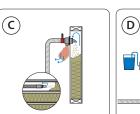
The X-Floc blow-in machines of the Minifant M99 series are virtually an allround solution in terms of both the blowing method and the insulation material. There are almost no limits to the processing of loose insulation materials.

# Open/attic blowing

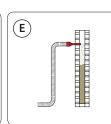
(A)



# Dry injection with ventilation



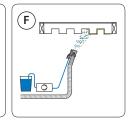
Damp spraying/CSO



Cavity wall

insulation

# Fire protection















## Blow-in insulation materials product groups

#### Cellulose

#### Wood fibre

GUTEX Thermofibre/FQ, WOODYCELL SW, AIRFLEX, best wood FIBRE, Hoiz, Jasmin, STEICO zell, Thermocell in-situ formed loose fill insulation, Termoträ Original, Termoträ Fire Protect etc.

#### Mineral fibre

InsulSafe, Supafil Cavity Wall, Supafil Loft Plus, Supafil Timber Frame, Supafil Max Frame, Teko-Flock, Indi-Flock, Trendi-Flock, swissporROC, COOMBLISSIMO, FLOCOLENE, TECHWOOL, Fillrock KD, Plus, Fillrock KD, Fillrock RG, Conlit Firesafe, PAROC BLT 5, DOSSOLAN THERMIQUE etc.

#### Mineral granules

BIT Perlit Bachl, HY Perlit Bachl, Neopor, Hyperdämm, Hyperlite KD, Thermoperl, 2K Perlit Flachdachdämmung, Extraperl S4, Thermo-Fill, Thermo-Floor, Thermo-Plan, Thermo-Roof, ISOPLUS100 BEPS-WD, SLS 20F, SLS20 Plus, Perli-Fill, Poraver Blähglas-Granulat, Bauhaus DSX100, Geocell Blähglas, JASS Wärmedämmschüttung, Liaver, NEVOLIT etc.

#### **EPS** granules

ThermoWhite WD 100 R, ISO Plus BINDER WD 100R, ThermoWhite WD 70 R (RN), ThermoWhite WD 130 R, HIRSCH PoroBead 033, H2 Wall, Granublow 033, HIRSCH Poro-Bead Plus, H2 Wall Plus, Granublow Plus, Isofloc Pearl, RigiBead Premium 033, RigiBead 035, SwissporEPS Perlen, SwissporEPS Styromull, airpor level 3.0, airpor level 3.0 A, airpor rapid, airpor light, BACHL niveauTHERM 160 Premium, BACHL niveauTHERM 400 Premium, BACHL niveauTHERM 400 Premium-PLUS, HK33, TF Pearls, GRANU-PUR, Neopixels Premium HR Insulation, thermotec BEPS-WD 130R, thermotec BEPS-WD 70N, Ecofibre EPS 033 Kerndämmung etc.

#### Fire protection plaster and other insulation material

ISOVER FireProtect 150, ISOVER FireProtect 150F, DOSSOLAN THERMIQUE, DOSSOLAN 3000, DOSSOLAN-HOECO F II/1, Cafco-BLAZSHIEKD DC/F, Cafco-300, FIBREXPAN, Hanf-Dämmwolle HDW, AgriCell BW, Einblasstroh, Bio-Einblasstroh, Thermostroh, Thermostraw, Blown straw insulation, Plantacell, Stroheinblasdämmung, SonnenStroh, SunStraw, Blowstraw, Blow-in straw, Loose fill straw insulation, SonnenNelee-Einblasstroh, GREENFLOC, Thermofloc-Dämmpellets, G-tec gebundener Dämmkork, Iso-Stroh, Flachsfloc, Lopas-Strohhäcksel-dämmung, CEMWOOD CW 1000 / CW 2000, ISOLENA-BLOCK, ISOLENA-OPTIMAL, ISOLENA-PREMIUM, ISOLENA-HEMMFILZ, ISOLENA-OPTIMAL PLUS, MEHABIT, MEHAPORT, MEHAS-PORT, NeptuTherm, Calor, THERMO JUTE 100, THE

Table does not claim to be complete. X-Floc will check other products upon request.













# Which blow-in machine for your application?

The machines of the Zellofant M95 series are suitable for all insulation materials and blowing methods. However, you can choose a design optimally matched to your needs from the various machine types. Contact us - we will be happy to advise you!

Zellofant M95 series					
Machine type	M95-230V/3,7kW	M95-2x230V/5,1kW	M95-400V/5,5kW	M95-2x230V/6,6kW	M95-400V/7,3kW
	FLOC MS	FLOC MS	FLOC MS	FLOC MS	FLOC ME
Article number	7139	6906	6907	10919	6908
Power/Material processing speed	650kg/h	750kg/h	1080kg	980kg/h	1255kg/h
Hopper (shorter hopper)	0,44m³ (0,3m³)	0,44m³ (0,3m³)	0,44m³ (0,3m³)	0,44m³ (0,3m³)	0,44m³ (0,3m³)
Airlock outlet ø	NW75 (3") (Standa	rd) Erweiterung auf NW9	90 (3½") oder Direktreduz	zierung auf NW63 (2½"),	NW50 (2") möglich
Dimensions (øxH)	880x1425mm	800x1425mm	800x1425mm	800x1425mm	800x1425mm
Unladen weight	155kg	160kg	165kg	170kg	185kg
Filling height	1425mm	1425mm	1425mm	1425mm	1425mm
Airlock ventilation	•	•	•	•	•
Dust removal/Support for bags		Support for	bags optional with vent	lation cover	1
Machine control	Cable re	emote control KFB2000 (	standard) or Radio remo	te control FFB2000/FFB2	2000-Pro
Machine conditioning		2-level agitator with rota	nting shredder arm, repla	ceable grid and rake uni	t
Shredder	HW95 optional	HW95 optional	HW95 optional	HW95 optional	HW95 optional
Airlock feed gate adjustable		14	l-levels, manually (option	al)	'
Airlock rotational speed adjustable	10-lev	vels cable remote contro	l KFB2000 / 19-levels rad	io remote control FFB20	00-Pro
Automatic blowing	•	•	•	•	•
Pressure relief valve	optional	optional	optional	optional	optional
Air generator	High-powered radial compressor 2x1,45kW	High-powered radial compressor 2x1,8kW	High-powered radial compressor 2x1,8kW	High-powered radial compressor 2x1,8kW + 1x1,45kW	High-powered radial compressor 3x1,45kW
Dynamic pressure max. (adjustable)	300mbar	375mbar	390mbar	420mbar	400mbar
Air feed amplification	External ar	mplification optional e. g	. X-Floc Amplifier/vacuur	n station VS28/VS33, VS	55M/VS75M
Air volume (nominal/measured)	320/250m³/h	390/370m³/h	390/370 m <sup>3</sup> /h	590/540m³/h	590/540m³/h
Aspiraton with suction hood (cleaning/dust extraction)	0	0	0	0	0
Conveying height (without/with amplifier)	>45/>70m	>30/>70m	>30/>70m	>30/>75m	>30/>75m
Hose length L=max.	80m	150m	150m	180m	180m
Motor	2x3-phase, 0,75kW	2x3-phase, 0,75kW	2x3-phase, 0,75kW	2x3-phase, 0,75kW	1x3-phase, 1,1kW and 1x3-phase, 0,75kW
Power rating	3,7kW	5,1kW	5,5kW	6,6kW	7,3kW
Power supply	230V/50Hz/16A	2x230V/50Hz/16A	400V/50Hz/3x16A/N/PE	2x230V/50Hz/16A	400V/50Hz/3x16A/N/PI
Max. material packing density	155kg/m³	165kg/m <sup>3</sup>	165kg/m <sup>3</sup>	165kg/m³	165kg/m <sup>3</sup>

Compatibility table																															
Cellulose	Applications	Α	В	C	D	Ε	F	Α	В	C	D	Е	F	Α	В	C	D	Ε	F	Α	В	C	D	Ε	F	Α	В	С	D	Е	F
	Suitablility	•	•	•	•	•	-	•	•	•	•	•	-	•	•	•	•	lacktriangle	-	•	•	•	•	•	-	•	•	•	•	•	-
Wood fibre	Applications	Α	В	C	D	Ε	F	Α	В	C	D	Ε	F	Α	В	C	D	Ε	F	Α	В	C	D	Ε	F	Α	В	C	D	Ε	F
	Suitablility	•	0	0	-	0	-	•	•		-	0	-	•	•	•	-	•	-	•	•		-	0	-	•		•	-	•	-
Mineral fibre	Applications	Α	В	C	D	Ε	F	Α	В	C	D	Ε	F	Α	В	C	D	Ε	F	Α	В	C	D	Ε	F	Α	В	C	D	Ε	F
	Suitablility	0	0	0	0	0	-	•	•	•	0	•	-	•	•	•	0	•	-	•	•		0		-	•		•	0	•	-
Mineral granules	Applications	Α	В	C	D	Ε	F	Α	В	C	D	Ε	F	Α	В	C	D	Ε	F	Α	В	C	D	Ε	F	Α	В	C	D	Ε	F
	Suitablility	•	-	-	-	0	•	•	-	-	-	0	•	•	-	-	-	0	•	•	-	-	-	0	•	•	-	-	-	0	•
EPS granules	Applications	Α	В	C	D	Ε	F	Α	В	C	D	Ε	F	Α	В	C	D	Ε	F	Α	В	C	D	Ε	F	Α	В	C	D	Ε	F
	Suitablility	-	-	-	-	•	-	-	-	-	-	lacktriangle	-	-	-	-	-	lacktriangle	-	-	-	-	-	•	-	-	-	-	-	•	-
Fire protection plaster,	Applications	Α	В	C	D	Ε	F	Α	В	C	D	Ε	F	Α	В	C	D	Ε	F	Α	В	C	D	Ε	F	Α	В	C	D	Ε	F
Others	Suitablility	•	•	•	•	•	•	•	•	•	•	•	•	•		•		•	•	•	•		•		•	•	•	•		•	•

A = Open/attic blowing | B = Dry injection | C = Dry injection with ventilation | D = Damp spraying/CSO | E = Cavity wall insulation | F = Fire protection

X-Floc blow-in machine Zellofant M95

ullet suitable/yes | ullet recommended with limitations | ullet not recommended/no/not specified | ullet All values are approximate.

# **Equipment options**

		Art.no.
NW75 → NW90	Outlet nozzle NW90 Upgrade from NW75 (3") > NW90 (3½") suitable for all Zellofant M95 machine types	7109
	Radio remote control FFB2000-Pro Bidirectional radio technology, four radio channels, high transmission reliablility	5243
San	Direct extension NW75>NW90 Airlock outlet nozzle for extension of NW75 (3") > NW90 (3½), suitable for conveyor hose NW90	6746
Mains oltage [V]	Mains voltage indicator for 230V power supply installation in Zellofan 95 for detection of voltage supply fluctuations	4604
	Airlock feed gate manually, suitable for all Zellofant M95 machine types	3194
	Quick coupling for airlock outlet nozzle Storz coupling, fixed NW75(B) with female thread R2 1/2"	172
3→5mm	Reinforced rotary airlock L200 due to thicker wall thickness for longer service life when working with abrasive insulating materials	6719
	Power generator XM5kVA/4,5kW Compact, mobile single-phase synchronous generator, self-regulating	9
	Direct reducer NW75>NW63 Reducer NW75 (3") > NW63 (2½"), for insertion into the airlock outlet nozzle of the blow-in machine	526
	Direct reducer NW75>NW50 Reducer NW75 (3") > NW50 (2"), for insertion into the airlock outlet nozzle of the blow-in machine	1972
	Mains adapter distributor 400V 400V-CEE>3x 230V-Schuko (with connection cable)	9481
	Power distributor 400V/16A PRCD-S Type B, mobile, with integrated all-current sensitive residual-current protection	9271

		Art.no.
	Suction drum V=115I with swivelling lid. Tape fabric bags and connection parts included in the scope of delivery.	1160
250L	Suction drum V=250l with swivelling lid. Tape fabric bags and connection parts included in the scope of delivery.	3075
0	Support for bags Sturdy bag support made of aluminium with support bracket	4791
	Support for bags with ventilation cover Sturdy bag support made of aluminium and dust extraction attachment with strip curtain	3218
MIN SPLOCE	Machine hopper short suitable for all types of Zellofant M95 H= spprox. 750mm (use bag support with ventilation cover)	4812
4	Deflector element universal for attachment to the inside of the hopper, suitable for all Zellofant M85 types	8358
	Retention grid for the hopper for insertion into the hopper, for processing free-flowing bulk materials such as EPS granulates	2941

# Sample order size

## **Example: Zellofant M95**



- Zellofant M95 (Art.no.: see page 5)
- ► Radio remote control FFB2000-Pro (Art.no. 5243)
- Accessories set NW75/63 for loose insulation material (non-abrasive)
   (Art.no. 5246)
- Injection bezel universal (Art.no. 9209)
- Blow-in needle NW75-180 (Art.no. 6711)
- Hose reel NW75 D1000 plus (Art.no. 6464)
- Hose reel accessories set (Art.no. 5845)
- Density test set NW100 with case (Art.no. 4348)

### Radio remote control FFB2000-Pro

Bidirectional radio communication with FM technology: The machine type Minifant M99-DS-Pro comes with the digital radio remote control FFB2000-Pro art. no. 5154.

All important settings and functions can be conveniently controlled from the blower's working location. Air output and material delivery rate can be adjusted in 19 steps during operation or when the machine is at a standstill. Together with the pressure signalling unit integrated in the blow-in machine, special functions such as dynamic pressure control and automatic switch-off can be used.

The FFB2000-Pro is characterised by high transmission reliability. However, in the event of radio interference, the hand control unit and the receiver can also be connected via a connecting cable supplied, thus ensuring operation.

## **Technical data**

Connections

Power supply

Dimensions

Weight

Transmission frequency	434MHz
Operating temperature range	-20°C to +40°C
Voltage supply	24V DC
Radio channels	4 (for construction sides with source of interference)
Hand-held transmitter	
Duration of use	up to 30 hours
Range	>100m w/o interruption
Overpressure signal	LED (optical) warning tone (accoustic)
Function buttons	6 (foil keypad)
Parameter levels	10
Parameters adjustable: Radio channels Switch-on delay material Switch-off delay air Delay time: Automatic switch-off Response time: Dynamic pressure control	1-4 0, 1, 2,9s 0, 1, 2,9s 0, 1, 2,9s 50, 100,500ms
Protection class	IP40
Connections	Cable control Charging socket Antenna
Power supply	3x AAA NiMH 800mAh
Weight	approx. 400g
Dimensions	approx. 47x154x47mm
Radio receiver	(6
Protection class	IP40
	ii ii

Control line

to the machine

Cable control Antenna

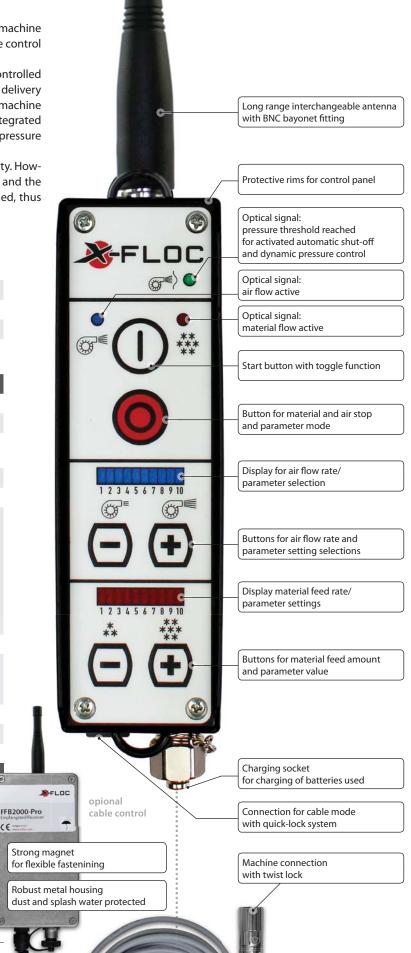
24V DC (from

approx. 765g

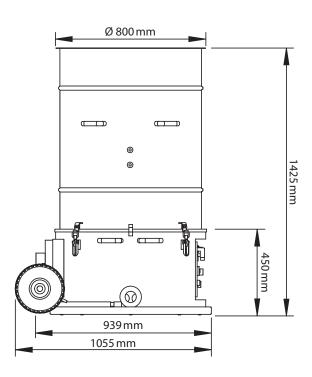
blow-in machine)

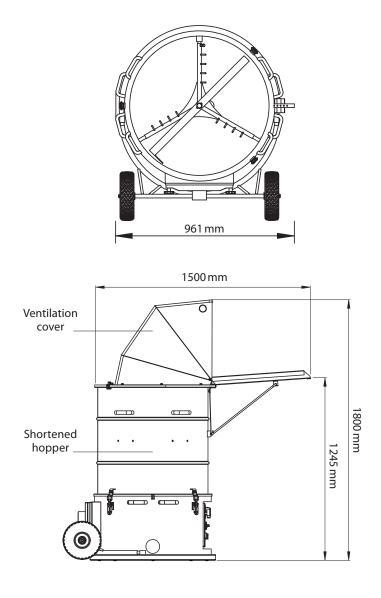
approx. 83x151x50mm

(E:



## **Dimensions**





# Filling, suction and cleaning

The Zellofant M95 blow-in machine is easy to fill from the top. With a few equipment options, the working comfort can be increased even further. The bag support, for example, makes it easy to place and open the insulation material delivery containers. The Zellofant M95 with shortened hopper can be filled particularly ergonomically – at a working height of approx. 1.20 metres.

For safety reasons, the short hopper must be used with a ventilation cover, which also retains whirled-up dust by means of a strip curtain. In addition to passive dust extraction, also active dust extraction and residue-free cleaning of the workplace is possible with the ventilation cover in combination with an amplifier/vacuum station and a suction drum.





### Reinforcement as desired

Some insulation materials require a particularly high air volume for proper installation and certain installation situations require the use of long conveyor hoses, e.g. to overcome high gradients. Occasionally, loose insulation materials also have to be removed again.

With an amplifier/vacuum station you can supplement your blow-in machine or use it in conjunction with a suction drum for cleaning. The VS28/VS33 can be used as suction as well as pressure units and are particularly reliable due to the separate working and cooling air. They are equipped with lightweight powerful centrifugal fans and in portable compact design are the perfect complement to the Zellofant M95 insulation blow-in machine series.

#### Synchronous control included:

Via the potentiometer on the amplifier station, the maximum amplifier fan power is adjusted to the max. fan power of the blow-in machine. Further regulation of the amplifier blower output is synchronous with the blower signal of the blow-in machine. This means that the amplifier always works with the blower line that the processor sets on the remote control.

#### Main application areas of the X-Floc VS series::

- Reinforced blowing (with dust extraction)
- For large inclines, heavy insulation material
- As extraction station (cleaning or deconstruction old building materials)





# **Amplifier/Vacuum stations**







**VS33** 



**VS55M** 



VS 75M

Amplifier/Vacuum station				
Туре	VS28	VS33	VS55M	VS75M
Article number	2711	5855	9455	9793
Amplification/cleaning	●/●	●/●	●/●	●/●
Active dust removal	•	•	•	•
Stepless performance regulation	•	•	•	•
Synchronisation with machine	•	•	•	•
Remote control	•	•	•	•
Power	2,8 kW	3,3 kW	5,5 kW	7,5 kW
Max. overpressure	320 mbar	350 mbar	500 mbar	600 mbar
Max. negative pressure	280 mbar	320 mbar	450 mbar	550 mbar
Max. air volume (nominal/measured)	440/360 m³/h	420 / 400 m³/h	470 m <sup>3</sup> /h*	390 m <sup>3</sup> /h*
Air feed unit	high-powered radial compressor	high-powered radial compressor	5-stage turbine	5-stage turbine
Outlet nozzle/intake socket	NW63 (2½") / NW75 (3")	NW63 (2½") / NW75 (3")	NW63 (2½") / NW90 (3½")	NW63 (2½") / NW90 (3½")
Dimensions (L×W×H)	482×358×418 mm	482×358×418 mm	605×560×750 mm	605×560×750 mm
Weight	approx.19,5 kg	approx. 19,8kg	approx. 65kg	approx. 88kg
Operating hours counter	0	•	-	-
Mains voltage display	0	0	-	-

<sup>\*</sup> free-blowing ● suitable/yes | ○ recommended with limitation | - not recommended/no/not specified (all values approximate)

X-Floc blow-in machine Zellofant M95

# Blow-in machines Zellofant M95 series



In use at the North Cape: Zellofant M95 with amplifier VS33



Glass fibre material test in the X-Floc lab



Sustainable insulation with cellulose



Mobile application Zellofant M95 (Derowerk, Poland)



St Joseph's Church in Alta (Norway) https://bundschuh-holzbau.de



Attic blowing with glass fibre (NESTA SAS, France)



Houseboat Atelier Fluvial SARL (France)



Versatile also in terms of insulation: Zellofant M95 material test with seaweed



State-of-the-art with the Zellofant M95



When processing the sustainable insulating material classic cellulose



Blow-in professionals also relies on X-Floc quality when it comes to accessories



Fire protection plaster applied by damp spraying ensures safety



# **Convince yourself**

Feel free to visit our social media channels and get an impression of the performance of our proven Zellofant M95 injection machines with your own eyes.

Follow us on Facebook and Instagram and/or browse through our videos:



X-Floc blow-in machine Zellofant M95

#### Blow-in machines Zellofant M95 series

#### Machine accessories

X-Floc blow-in machines, amplifier/vacuum stations and other products can be operated and combined in a variety of ways. Detailed information on radio remote controls, cable control, power generators as well as bag supports, suction drums and other machine accessories can be found in the relevant product docu.

▶ Further information, see brochure Machine accessories



## Nozzles and blowing accessories

For each insulation blow-in principle and each application, tools and/or accessories are necessary for insertion, sealing and venting. Detailed information about these accessories and everything about tools such as injection nozzles, injection needles/lances as well as hole saws and sealing parts can be found in the relevant product docu.

▶ Further information, see brochure **Nozzles and blowing accessories** 



### Hoses and connectors

Hoses and connectors are an essential part of the blow-in equipment because they can be used to create all conceivable transport lines and circuits. Detailed information on conveying and injection hoses as well as hose connectors, hose clamps, Y-pieces and fibre switches can be found in the relevant product docu.

▶ Further information, see brochure **Hoses and connectors** 



#### Measurement devices

X-Floc maintains close cooperation with university research and development institutions. This results in an extensive product range in the field of measuring and testing technology for blow-in technicians, insulation manufacturers and material testing institutes, and many more. More info can be found in the relevant product docu.

Further information, see brochure **Measurement devices** 



## Damp spraying

In the damp spray process, thermal insulation material is moistened with water after exiting the hose. Detailed information on spray heads and pipes for the various applications as well as on high-pressure pumps such as membrane or piston pumps and on wall scrubber for smooth surfaces can be found in the relevant product docu.

▶ Further information, see brochure **Damp spraying** 



## Industrial safety and respiratory protection

The special work suit with hood protects the blow-in professional from contact with skin-irritating insulation materials. Detailed information on the X-Floc range of workwear, dust masks, professional respirators with legal approval as well as air filters, rechargeable batteries and other accessories can be found in the relevant product docu.

▶ Further information, see brochure Industrial safety/Respirators



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Your X-Floc representative

 $Prices \ on \ request \cdot Published \ 11.2022 \cdot Errors \ and \ omissions \ excepted \cdot PDF: www.x-floc.com/download$