X-FLOC
Shaping the future of insulation

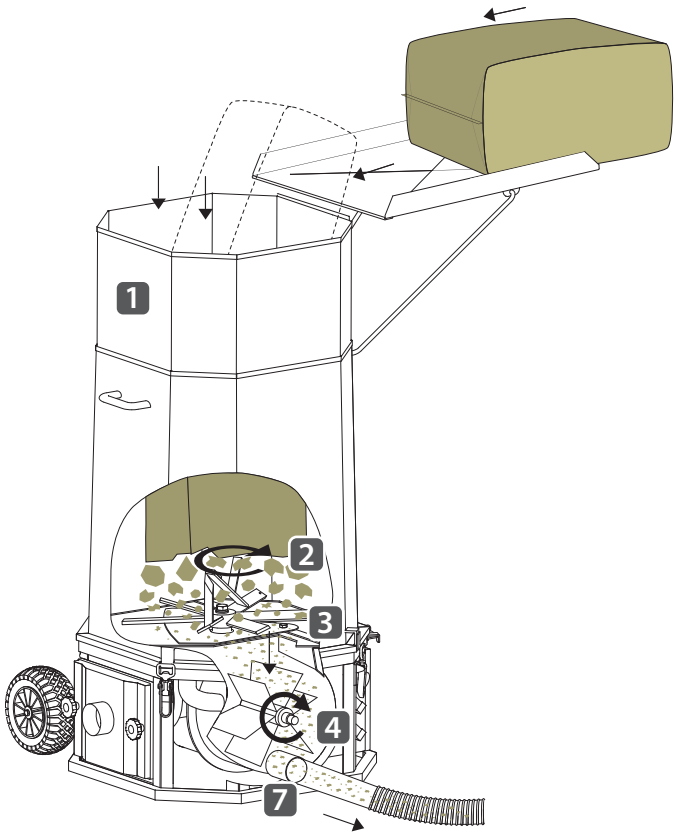


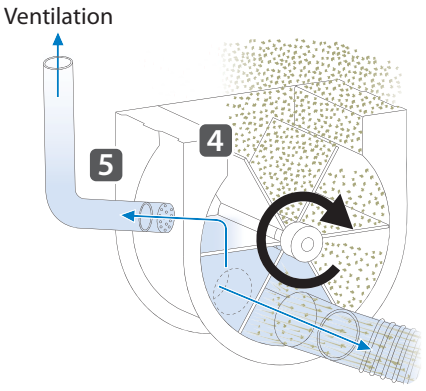
EM99 INSULATION BLOW-IN MACHINE

GLOBALLY PROVEN JACK-OF-ALL-TRADES

Operating principle

The insulation material is pushed into the filling hopper after opening the delivery package. Specially shaped shredding arms break the insulation material into smaller pieces and loosen it up completely. The airlock feed gate feeds the material into the rotary airlock. In the lowest airlock chamber, the insulation material is conveyed by the air flow to the outlet nozzle and then blown into the component at an accelerated rate through the conveying hose.





Composition

1 Filling hopper
The delivery package is placed on the sack support (optional) and fed into the hopper. Its volume (approx. 0,26m³) is sufficient for up to two bags of commercially available insulation material.

2 Agitator
The powerful agitator unit breaks up the compressed insulation material and feeds it into the rotary airlock. The rotary movement achieves fine disintegration of the insulation material. The special shape of the agitator prevents the formation of undesirable material bridges.

3 Electrical airlock feed gate
An adjustable airlock feed gate is located above the rotary airlock, which can be used to fine-tune the material feed to suit the application.

4 Rotary airlock
The rotary airlock consists of six (or eight) chambers with rubber seals. This design allows high performance with low wear and excellent sealing. The rotary movement of the airlock rotor moves the upper airlock chamber downwards. The insulating material is accelerated by the air flow and blown into the component through the outlet nozzle and conveying hose.

5 Airlock venting
The rotary airlock is equipped with a valve deaeration, through which the airlock chamber, which is still pressurised after the blow-out process, is depressurised in the upward movement. This allows the chamber to be quickly and completely filled with insulating material in the upward position.

6 Motor/gearbox
The agitator as well as the rotary airlock are driven by a motor that can withstand tough site conditions. Angular and spur gears transmit the necessary drive torques.

7 Outlet nozzle
The conveying hose is connected via a NW75 (3“) outlet nozzle. Alternatively, direct reducers or extensions can be used to connect different hose sizes.

8 Electrical switchgear
Only high-quality components are installed in the switchgear. The operating and signalling elements are clearly arranged and user-friendly.

9 Mains voltage display
The mains voltage display (optional) allows the machine operator to easily keep an eye on the mains voltage at all times (even under load). Possible sources of error in the area of the mains voltage supply can be quickly detected if necessary.









EM99-DS-Pro and EM99-DS

The X-Floc EM99 insulation blow-in machines are equipped with a 230V (or 220-240V) light current connection. They are ideally suited for all approved loose insulation materials and for free-flowing bulk materials. Excellent insulation results can be achieved with cellulose and glass wool thanks to the powerful agitator.

The EM99 is also versatile in terms of blowing methods and, due to the uniform material feed, EM99-DS-Pro/-DS can also be used very well for spraying work. In both machine types, the agitator and airlock are equipped with speed control, which allows the loosening to be optimally matched to the insulation material used and the material quantity - in addition to the airlock feed gate setting - to be metered even more finely. For example, the standard airlock speed is increased for very uniform material delivery when spraying acoustic coatings. For special requirements for an always uniform material flow, the machines are also available with an eight-chamber airlock (optional).

The EM99-DS-Pro blow-in machine is equipped with the FFB2000-Pro radio remote control as standard. With this, all important settings and functions can be conveniently controlled directly from the blow-in technician's working place.







Mobility

Relocation made easy: All EM99 machines can be easily tipped down thanks to their low own weight and can also be moved easily on uneven construction site surfaces with the help of the two transport wheels.

After loosening the three tension locks, the filling hopper can be removed. This makes the machines of the EM99 series easy to transport even in small vehicles and also the machine base is easily accessible for maintenance work.

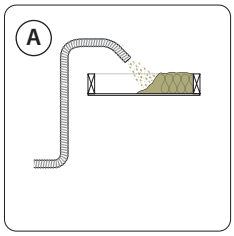


Blowing methods and insulation material

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.

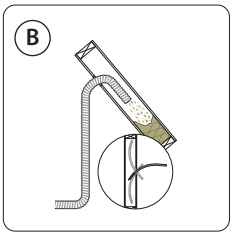
The X-Floc EM99 blow-in machines are virtually an allround solution in terms of both the blowing method and the insulation material. There are almost no limits regarding the processing of loose insulation materials.

Open/attic blowing



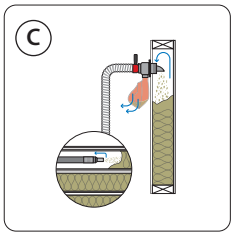


Dry injection



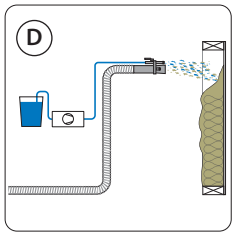


Dry injection with ventilation



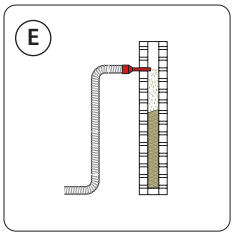


Damp spraying/CSO



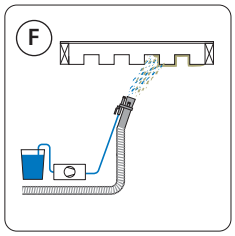


Cavity wall insulation





Fire protection





Blow-in insulation materials product groups

Cellulose

AISLANAT, Arbocel Climasafe, Cellisol 300, Cellisol 500, Warmcel, Warmcel 500, Zellofix, Ouatex, Eurocellulose, cellulose V1, Vosges Cellulose, Eurocellulose SB, cellulose V3 SB, Vosges Cellulose S B, FranceFloc B, Ecofloc B, Cell Ia vie B, Néocell B, Optimum MP, Climacell S, Climacell pure, Climacell akust, Climacell inside, Climacell sonic, cellfloc, climacell Loft, climacell InduTec, climacell HSX, climacell FSX, climacell Green Nature, Unifloc, Witherm, DÄMMSTATTs CI 040, KLIMA-TEC-FLOCK, biocell, DÄMMSTATTs CI Dämmschüttung, DÄMMSTATTs CI 040 bf, KLIMA-TEC-FLOCK bf, biocell bf, DÄMMSTATTs CI Dämmschüttung bf, DAEMMSTATT D, Isocell D, Trendisol D, Dobry-Ekovilla D, DAEMMSTATT D bf, Isocell D bf, Trendisol D bf, Dobry-Ekovilla D bf, Isocell P, Isocell for you, FLOCO'MOBIL Dämmflocke, Floci-Cell, naturheld Holzfaser Einblasdämmung, WoodyCell+, WoodyCell Plus, WOODYCELL, isofloc, isofloc L, isofloc L+, isofloc LW, isofloc LM, swissfloc, isofloc eco, isofloc neo, easyfiber, CelluBOR SW, OUATECO PREMIUM, JUST BE GREEN, ISOL+, OUATECO, OUATECO NATURE, STEICOfloc, STEICOfloc NB, THERMOFLOC F, THERMOFLOC B, GREENFLOC, Clima-super, Isocell, trendisol, Isodek, Dobry-Ekovilla, Fibra-Natur, Domexcell, Pavafloc, Renocell, Isolare, Poesis, isECO, ISOCELL F, greenwool, clima-super Evolution, Isocell Evolution, greenwool Evolution, isECO green, clima-super lambda+, clima-super max, Isocell lambda+, greenwool lambda+, isECO lambda+, isECO max, trendisol lambda+, Wolfinger Zellulosedämmung, STT Floc, Ekovilla, Ekovilla Puru, Ekovilla IA, Isonem, Isolet, UpCell, GreenCell, Climatizer plus,Thermocel, La cellulosa, Easycell, Celisol, Isofloc EU 01, WarmFiber, WarmFiber Plus, Termex, Termex Green, Ekocell, Ekocell Green, Kätevä, Kätevä Green, iQ3 CELLULOSE, CELLIPURE, ISOLANT ECOLOGIQUE SEMI, DOMOSANIX, CELLECO etc.

Wood fibre and Mineral fibre

GUTEX Thermofibre, 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, Climawood, 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 Plus, Fillrock RG, Conlit Firesafe, PAROC BLT 5, DOSSOLAN THERMIQUE, Climastone, Climaglass etc.

Mineral granules / EPS 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, Climastyren, 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 160 Premium-PLUS, 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

IISOVER 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, Sonnen-Stroh, SunStraw, Blowstraw, Blow-in straw, Loose fill straw insulation, SonnenKlee-Einblasstroh, GREENFLOC, Thermofloc-Dämmpellets, G-tec gebundener Dämmkork, Iso-Stroh, Flachsfloc, Lopas-Strohhäckseldämmung, CEMWOOD CW 1000 / CW 2000, ISOLENA-BLOCK, ISOLENA-OPTIMAL, ISOLENA-PREMIUM, ISOLENA-KLEMMFILZ, ISOLENA-OPTIMAL PLUS, MEHABIT, MEHAPORT, MEHASPORT, NeptuTherm, Calor, THERMO JUTE DUO, THERMO JUTE 100, THERMO JUTE 100 PLUS, Métisse Flocon, FonaTerm - granular, REINFLOCK, Conluto, JOMAperl etc.

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













Which blow-in machine for your application?

In principle, you can process almost all available blow-in insulation materials with every X-Floc EM99 machine. However, it is advisable to select a model that is optimally matched to your needs from the various machine types, also with regard to the areas of application or blow-in methods. Contact us for detailed and further information - we will be happy to advise you.

Model series	EM99	EM99
Machine type	EM99-DS	EM99-DS-Pro
		  8 chambers **Art.no. 7392**
Article number	**3837**	**5416**
Power/Material processing speed	650kg/h	650kg/h
Hopper	0,26m³	0,26m³
Airlock outlet ø	NW75 (3“)	NW75 (3“)
Dimensions (LxWxH)	640x1400mm	640x1400mm
Unladen weight	111kg	111kg
Filling height	1400mm	1400mm
Airlock ventilation	●	●
Dust removal/support for bags	Sack support (optional)	Sack support (optional)
Machine control	Radio remote control FFB500 or cable remote control KFB3 (optional KFB30)	Radio remote control FFB2000-Pro or cable remote control KFB2000
Material conditioning	Rotating agitator with shredder arms	
Airlock feed gate adjustable	●	●
Airlock rotational speed adjustable	17 levels, manual	17 levels, manual
Airlock feed gate material	Sheet steel	Sheet steel
Automatic switch-off	○	●
Air generator	High-powered radial compressor 2x1,45kW	High-powered radial compressor 2x1,45kW
Max. dynamic pressure (adjustable)	340mbar	340mbar
Air feed amplification	External amplifiation optional e. g. X-Floc amplifier/vacuum station VS28/VS33	
Air volume (nominal/measured)	440/350m³/h	440/350m³/h
Aspiration with suction hood	●	●
Conveying height with/without amplifier	>30/50m	>30/50m
Hose length L=max.	80m	80m
Motor	3-phase 0,75kW	3-phase 0,75kW
Power rating	3,6kW	3,6kW
Power supply	230V/50Hz/16A (10A possible with only one radial compressor)	
Max. material packaging density	155kg/m³	155kg/m³

Compatibility table													
Cellulose	Application	A	B	C	D	E	F	A	B	C	D	E	F
	Suitablitity	●	●	●	●	●	-	●	●	●	●	●	-
Wood fibre	Application	A	B	C	D	E	F	A	B	C	D	E	F
	Suitablitity	●	●	●	●	-	-	●	●	○	●	-	-
Mineral fibre	Application	A	B	C	D	E	F	A	B	C	D	E	F
	Suitablitity	●	●	●	●	●	-	●	●	●	●	●	-
Mineral granules	Application	A	B	C	D	E	F	A	B	C	D	E	F
	Suitablitity	●	-	-	-	●	●	●	-	-	-	●	●
EPS granules	Application	A	B	C	D	E	F	A	B	C	D	E	F
	Suitablitity	-	-	-	-	●	-	-	-	-	-	●	-
Fire protection plasters/other	Application	A	B	C	D	E	F	A	B	C	D	E	F
	Suitablitity	●	●	●	●	●	●	●	●	●	●	●	●

A = Open/attic blowing | **B** = Dry injection | **C** = Dry injection with ventilation | **D** = Damp spraying/CSO | **E** = Cavity wall insulation | **F** = Fire protection
● suitable/yes | ○ recommended with limitations | - not recommended/no/not specified (all values approximate)

Radio remote control FFB500

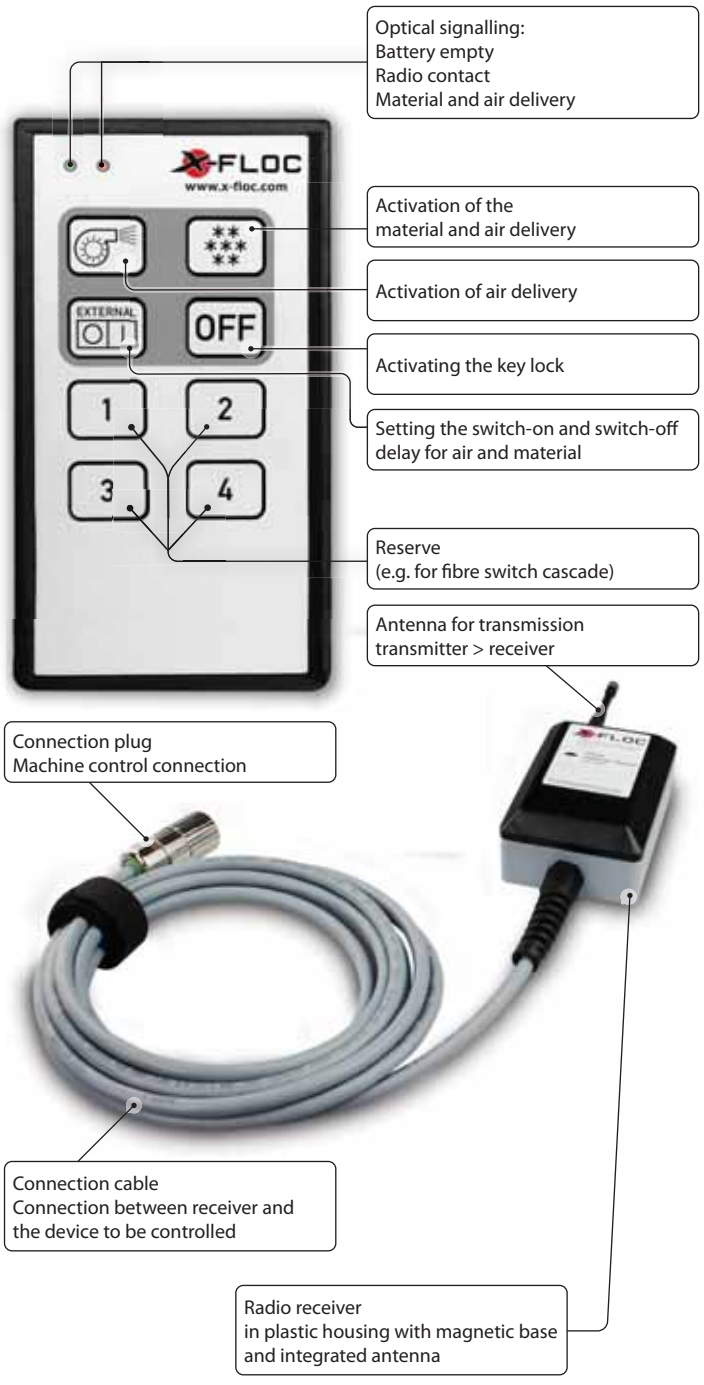
The EM99-DS blow-in machine type is supplied as standard with a specially developed FFB500 radio remote control. It is characterised by low weight and a robust, handy housing.
Radio contact takes place via secure, bidirectional communication between the hand control unit and the receiver. Several frequency channels are available. The transmitting and receiving power increases automatically over longer distances.
If the range is exceeded or the radio contact is broken, the machine is switched off safely. The robust hand control can be easily secured with a wrist strap via an eyelet. The operating elements can be locked with a key lock to prevent unintentional switching on.



Special effects in the film industry with the EM99

Technical data

Frequencies (adjustable)	868,15 MHz, 868,45 MHz (Art.no. 6708) or 922 MHz (Art.no. 8869)
Protection against	Short circuit, under-voltage and overvoltage
Compatibility	EM99-DS
Radio power	10dBm
Hand-held transmitter	
Range	>180m w/o interruption
Power supply	3x Micro AAA 1.5V
Battery lifee	approx. 800 hours
Keys	8 in plastic housing IP65
Key lock	Protection against unintentional inputs
Functions	Air start, material start, air and material start combined (time delay adjustable), stop
Switch-on and switch-off delay times between air and material	0...9s (adjustable)
LED display	Battery and radio contact, air ON, material ON, air and material ON
Weight	approx. 80g
Dimensions	approx. 62x111x18mm
Radio receiver	
Range monitoring	Safety shutdown if exceeded
Radio power	10kBm
Weight	approx. 250g
Dimensions	approx. 81x120x46mm



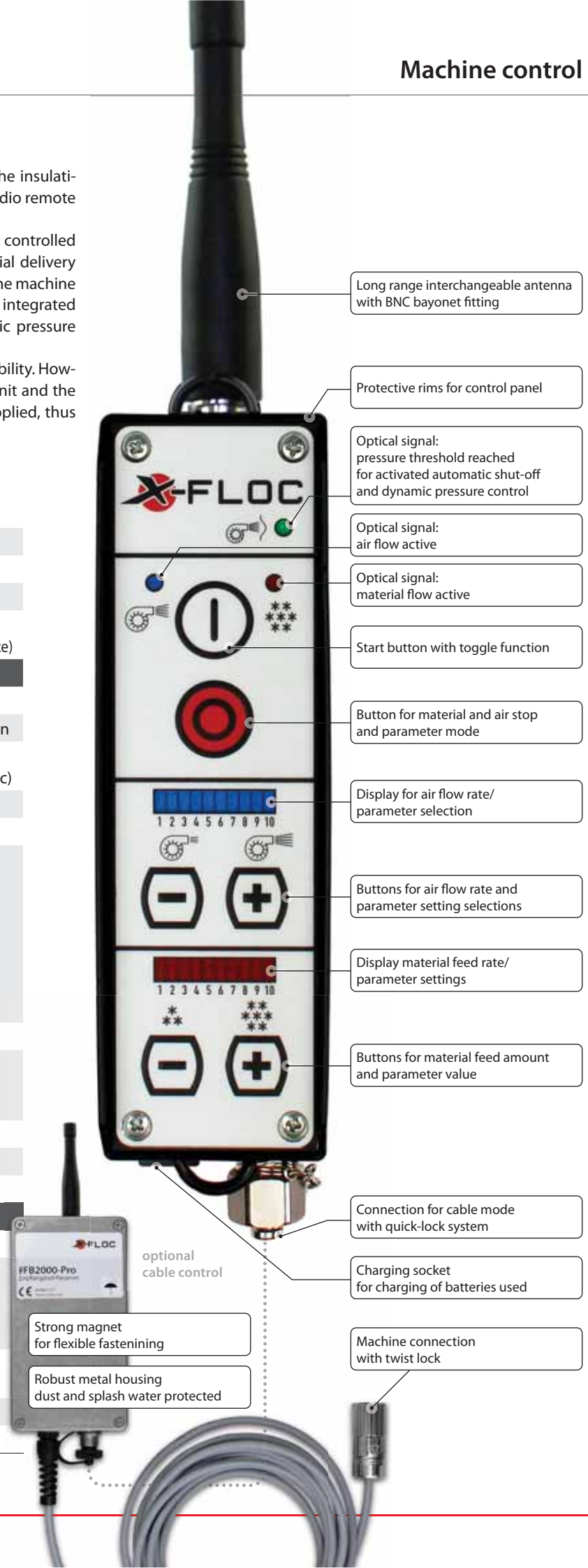
Note:
The FFB500 radio remote control is also compatible with many other brands. After adapting the connection, the control can be used, for example, with Krendl, Thermoblow, SHS, Isoblow etc. machines.

Radio remote control FFB2000-Pro

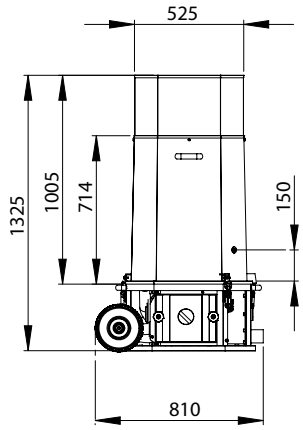
Bidirectional radio communication with FM technology: The insulation blow-in machine EM99-DS-Pro comes with the digital radio remote control FFB2000-Pro **art. no. 5154**.
All important settings and functions can be conveniently controlled from the blower's working location. Air output and material delivery 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.

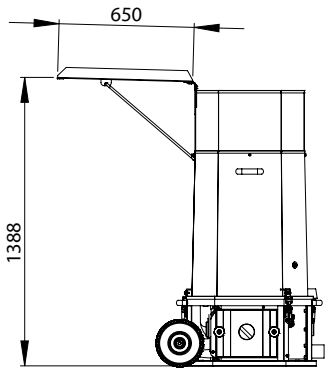
Technical data

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	
Protection class	IP40
Connections	Control line to the machine Cable control Antenna
Power supply	24V DC (from blow-in machine)
Weight	approx. 765g
Dimensions	approx. 83x151x50mm

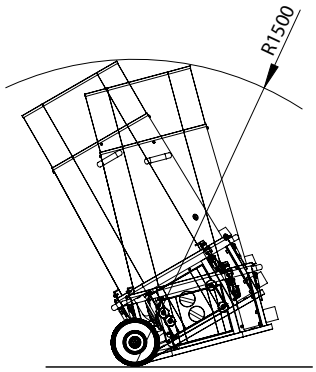


Dimensions EM99

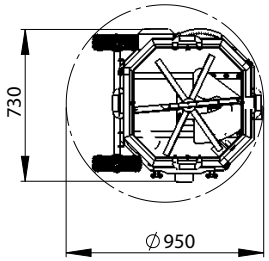




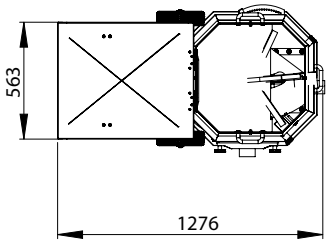
EM99 with sack support



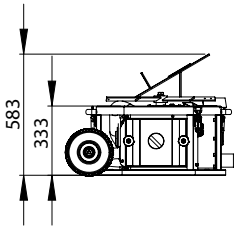
Tipping dimension



Top view



Top view



EM99 without funnel

Equipment options

1. **Power generator XM5kVA / 4,5kW**
   Generator for securing the power supply. **Art.no. 9583**
2. **Power generator XM6,7kVA / 6kW**
   Generator for securing the power supply. **Art.no. 9584**
3. **KFB 30-8p - Hand cable control**
   with toggle switch Air ON, Luft/Material ON, OFF **Art.no. 7851**
4. **Extension cable for cable/radio remote control**
   7-core, contact plug/socket.
   25m **Art.no. 2015 /** 50m **Art.no. 2166**
5. **Mains voltage indicator**
   on the control box. Detects fluctuating or weak voltage supply and voltage breaks. **Art.no. 4604**
6. **Suction drum V=115l / V=250l**
   with swivelling lid with quick release fastener for fast exchange of fabric bags. **Art.no. 1160 / Art.no. 3075**
7. **Retention grid for loose bulk materials**
   ø >10mm, for installation in the filling hopper. **Art.no. 8148**
8. **Sack support**
   for superior filling comfort. After use, can be used as a lid for the filling hopper.. **Art.no. 3474**
9. **Intake socket 90° NW75 (3“)**
   enables right-angled hose connection. **Art.no. 5614**
10. **Interference element**
    to avoid bridging. **Art.no. 6396**
11. **Reducer tube NW75>63 (3“>2½“)**
    for insertion into the airlock outlet. **Art.no. 8968**
12. **Wrist/neck strap for FFB500, L=21cm/48cm**
    for comfortable carrying of the control unit. **Art.no. 7128**

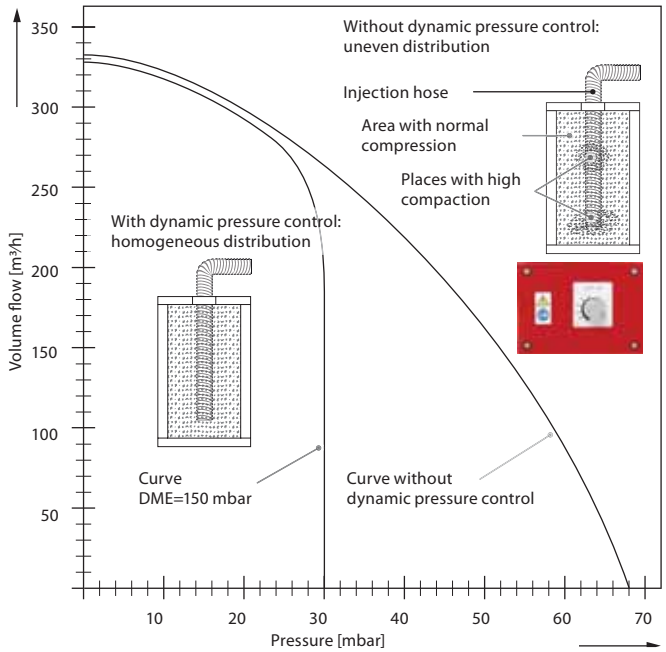


Dynamic pressure control

The blow-in machine EM99-DS-Pro is supplied with the FFB2000-Pro radio remote control as standard. In this version, the machine has an integrated pressure signalling unit. Together with the control unit, the dynamic pressure control function can be used.
For this purpose, the pressure threshold value on the blow-in machine is set to the desired permissible maximum pressure.
When the defined threshold value is reached, the pressure signal unit transmits an overpressure signal to the control unit. The control system regulates the air output accordingly or reliably limits the pressure.
The control mechanism is activated on the hand-held transmitter of the radio remote control (or KBF2000 cable control) by means of a key combination and signalled by a flashing of the air output scale (display of air output/parameter selection).

Exemplary applications:

- Blowing in airtight elements with the risk, damaging the cladding materials
- Reduction of bulging in thin planking materials planking materials
- Avoiding localised areas of high density when blowing in roof elements

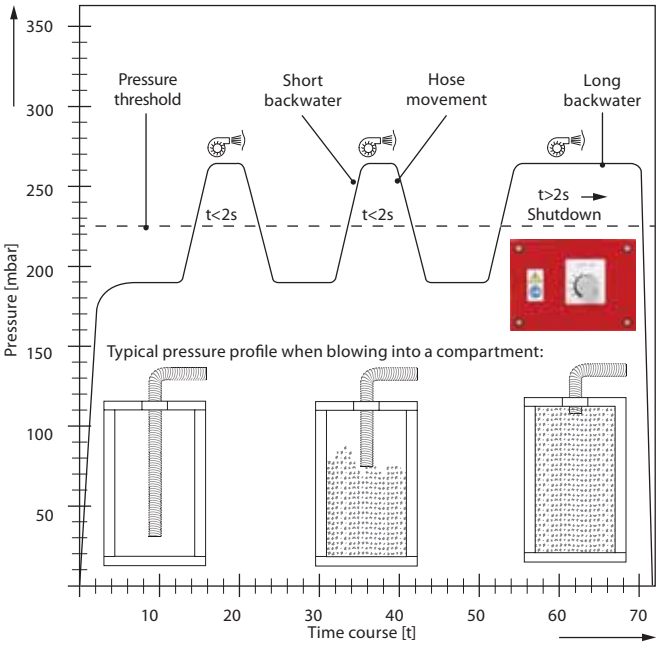


Automatic switch off

The EM99-DS-Pro variant also enables automatic shutdown of the blow-in machine from a defined pressure threshold value. To do this, the desired value is set on the machine and the automatic shut-down function is activated on the manual control unit of the control system. As a result, when the specified pressure threshold value is reached (response time adjustable via parameters), the machine shuts down automatically without additional user intervention.

Exemplary applications:

- Ease of work when blowing in air through automatic the machine is switched off automatically when the threshold value is reached
- Making blowing-in processes reproducible through pressure-based switching off the machine
- Automatic shutdown when backfilling core insulation materials





Japan: Function test with image proof



Chile: Damp spraying

X-Floc EM99 international

Compressed blowing in with ecological insulation materials such as wood and cellulose, damp spraying or open/attic blowing with glass wool made from 80% recycled waste glass, and much more. The insulation blow-in machines X-Floc EM99 are as flexible as they are powerful, both in terms of blowing methods and materials as well as areas of application. In mobile construction site use, these machines convince worldwide with their versatile and efficient application possibilities. They are characterised by user-friendly operation and offer a range of technical features that help the professional user achieve the best work results every day.
Would you like to get an impression with your own eyes? Visit our social media channels and contact us for more information. We are also glad to support you with references in your area.

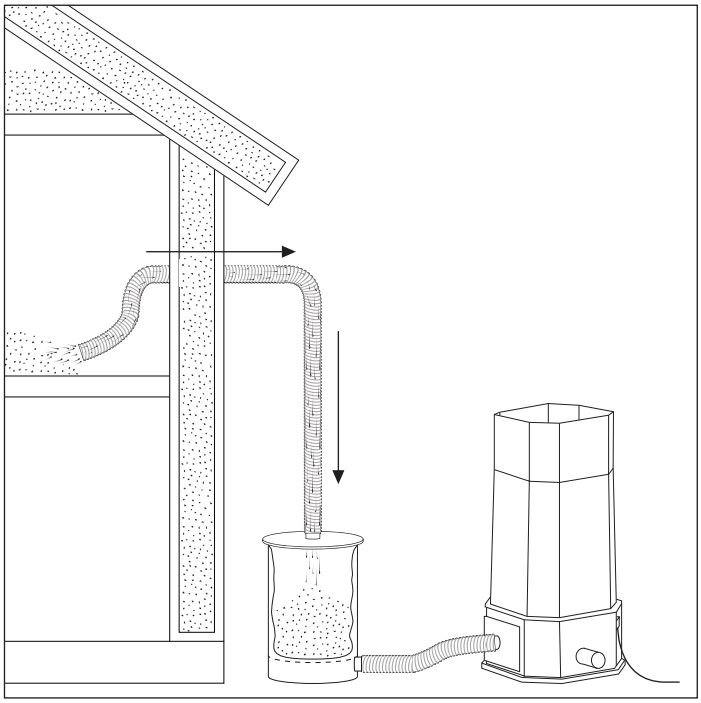




Südafrika: Glaswolle offen aufblasen

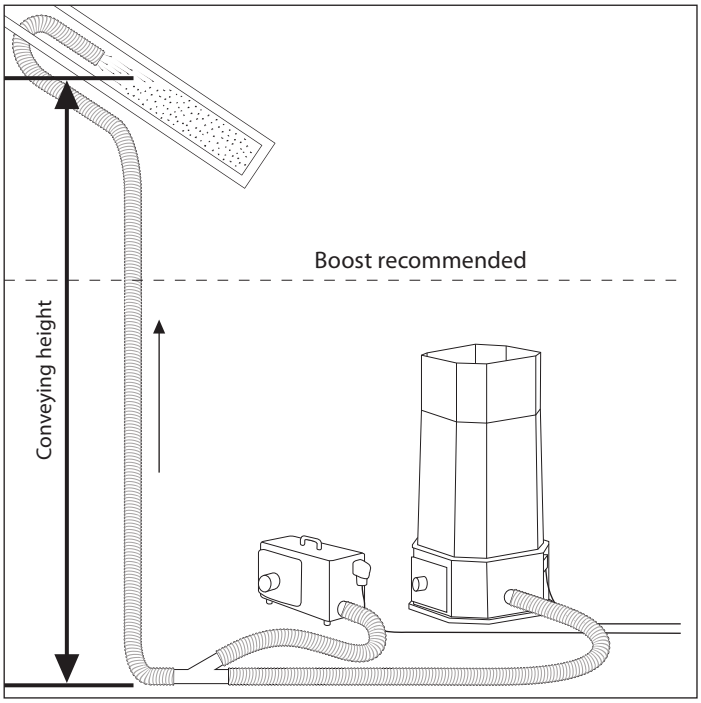
Deconstruction, vacuuming and cleaning

The EM99-DS/DS-Pro insulation blow-in machine can also be used for the removal and cleaning work that is occasionally necessary on the construction site. For this purpose, the machine is connected to a suction drum (see optional accessories). Suction can then be applied via the existing conveying hose.



Air boost

Heavy insulation material or large conveying heights can be handled better with a higher air output. For this purpose, or generally to further increase performance, both the EM99-DS-Pro and EM99-DS blow-in machine can be equipped with an additional amplifier unit (see amplifier/ vacuum stations).



Reinforcement, deconstruction and cleaning

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 EM99 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:

- Amplified blowing (with dust extraction)
- For large conveying heights, heavy materials
- As extraction station (cleaning or deconstruction of ancient building materials)





Amplifier/vacuum stations in comparison



VS28



VS33



VS55M



VS 75M

Amplifier/vacuum station					
Type	**VS28**	**VS33**	**VS55M**	**VS75M**	Special versions on request
Article number	2711	5855	9455	9793	
Amplify/clean	●/●	●/●	●/●	●/●	
Active dust removal	●	●	●	●	
Stepless power 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 m^3/h	420 / 400 m^3/h	470 m^3/h*	390 m^3/h*	
Air feed unit	High-powered radial compressor	High-powered radial compressor	5-stage turbine	5-stage turbine	
Outlet nozzle	NW63 (2½") / NW75 (3")	NW63 (2½") / NW75 (3")	NW63 (2½") / NW90 (3½")	NW63 (2½") / NW90 (3½")	
Dimensions (LxWxH)	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	○	●	-	-	
Mains voltage display	○	○	-	-	

* Freeblowing ● suitable/yes | ○ recommended to a limited extent | - unsuitable/no/no information (all values given are approximate)

X-Floc worldwide



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