Nozzles and Blowing Accessories

X-FLOC

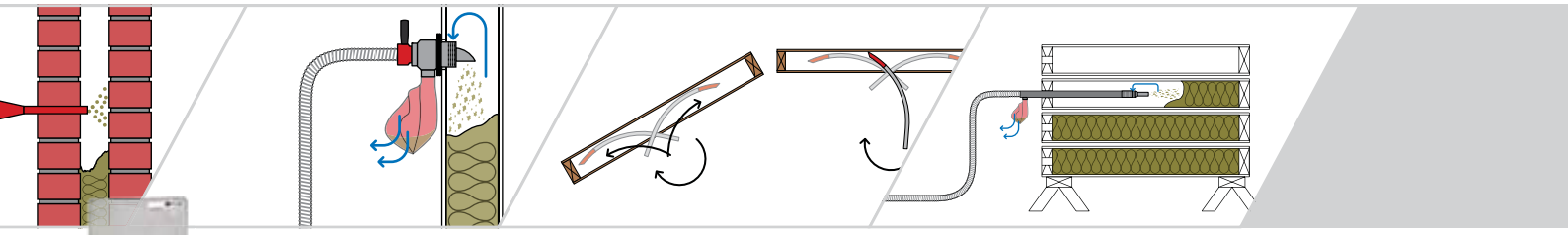
Insulation Blowing Machines and Equipment

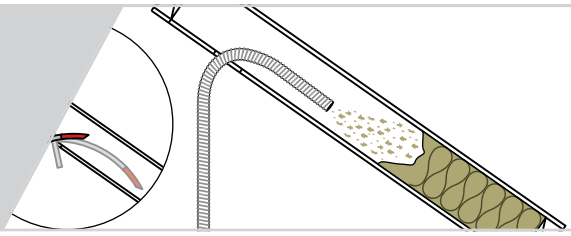
www.x-floc.com

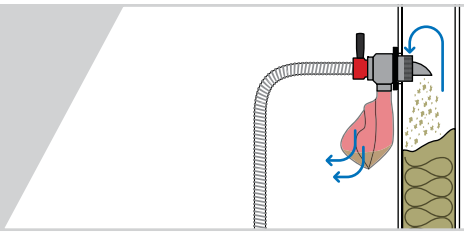
01.2017

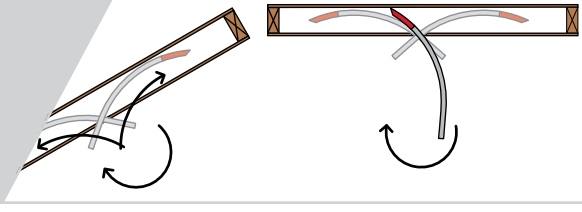
Content

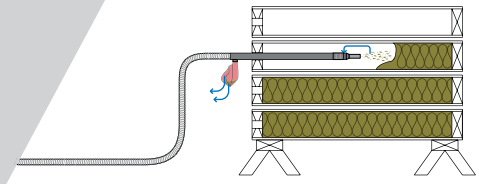
X-Floc Dämmtechnik-Maschinen GmbH | Rosine-Starz-Straße 12 · 71272 Renningen · Germany | Telephone + 49 - 7159 - 80470 - 30 · Fax - 40 | www.x-floc.com

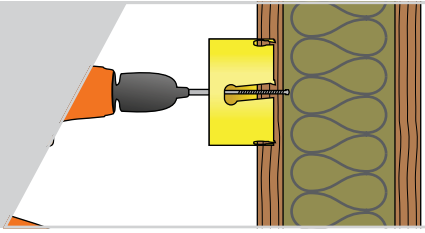






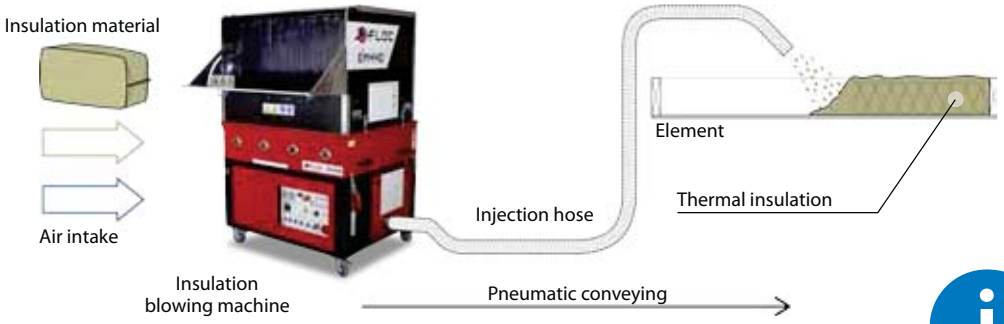






Blowing Injection Methods: Illustrations

Open/Attic Blowing



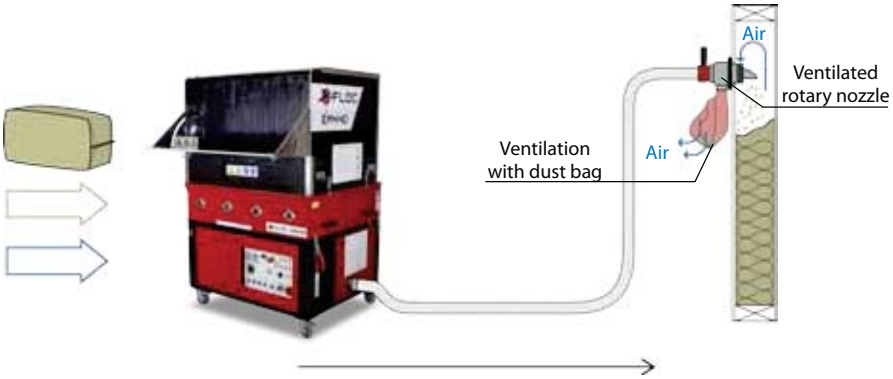
For open/attic blowing or simple dense blowing are no special blowing injection tools necessary. However you find on page 6 some accessories which make hose blowing easier.
You can see our hose product range clearly arranged in the brochure "Hoses and connectors".
There is also the option to use open blowing in combination with damp spraying.
Further information about that can be found in the brochure "Damp spraying".

Dense Blowing (Hose Blowing)

Cavity Wall Insulation

Injection nozzles: You find one-piece nozzles, with adapter and/or ball valve for cavity wall insulation or small elements on page 8.

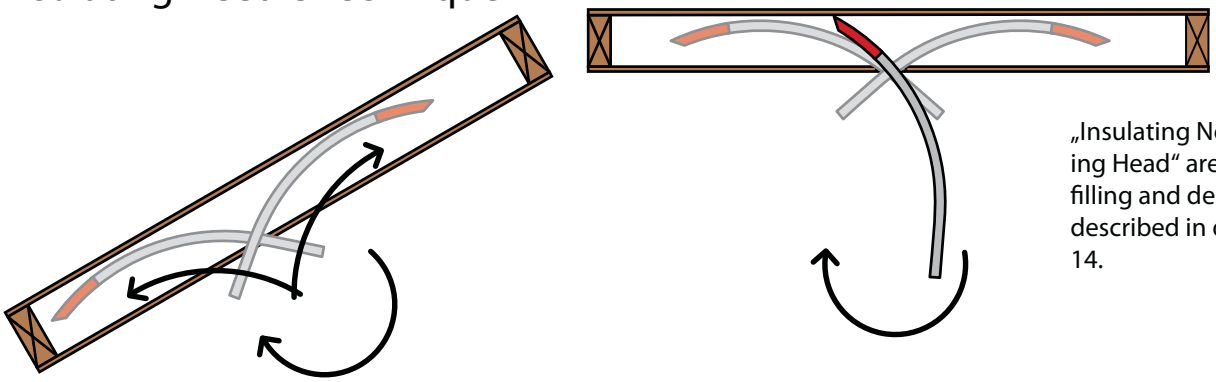
Dense Blowing with Ventilated Rotary Nozzles



Ventilated rotary nozzles can be found on page 11.

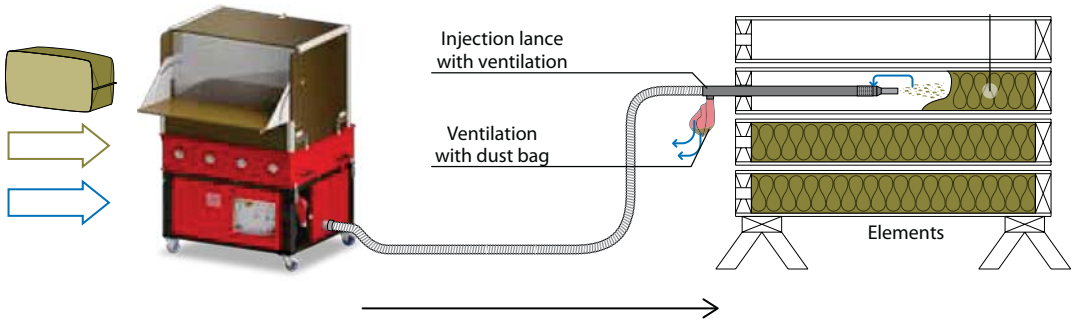
X-Floc Dämmtechnik-Maschinen GmbH | Rosine-Starz-Straße 12 · 71272 Renningen · Germany | Telephone +49-7159-80470-30 · Fax -40 | www.x-floc.com

Insulating Needle Technique



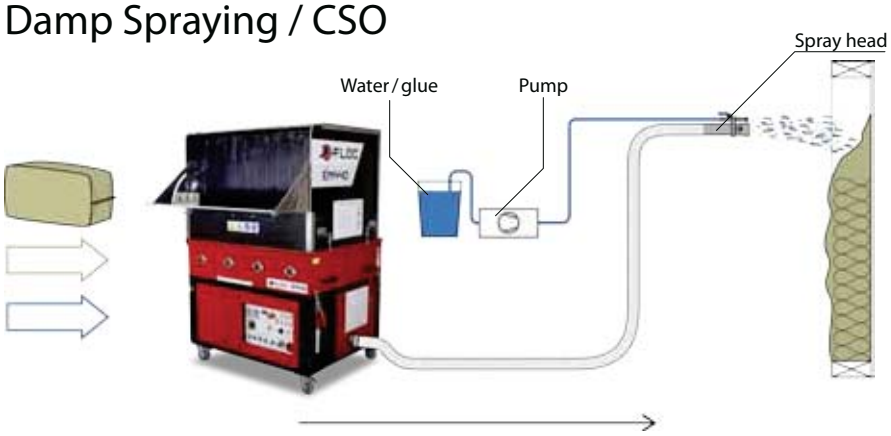
„Insulating Needles with Piercing Head“ are proper for accurate filling and densifying. They are described in detail on pageSeite 14.

Dense Blowing with Ventilated Injection Lances



You find all information about ventilated injection lances on pageSeite 16.

Damp Spraying / CSO



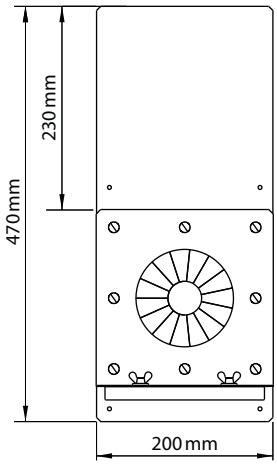
The damp spraying method is described in detail in the brochure “Damp spraying”.
For this method are spray heads, pumps, high-pressure hoses and wall scrubbers necessary.

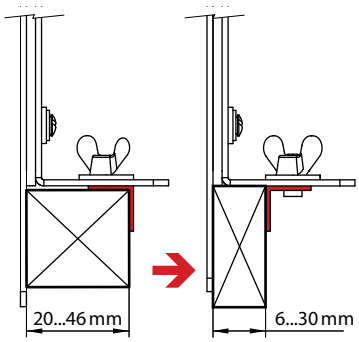
Injection Bezel for Wall and Ceiling

Low Dust Formations and Protects the Construction

- Easy and fast blowing insulation in structures with supporting battens and vapour barriers or air tightness membranes
- Little dust formations and no lacerated injection holes
- Easy clipping behind the battens
- Easy making of the injection hole with a cutter knife
- Adjustable fastener corner
- Dust-tight flexible rubber sealing for hoses NW50/75 (2“ / 2 ½“)
- Seamless working possible by using two or more injection bezels

Product no.: 2911



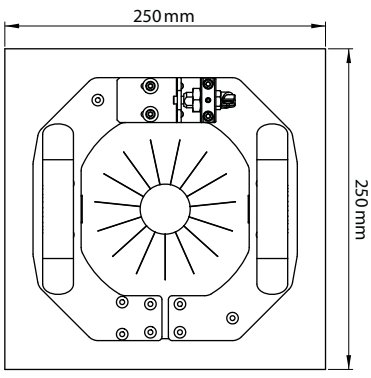


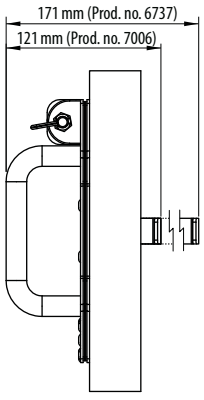
By turning the locking bracket, the setting range for the cross pieces can be extended. The injection bezel can be used flexible for battens from 6 to 46 mm.

Detachable Tubing Port for Dust-free Blowing Injection

- Compatible with board thicknesses of s = 10 - 35 mm or 30 - 80 mm
- Required drill hole Ø = 106,5 to 120 mm
- Compatible for hose diameters NW50/63/75/90 (2”/2 ½”/3”/3 ½“)
- Three-ply rubber collar for sealing
- Flexible sealing to avoid dust emissions from the injection hole
- Ergonomic indexing plunger for easy opening and locking/ single-hand operation

Product no.: 6737 (10 - 35 mm) or 7006 (30 - 80 mm)





X-Floc Dämmtechnik-Maschinen GmbH | Rosine-Starz-Straße 12 · 71272 Renningen · Germany | Telephone +49 - 7159 - 80470 - 30 · Fax - 40 | www.x-floc.com

Sealing Sponges

Prod.-No. 7101/7100/7099

Prod.-No. 6336/3947/292

For sealing of injection holes at dense blowing with hose.
Size 250 × 250 × 40 mm

Injection hose	Drill hole	Prod. no.
NW38/50 (1½"/2")	35 mm	7101
NW50/63 (2"/2½")	50 mm	7100
NW63/75 (2½"/3")	70 mm	7099

Size 400 × 300 × 40 mm

Injection hose	Drill hole	Prod. no.
NW38/50 (1½"/2")	35 mm	6336
NW50/63 (2"/2½")	50 mm	3947
NW63/75 (2½"/3")	70 mm	292

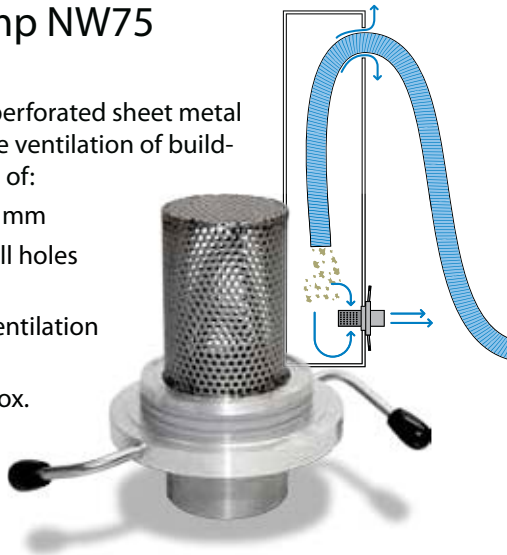
Clamping Connector NW75 Ø 106.5 mm

Dust free system for securing an injection hose to a drill hole Ø 106.5 mm. The injection hose is clamped by pressing a rubber profile into the drill hole walls. It can therefore be used in all materials and from a minimum wall thickness of approx. 10 mm and a drill hole diameter of between 106.5 and 108 mm.
Prod. no. 2462

Ventilated Clamp NW75 Ø 106.5 mm

Ventilation clamp with perforated sheet metal cage for passive or active ventilation of building elements, consisting of:

- Ventilation cage Ø 75 mm
- Clamp suitable for drill holes 106.5 - 108 mm
- Hose connector for ventilation NW75 (3")
- Insertion depth: approx. 125 mm from board
  Prod. no. 5169



Injection Nozzles: One-piece, with Adapters and/or Ball Valve

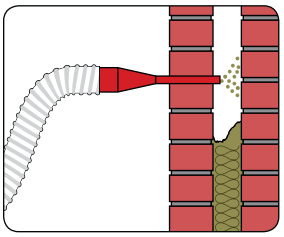
Fixed injection nozzles have been specifically designed for blowing into cavity walls and small cavities.

Injection nozzles with nozzle pipe adapters are for operators who use abrasive insulation materials which wear the nozzles off. In this case the nozzle pipe adapter can be exchanged by a wing-nut lock. It also can be replaced with another nozzle outlet.

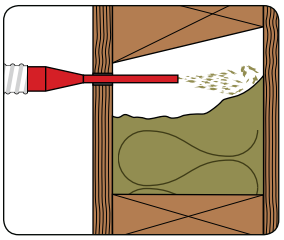
They are indispensable tools in the field of cavity wall insulation. They are also useful tools for stud walls and difficult to access cavities. Sometimes there are also reasons relating to the cavity for choosing these tools. They only need small injection holes which are easy to cover or stand out because of their diameter. Often, the blow-in pro posses has different configurations for these tools. Cavities which can only be blown-in circuitous, or not at all, can be insulated using these nozzles.

Applicable for every injection nozzle:

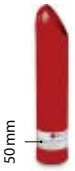
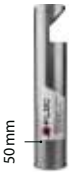
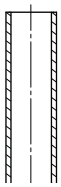
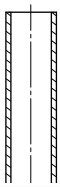
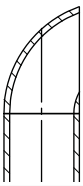
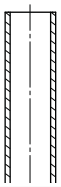
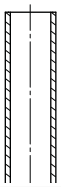
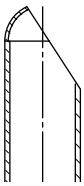
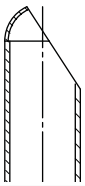
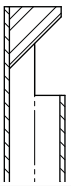
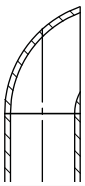
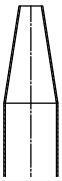
- Small piercing pipe = little processing speed
- Big piercing pipe = high processing speed



Cavity wall insulation
Injection nozzles are often used for cavity walls made of brickwork.



Stud walls/restoration
Another primary use is a small and difficult to access cavities.

Model Range	One-piece									
Typ	**ED50>15**	**ED50>20**		**ED50>24**	**ED50>29**	**WED50>30**	**ED50>50**		**ED63>63**	**ED50>oval**
Product number	3637	2688	2826	3961	4037	571	300	6889	5670	1737
Image										
Nozzle outlet	straight	straight	angled*	straight	straight	cranked	cranked	45°	angled*	oval
Nozzle outlet drawing										
Nozzle pipe adapter	-	-	-	-	-	-	-	-	-	-
Ball valve	-	-	-	-	-	-	-	-	-	-
Suitability insulation material Cellulose fibre Wood fibre Mineral/glass wool Bulkware	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●
Pipe diameter [mm]	15	20	20	24	29	30	50	50	63	50 > 75 × 14
Overall length L_1 [mm]	335	340	360	320	320	330	200	250	225	245
Insertion depth L_2 [mm]	170	187	186	175	190	200	-	-	-	-
Hose connection	NW50 (2“)	NW50 (2“)	NW50 (2“)	NW50 (2“)	NW50 (2“)	NW50 (2“)	NW50 (2“)	NW50 (2“)	NW63 (2 ½“)	NW50 (2“)
Drill hole required Ø [mm]	> 15	> 20	> 23	> 24	> 29	> 30	>50	>50	> 68	> 77 × 15
Material	Steel	Steel	Steel	Steel	Steel	Steel	Steel	Stainless steel	Stainless steel	Stainless steel
Finish	Powder-coated	Powder-coated	Powder-coated	Powder-coated	Powder-coated	Powder-coated	Powder-coated	blank	blank	blank
Weight [kg]	0.3	0.3	0.3	0.31	0.31	0.31	0.42	0.42	0.64	0.4

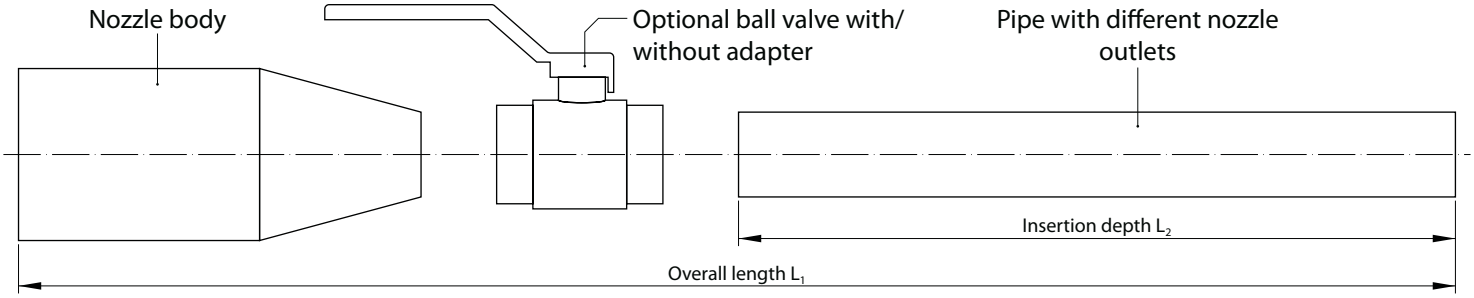
Suitability key: ● Extremely well-suited / best nozzle choice ● Well-suited ● Recommend with limitations ● Not recommend

* 90° straight sawn-off pipe bend, ensures good diversion of material flow with a good importability into the drill hole.

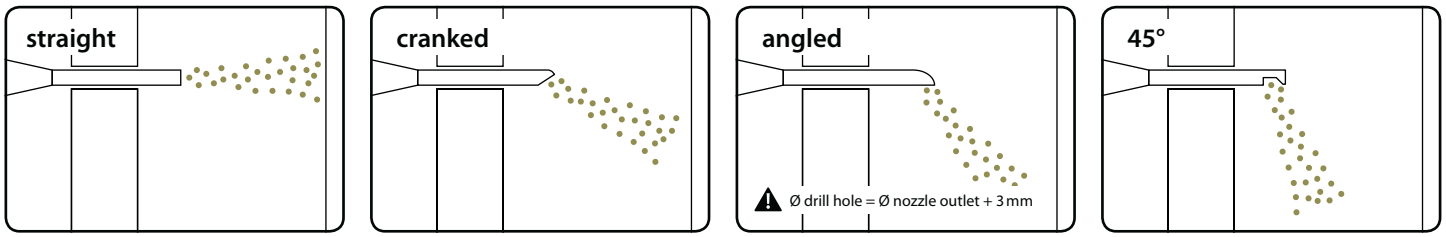
All values approximate.

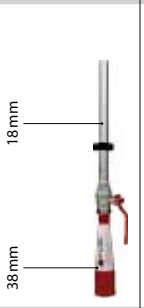
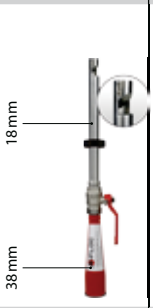
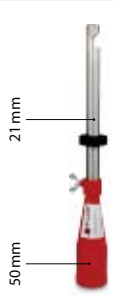
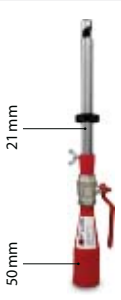
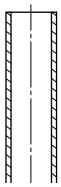
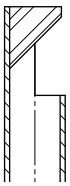
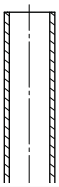
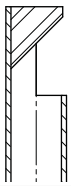
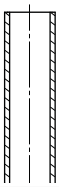
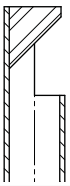
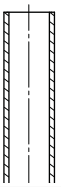
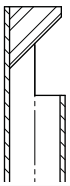
X-Floc Dämmtechnik-Maschinen GmbH | Rosine-Starz-Straße 12 · 71272 Renningen · Germany | Telephone + 49 - 7159 - 80470 - 30 · Fax - 40 | www.x-floc.com

Dimensioning Principle



Characteristics of the Different Nozzle Outlets



With nozzle pipe adapter and/or ball valve							
ED38>18-AV		ED50>21-WE		ED50>21-AV-WE		ED50>24-AV	
5710	6377	4959	6017	5998	6201	5692	6415
							
straight	45°	straight	45°	straight	45°	straight	45°
							
-	-	✓	✓	✓	✓	-	-
✓	✓	-	-	✓	✓	✓	✓
							
18	18	21	21	21	21	24	24
430	430	310	430	370	480	410	410
220	220	130	240	250	240	200	200
NW38 (1 ½“)	NW38 (1 ½“)	NW50 (2“)	NW50 (2“)	NW50 (2“)	NW50 (2“)	NW50 (2“)	NW50 (2“)
> 18	> 18	> 21	> 21	> 21	> 21	> 24	> 24
Steel/stainless steel	Steel/stainless steel	Steel/stainless steel	Steel/stainless steel	Steel/stainless steel	Steel/stainless steel	Steel/stainless steel	Steel/stainless steel
Powder-coated/blank	Powder-coated/blank	Powder-coated/blank	Powder-coated/blank	Powder-coated/blank	Powder-coated/blank	Powder-coated/blank	Powder-coated/blank
0.44	0.44	0.4	0.4	0.4	0.4	0.72	0.72

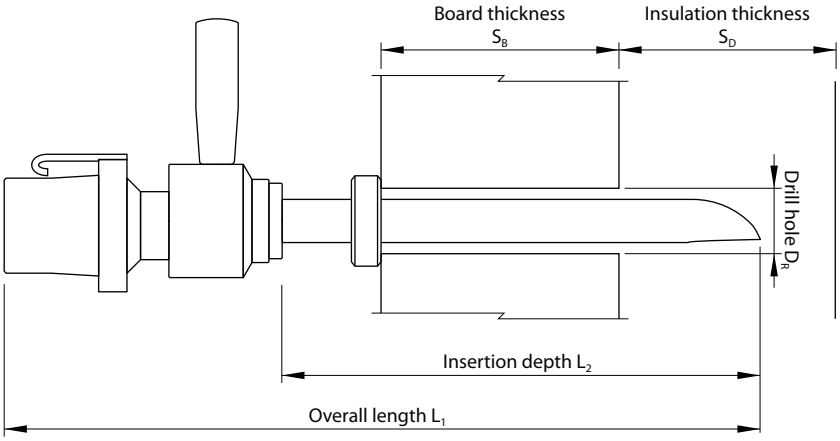
General information

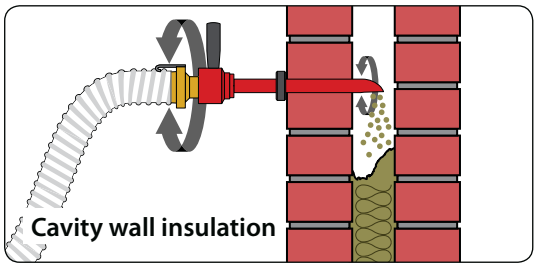
- With small nozzle diameters (< 30 mm), the material flow must be reduced using the airlock feed gate
- For materials with a high density (> 80 kg/m³), hoses with small diameters should be used (increased air flow speed)
- The angled and cranked nozzle outlets can wear down quickly if used to convey abrasive materials

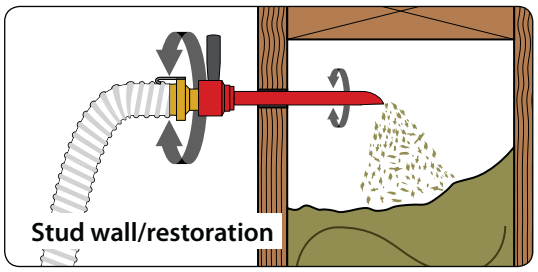
Rotary Nozzles

These injection nozzles's nozzle pipe is equipped with a rotary bearing. This facilitates the comfortable rotation of the nozzle outlet by a handle. This function is absolutely necessary for big cavities. This is the only way that the material flow can be directed. Therefore, a homogeneous insulation density can be achieved which is in accordance with the certification.

Rotary nozzles can be used in the same application fields like injection nozzles. But just now, this opens up the possibility to fill elements with big heights or widths professionally. All nozzles have a nozzle outlet with shaping. In combination with the rotation mechanism you have the advantage of a controllable material flow.

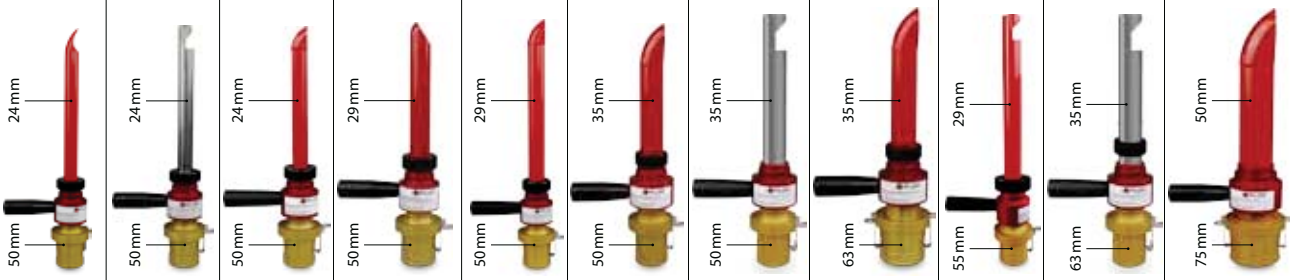
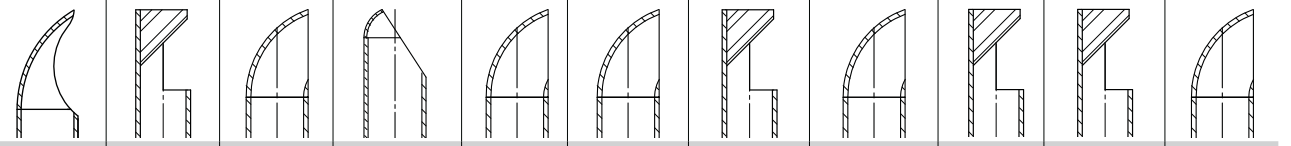






What is to keep in mind when working with rotary nozzles?

- Board thickness smaller than insulation thickness.

Model range	Rotary nozzles										
Type	DD50>24	DD50>24-45°	DD50>24-90°	DD50>29 KR	DD50>29-90°	DD50>35	DD50>35-45°	DD63>35	DD50>29-45°	DD63>35-45°	DD75>50
Product number	852	6291	2828	544	4788	3569	6297	2496	8081	7146	2997
Image											
Nozzle outlet	shaped	45°	angled*	cranked	angled*	angled*	45°	angled*	45°	45°	angled*
Nozzle outlet drawing											
Suitability material Cellulose fibre Wood fibre Mineral/glass wool Bulkware	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●
Insulation thickness S_D [cm]	> 4	> 4	> 4	> 4	> 4	> 4,5	> 4,5	> 4,5	> 4	> 4,5	> 5
Pipe diameter [mm]	24	24	24	29	29	35	35	35	29	35	50
Overall length L_1 [mm]	420	420	380	350	445	337	337	337	420	333	360
Insertion depth L_2 [mm]	277	277	235	205	300	195	195	195	270	195	213
Hose connection	NW50 (2")	NW50 (2")	NW50 (2")	NW50 (2")	NW50 (2")	NW50 (2")	NW50 (2")	NW63 (2 ½")	NW50 (2")	NW63 (2 ½")	NW75 (3")
Hose fastener	✓ (1 bracket)	✓ (1 bracket)	✓ (1 bracket)	✓ (1 bracket)	✓ (1 bracket)	✓ (1 bracket)	✓ (1 bracket)	✓ (2 bracket)	✓ (1 bracket)	✓ (2 bracket)	✓ (2 bracket)
Drill hole Ø D_R [mm]	> 26	> 26	> 26	> 31	> 31	> 37	> 37	> 37	> 31	> 37	> 52
Spacer	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Rotary bearing	Plain bearing										
Material	Steel/Aluminium										
Finish	Powder-Coated/anodised										
Weight [kg]	1	1	1	1	1	1,1	1,1	1,1	1	1,1	1,1

All values approximate.

Suitability key: ● Extremely well-suited / best nozzle choice ● Well-suited ● Recommend with limitations ● Not recommend

* 90° straight sawn-off pipe bend, ensures good diversion of material flow with a good importability into the drill hole.

X-Floc Dämmtechnik-Maschinen GmbH | Rosine-Starz-Straße 12 · 71272 Renningen · Germany | Telephone +49-7159-80470-30 · Fax -40 | www.x-floc.com

Ventilated Rotary Nozzles

The S-Jet rotary nozzle with integrated hose grommet and from left X-Jet 63, J-Jet and S-Jet

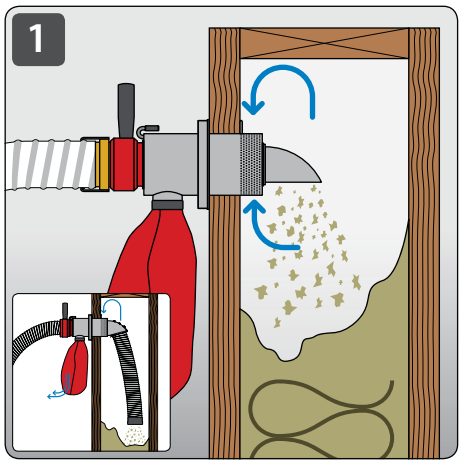
Ventilated rotary nozzles can fill stud wall constructions with insulation material and conduct excess air controlled. In this process the insulation material flowing with the injection air is accelerated by inflow in the rotary nozzle.

Arrived at the top the installer turns the nozzle pipe with the grip in the right stud cavity corner. The excess air is ventilated through the perforated sheet metal cage in the dust sack.
Thereby dust emissions can be reduced to a minimum while injecting.

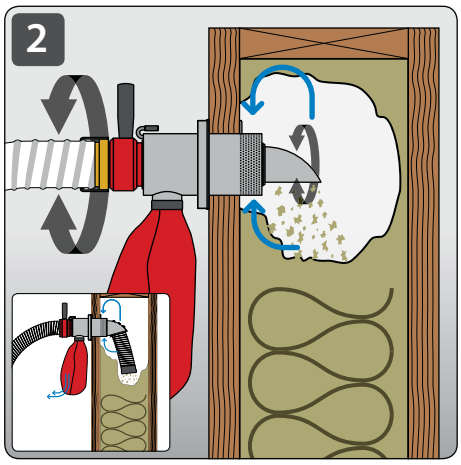
Advantages of ventilated rotary nozzles

- Reduces the risk of deformation by ventilation
- Economical by saving of time
- Effort-saving operation
- Dust-free process

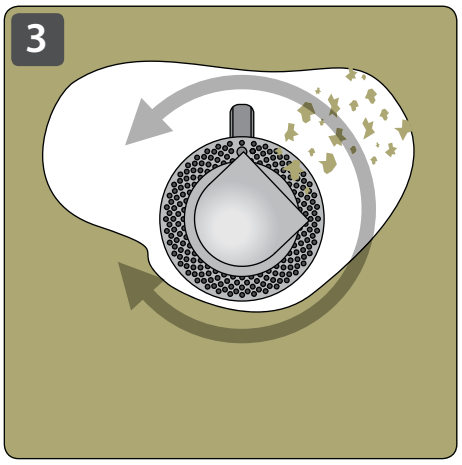
Filling Principle



The ventilated rotary nozzle is placed in custom-fit injection hole which is made with a hole saw. The element is filled…



…up to the height of the nozzle outlet. The pressure sound change from a noisy to a airless, quiet pressure sound.



Now the nozzle outlet must be turned one after another to both element corners thus achieving an ideal insulation density in the upper area.

Ventilated Rotary Nozzles

Model range	Ventilated rotary nozzles					
Type	**X-Jet 63**	**X-Jet 63 with clamping ring**	**X-Jet 75**	**X-Jet 75 with clamping ring**	**J-Jet 75**	**S-Jet 63**
Product number	1708	3843	1789	2929	3795	4910
Image						
Nozzle outlet	angled [4]	angled [4]	angled [4]	angled [4]	angled [4]	shaped
Suitability insulation material Cellulose fibre Wood fibre Mineral/glass wool Bulkware	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●
Passive/active [1] ventilation	✓	✓	✓	✓	✓	✓
Min. insulation thickness S_D [cm]	> 5.5 [2]	> 7.5	> 8.5 [2]	> 10	> 14	> 16
Max. insulation thickness S_D [cm]	< 30	< 20	< 40	< 40	< 45	< 60
Board thickness S_B [mm]	< 40	15…35	< 40	15…35	10…75	10…75
Flange adjustable	-	-	-	-	✓	✓
Overall length L_1 [mm]	333	333	371	371	426	390
Insertion depth L_2 [mm]	L_3 - S_B				140	155
Length L_3 [mm]	98	82	126	110	-	-
Hose connection D_S	NW63 (2½“)	NW63 (2½“)	NW75 (3“)	NW75 (3“)	NW75 (3“)	NW63 (2½“)
Hose fastener	✓ (2 Halter)					-
Drill hole required Ø D_R [mm]	85…87	106.5	106.5…107.5	106.5	105…115	105…115
Max. drill hole Ø D_R [mm]	100 [3]	107.5	120 [3]	107.5	120 [3]	120 [3]
Locking device	✓ 4 clip springs	✓ clamping ring	✓ 6 clip springs	✓ clamping ring	✓ sash lock	✓ sash lock
Rotary bearing	Sliding ring and ball bearing				Plain bearing	Plain bearing
Material	Steel, stainless steel, aluminium and plastic				Aluminium and stainless steel	Aluminium and stainless steel
Finish	Powder coated/anodised					
Weight [kg]	1.5	2.2	2.1	2.8	2.6	2.7 without hose

All values approximate.

Suitability Key:

● Extremely well-suited / best nozzle choice ● Well-suited ● Recommend with limitations ● Not recommend

1) Not recommended but technically possible.

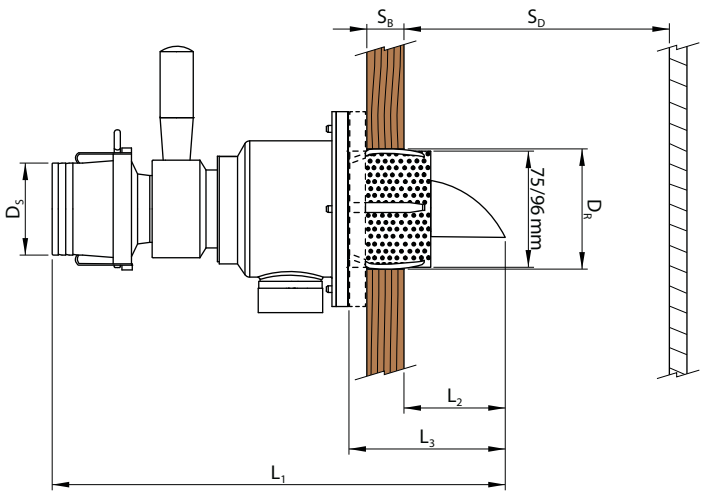
2) The smallest possible insulation thickness can be further reduced using the stopper rings included with the nozzle.

3) It may be difficult or impossible to secure the nozzle if too large an injection hole is drilled.

4) 90° straight sawn-off pipe bend, ensures good diversion of material flow with a good importability into the drill hole.

X-Floc Dämmtechnik-Maschinen GmbH | Rosine-Starz-Straße 12 · 71272 Renningen · Germany | Telephone +49-7159-80470-30 · Fax -40 | www.x-floc.com

Dimensioning and Details

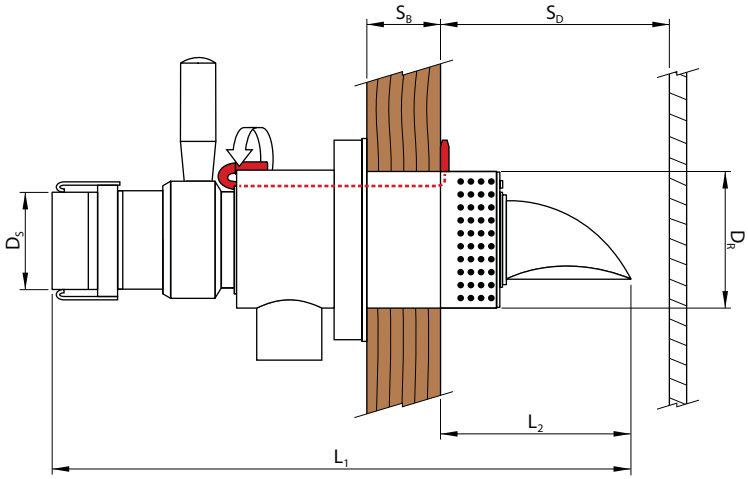


X-Jet 63/75

- Fixation in the drill hole with clamping springs (alternatively with clamping ring)
- Available in two sizes: NW63 (2½“) or NW75 (3“)
- Rotary bearing with sliding ring and ball bearing

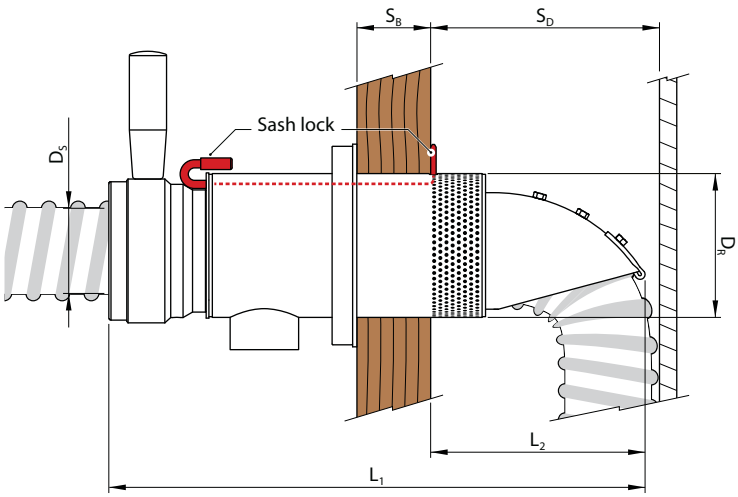
Clamping ring 106.5 as upgrade!

Proper for X-Jet 63/X-Jet 75 with clip springs.
Prod. no. 2223



J-Jet 75

- Fixation with simple sash lock
- Adjustable clamping flange for different board thicknesses
- Optimized for high processing speeds



S-Jet 63

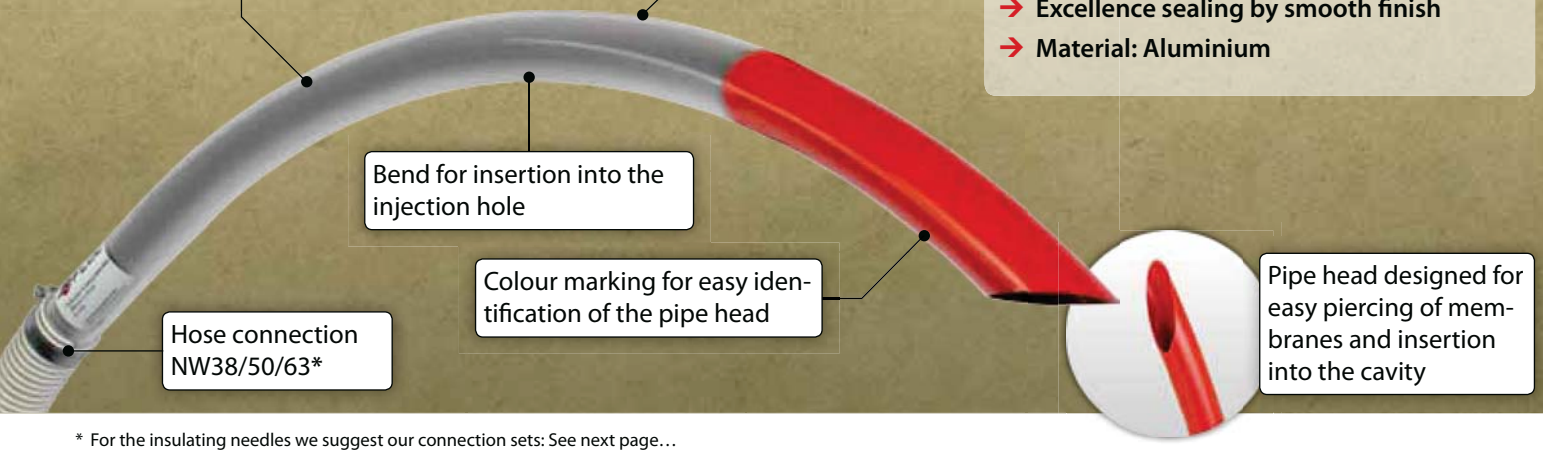
- Combines the advantages of hose and nozzle injection with the integrated hose grommet
- Fixation with simple sash lock
- Adjustable clamping flange for different board thicknesses

Also available with harder injection hose.
Prod. no. 5191

Insulating Needles with Piercing Head
Accurate Filling and Densifying

Bent pipe for insulating behind vapour barriers and other membranes, as well as for insulating hard boarded cavities (with a sufficiently large injection hole).

- **Specially shaped head for piercing membranes.**
- **Allows precise injection even into remote areas of cavities.**
- **Easy redensification by fixed design**
- **Excellence sealing by smooth finish**
- **Material: Aluminium**



* For the insulating needles we suggest our connection sets: See next page…

Available Dimensions

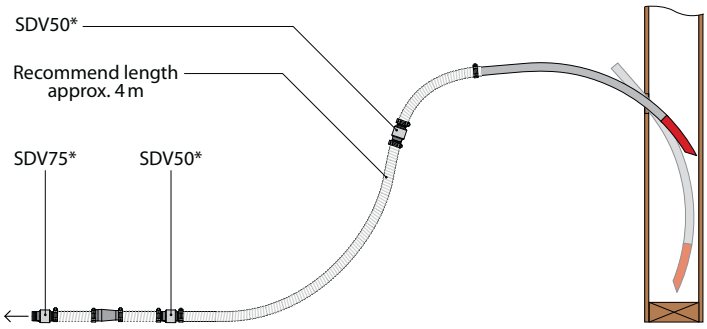
Insulating needle NW50-144 → NW50 = 2“

(D_S = NW50, L = 144)

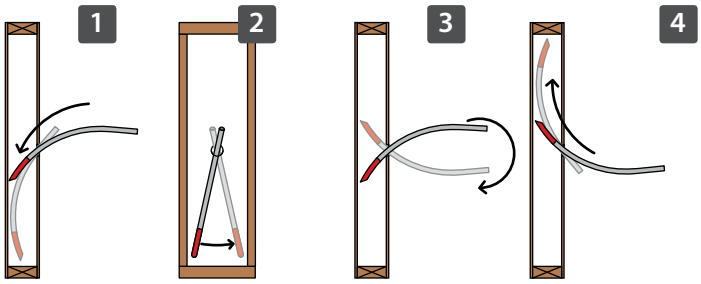
Insulating needle	S_B	D_S	Drill hole Ø *	L [cm]	Prod. no.
NW38-90	> 70 mm	1 ½“	106,5	90	5304
NW50-80	> 90 mm	2“	106,5	80	6180
NW50-130	> 200 mm	2“	120	130	5303
NW63-124	> 200 mm	2 ½“	120	124	5836
NW50-184	> 240 mm	2“	120	184	5153
NW63-184	> 240 mm	2 ½“	120	184	6390
NW75-120	> 240 mm	3“	150	120	6710
NW75-180	> 240 mm	3“	150	180	6711
NW38-straight NW50-straight NW63-straight NW75-straight	All insulation thick-nesses	1 ½“ 2“ 2 ½“ 3“	-	up to 6 m	6028 5730 5839 5840

* Regarding to board thicknesses from 12 - 20 mm.
S_B: Minimal insulation thickness
D_S: Hose connection
L: Total length

Installer with insulating needle at the roof

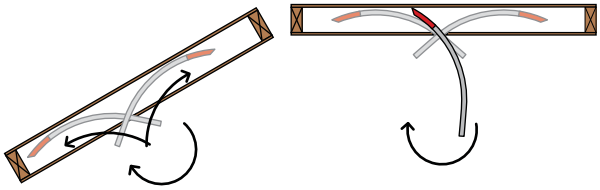


Example Stud Wall



Insert the insulating needle | Turn the insulating needle | Rotate the needle upwards | Fill top area and turn again

Examples: Roof Pitch and Ceiling



Begin at the bottom end of the rafter field

Suggestions for Connection and Preparation:

- Good mobility by long previous working hose
- Avoidance of blockages
- Highest possible processing speed

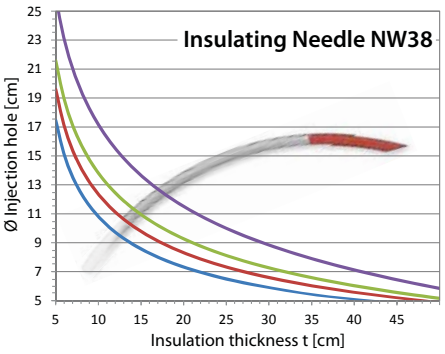
* We recommend the rotary hose connector, because the rotary hose connector enable easily rotated and the working with the insulation needle is facilitated. They are available as an option (see on the page 15).

X-Floc Dämmtechnik-Maschinen GmbH | Rosine-Starz-Straße 12 · 71272 Renningen · Germany | Telephone +49 - 7159 - 80470 - 30 · Fax - 40 | www.x-floc.com

Suitabiltiy matrix

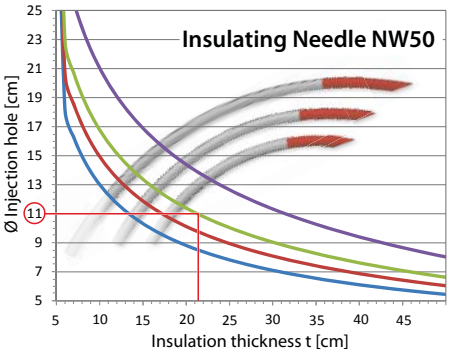
In the diagram shown below you can read, how big must thr drill hole be for the needle. This is depending on the insulation thickness, of the board thickness, of the insulation hole and of the insulation needle.

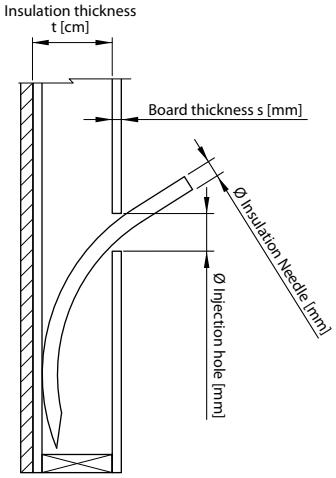
Example:
Insulation thickness t = 20cm
Board thickness s = 35mm
Insulation needle = NW50
Therfore, the injection hole needed the diameter of approximately 11 cm (see reading example).

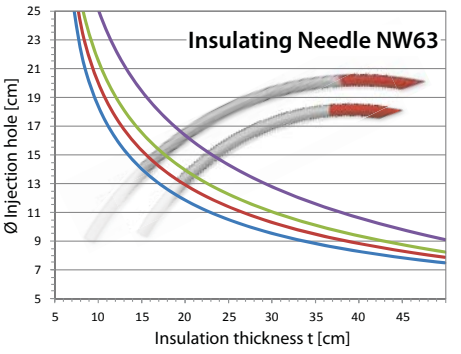


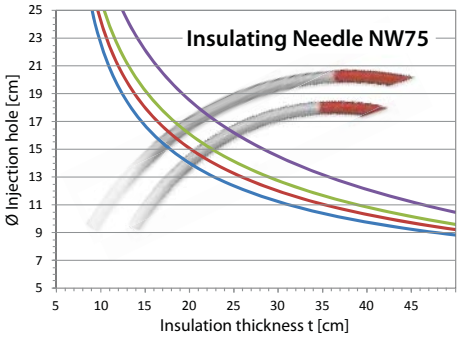
Legende:

- board thickness s=15mm
- board thickness s=25mm
- board thickness s=35mm
- board thickness s=60mm

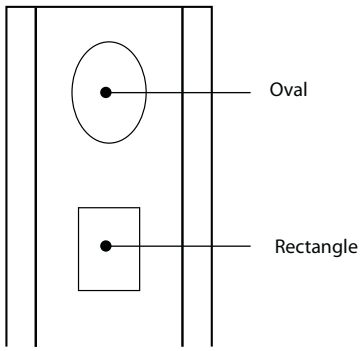








Suggested Injection Holes



Available Connection Sets

All connection sets are delivered with a flexible conveyor hose.

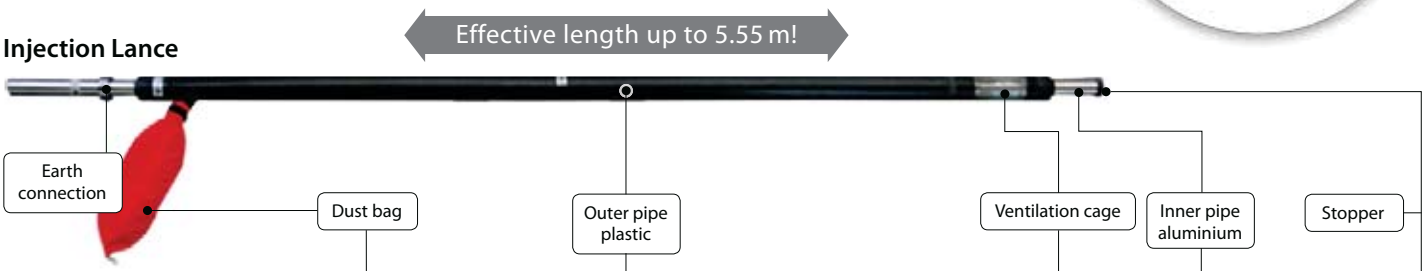
Reducer connector	Hose	Hose clamps	Prod. no.
1 × NW63>38 (2 ½“ > 1 ½“)	1 × NW38 (2“); length 4 m	2 × NW38 (1 ½“)	6104
1 × NW63>50 (2 ½“ > 2“)	1 × NW50 (2“); length 4 m	2 × NW50 (2“)	6206
1 × NW75>50 (3“ > 2“)	1 × NW50 (2“); length 4 m	2 × NW50 (2“)	6103
1 × NW75>63 (3“ > 2 ½“)	1 × NW63 (2 ½“); length 4 m	2 × NW63 (2 ½“)	6124

Accessories

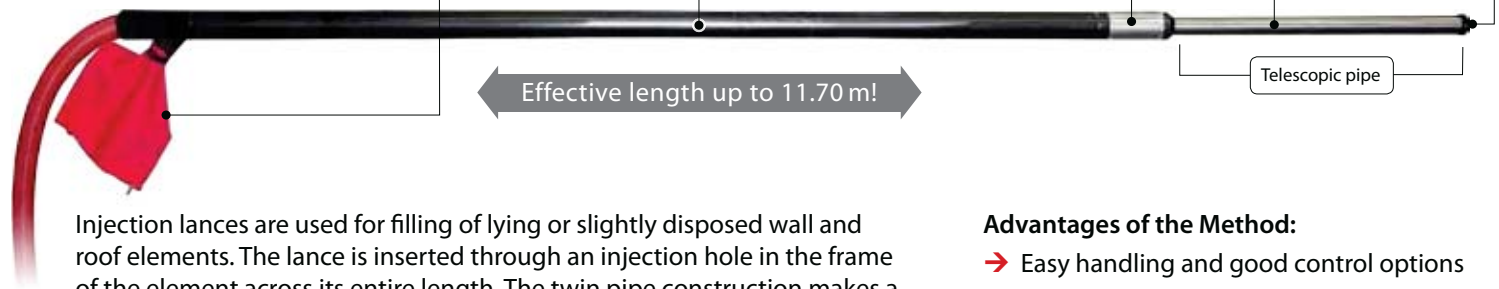
Image	Description		Prod. no.
	**Pro hole saw Ø 106.5 mm**		6182
	**Hole saw Ø 106.5/120 mm**		4966/ 5282
	**Hole saw HF Ø 106.5 mm** wood fibre panels		5917
	**Reducer tube connector** **NW75>63** **NW75>50** **NW63>50** **NW63>38** **NW50>38**		 1264 1262 1261 1263 1970
	**Rotary hose connector SDV50**		6522
	**Rotary hose connector SDV75**		4451
	**Sealing sponge (250×250×40 mm)**	NW38/50 NW50/63 NW63/75	7101 7100 7009
	**Sealing sponge (400×300×40 mm)**	NW38/50 NW50/63 NW63/75	3947 6336 292
	**Sealing corks VK106/120**		1948/ 4671
	**Closing plugs VS106/120**		4673/ 4674

Ventilated Injection Lance Technology
Element Filling on an Industrial Level

Injection Lance



Telescope Injection Lance



Injection lances are used for filling of lying or slightly disposed wall and roof elements. The lance is inserted through an injection hole in the frame of the element across its entire length. The twin pipe construction makes a good conduction of the excess air through a ventilation cage possible. The excess air is led to the dust bag (passive ventilation) or a connected extraction system (active ventilation).
The length of the injection lance can be selected freely. The fixed lance can be used up to a length of 5.55 m. We recommend the use of a telescope lance for elements with lengths of more than 4 m up to 11.7 m.
The space behind the element must be rated sufficient for a good handling (> overall length of the lance).

Technical Data

	Injection lance fixed NW75/90	Telescope injection lance
Active / passive ventilation	✓	✓
Length (freely selectable)	1.5 up to 5.55 m	2 up to 11.7 m
Hose	75 mm (3“) / 90 mm (3 ½“)	75 mm (3")
Inner pipe	50 × 1.5/63.5 × 1.5 mm	50 × 1.5 / 75 mm
Outer pipe D_A	75/90 mm	75 mm
Drill hole required D_B	≥ 85 / ≥ 100 mm	≥ 85 mm
Material	Aluminium + PE pipe	Aluminium + PE pipe / -hose
Weight	11.5 up to 18 kg	4.3 up to 12.9 kg
Product number	2675/3740	4626

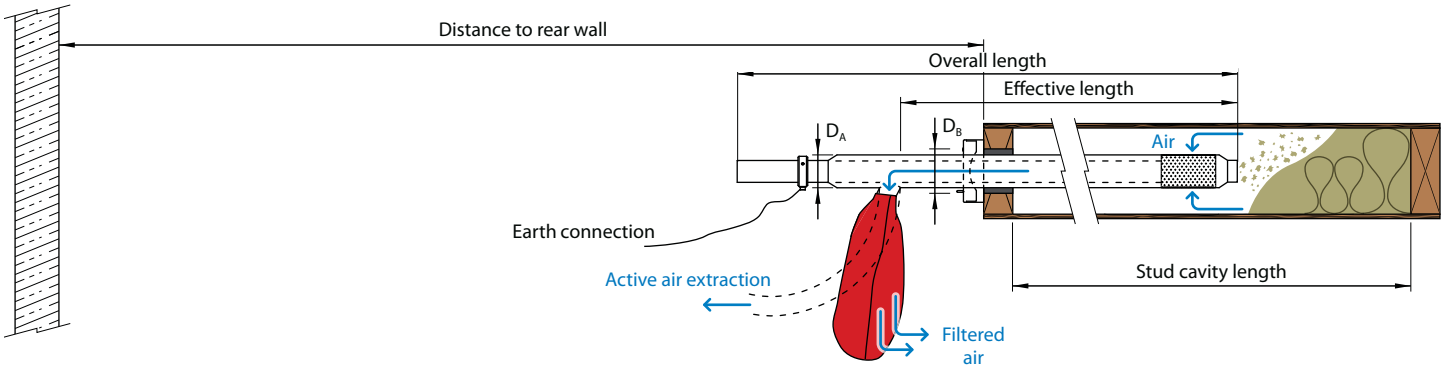
Advantages of the Method:

- Easy handling and good control options
- Time-saving procedure by easy handling
- Consistent allocation and insulation density achievable
- Reduces the risk of board deformation by active / passive ventilation
- Nearly no insulation material adhesion because of smooth outer finish

X-Floc Dämmtechnik-Maschinen GmbH | Rosine-Starz-Straße 12 · 71272 Renningen · Germany | Telephone + 49 - 7159 - 80470 - 30 · Fax - 40 | www.x-floc.com

Schematic Diagrams, Diameters and Determination of the Lance Length

Injection Lances

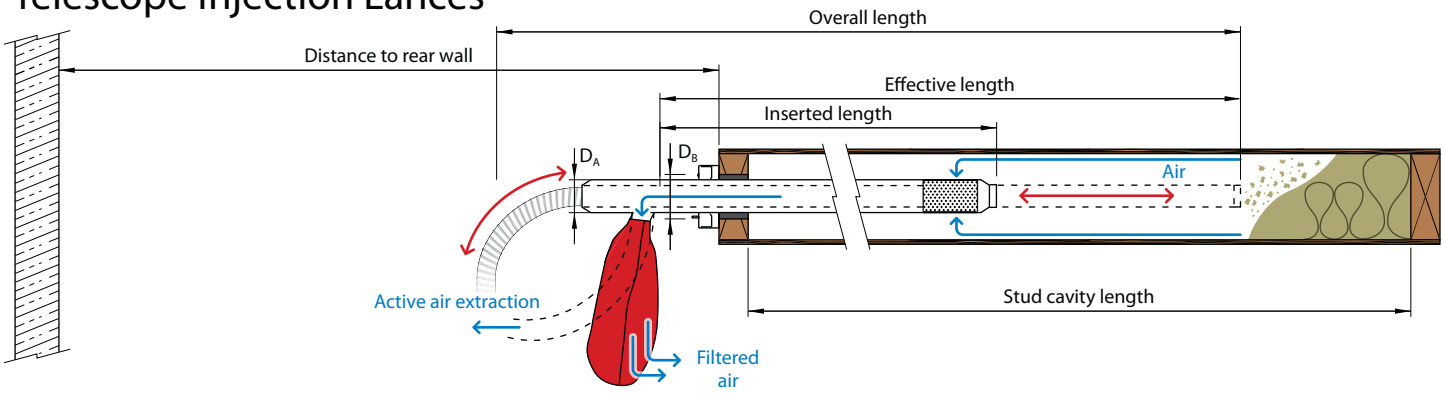


Determining the Lance Length:

Effective length = stud cavity length + frame thickness + thickness of the injection sleeve (optional)

Overall length = effective length + 450 mm

Telescope Injection Lances



Determining of the Lance Length:

Effective length = stud cavity length + frame thickness + thickness of the injection sleeve (optional)

Overall length (lifted) = effective length + 450 mm

$$\text{Overall length (inserted)} = \frac{\text{Effective length}}{2} + 750\,\text{mm}$$

Pro Hole Saw 106.5 mm

The in-house developed drill bit consists of tool steel. It is turned of a solid piece of metal. Thereby the hole saw has high-strength and a long life-time.

Material examples: Wood, plywood, chipboard (raw, veneered or laminated), laminated paper, PVC, acrylic, glass reinforced plastic, gas concrete, plaster board, Ytong stones, clay bricks, cavity blocks, flagging up to scratch resistance 6 and timber substitutes

Blockages do not form any more thanks to the new developed cut-outs in the blade edge geometry. This innovation makes difficult digging out of drill cores a thing of the past. A toothing disruption can be replaced with carbide tips. The drill bit is resharpenable.
The sealing corks of our range seal the injection holes perfectly.

Ø Hole saw	Prod.no.	Ø Drill hole	Cut. depth
85 mm	7544	87 mm	ca. 65 mm
85 mm	7829	87 mm	ca. 90 mm
106,5 mm	6182	106,5 mm	ca. 65 mm
106,5 mm	7816	106,5 mm	ca. 90 mm

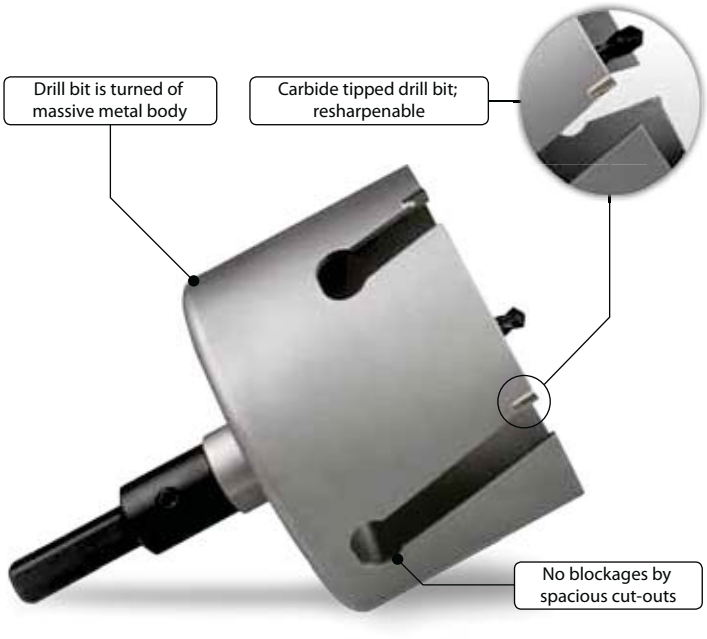


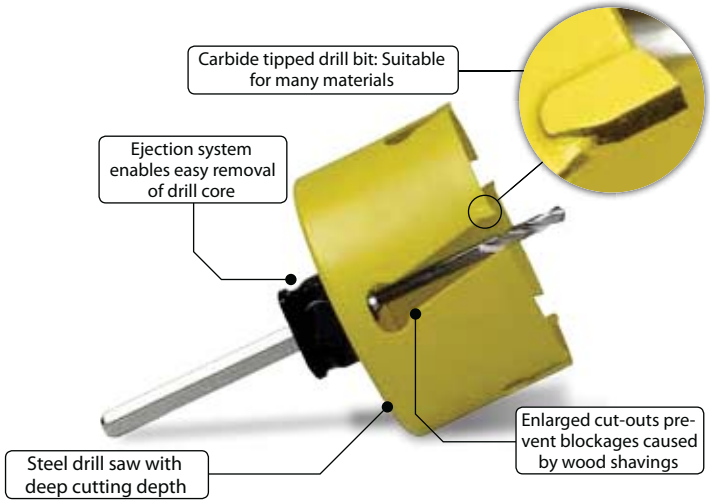
Image	Description	Prod. no.
	Drill (8 × 115 mm)	3883
	Drill Ø 7,2 mm	6184
	Adapter holder	6183
	Drill bit	6202
	VK85	2208
	VK106	1948

Hole Saw with Ejection System

This effective hole saw with ejection system is ideally suited to the professional cutting of injection holes. The day of fiddly removal of the saw core are over! The hole cutter is available in SDS and HSS standard.

Material examples: OSB and DWD boards, all wooden panel materials, soft wood fibre materials, plasterboard and cement bonded materials

The core bit is made from high quality steel, providing highly effective hole cutting. This saw allows you to achieve the best preparation for hose or nozzle injection. Our range of cork stoppers are perfect for sealing your injection holes.



Hole Saw HSS

Ø hole saw	Prod. no.	Ø drill hole	Cutting depth
120 mm	5282	120 mm	ca. 58 mm
106.5 mm	4966	106.5 mm	ca. 55 mm
86 mm	4977	87 mm	ca. 55 mm
65 mm	5038	66 mm	ca. 55 mm

Replacement HSS/SDS

Description	Ø 106.5	Ø 85.5	Ø 65
Saw and HSS drill	4966	4977	5038
Saw	4983	4984	5082
HSS drill		5032	
SDS drill		5031	

X-Floc Dämmtechnik-Maschinen GmbH | Rosine-Starz-Straße 12 · 71272 Renningen · Germany | Telephone +49-7159-80470-30 · Fax -40 | www.x-floc.com

Hole Saw HF

Exact injection holes in wood fibre panels

The hole saw HF allows through the very thin knife edge the reutilization of the drilling core. The hole saw HF was developed especially for drilling of wood fibre panels.

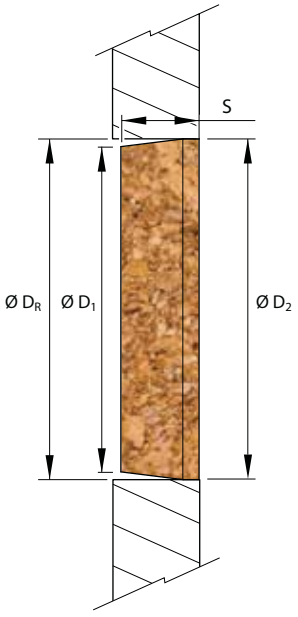
Prod. no. 5917

Drilling diameter	106.5 mm
Cutting depth	≤ 85 mm
Suggested rotational speed	400 - 600 U/min
Chuck adapter	Ø 13 mm

Sealing Corks

Injection holes can be closed easily and time-saving with closing plugs. The best ability is made in combination with hard materials like OSB, hardboard or gypsum cardboard. The sealing cork's conical shape lets you close the injection hole flush with only a few hand movements.

A good fixation is due to the oversize and a bit smaller drill hole. The actual sealing takes place in the cylindric top ending. This closing obtains generally as air tight and impermeable to splash-water when the drill hole and board material is correct. Smudging after plaster coating can be ruled out by experience.



Closing Plugs Made of Wood Fibre

Injection holes in wood fibre materials can be closed optimally with wood fibre closing plugs.

The closing plug has oversize and 12 edges. When it is driven in the injection hole it is retained by those reasons. In combination with an appropriate drill hole, the closure can be seen as air tight and impermeable to splash water.

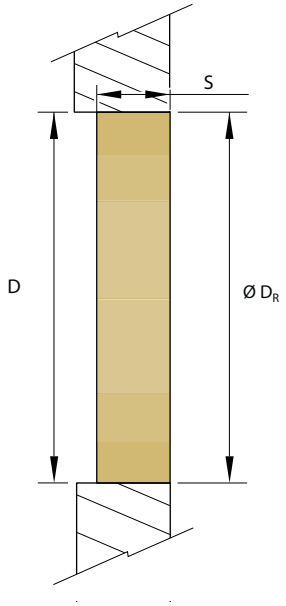


Image	Ø drill hole [D_R]	Ø D_1 / D_2	Thickness S	Prod. no.
	26 up to 32 mm	26 / 33 mm	25 mm	3626
	35 up to 39 mm	35 / 40 mm	25 mm	3838
	64 up to 67 mm	64 / 68 mm	25 mm	2018
	84 up to 87 mm	84 / 88 mm	25 mm	2208
	105 up to 108 mm	105 / 109 mm	25 mm	1948
	120 - 122.5 mm	120 / 123.5 mm	25 mm	4671

Image	Ø drill hole [D_R]	Thickness S	D	Prod. no.
	85 up to 88 mm	40 mm	approx. 90 mm	4675
	105 up to 108 mm	40 mm	approx. 110 mm	4673
	119 up to 122 mm	40 mm	approx. 124 mm	4674

X-FLOC

Insulation Blowing Machines and Equipment

X-Floc Channel

See many product demos and tips on Youtube

X-Floc partner

X-Floc Dämmtechnik-Maschinen GmbH
Rosine-Starz-Straße 12 · 71272 Renningen · Germany
Telephone +49-7159-80470-30 · Fax -40
E-Mail info@x-floc.com · Web www.x-floc.com

For prices, see current price list · Published 01.2017 · We accept no responsibility for errors or changes. · PDF: www.x-floc.com/download