



Damp spraying



Content

1 The Damp-Spray Principle

4

2 Comparison Spray Heads and Pipes

6



3 Pumps

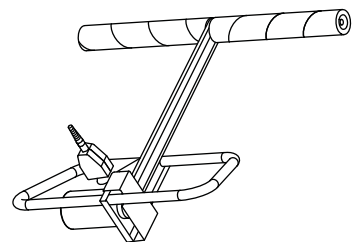
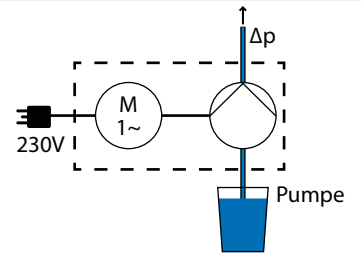
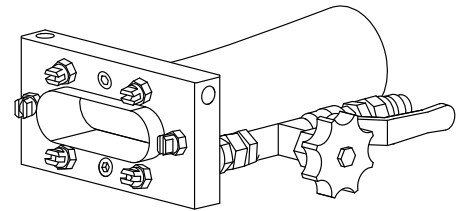
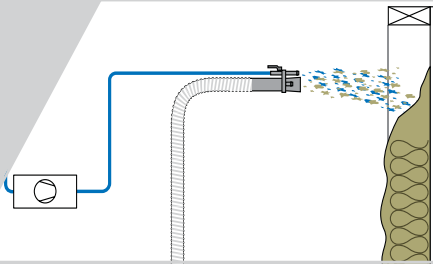
8



4 Wall scrubbers

10





The Damp-Spray Principle

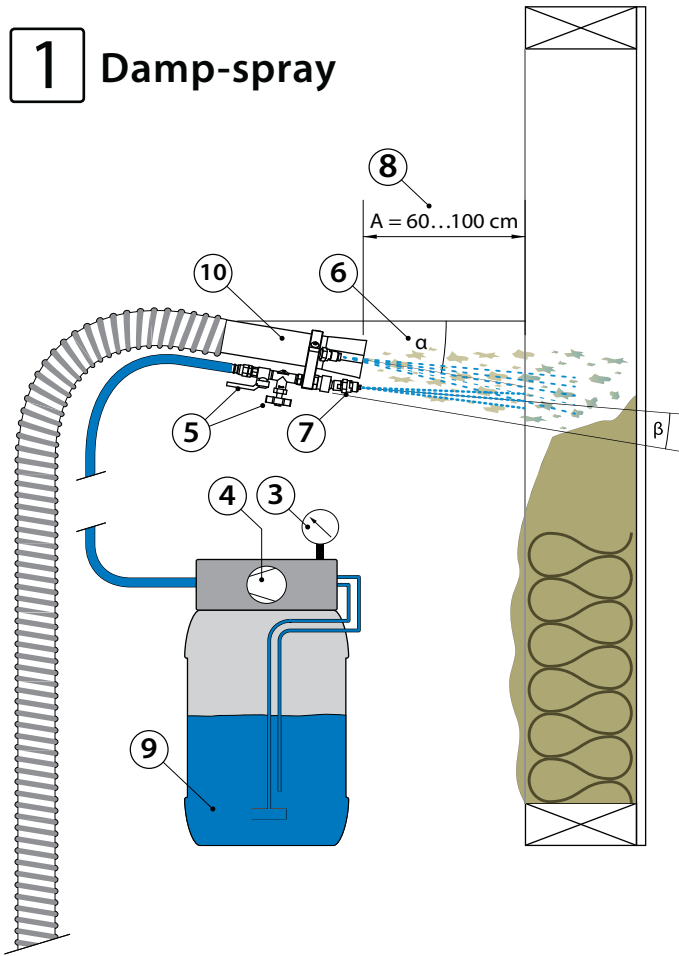


The damp spraying method works using water; the insulation material is dampened with water as it leaves the hose. The humidity causes a loosening of the Lignin in the insulation material and a conglutination of the material. The damp insulation material can thereafter be applied permanently on walls and roofs. This isn't possible with dry material. Spray heads or pipes with multiple spray nozzles are used for dampening the material.


The insulation material stream can be flawlessly imbrued and bunched by using two or more spray nozzles. This stream can be built up to the desired thickness. When glue is added to the water, the binding effect increases. Higher thicknesses are no longer an obstacle and processing the thermal-insulation material is a lot easier.




1 Damp-spray



Machine settings:

1 **Air power**
(1 blower, 20-50%) 

2 **Material flow**
(Feed gate 15-30%, M=6...10) 

3 **Pressure (15...30 bar)**

4 **Pump**

5 **Valve position, amount of liquid moisture addition typical**

Example:

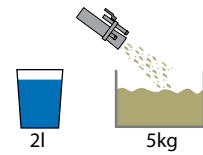
f: moisture content [%]

m_L : mass liquid [kg]

m_{DS} : mass insulating material [kg]

$m_L = 2$ kg

$m_{DS} = 5$ kg



$$f = \frac{m_L}{m_L + m_{DS}} = \frac{2}{5 + 2} = 29\%$$

Recommended: 22%...40%

6 Angle of inclination spray head α

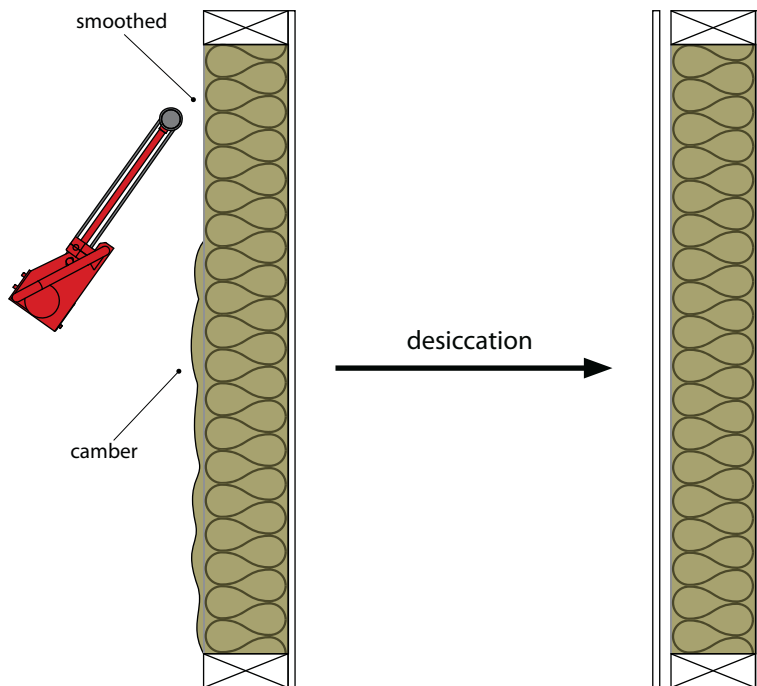
7 Angle of inclination nozzle β

8 Distance to wall A

9 Liquid optional with glue

10 Guiding spray head: Slow horizontal movements; building from bottom to top

2



With the wall scrubber smooth the excess insulation material.

Closed after desiccation.

Comparison Spray Heads and Pipes






The two different main applications in damp spraying:

- ▶ Wall coating and ceiling elements adding water or water-glue-mix
- ▶ Open blowing with water

Smaller spray heads with up to two spray nozzles are especially suitable for wall and ceiling coatings. Mostly only water without glue is used (cellulose). Spray heads with three and more spray nozzles can be used for wall coatings because of the precise adjustment options. In practice, these tools are mainly used for open blowing.

Spray pipes (Terminators) have further advantages compared to spray heads:

- ▶ Improved accuracy by coating with insulation material with high distance
- ▶ Easier and more comfortable handling thanks to the handles and rotary connector







Model	Spray heads				
Type	NW63 compressed air with 4 spray nozzles	NW50 inline (aluminium)	NW50 inline (Stainless steel)*	NW50 inline (plastic)	NW63 inline (plastic)
Product number	3196	4781	3535	5099	7841
Image					
Hose connection	NW63 (2½")	NW50 (2")	NW50 (2")	NW50 (2")	NW63 (2½")
Nozzles	6 piece drilled	4 piece drilled	1 piece screwed	1 piece integrate	1 piece integrate
Pressure range	< 6 bar	< 50 bar	< 25 bar	< 20 bar	< 20 bar
Water output	< 10l/min	< 5l/min	< 1.6l/min	< 2,5l/min	< 2,5l/min
Adjustment	2 adjusting valves	1 valve	Ball valve and needle valve for fine regulation	Ball valve	Ball valve
Typical application areas	Mineral fibre spray insulation	Mineral fibre spray insulation	Cover rating, thin wall coatings and acoustics	Cover rating, thin wall coatings, acoustics and cover fire protection	Cover rating, thin wall coatings, acoustics and cover fire protection
Weight	1.22 kg	0.52 kg	1.42 kg	0.235 kg	0.235 kg
Overall length	300 mm	230 mm	3000 mm	130 mm	130 mm
Material	Aluminium / plastic	Aluminium	Stainless steel	Plastic	Plastic
Exchange nozzles	-	-	On request	-	-

All values are approximate.

* NW50 inline (Stainless steel): order-based storage, thereby possibly extended delivery times



Spray pipes

	NW75 inline (plastic)	NW50 with 2 spray nozzles	NW63 with 3 spray nozzles	NW63 with 4-8 spray nozzles	NW63 with 4 spray nozzles	NW75 with 4 spray nozzles
	7842	1983	3169	5824	1494	1720
						
	NW75 (3")	NW50 (2")	NW63 (2½")	NW63 (2½")	NW63 (2½")	NW75 (3")
	1 piece integrate	2 piece exchangeable	3 piece exchangeable with ball joint	6 piece screwed (optionally 4-8 piece)	4 piece exchangeable with ball joint	4 piece exchangeable with ball joint
	< 20 bar	< 50 bar	< 50 bar	< 10 bar	< 50 bar	< 50 bar
	< 2,5l/min	< 1.25l/min	< 1.9l/min	< 10l/min	< 2.5l/min	< 2.5l/min
	Ball valve	Ball valve and needle valve for fine regulation	Ball valve and needle valve for fine regulation	Ball valve and needle valve for fine regulation	Ball valve and needle valve for fine regulation	Ball valve and needle valve for fine regulation
	Cover rating, thin wall coatings, acoustics and cover fire protection	Cover rating, thin wall coatings and acoustics	Cover rating, thin wall coatings and acoustics	Cover rating, thin wall coatings and acoustics	Open blowing and wall coatings	Open blowing
	0.235 kg	0.96 kg	1.22 kg	0.98 kg	1.22 kg	1.5 kg
	130 mm	250 mm	260 mm	180 mm	750 mm	400 mm
	Plastic	Aluminium	Aluminium	Aluminium	Aluminium / plastic	Aluminium / plastic
	-	Many sizes available	Many sizes available	On request	Many sizes available	Many sizes available

Pumps

High pressure pumps are used for supplementing the material flow with liquid.

Two types of pumps are used here:

- ▶ Piston pumps
- ▶ Diaphragm pump

Piston pump

The piston pump needs a water-connection making refilling unnecessary. The working pressure can be fine-tuned using the adjustment wheel and a manometer.

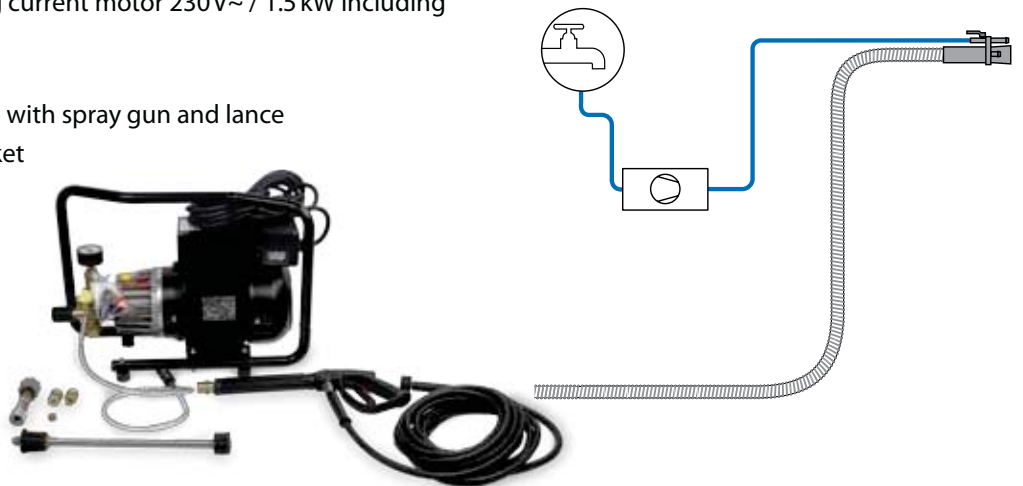
Portable high-pressure piston pump consisting of motor:

- ▶ High pressure pump, alternating current motor 230V~ / 1.5 kW including thumb wheel
- ▶ Manometer
- ▶ Hose fitting on the pressure side with spray gun and lance
- ▶ Pump screwed on support bracket

Technical data:

- ▶ p_{max} : approx. 80 bar
- ▶ Weight: approx. 20 kg
- ▶ Dimensions (L×W×H):
450×300×300 mm
- ▶ L/min: 9.4

Prod. no. 1577



Diaphragm pump

Using this type of pump, water can be pumped out of a tank (bucket/drum), thus enabling you to work with your own water-glue-mixes. The working pressure can be fine-tuned using the adjustment wheel and a manometer.

Portable vacuum pump with motor consisting of:

- ▶ High pressure pump, alternating current motor 230V~ / 1.5 kW including thumb wheel
- ▶ Manometer
- ▶ Hose fitting on the pressure side with spray gun and lance
- ▶ Pump screwed on support bracket

Technical data:

- ▶ p_{max} : approx. 20 bar
- ▶ Weight: approx. 14 kg
- ▶ Dimensions (L×W×H):
400×200×220 mm
- ▶ L/min: 17.2

Prod. no. 206



High pressure hoses

Image	Length	Prod. no..
	15m	715
	30m	5054
	50m	5055

→ Use 2 high pressure hoses as maximum!





Wall Scrubbers

The fast way to smooth surfaces.

The X-Floc wall scrubbers offer fast and easy stripping and smoothing for overlapping loose insulation coatings which are produced when damp spraying in studwork and cavities. Neither old nor new buildings affect these functions. The accurate stripping makes a precise closing of the cavities with the desired planking material possible.

Wall Scrubber M05

Our classic, the wall scrubber M05, is available two widths – 690 mm and 1000 mm. The M05 model w=690 mm can also be extended to 990 mm width by using the optional extension set (prod. no. 2438).





If the friction lining is worn off due to intensive use with the wall scrubber, it can be renewed relatively easily by yourself.

Battery Wall Scrubber

The lightweight battery wall scrubber is particularly suitable for the work hard to reach areas or in constrained posture (e.g. when working overhead).

This wall scrubber is driven by cordless angle drill machine. Almost uninterrupted work is possible by the included additional battery and the quick charge function. For wider compartments the battery wall scrubber can be extended with the included roll extension to approximately 710 mm.

If the friction lining is worn off by intensive use of the wall scrubber, it can be renewed relatively easily by yourself.

Image	Designation	Broad brush	Gear	Prod. no.
	Wall scrubber M05 with 4 m cable	690 mm	230V	2364
	ExtensionsSet	+ 150 mm on both side	230V	2438
	Wall scrubber M05 with 4 m cable	1000 mm	230V	4246
	Battery wall scrubber	400 mm	12V=	3803



Battery wall scrubber with two batteries and charger



Wall Scrubber M05

- ▶ With cable connection
- ▶ Low weight
- ▶ Easy and effort-saving operable
- ▶ Roll extension approx. 150 mm on both sides possible
- ▶ Available in 2 lengths



Battery Wall Scrubber

- ▶ Without cable connection
- ▶ Ultra light-weight
- ▶ Easy and effort-saving operable
- ▶ Two batteries, quick charger
- ▶ Roll extension approx. 710 mm possible





X-Floc Channel

See many product demos and tips on Youtube



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

Your X-Floc partner