# Technical data

# Type A1N

IVDE ATM			
Practical conveying capacity	(m³/h)	0.3 - 5	
Grain size of the aggregates	(mm)	0 - 12	
Material conveyor hose connection	(ø mm)	25/32/40	AT
Air requirements, depending on hose ø	(m³/min)	3 - 9	4
and conveying distance			
Conveying distance	(m)	up to 700	ST 10 10
Conveying height	(m)	up to 150	910 -
Length/ Width/ Height	(mm)	1,720 x 910 x 1,300	
Weight	(kg)	900	l



# Shotcrete machines

for shotcrete, mortar and refractory compounds

#### Type TSN/ B1N

Practical conveying capacity	(m³/h)	0.3 -
Grain size of the aggregates	(mm)	0 - 1
Material conveyor hose connection	(ø mm)	25/3
Air requirements, depending on hose ø	(m³/min)	4 - 2
and conveying distance		
Conveying distance	(m)	up to
Conveying height	(m)	up to
Length/ Width/ Height	(mm)	2,00
Weight	(kg)	1,12

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16	
32/40/50/65	1. 17
20	
o 1,500	
o 150	- 710- 2
5 x 710 x 1,300	
0/ 1,150	

3,045 x 1,860 x 1,830

1,640



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Type C1N				
Practical conveying capacity	(m³/h)	5 - 15		
Grain size of the aggregates	(mm)	0 - 16	<b>⊨</b> —1050 — <b>—</b>	
Material conveyor hose connection	(ø mm)	50/ 65/ 70/ 80	K-A-A	
Air requirements, depending on hose ø	(m³/min)	12 - 35		7
and conveying distance				I
Conveying distance	(m)	up to 1,500		Ē
Conveying height	(m)	up to 150	<b>-</b> 950 -	-
Length/ Width/ Height	(mm)	2,275 x 1,050 x 1,450		
Weight	(kg)	1,950		

(mm)

(kg)

Type 208 "Refurbishment-Express"		
Practical conveying capacity	(m³/h)	0.3 - 5
Grain size of the aggregates	(mm)	0 - 12
Material conveyor hose connection	(ø mm)	25/32/40
Air requirements, depending on hose ø	(m³/min)	3 - 9
and conveying distance		
Conveying distance	(m)	up to 700
Conveying height	(m)	up to 150

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Developed for

- Professionals working in the toughest of conditions
- Oven-dry and moist mixes
- Dust-free work sites
- High efficiency

Subject to technical alterations | as of July 2006

Length/ Width/ Height

Weight





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### Initial situation

The quality of the shotcrete is largely dependent on compliance with specified water/cement ratio and the correct mix of spraying material and water. Only an absolutely pulsation-free, even flow rate

ensures an optimised spraying material mix at the nozzle.

#### Solution

The intelligent SBS control chamber system allows the user to easily and reliably produce top quality shotcrete even in the toughest of conditions.

Lots of small pockets load the air flow with small even portions of spraying material. An adequate supply of the spraying material in the feed chamber and a constant flow of air ensure thinflow conveying with a pulsation-free, even material flow to the nozzle tip. The electro-hydraulic drive in the spraying machine guarantees stepless adjustment of the material quantity by altering

the speed of the pocket wheel. The allocator unit responsible for loading the feed chamber seals the pressurised part of the machine reliably, guarantees that the machine works in an absolutely dust-free manner and also avoids any losses of compressed air. A fool-proof adjustment system on the allocator ensures long service lives of the wear parts and low costs. Sturdy flap and plug mechanisms allow the machine to be cleaned in minutes.



SBS-system



# Advantages at a glance

- Low-rebound shotcrete processing by means of even delivery flow
- Dust-free machine operation due to fully contained system
- Conveying distances up to 1,500 m, conveying heights up to 150 m
- Stepless conveying capacity setting from 0.3 m<sup>3</sup>/h to 15 m<sup>3</sup>/h
- A machine for small applications which can also be used for large quantities of shotcrete
- Low wear costs thanks to cooling and lubrication of the wear parts
- Also suitable for SPCC mortar and fibre concrete mixes
- Can be used for sand-blasting and backfilling work
- Sturdy design and long service life





Feeder cone

#### Opened machine

# Working principle

The feeder cone (3) acts as a sluice between the hopper (1) and the feed chamber (4) that is filled with compressed air. The pockets (8) of the rotating feeder cone (3) fill the feed chamber (4) with spraying material\*. Compressed air that flows in when the pockets are emptied is relaxed via the exhaust (2) and any fine particles here are retained in a filter. To seal the sluice, the water-cooled feeder cone (3) is pushed into the centre of an elastic seal using a readjustment device. The spraying material\* in the feed chamber (4) is transported from the pocket wheel (5) to the discharge area (6). The compressed air (7) flowing into the feed chamber (4) is redirected in the discharge area (6) and loaded with spraying material.

\* oven-dry to earth-moist, max. 5 %.





Type A1N - Application: refurbishment/ refractory construction work



Type TSN/ B1N - Application: tunnelling/ mining



Type C1N - Application: tunnelling



Type 208 - Application: refurbishment work