

TSN Shotcrete Machine

- Clever & Co Dry Shotcrete machines have an intelligent SBS control chamber system that 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 in the feed chamber and a constant flow of air ensure thin-flow 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 ensure long service lives of the wear parts and low costs.
- Sturdy flap and plug mechanisms allow the machine to be cleaned in minutes.



Advantages

- Low-rebound shotcrete processing by means of even delivery flow
- Dust-free machine operation due to fully contained system
- Conveying distances up to 1,500m, conveying heights up to 150m
- Stepless conveying capacity setting from 0.3m³/h to 15m³/h
- A machine for small applications which can also be used for large quantities of shotcrete
- Low wear costs due 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

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		A1N	B1N / TSN	C1N
Practical conveying capacity	m ³ /h	0.3 – 5	0.3 – 8	5 – 15
Grain size of the aggregates	Mm	0 – 12	0 – 16	0 – 16
Material conveyor hose connection	ømm	25 / 32 / 40	25 / 32 / 40 / 50 / 65	50 / 65 / 70 / 80
Air requirements, depending on hose ø and conveying distance	m ³ /min	3 – 9	4 – 20	12 – 35
Conveying distance	m	Up to 700	Up to 1500	Up to 1500
Conveying height	m	Up to 150	Up to 150	Up to 150
Length / Width / Height	mm	1720 x 910 x 1300	2005 x 710 x 1300	2275 x 1050 x 1450
Weight	kg	900	1120 / 1150	1950

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%

