ASM-9D Dry Type Shotcrete Machine

A.E.G Group Shotcrete Machine Introduction:

Shotcrete process is to use compressed air to convey the pre-dampened mix through delivery hose to the nozzle to project the material onto the sprayed surface under high velocity, and then to form concrete support layer after the projected material coagulates and hardens. With simple technology, special effect, economy cost, flexibility and high construction efficiency, shotcrete technology has widely been applying in construction, railway and super highway engineering, underground engineering, tunneling, mining operations, hydropower projects and slope stabilization, etc. and showing prosperous future.

A.E.G Group Shotcrete Machine Features:

· Non-adhesion going-through rotor with new material chamber, completely eliminate bonding and blocking during operation so as to reduce clearance and maintenance period.

· Thin flow conveying method with vortex flow, so the spraying flow is even, continuous and steady, to improve the shotcrete quality.

· Four-point clamping device make it easy to adjust the press between sealing plate and rotor disk so as to no air and dusk leak and prolong consumption parts life.

A.E.G Group Shotcrete machine types: dry type, wet type, wet and dry type.

Dry type shotcrete machine has 3 types:
mini-sized ASM-3D, medium-sized ASM-5D, large-sized ASM-9D.
Wet type shotcrete machine is model ASM-7W.
Wet and dry type shotcrete machine is model ASM-5R.
Shotcrete robot arm is model ASMS-30.

A.E.G Group dry type shotcrete machine working principle:

Dry mix components (not includeing water) according to the design ratio, directly feed the mix into hopper (by hand or by feeder) compressed air introduced through air compressor conveys the mix to the nozzle through delivery hose, water is added to the mix at the nozzle, spray the mix with high velocity.

A.E.G Group dry type shotcrete machine models:ASM-3D, ASM-5D, ASM-9D.

We can choose a suitable one for your working requirements.

ASM-9D Dry type shotcrete machine description:

ASM-9D is a large-sized concrete spraying machine for the processing of dry mix.
The machine can be used thanks to its compact design and mobility where space is at a premium e.g. in mines and galleries.
Other potential applications are slope and hillside protection, lining of water tanks and swimming pools, guniting for single and double shell tunnel construction, backfilling of tubing.

ASM-9D is available in the following versions:

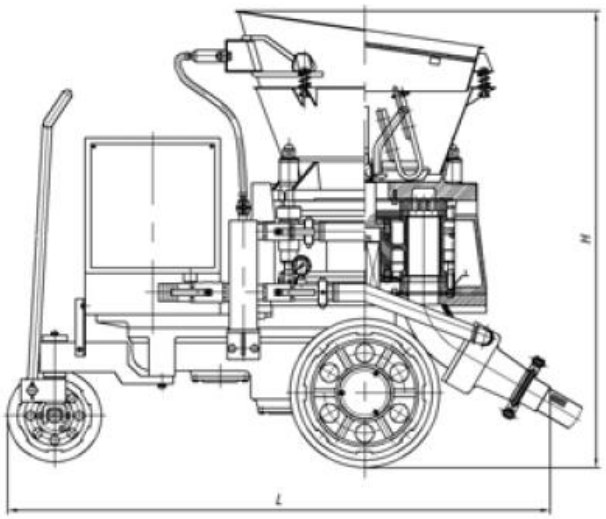
- BASIC Electric drive • AIR With air drive •

Basic: electric drive can be combined with tyre chassis
Extended (optional): air motor drive combined skid or with single hydraulic power pack
Skid or Rail-wheel

ASM-9D Technical Data Sheet

Output	9 m3/h
Maximum horizontal convey dist	200m
Suitable Mix Ratio(Cement/Sand)	≤1:4~5
Mmaximum aggregate size	20mm
Conveying hose inner size	64mm
Operating air pressure	0.2-0.4MPa
Air consumption	9-10 m3 /min
Filling Height	1.1m
Rotor Speed	11r/min
Motor power	7.5kW
Voltages	380V, 440V, 660V, 1140V 50Hz/60Hz
Basic chassis	Basic chassis is tyre .Skid and rail-wheel are optional
Overall Dimension	1.65×0.9×1.25m
Net Weight	900kg

Dimensions:



Dimension with chassis:

Length L : 1650 mm
Height H : 1250 mm
Width : 900 mm
Weight : 900 kg
Content of hopper : 50 Liters

Dimension with skid:

Length L : 1650 mm
Height H : 1195 mm
Width : 620 mm
Weight : 900 kg
Content of hopper : 45 Liters

Drive

Electric (Basic)

Motor output : 7.5KW /10hp
Speed range : 1500 rpm
Voltages : 380V50 Hz ,440V50/60 Hz, 220V50/60 Hz

With air motor (Air)

Motor output : 8 KW/11hp
Speed range : 400-650 rpm
Pressure : 0.63 MPa/93psi
Air consumption : 9.36 m3/min

Theoretical conveying date (only dry)

Rotor(Liter): 15

Hose: Φ (mm) 65

Conveying output (m3/h): BASIC: 9, AIR/DIESEL: 4～8

With theoretical filling degree of 100%. If motor with 60 Hz =20% higher conveying capacity

max. grain (mm): 20

max. conv. dist. (m) Horizontal / Vertical: 200 / 70

Theoretical data for air consumption for conveying

Air consumption (m3/min): Dry spraying, 60 m-10, 120 m-12

Air consumption data are approximate values and are depending on conveying distance.

CAUTION: For the configuration AIR (with air motor) it has to be considered:

Total air consumption = Air consumption for conveying + Air consumption for air motor!