

Ancillaries

Grout line

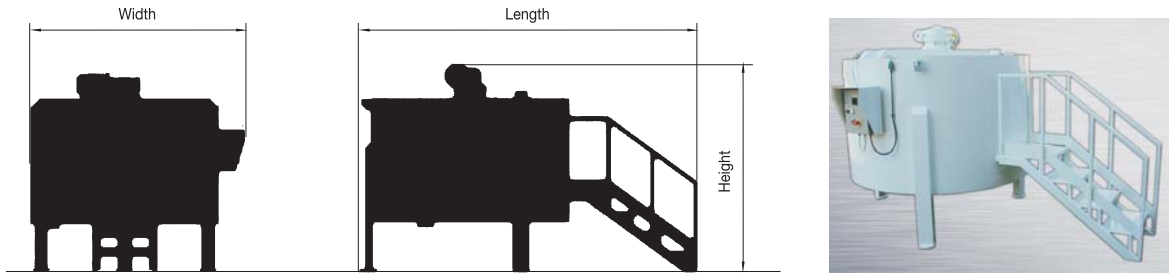


GROUT LINE

Soilmec offer a machine, a technology and a solution to meet foundation needs. A comprehensive and technologically advanced jobsite, enriched by IPC technology with highly performing auxiliary equipment and accessories in a Grout product line dedicated to the preparation and injection of water/cement mix.

Agitators

The Soilmec agitators are used to maintain the water and cement mix or bentonite slurry fluidity. The unit is powered by electric or hydraulic motor that moves the blades to stir the fluid providing to maintain in suspension the solid particles and to eliminate the air pockets contained in the mix. The agitator is equipped with inspection doors and electric panel.

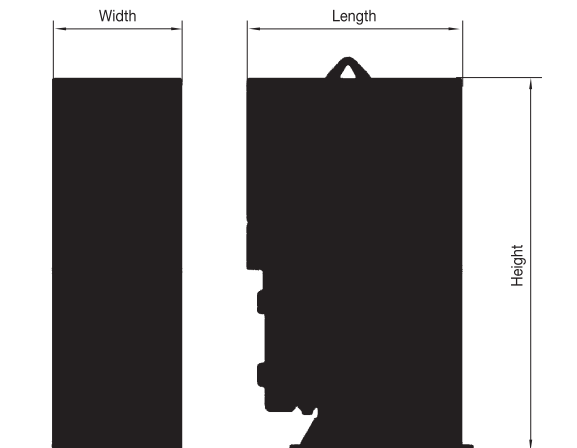


Model	SGA-5	SGA-5	A80 E	A80 E	SGA-10	SGA-10	A170	A170	A200 E	A200 E
Max. capacity	500 l	132 US gal	800 l	211 US gal	1000 l	264 US gal	1700 l	434 US gal	2000 l	528 US gal
Mixing axis	1	1	1	1	1	1	1	1	1	1
Electric motor power	2,2 kW	3 HP	1,5 kW	2 HP	2,2 kW	3 HP	2,2 kW	3 HP	2,2 kW	3 HP
Motor speed	1450 rpm	1450 rpm	1450 rpm	1450 rpm	1450 rpm	1450 rpm	1450 rpm	1450 rpm	1450 rpm	1450 rpm
Reduction ratio	01:46	01:46	01:64	01:64	01:46	01:46	01:46	01:46	01:46	01:46
Max. speed	31 rpm	31 rpm	22 rpm	22 rpm	31 rpm	31 rpm	31 rpm	31 rpm	31 rpm	31 rpm
Integrated booster pump	n.a.	n.a.	n.a.	n.a.	1 (opt.)	1 (opt.)	n.a.	n.a.	n.a.	n.a.
Electric motor power	-	-	-	-	5,5 kW	7 HP	-	-	-	-
Motor speed	-	-	-	-	1450 rpm	1450 rpm	-	-	-	-
Height	1700 mm	67 in	1785 mm	70.28 in	1700 / 1800 mm	66.93 / 7.87 in	1930 mm	77 in	2105 mm	82.87 in
Width	1000 mm	39 in	1080 mm	42.52 in	1200 / 1400 mm	47.24 / 55.12 in	1250 mm	48 in	1830 mm	72.05 in
Length	1100 mm	43 in	1080 mm	42.52 in	1200 / 1400 mm	47.24 / 55.12 in	1250 mm	48 in	1700 mm	66.93 in
Dry weight	290 kg	639 lb	350 kg	772 lb	330/400 kg	727.5/881.8 lb	790 kg	1820 lb	780 kg	1720 lb

Model	A350 E	A350 E	SGA-45	SGA-45	SGA-100	SGA-100
Max. capacity	3500 l	925 US gal	4500 l	1189 US gal	10000 l	2642 US gal
Mixing axis	1	1	1	1	2	2
Electric motor power	4,0 kW	5 HP	5,5 kW	7 HP	5,5 kW	7 HP
Motor speed	1450 rpm	1450 rpm	1450 rpm	1450 rpm	1450 rpm	1450 rpm
Reduction ratio	01:46	01:46	01:100	01:100	01:100	01:100
Max. speed	31 rpm	31 rpm	15 rpm	15 rpm	15 rpm	15 rpm
Integrated booster pump	n.a.	n.a.	1 (opt.)	1 (opt.)	2 (opt.)	2 (opt.)
Electric motor power	-	-	15,0 kW	20 HP	15,0 kW	20 HP
Motor speed	-	-	950 rpm	950 rpm	950 rpm	950 rpm
Height	2110 mm	83.07 in	2250 mm	89 in	2250 mm	89 in
Width	2280 mm	89.76 in	2200 mm	87 in	2200 mm	87 in
Length	3413 mm	134.37 in	2400 mm	94 in	4700 mm	185 in
Dry weight	1120 + 150 kg (ladder weight)	2469.1 + 330.7 lb (ladder weight)	1800 kg	3968 lb	3600 kg	7937 lb

Injectors

The grout pumps are suitable for grouting water and cement mixes. The alternate motion is given by a hydraulic piston, which is driven by an electric power pack. The grout pump is equipped with pressure gauges displaying the grouting pressure and the power pack running pressure. The grout pump runs in two different ways: high pressure with low delivery to break the valves, and low pressure with high delivery for the grouting operations.



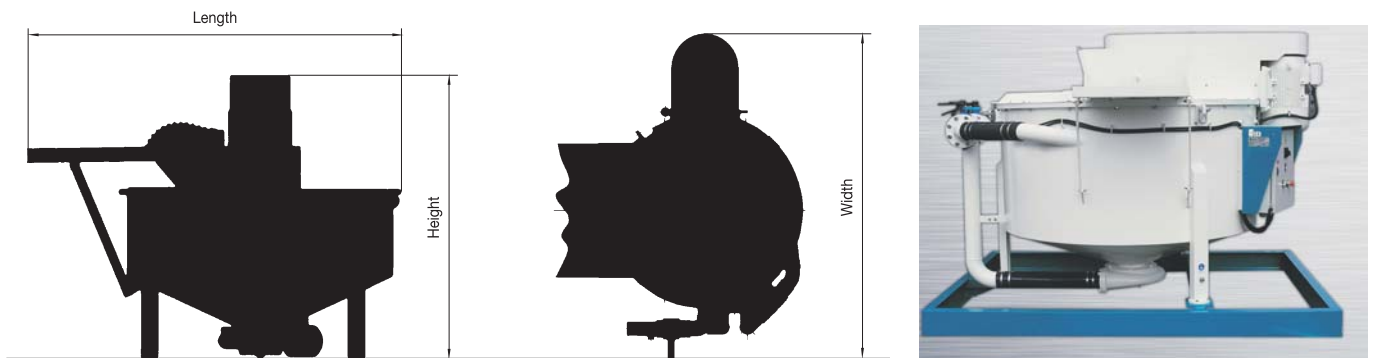
Model	SGP-3.12	SGP-3.12	GP 30	GP 30	GP 80	GP 80	SGP-8.8	SGP-8.8
Electric motor power	5,5 kW	7 HP	4 kW	5 HP	5,5 kW	7 HP	7,5 kW	10 HP
Motor speed	1450 rpm	1450 rpm	1450 rpm	1450 rpm	1450 rpm	1450 rpm	1450 rpm	1450 rpm
Type hydraulic motion	double gear pump	double gear pump	50 HZ IP65	50 HZ IP65	50 HZ IP65	50 HZ IP65	double gear pump	double gear pump
Bore piston (std)	80 mm	3 in					110 mm	4.4 in
Piston stroke	200 mm	7.8 in					350 mm	
Delivery per stroke	1,0 l	0.3 US gal	0,5 l	0.1 US gal	1,5 l	0.4 US gal	3,30 l	0.9 US gal
Min. delivery	3 l/min	1 US gal/min	5 l/min	1.3 US gal/min	5 l/min	1.3 US gal/min	10 l/min	3 US gal/min
Max. delivery	33 l/min	9 US gal/min	40 l/min	11 US gal/min	82 l/min	22 US gal/min	78 l/min	21 US gal/min
Max. working pressure	7 MPa	1015 PSI	3,5 MPa	507.6 PSI	3MPa	435.1 PSI	3,5 MPa	508 PSI
Max. breaking pressure	12 MPa	1740 PSI	9 MPa	1305 PSI	9 MPa	1305 PSI	7,8 MPa	1131 PSI
Height	2000 mm	79 in	1300 mm	51.18 in	1680 mm	66.14 in	2000 mm	79 in
Width	800 mm	31 in	450 mm	17.72 in	450 mm	17.72 in	800 mm	31 in
Length	600 mm	24 in	650 mm	25.59 in	650 mm	25.59 in	600 mm	24 in
Dry Weight	320 kg	705 lb	370 kg	816 lb	510 kg	1124 lb	400 kg	882 lb

Model	SGP-10.10	SGP-10.10	GP 140	GP 140	SGP-20.5	SGP-20.5	SGP-36.3	SGP-36.3
Electric motor power	18,0 kW	24 HP	7,5 kW	10 HP	22 kW	29 HP	22 kW	29 HP
Motor speed	1450 rpm	1450 rpm	1450 rpm	1450 rpm	1450 rpm	1450 rpm	1450 rpm	1450 rpm
Type hydraulic motion	double gear pump	double gear pump	50 HZ IP65	50 HZ IP65	axial piston Rexroth	axial piston Rexroth	axial piston Rexroth	axial piston Rexroth
Bore piston (std)	110 mm	4.4 in			115 mm		160 mm	
Piston stroke	350 mm				330 mm		330 mm	
Delivery per stroke	3,30 l	0.9 US gal	1,5 l	0.4 US gal	3,4 l	0.9 US gal	6,6 l	1.7 US gal
Min. delivery	10 l/min	3 US gal/min	5 l/min	1.3 US gal/min	13 l/min	3 US gal/min	25 l/min	7 US gal/min
Max. delivery	105 l/min	28 US gal/min	140 l/min	37 US gal/min	205 l/min	54 US gal/min	360 l/min	95 US gal/min
Max. working pressure	7 MPa	1015 PSI	3MPa	435.1 PSI	5 MPa	725 PSI	3,3 MPa	479 PSI
Max. breaking pressure	10 MPa	1450 PSI	9 MPa	1305 PSI	-	-	-	-
Height	2100 mm	83 in	1680 mm	66.14 in	1600 mm	63 in	1600 mm	63 in
Width	1000 mm	39 in	450 mm	17.72 in	800 mm	31 in	800 mm	31 in
Length	700 mm	28 in	650 mm	25.59 in	2200 mm	87 in	2200 mm	87 in
Dry Weight	670 kg	1477 lb	513 kg	1131 lb	1100 kg	2425 lb	1210 kg	2668 lb

GROUT LINE

Turbomixers

The Soilmec turbomixers are designed to mix water and cement. The unit is powered by electric or hydraulic motor that drives the centrifugal pump to move the fluid.



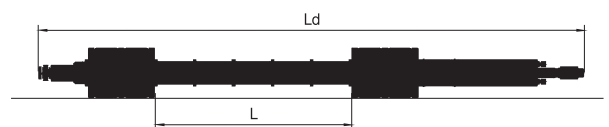
Model	SGT-6	SGT-6	SGT-7	SGT-7	MT 31 E	MT 31 E
Version	Manual	Manual	Manual	Manual	Manual	Manual
Max. Volume batch	265 l	70 US gal	390 l	103 US gal	310 l	82 US gal
Electric motor power	5,5 kW	7 HP	5,5 kW	7 HP	7,5 kW	10 HP
Max. speed	1450 rpm	1450 rpm	1450 rpm	1450 rpm	1450 rpm	1450 rpm
Max. delivery	650 l/min	172 US gal/min	650 l/min	172 US gal/min	700 l/min	185 US gal/min
Head	20 m	66 ft	20 m	66 ft	16 m	52.80 ft
Mixing cap.ty (determined on C/W=1)	5,6 m3/h		6,5 m3/h			
Water Max Batch	200 kg	441 lb	292 kg	644 lb		
Cement Max Batch	200 kg	441 lb	292 kg	644 lb		
Min Feed Water	1560 l/min		1560 l/min			
Feed Cement	100 kg/min		115 kg/min			
Time to Batch	170 sec	412 US gal/min	217 sec	412 US gal/min		
Height	1850 mm	73 in	2050 mm	81 in	1265 mm	49.80 in
Width	1100 mm	43 in	1100 mm	43 in	1430 mm	56.30 in
Length	1100 mm	43 in	1100 mm	43 in	1550 mm	61.02 in
Dry weight	300 kg	661 lb	345 kg	761 lb	395 kg	871 lb

Model	SGT-12 Plus	SGT-12 Plus	SGT-13 Plus	SGT-13 Plus	MT 58	MT 58
Version	Automatic	Automatic	Manual	Automatic		
Max. Volume batch	265 l	70 US gal	390 l	103 US gal	600 l	159 US gal
Electric motor power	5,5 kW	7 HP	5,5 kW	7 HP	9,2 kW	12 HP
Max. speed	1450 rpm	1450 rpm	1450 rpm	1450 rpm	1450 rpm	1450 rpm
Max. delivery	650 l/min	172 US gal/min	650 l/min	172 US gal/min	840 l/min	222 US gal/min
Head	20 m	66 ft	20 m	66 ft	18 m	59 ft
Mixing cap.ty (determined on C/W=1)	11,6 m3/h		6,5 m3/h			
Water Max Batch	200 kg	441 lb	292 kg	644 lb		
Cement Max Batch	200 kg	441 lb	292 kg	644 lb		
Min Feed Water	1560 l/min	412 US gal/min	1560 l/min	412 US gal/min		
Feed Cement	360 kg/min		115 kg/min			
Time to Batch	82 sec		217 sec			
Height	1900 mm	75 in	2050 mm	75 in	1630 mm	64.17 in
Width	1000 mm	39 in	1100 mm	39 in	1950 mm	76.77 in
Length	1400 mm	55 in	1100 mm	55 in	1800 mm	70.87 in
Dry weight	800 kg	1764 lb	345 kg	1863 lb	500 kg	1102 lb

Model	MT 130 E	MT 130 E	MT 200 E	MT 200 E	SGT-45	SGT-45
Version					Automatic	Automatic
Max. Volume batch	1300 l	343 US gal	2000 l	528 US gal	2000 l	528 US gal
Electric motor power	11 kW	15 HP	15 kW	20 HP	26,5 kW	36 HP
Max. speed	1540 rpm	1540 rpm	1550 rpm	1550 rpm	1450 rpm	1450 rpm
Max. delivery	1400 l/min	370 US gal/min	2720 l/min	719 US gal/min	3000 l/min	793 US gal/min
Head	20 m	66 ft	17 m	56 ft	20 m	66 ft
Mixing cap.ty (determined on C/W=1)					45 m ³ /h	
Water Max Batch					1500 kg	3307 lb
Cement Max Batch					1500 kg	3307 lb
Min Feed Water					3150 l/min	832 US gal/min
Feed Cement					1200 kg/min	
Time to Batch					160 sec	
Height	1650 mm	64.96 in	1850 mm	72.83 in	2250 mm	89 in
Width	1866 mm	73.46 in	2150 mm	84.65 in	2200 mm	87 in
Length	1450 mm	57.09 in	1750 mm	68.90 in	2400 mm	94 in
Dry weight	740 kg	1631 lb	800 kg	1764 lb	800 kg	1764 lb

Packer

The packer is a sealing device developed by Soilmec, thanks to the IPC technology, to isolate zones inside well casing. The high tightness of the packer allows to grout to a pressure of 90 bar, obtaining breakage of the “sheath”, and to use a working pressure of 70-80 bar.

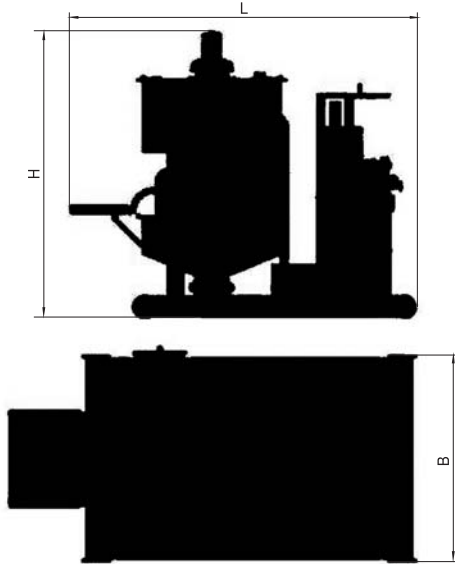


Model	1 HP	1 HP	2 HP	2 HP	3 HP	3 HP
Ld	1133 mm	45 in	1537 mm	61 in	1608 mm	63 in
Ls	811 mm	32 in	908 mm	36 in	1024 mm	40 in
A	G 1/4"	G 1/4"	G 1/2"	G 1/2"	G 3/4"	G 3/4"
L	315 mm	12 in	585 mm	23 in	590 mm	23 in
Dry weight	2,5 kg	5.5 lb	10 kg	22 lb	22 kg	49 lb
Rubber pads min. dia.	40 mm	2 in	60 mm	2 in	80 mm	3 in
Rubber pads max. dia.	60 mm	2 in	115 mm	5 in	140 mm	6 in
Max. hydraulic pressure	30 MPa	4351 PSI	30 Mpa	4351 PSI	30 Mpa	4351 PSI
Max. hydraulic working pressure	25 Mpa	3626 PSI	25 Mpa	3626 PSI	25 Mpa	3626 PSI
B maximum	4 mm	0.15 in	5 mm	0.20 in	6 mm	0.24 in
Max. grouting pressure	8 Mpa	1160 PSI	8 Mpa	1160 PSI	8 Mpa	1160 PSI

GROUT LINE

Grout mixing plant

The grout mixing plants are used to mix and grout water and cement. The plant is composed of a turbomixer, an agitator, and a grout pump. The skid option is highly compact in order to reduce the costs of transport and time of installation on the job site.



Model	GI ET 2: MT 20 + A 40 + GP30		GI ET 4K: MT 32 + A 45 + GP80		GI ET 4: MT 31 + A 80 + GP80		GI ET 8: MT 58 + A 80 + GP140	
DIMENSIONS (approx)								
- L	2200 mm	87 in	2200 mm	87 in	2800 mm	110 in	3300 mm	130 in
- B	1200 mm	47 in	1200 mm	47 in	1650 mm	65 in	1955 mm	77 in
- H	2000 mm	79 in	2480 mm	93 in	1925 mm	76 in	1955 mm	77 in
- Dry weight	1200 kg	2646 lb	1400 kg	3186 lb	1480 kg	3263 lb	1880 kg	4145 lb
TECHNICAL DATA								
- Output per hour	2000 l	528 US gal	4000 l	1057 US gal	4000 l	1057 US gal	8000 l	2114 US gal
- Max. pressure	90 bar	1305 PSI	90 bar	1305 PSI	90 bar	1305 PSI	90 bar	1305 PSI
- Max. delivery	40 l/min	11 US gal/min	70 l/min	18 US gal/min	80 l/min	21 US gal/min	140 l/min	37 US gal/min
AGITATOR	A40	A40	A45	A45	A80	A80	A80	A80
- Max. batch capacity	310 l	82 US gal	450 l	126 US gal	800 l	211 US gal	800 l	211 US gal
- Max. speed	22 rpm	22 rpm	22 rpm	22 rpm	1,5 kW ; 50 Hz ; IP65	1.5 kW ; 50 Hz ; IP65	1,5 kW ; 50 Hz ; IP65	1.5 kW ; 50 Hz ; IP65
- Hydraulic motor	planetary drive	planetary drive	planetary drive	planetary drive	22 rpm	22 rpm	22 rpm	22 rpm
TURBOMIXER	MT20	MT20	MT32	MT32	MT31	MT31	MT58	MT58
- Max. capacity	200 l	53 US gal	320 l	88 US gal	310 l	82 US gal	600 l	159 US gal
- Max. delivery	600 l/min	158.5 US gal/min	600 l/min	158.5 US gal/min	700 l/min	185 US gal/min	840 l/min	222 US gal/min
- Max. head	11 m	36 ft	11 m	36 ft	20 m	66 ft	18 m	59 ft
- Hydraulic motor	gear type	gear type	gear type	gear type	7,5 kW ; 50 Hz ; IP65	7.5 kW ; 50 Hz ; IP65	9,2 kW ; 50 Hz ; IP65	9.2 kW ; 50 Hz ; IP65
- Max. speed	1450 rpm	1450 rpm	1500 rpm	1500 rpm	1450 rpm	1450 rpm	1450 rpm	1450 rpm
GROUT PUMP	GP30	GP30	GP80	GP80	GP80	GP80	GP140	GP140
- Max. delivery	40 l/min	11 US gal/min	70 l/min	18 US gal/min	80 l/min	21 US gal/min	140 l/min	37 US gal/min
- Max. pressure	90 bar	1305 PSI	90 bar	1305 PSI	90 bar	1305 PSI	90 bar	1305 PSI
- Electric motor	9.2 kW ; 50Hz ; IP65	9.2 kW ; 50Hz ; IP65	11 kW ; 50Hz ; IP65	11 kW ; 50Hz ; IP65	5,5 kW ; 50 Hz ; IP65	5.5 kW ; 50 Hz ; IP65	7,5 kW ; 50 Hz ; IP65	7.5 kW ; 50 Hz ; IP65

Model	SGJ modular series	
Structure	Protected skid or containerized	
Batch volume	250 dm3	3 ft3
Mixer version	Manual (SGT-6/SGT-7) or automatized (SGT-12plus/SGT-13 plus)	
Storage agitator	0,5 (SGA-5) or 1 (SGA-10) m3	17.5 (SGA-5) or 35 (SGA-10) ft3
Agitator number	1 or 2	1 or 2
Injector type	SGP series available	SGP series available
Injector number	(SGP-3.12/SGP-8.8/ SGP-10.10) up 1 to 10; (SGP-20.5/SGP-14.15/SGP36.3) up 1 to 4	

Mixing units

The Soilmec mixing units are developed to mix either water and cement or water and bentonite or bentonite and cement. The units are designed to minimize service costs and operation times with special attention for ease of shipping, assembling and disassembling time.



Model	GM 20 C AUT	GM 20 C AUT	GM 30 C AUT	GM 30 C AUT
Capacity	20000 l	5284 US gal	30000 l	7926 US gal
Mixer MT 130 EC				
- Capacity	1300 l	343 US gal	2000 l	528 US gal
- Max Pump Delivery	1400 l/min	370 US gal/min	2720 l/min	719 US gal/min
- Max Head	20 m	66 ft	17 m	56 ft
- Electrical Engine	50 Hz; IP65; 4 p	50 Hz; IP65; 4 p	50 Hz; IP65; 4 p	50 Hz; IP65; 4 p
- Power	11 kW	15 HP	15 kW	20 HP
- Max. speed	1465 rpm	1465 rpm	1550 rpm	1550 rpm
Agitator A 200 EC				
- Capacity	2000 l	528 US gal	2000 l	528 US gal
- Electrical Engine	50 Hz; IP65	50 Hz; IP65	50 Hz; IP65	50 Hz; IP65
- Power	2,2 kW	3 HP	2,2 kW	3 HP
- Max. speed	1450 rpm	1450 rpm	1450 rpm	1450 rpm
- Gear ratio	1:46	1:46	1:46	1:46
Pump 60-180 (opz.)				
- Electrical Engine	50 Hz; IP65; 4 p	50 Hz; IP65; 4 p	50 Hz; IP65; 4 p	50 Hz; IP65; 4 p
- Power	2,2 kW	3 HP	2,2 kW	3 HP
Compressor				
- Delivery	387 l/min	102 US gal/min	387 l/min	102 US gal/min
- Max Pressure	8 bar	116 PSI	8 bar	116 PSI
Electrical Engine (1ph)	230 V; 50 Hz	230 V; 50 Hz	230 V; 50 Hz	230 V; 50 Hz
- Power	2,2 kW	3 HP	2,2 kW	3 HP
- Max. speed	1100 rpm	1100 rpm	1100 rpm	1100 rpm
- Screw Conveyor Plug Power (for 2 plug)	4 kW	5 HP	5,5 kW	7 HP
- Electrical Power	37 kW	50 HP	37 kW	50 HP
Water Tank				
- Capacità	1000 l	264 US gal	1000 l	264 US gal

Model	SGM-45	SGM-45
Upper silos	2 x 27 m3	2 x 953 ft3
Integrated booster pump	1 (opt.)	1 (opt.)
Batch volume	2000 dm3	71 ft3
Mixing capacity	45 m3/h	1589 ft3/h

High pressure pumps

Soilmec pumps are used for high pressure grout technologies for soil consolidations. The experience gained in the oilfield as well as in soil improvement over the last two decades, has developed into a sturdy and reliable. Soilmec pumps are mechanically driven through a system made of clutch, gearbox, cardan joint and chain.



Model	7T-450J		7T-600J	
Type	Fluid end c/w 2" or 3" valves section		2R gearbox, 3R gearbox or ZF Astronic gearbox	
Horizontal design	Temperature range: -18°C +50°C		Temperature range: -18°C +50°C	
Max nominal power	335 kW	450 HP	480 kW	653 HP
Stroke	7"	7"	7"	7"
Max stroke per minute	139 spm	139 spm	102 to 147 spm	102 to 147 spm
Plungers diameter	3" to 4 1/2"	3" to 4 1/2"	3 1/2" to 4 1/2"	3 1/2" to 4 1/2"
Max delivery	600 to 759 l/min	158.5 to 200.5 gal/min	560 to 696 l/min	147.9 to 184 gal/min
Max discharge permanent pressure	650 bar	9427.5 PSI	650 bar	9427.5 PSI
Max discharge intermittent pressure	800 bar	11603 PSI	800 bar	11603 PSI

All technical data are purely indicative and subject to change without notice

Technical data sheet Grout Line-002 06/2014

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