



We present you the middle-range shotcrete robots:



### SC 20.9

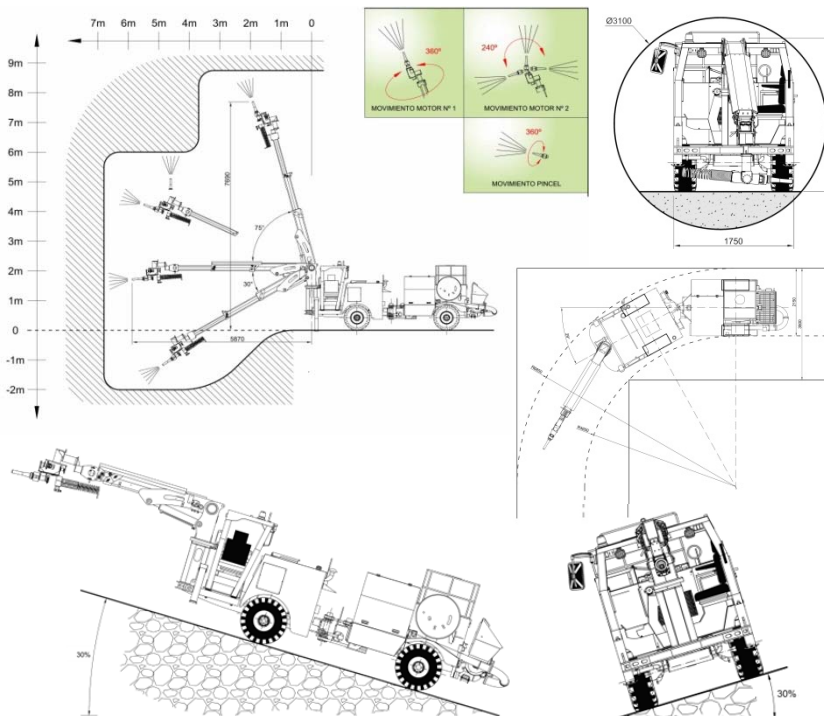
**Strong and versatile** shotcrete robot adapted to all requirements of middle-profile tunnels and mine sites in a very competitive way.


### SC 20.9 D

We also present you **DUAL equipment**, able to perform all movements and Works either on diesel or electric engine.

### SC 20.9 C

Ready to work under the worst conditions. The **air-compressor on board** makes our unit a significant factor to move forward.



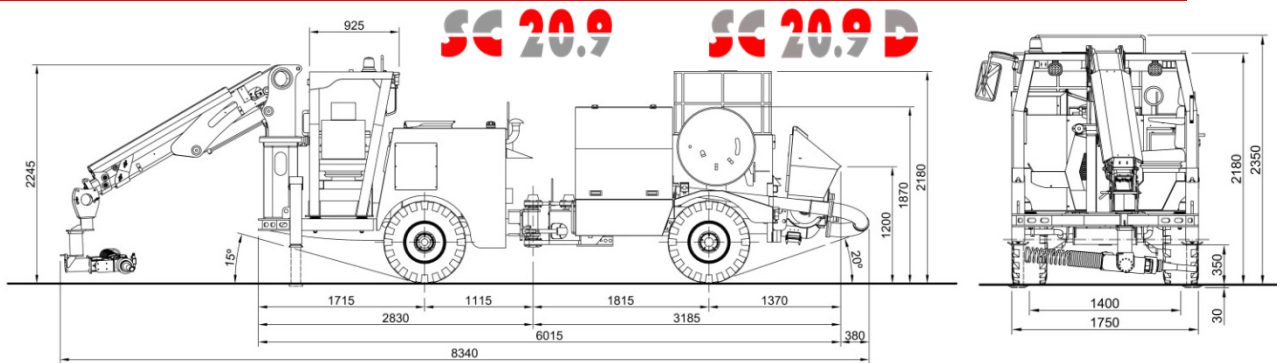


COMPRESSOR SPECS.	
PRESSURE	FLOW
8 bar	5.80m <sup>3</sup> /min
10 bar	5.16m <sup>3</sup> /min
13 bar	4.34 m <sup>3</sup> /min

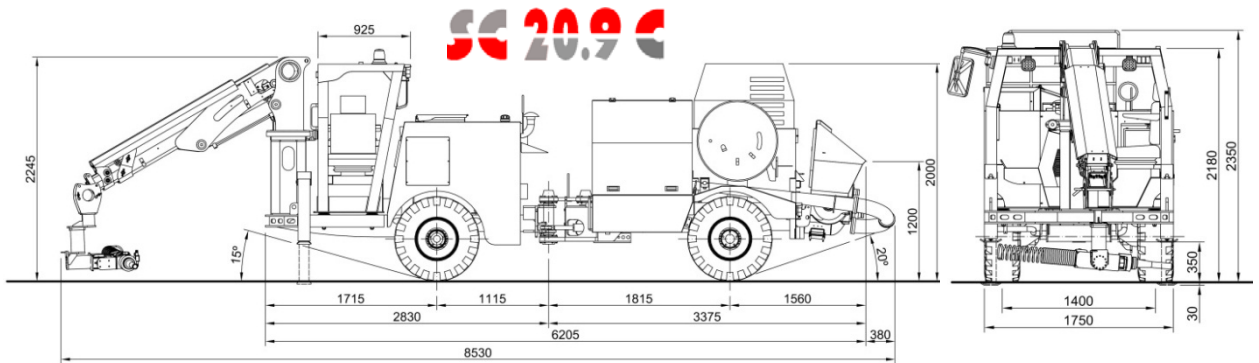
### SMALL ROBOT WITH BIG FEATURES

With its small dimensions and the optimal use of its features, **SC 20.9**, in all three models, can work at different types of sites and tunnels. The **short steering radii**, supported on the central joint, added to the chance of **overcoming slopes up to 30%** give the versatility which supports our equipment at work. With the high-efficient engine that we mount in the robot, our units are working in full performance everywhere in the world, even **over 4,500 MASL**





Equipped with the most advanced safety standards, our robots accomplish all international regulations for working where operator's safety is the most appreciated value.



## LONGING TO INCREASE YOUR PRODUCTIVITY

Additives' tanks up to **1.000lts** capacity, high quality electrical systems, full accessibility to high-rotation components....Our equipment responds to the need of increasing productivity saving time.



## EASY TO TRANSPORT

In this global world, forwarding equipment in a fast and safe way has become a need and an obligatory feature. The use of trailers and containers helps to deliver the equipment anywhere in the world.



SHOTCRETE ROBOT		SC 20.9	SC 20.9 D	SC 20.9 C
<b>ENGINES</b>				
DIESEL	BRAND	DEUTZ		
	MODEL	TD 2011L04i		
	POWER	SHIFTING 74,5 CV AT 2.600 r.p.m. SPRAYING 52 CV AT 1.500 r.p.m.		
ELECTRIC	COOLING	AIR-OIL		
	BRAND	AEG		
	POWER	30 kW/40 CV AT 3.000 r.p.m.		
	VOLTAGE	400/440 V 50/60 Hz		
	PROTECTION	IP 65		
DUAL SYSTEM	SHITING	DIESEL		
	SPRAYING	ELECTRIC	DIESEL OR ELECTRIC	ELECTRIC
<b>HYDROSTATIC TRANSMISSION</b>				
PISTONS PUMP	BRAND	POCLAIN		
	MODEL	PM65		
	APPLIED	AFTER SHIFTING PUMP		
PUMPING PUMP	TYPE	PISTONS		
	BRAND	REXROTH		
	APPLIED	TO ELECTRICAL ENGINE	TO BOTH ENGINES	TO ELECTRICAL ENGINE
<b>BOOM</b>				
PISTONS PUMP	APPLIED	AFTER PUMPING PUMP		
	USED FOR	EXTENSIONS AND MOVEMENTS OF BOOM AND SPRAYING HEAD		
<b>SERVICE</b>				
GEARS PUMP	APPLIED	TO DIESEL ENGINE		
	USED FOR	STEERING, BRAKES..		
<b>NOZZLE</b>				
PISTONS PUMP	APPLIED	AFTER PUMPING PUMP		
	USED FOR	MOVEMENTS OF SPRAYING NOZZLE		
BRAKES	SERVICIO	HYDRAULIC ON REAR WHEELS		
	ESTACIONAMIENTO	HYDRAULIC NEGATIVE ACT. ON ALL 4 MOTOR- WHEELS		
AXLE		4 MOTOR- WHEELS		
DRIVE		4- WHEELS		
CABIN		FRONT AND OPEN		
DRIVER'S SEAT		ROPS - FOPS		
STEERING		FIXED AT 90°		
		HYDROASSISTED ON CENTRAL JOINT		
SPRYING BOOM	ARTICULATION	NO		
	TELESCOPIC	2 SECTIONS		
	BOOM ROTATION (LATERAL)	180°		
	BOOM TILT (UP/DOWN)	80°		
	SPRAYING HED ROTATION	360°		
	SPRAYING HEAD TILT	240°		
	MAXIMUM REACH F SPRAY	9 mt		
	REMOTE CONTROL	RADIO AND CABLE		
<b>SHOTCRETE UNIT</b>				
PERISTALTIC PUMP	BRAND	BOYSER		
	MODEL	AMP22		
	WORK	ELECTRICALLY		
	FLOW REGULATION	ELECTRICA INDEPENDIENTE		
	WORK PRESSURE	8 BAR		
PUMPING UNIT	FLOW	DE 1a 10 l/min		
	MODEL	MLO1		
	OUTPUT	20 m <sup>3</sup> /h		
	MAXIMUM PRESSURE	6Mpa		
	DIAMETER OF CYLINDERS	80 mm.		
	LENGHT OF STROKE	700 mm		
	PISTOM MAXIMUM PRESSURE	4.000 psi		
	CONCRETE MAXIMUM PRESSURE	2.000 psi		
	WORKING RANGE OF PRESSURE	1.500 / 3.000 psi		
GRANULOMETRÍA MÁXIMA	16 mm			
AGITATOR ON HOPPER	YES			
COMPRESSOR	MODEL	NO	AIRTOP- 50	
	POWER		37 KW	
	FLOW		6 M3/MIN	
	TYPE		SCREW TYPE	
	ENGINE		ELECTRIC	
	MAXIMUM AIR PRESSURE	8 BAR		
PIPES	TYPE	HIGH- STRENGTH STEEL		
	DIAMETER	3"		
HOSES	DIAMETER	3"		
COILER	TYPE	MANUAL		
	LENGHT	50 mts.		
	CABLE	4x16	4 X 50	
STEERING RADIO	SOCKET	NO		
	INNER	4,650 m		
	OUTTER	6,850 mm		
<b>SPEED</b>				
MAXIMUM SLOPE	20 KM/H ACCORDING TO SPANISH RULES			
ELECTRIC SYSTEM	30%			
WEIGHT	2 BATTERIES OF 12V. 110 Ah			
TYRES		6.850 Kg	7.000 Kg	7.550 Kg
		12 - 16.5 RIM 9.75 X 16.5		
HYDRAULIC OIL TANK	350 l			
WATER TANK	135 l			
FUEL TANK	195 l			

Due to the constant process of improvement at factory, all data are subject to modification without prior notice, being merely illustrative all data in this catalogue.

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