



SHOTCRETE PUMP SC 271/160

The Scamac SC271/160 is a fully mechanized shotcrete equipment mounted on a high mobility wheeled vehicle, specifically designed to operate in large tunnels. Compactly designed, the SC 271/160 is equipped with a diesel engine for vehicle movement which can be used also for powering the complete shotcrete equipment. For the shotcrete operation the pump is powered as well by an electric motor.

Standard Characteristics

- 4 wheel drive and 4 wheel steering vehicle with reversible driving seat, operator canopy;
- Powerful water cooled diesel engine;
- 2 sturdy hydraulically extendable support legs for highest stability;
- Articulated boom available in three different versions, high mobility nozzle support and terminal feed, stroke 2m, which can be aligned to the surface to be lined for having a smooth and continuous operation, boom rotation on the vertical and horizontal axis;
- Concrete pump 2-32 m³/h equipped with long stroke cylinders;
- Additive pump suitable for sodium silicate or alkali free complete of automatic metering system;
- Cable reel complete of 90 m of electric cable, water pump, water and additive tanks;
- Remote control system for controlling all pump functions (pump, boom and additive).

The equipment is complete of concrete, additive and air hoses and all the necessary accessories to be put it in operation.



Dimensions and weight transport		
Length	7.800	mm
Width	2.400	mm
Height	3.450	mm
Weight	14.000	kg
Carrier		
Diesel motor (other available)	IVECO AIFO Diesel	
Starter	electric	
Power rating	85	kW
Truck gauge	2.000	mm
Transmission	hydrostatic HP HMT flow pump 4WD	
Steering	4 wheels steering	
Steering mode	4 (front, rear, rear & front parallel and opposite)	
Service brake	hydraulic brake oil bath discs	
Parking brake	negative parking brake	
Stabilizers operation	fully Hydraulic	
Axles	rear & front planetary red. self-blocking front. axle	
Driving seat	reversible	
Driver cabin	protective canopy	
Fuel tank	50	l
Electric system	24	V
Speed 1/2	2/5	Km/h
Speed 3/4	10/20	Km/h
Control		
Carriage	operator cab	
Stabilizers, cable reel and water pump	hand levers	
Boom/pump and additive system	remote control	

Concrete pump	
Pump	SC 271/160
Cylinder Diameter	160 mm
Cylinder stroke	1000 mm
Strokes per minute	0-28
Capacity	2-32m ³ /h
Max grain size	32 mm
Pump output	5"
Hopper capacity	500 l
Electric motor	45 kW/400V/50 Hz
Accessories	
Cable reel capacity	90 m
Additive pump	piston diaphragm
Capacity	0-20 l/min
Pressure	0-15 bar
Water pump	piston
Capacity	45 l/min
Pressure	150
Additive tank capacity	2000 l
Water tank capacity	1000 l
Pump Hydraulic system	
Hydraulic pumps	1 HMT variable displ. for cylinder circuit
	1 variable displ. Constant press. For boom circuit
	2 gear pumps for pump valve and services
Oil Tank	300 l
Cooler	oil cooler electrically operated
Optional	
Radio remote control (std cable remote control)	
Working light 2x500W	
Additive automatic metering system	

Boom				
Type	SC 305.1	SC 305.2	SC 305.3	SC 405
Max covering Height (mm)	5.400	8.900	9.500	12.500
Max covering width (mm)	7.000	12.000	14.500	18.000
Centre of rotation Height (mm)	2.300	2.900	2.900	2.900
Max range at max height (mm)	3.700	4.500	5.000	7.000
Min. working radius measured from nozzle rotation centre (mm)	2.000	3.000	3.000	3.000
Pipe max dia	4"	4"	4"	4"

