

## PERIPHERAL DRIVE VACUUM SCRAPER BRIDGE

### GENERAL CHARACTERISTICS

The bridge is installed on a circular basin with flat base and tower. It is used in those cases where suspended particles in sewage need to be separated and removed by gravity.

### CONSTRUCTIONAL CHARACTERISTICS

- BRIDGE DECK with accidental overload 250 kg/sqm, max deflection 1/500 of the span, resting on a rotating steel support at the centre and, at the side, on a trolley with rubber wheels;
- CENTRAL SUPPORT with thrust bearing, lubricated with grease and mounted on a fixing plate, and horizontal pins for attaching and supporting the mobile bridge deck;
- CENTRAL BAFFLE AND SETTLING CYLINDER made of galvanized steel, anchored to the central plate with threaded rods;
- PERIPHERAL DOUBLE-AXIS DRIVE TROLLEY made of carbon steel, with polyurethane coated iron wheels, shafts and wheel holders and supports;
- BOTTOM SCRAPER ARMS consisting of a set of vertical tubular supports attached to the mobile bridge deck; at the end of the supports are “V-shaped” scraper blades fitted with the pumps required to intake the sludge;
- SET OF SLUDGE INTAKE PIPES with valves, collection tank and syphon;
- REPLACEABLE SCRAPER PLATES made of acid-resistant neoprene rubber.
- DISTRIBUTION MANIFOLD of loop design, with brush holder, brushes and terminals for connection to the geared motor (consisting of a central rotary manifold (consisting of a central rotary manifold with plastic protective base and rainproof cover);
- GEARED MOTOR connected directly to one of the wheels of the trolley;
- SURFACE SCRAPER, Thompson profile, collection and discharge tank of the supernatant scum box with supporting brackets.

### STANDARD CONFIGURATION

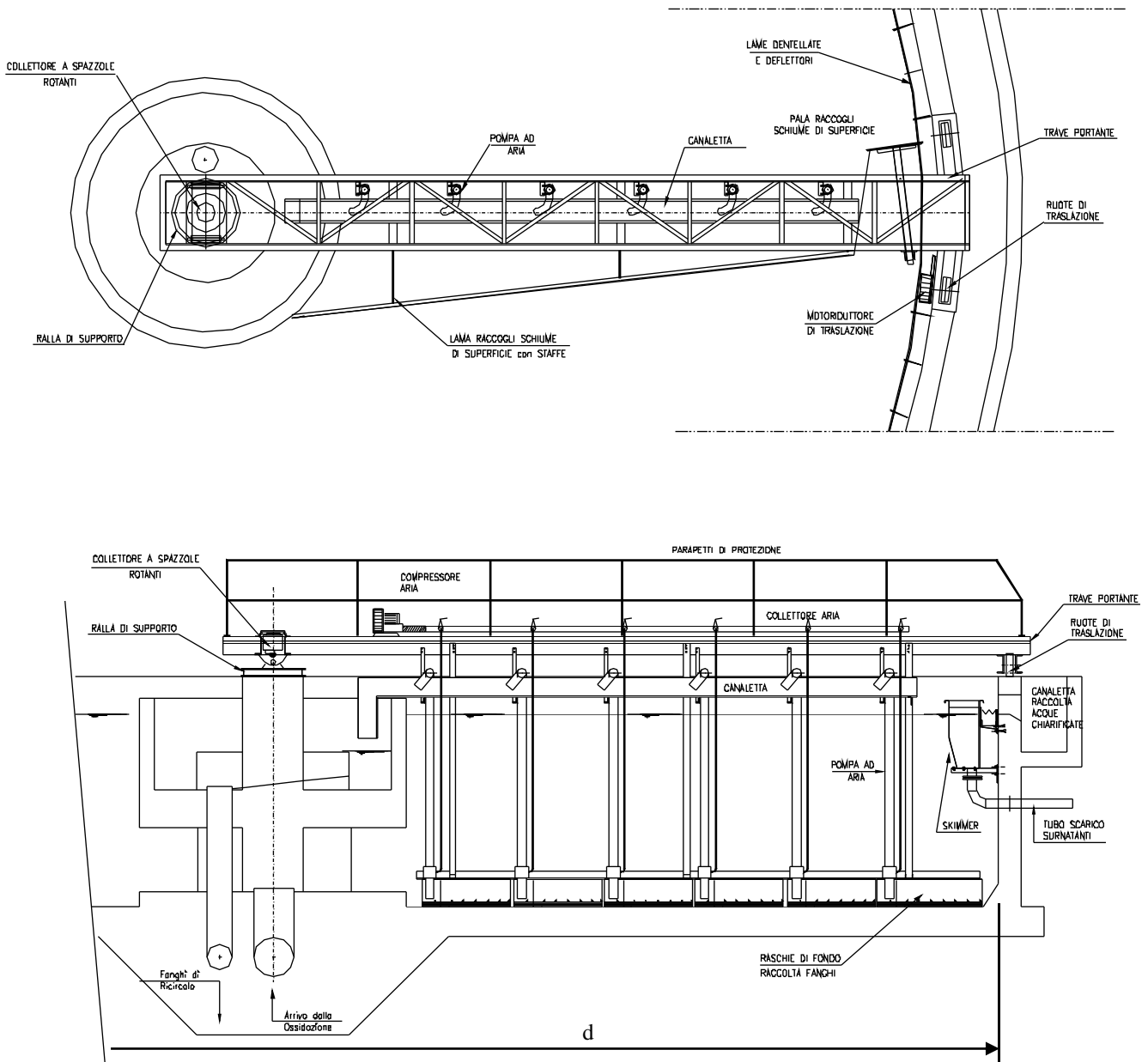
- REINFORCED BRIDGE DECK made of electrically welded carbon steel profiles and cold pressed sheet metal; walkway consisting of galvanized grating, parapets and toe plates, in conformity with ISPEL standards;
- CENTRAL BAFFLE CYLINDER made of hot-galvanized carbon steel;
- QUAYS and BOTTOM SCRAPERS made of hot-galvanized carbon steel;
- DRIVE WHEELS made of iron with polyurethane coating;
- THOMPSON PROFILE, skimming device and scum box made of AISI 304 stainless steel.

### OPERATION

The water and sludge mixture from the central tower is diverted by a baffle cylinder to let the sediment solids settle at the bottom. Scraper blades gather the precipitated sludge which then flow through intake pipes to a collection tub at the centre of the tank. The sludge are extracted from the tub with a siphon primed by a blower at a rate based on the amount of sludge involved. The clarified water flows in the channel around the top perimeter of the tank. Any floating materials are trapped by a blade in the spillway and taken to a collection and discharge tub.



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Main Features	UNIT	Dimensions				
Diameter (d)	m	6 - 12	14 - 20	22 - 28	30 - 34	36 - 40
Rotational speed	m/min	2,0		2,5		3
Power supply	kW	0,37		0,75		1,1

The company reserves the right to make modification and improvements without prior notice.