

PERIPHERAL DRIVE SCRAPER BRIDGE

GENERAL CHARACTERISTICS

The bridge is installed on a circular basin with a tower and central scum box for removing the sludge. 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 steel rotating 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 ARM** consisting of a set of vertical tubular supports attached to the mobile bridge deck; hinged at the ends of the supports are profiles on which are attached a logarithmic spiral blade and the travelling wheels. The height of the blade can be adjusted according to the gradient of the bottom;
- **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 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 scum box with supporting brackets.

STANDARD CONFIGURATION

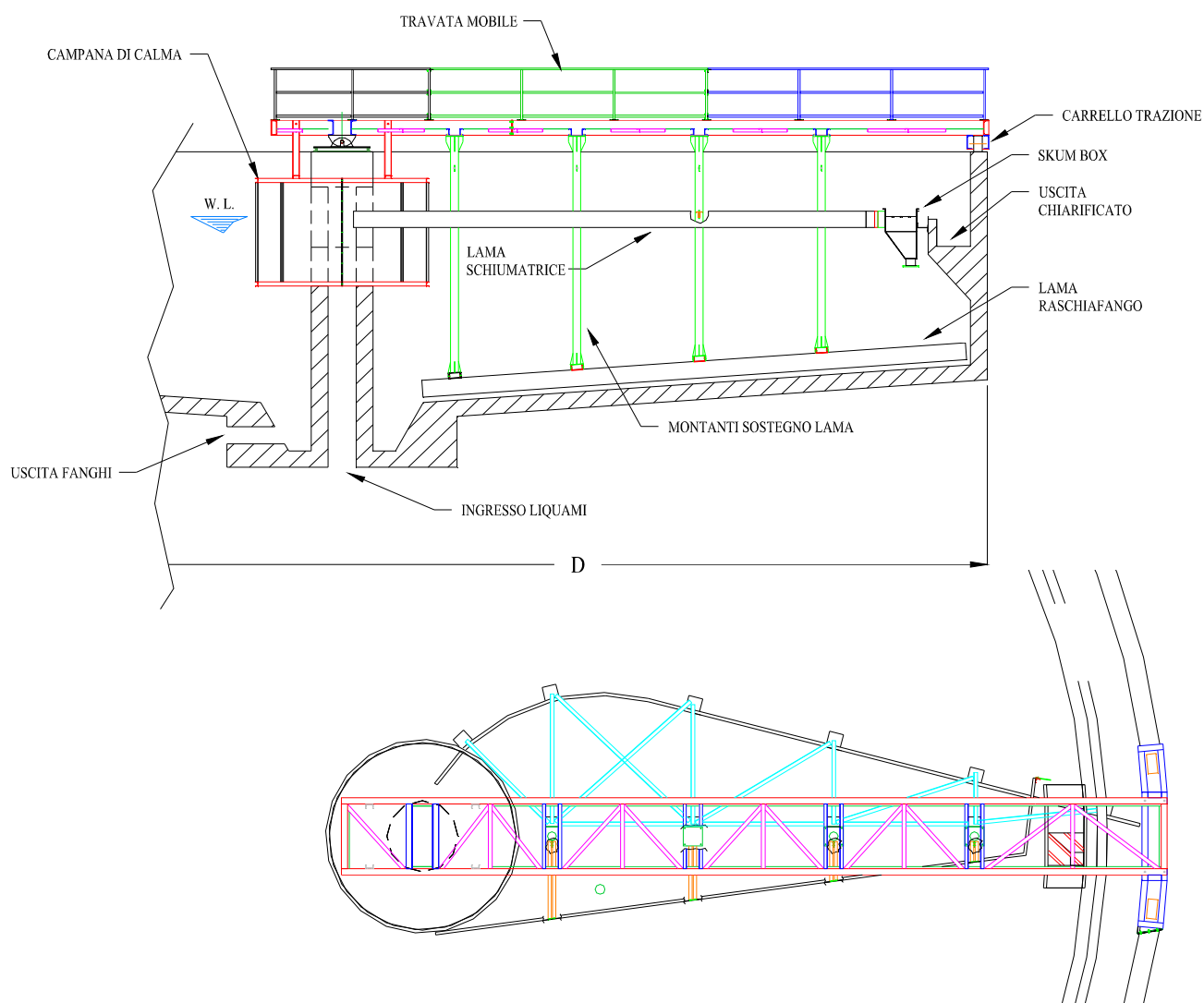
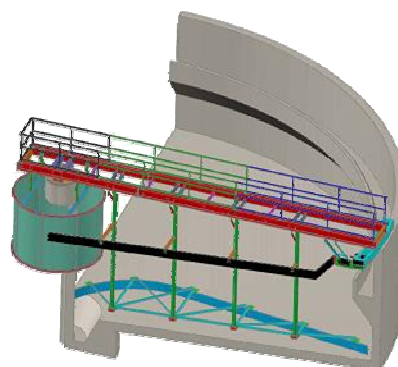
- **REINFORCED BRIDGE DECK** made of electrically welded carbon steel profiles and cold pressed sheet metal; walkway consisting of galvanized grating, parapets and toe plates, in conformity with ISPESL standards;
- **CENTRAL BAFFLE CYLINDER** made of hot-galvanized carbon steel;
- **QUAYS and BOTTOM SCRAPERS** made of hot-galvanized carbon steel;
- **DRIVE WHEELS** made of iron with polyurethane coating;
- **TRAVELLING WHEELS** made of nylon;
- **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 convey the precipitated sludge to the central cone in the tank where they are then extracted with a pump. 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.