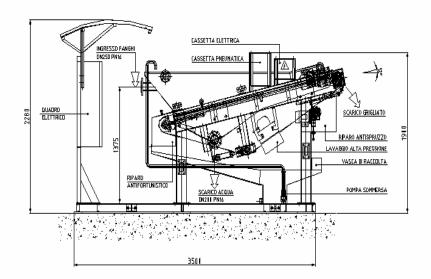
# ULTRASCREEN

## MODEL EM 100-G



MODELLO	LARGHEZZA TELE	TRAINO TELE	SPAZZOLA	POMPA ALTA PRESSIONE	POMPA SOMMERSA
GR1200	1200 mm.	0.55kW	0.37kW	30lt/1'-3kW	3-5mc/h-0.55kW
GR2100	2100 mm.	1.1kW	0.37kW	63lt/1'-7.5kW	5-10mc/h-1.55kW

# ULTRASCREEN

# MODEL EM 100-G

#### 1. <u>PROCESS AND OPERATION PRINCIPLES</u>

The fine screening is normally obtained by means of screens consisting of metal nets or drilled sheet with openings even smaller than 1 mm.

These screens retain all the materials which is larger than the opening size, but in some cases, if the material in the sewage arrives with larger side parallel to the screen openings, it cannot be retained.

In other cases it happens that there is a quick clogging because of the grease present in the sewage with the consequent need of long and expensive maintenance works for cleaning.

Moreover if the sewage contains solid threadlike material, it can clog the openings and give problems to the scrapers operation.

Our screen model EM100-G consists of a filtering belt having "square" filtering openings with dimensions from 100 up to 400 micron approximately and assuring a perfect screening-filtration.

During operation the belt is brushed and washed and gets to the screening phase perfectly clean.

The solid material, separated by a scraper and a brush, is discharged into a container.

The belt wash water are delivered to the feed tank together with the sewage to be screened.

The belt washing is made through some fixed nozzles at the pressure of 6 bar or through swinging nozzles at the pressure of 20-40 bar (it depends on the type of clogging).

The principle of operation is the water drainage by gravity through a polyester belt which, supported by a plastic grating, runs continuously.

The separation process can be summarized as follows:

- 1. Distribution of delivered sewage over the belt
- 2. Drainage by gravity
- 3. Screened material removal by means of a scraper
- 4. Belt cleaning by means of motorized brush
- 5. Belt wash by means of medium or high pressure nozzles

#### 2. <u>DESIGN TECHNICAL DATA</u>

The necessary information to be able to size the equipment are:

#### 2.1

2.1.1	Feed flow rate	: m³/hr
2.1.2	Suspended solids	: p.p.m.
2.1.3.	Min. size of solids to be separated	: micron

### 3. <u>REQUIRED SERVICES</u>

- 3.1 Belt wash water:
- 3.1.1Flowrate: m³/hr3.1.2Head: bar
- 3.2Service air compressor:3.2.1Flowrate: It/min.3.2.2Head: bar

#### 3.4 Electric service:

3.4.1	Equipment voltage	:	380-3-50
3.4.2	Auxiliary services voltage	: V	110
3.4.3	Installed powers:		
	belt drive	: kW	
	brush drive	: kW	
	water pump	: kW	
	air compressor	: kW	