

COMPACT WATER TREATMENT PLANTS

Capacity of 200 m³/h

SIRMET S.A. with its extensive experience in the field of water treatment provides integrated, effective and reliable compact water treatment units, of **200 m** ³ / **h**.

The plants are delivered ready for installation, connection and operation with all the necessary equipment, preinstalled solution implemented in 6 compartments (1x40 ft container, 1x20 ft container, 2 skid mounted 40ft and 2 skid mounted filters) ready to be connected with

- 1. the incoming water (surface or borehole)
- 2. filtrated outlet
- 3. electrical power
- 4. drain.

Benefits

- ✓ Low operating cost
- √ Fast, easy and instant operation with no odor
- ✓ No monitoring requirements and minimal maintenance
- ✓ Treated water suitable for drinking
- ✓ Minimum civil works small footprint

The system is designed for capacity of **200** m³/h .The treatment stages include:

- a)Initial pumping unit
- b)static mixing
- c)slow mixing
- d)pre-chlorination
- e) Sedimentation with Lamella clarifier
- f) Intermediate clean water storage tank
- g)Pumping to the sand filters
- h) Sand filters equipped with air/ water backwash system
- i) Final post chlorination
- j) Support equipment (aluminum sulphate dosing station, Chlorine gas dosing station, Cabinets for blowers, Control panel- switch board)

A. Pumping station

- Initial Pumping station for uptake of water, after screening, from river or underground water well (1 operation 1 standby).
- Static mixer made of SS316







(2,5x2,2x7,6) (H x W x L)

D. Intermediate clean water tank / Pumping station

B. Mixing station

C. Settlings unit

- Each unit contains a Skid mounted metallic construction (including above B and C sections) with total dimensions of a 40' ISO container

The Unit compartments are:.

- a. Slow mixing tank size (2,5x2,4x4,4) (H x W x L) with SS316 mixers.
- b. Lamella settling unit metallic construction with interior epoxy painting food grade size

A holding tank (15m3 HDPE, 1 pc) on metallic skid connected to the intermediate pumping station which feeds the sand filters.

E. Sand filters

Sand filters metallic construction St 37 with inside epoxy painting food grade

Type horizontal cylindrical Diameter 2200mm Total length with frame/skid 6000mm. Floor area $11m^2$

The sand filters are filled with special grade quartz sand.

Each sand filer on a skid (2 pcs) 20" container size



It is possible the construction of the sand filters' vessels to be made of SS 304 or SS 316

Support Equipment (40" container) (Pcs 1)

In a 40ft container there going to be all supported units in 5 different compartments

- a) compartment I Space for the chlorine gas drums
- b) Alumina (liquid) dosing system in which is included i) HDPE tank for alumina solution storage equipped with all dosing equipment and connections for alumna dosing.
- c) Chlorine dosing system in order to feed chlorine in the two stages pre-chlorination and post chlorination stage.

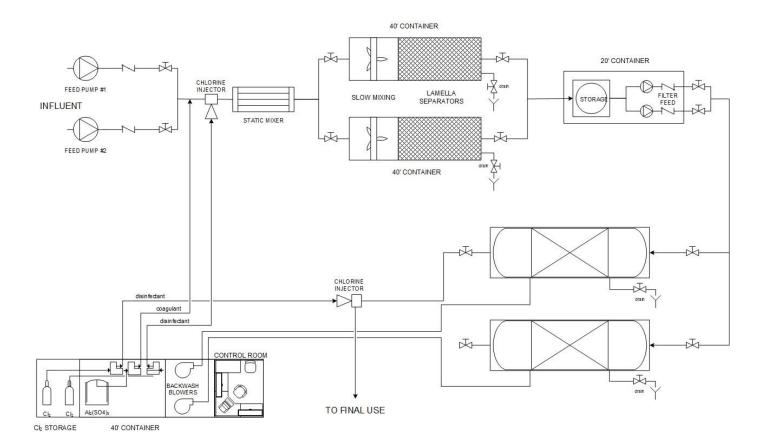






- d) Special sound proofed compartment for washing air blowers
- e) Electrical general switch board.
- f) Special compartment air conditioned for electrical control room

COMPACT POTABLE WATER TREATMENT (SPW-200) FLOW 200 m³/h



CERTIFICATIONS

SIRMET S.A. is currently in its 28th year of uninterrupted and developing activity and has been certified with the international standard EN ISO 9001:2008.