

# **UIPMENT**

POLYMER DOSING UNIT



### MAIN DATA

The polymer dosing unit consists in general of two 20-ft containers and some auxiliary equipment such as a water tank and platform. One container contains the polymer production station, including the control and monitoring equipment. The other container is used for storage of the polymer, other accessories and spare parts.

DIMENSIONS		
Dimensions conto	ainer (20 ft):	
Length	6.06 meter	
Width	2.44 meter	
Height	2.59 meter	

Optional: Water tank 5,000 liters, when there is a shortage of water.

### **PERFORMANCE**

Capacity	Max. 67.5 kg dry polymer per hour	
Time for batch creation	30 minutes per batch	
Capacity	± 100 ton dry matter per hour*	
Total installed power	40 kW	
Standard used generator	100 kVA	

The maximum output of the polymer dosing unit depends on the flow and density of the flow to be treated (dry matter/m<sup>3</sup>). For example, the flow treated on the Grensmaas project is about 4,000 m<sup>3</sup>/h at 80 tons ds/h, while in Tangier Morocco it was about 300 m<sup>3</sup>/h at 35 tons ds/h. The amount of polymer required per ton of dry matter varies per type of soil.

Boskalis Environmental has its own laboratory for determining the correct type and dosage of the polymer.

# **REMARKS**

Boskalis Environmental has extensive experience with the use of polymers in their soil and sediment treatment plants. This knowledge is used for the development of the polymer dosing unit. The dosing unit is easy to install and has a small footprint (m<sup>2</sup>). By adding a certain amount of (project specific) polymer, the sedimentation of fine parts in water is accelerated. After adding polymer, the project can be continued, without having to wait for the settling of these fine parts. At the same time, water is discharged that meets the turbidity criteria of the project.





The dosing unit is equipped with a PLC system that enables remote control. For polymer bag change and Maintenance, staff is required on site. For this staff, no knowledge about the sedimentation process is required.



- Disposal in sedimentation basin
- Measuring point in the flow
- Tangier



## **Boskalis Environmental** Head Office & Laboratory

Rosmolenweg 2 3356 LK Papendrecht The Netherlands T+31 78 69 69 000 environmental@boskalis.com