

# THE FUTURE OF BITUMEN LOGISTICS

## POLYCUBE® Package

The POLYCUBE® Package contains the filling of the bitumen as well as the loading and transport and ends with the liquefaction at the customers place.

## POLYCUBE®

The POLYCUBE® is a special transport container that was developed for the cold transport of pasty and viscous materials - in particular bitumen.

A POLYCUBE® differs considerably from the traditional Big Bag when it comes to quality, size, shape and design.

In terms of design and use of materials, the solution was aimed deliberately at the high demands imposed by the international cold transport of bitumen, to guarantee toughness, self-stabilization, and at the same time, maximum flexibility for a competitive price.

## FILLING MACHINE

The Filling Machine (FM) is designed to cool down and fill paving grade bitumen into POLYCUBES®.

Bitumen supplied from storage tanks up to a temperature of 180°C is cooled down to a filling temperature just below the melting point of the packaging material. The cooling process is fully automatically controlled.

The heat quantity of the bitumen is transferred to thermal oil in a specially designed heat exchanger. Finally, the heat is given off to ambient air.

The filling of POLYCUBES® is carried out semi-automatically. The operator must place the empty POLYCUBE® under the filling head and initiate filling. After reaching the exact weight, the filling head automatically stops the bitumen flow. The operator closes the POLYCUBES®, and removes them from the filling station by forklift.

## MELTER

The newly developed POLYCUBE® Melter family facilitates solutions for different applications and featuring a particular high re-melting capacity. An added advantage is lower energy consumption, due to its high degree of efficiency. In full operation, the PQM is run by one operator.



## FILLING MACHINE

High performance bitumen filling into POLYCUBES®. Controlled cooling process to stabilize bitumen at the filling temperature.

# 1



## POLYCUBE® FILLING

Fully automatic filling head. Autonomous creating of labels and record of process data.

# 2



## STORING

Easy storing of POLYCUBES® and fast pick-up character for forklift manipulation.

# 3



## LOADING

Maximum container utilization during transport thanks to tough and stackable POLYCUBES®.

# 4



## TRANSPORT

Possible for any means of transport, in particular for standard 20' container.

# 5



## UNLOADING

Straightforward POLYCUBE® unloading at customers' site.

# 6



## MELTING

Powerful POLYCUBE® Melter to provide liquid bitumen for different applications.

# 7