



**Packed bitumen for efficient, cost effective  
delivery worldwide**

We are packing various grades of bitumen / PMB in an intermediate bulk containers (IBC) Clovertainer® - “cardboard cube” placed on standard pallet on the refinery site.



# Clovertainer® technical data

Parameters	Value
Load-carrying capacity, L	1000
Length, mm	1140
Width, mm	1140
Height, mm	1080
Filler hole diameter, mm	200
Weight, Kg	75±5



The IBC Clovertainer® consist of the following functional components and parts:

- Shell - cardboard thickness of 0.5 mm , density 340 g/m<sup>2</sup>;
- Pallet (plywood) ;
- Internal taping (anti-adhesive siliconize paper);
- Cover (plywood);
- Identification (marking) label;
- Fasteners and seals

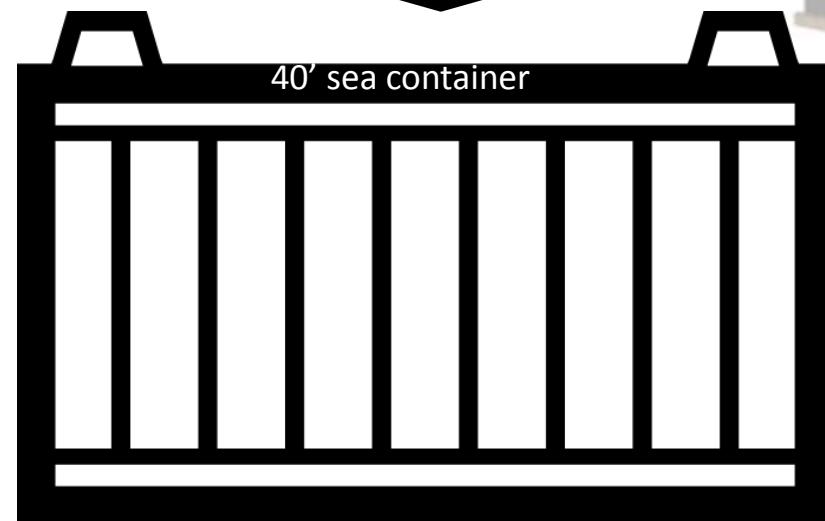
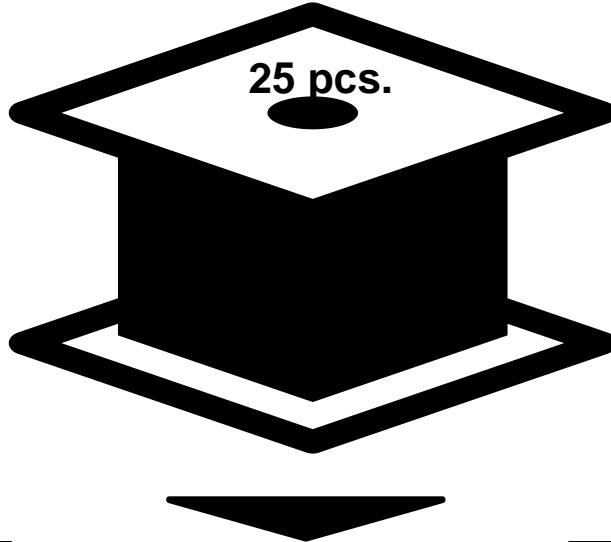
**985 Kg  
of PMB / Bitumen**



Packing on plant side allows us to safe all quality values of our products

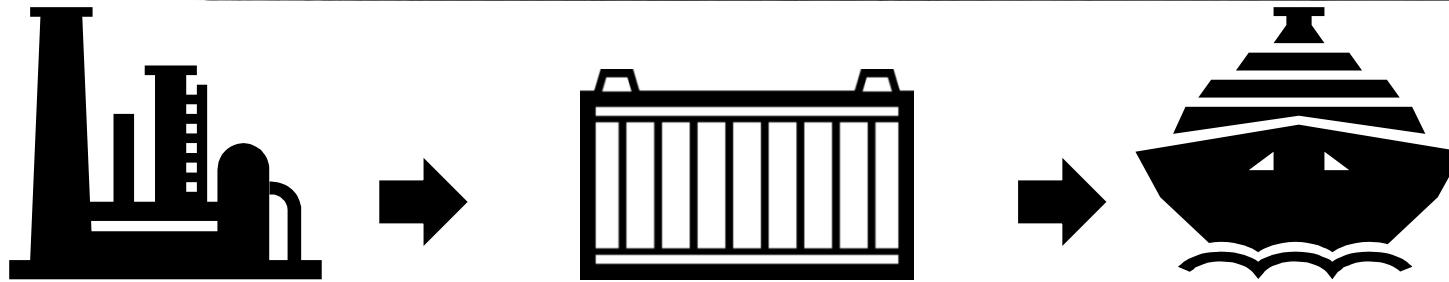
**TSR**  
TRANSIT SERVICE RESOURCE

**Unlimited logistic to  
any region in the world**



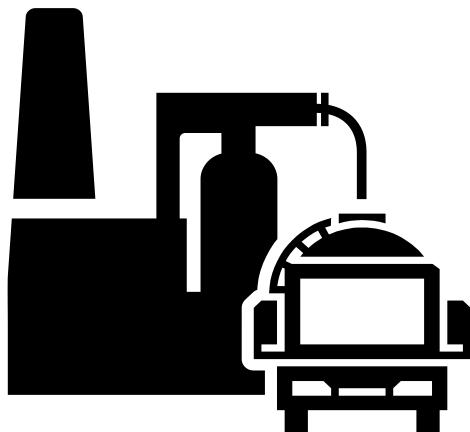
= **24 625 Kg of PMB /  
bitumen**

We offer efficient delivery of  
PMB directly from the plant



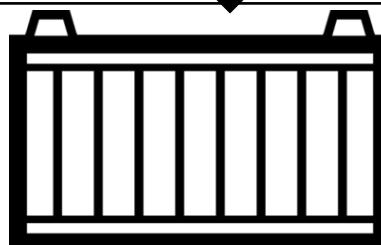
**TSR**  
TRANSIT SERVICE RESOURCE

**Easy to melt using  
our reliable and  
cost-effective  
equipment**



# Bitumen melting unit technical data

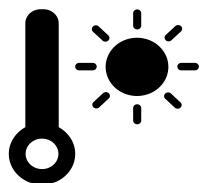
The equipment productivity, ton/hour	2,25
The coolant maximumal temperature, °C	160
Total registers square, m <sup>2</sup>	60
The coolant volume in equipment, l	830
Equipment dimensions, mm	
- length	5846
- width	2810
- height	2550
Equipment dimensions in transport position, mm	
- length	5457
- width	2170
- height	2082
Equipment mass, Kg	5470



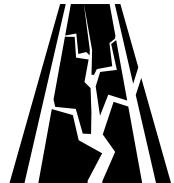
= FIT 100%

**Polymer-modified bitumen supplied by T S R – innovation bitumen material aimed to enhance road concrete quality**

**PMB application allows to increase the quality of asphalt concrete**



**High heat resistance of road concrete**



**Higher resistance to cracking and rutting**



**Significant increase of maintenance periods**



# Extract from the passport of Quality

Product: Polymer-modified bitumen PMB-45/80-65 EN 14023:2010 (for information purpose only)

Nº	Parameters	Unit of measure	Test method	Standar d	Actual Value	Chosen class
1	Penetration at 25°C	0,1 mm	EN 1426	45-80	68	5
2.	Softening Point (Ring-and-Bell),	°C	EN 1427	≥75	83	2
3.	Viscosity under the influence of force (traction effort 50mm/min)	J/cm2	EN 13589 then EN 13703	≥3	4,3	2
2	Ductility, cm					
4	Firmness in hardening at 163°C, EN 12607-1					
	Change of weight	%	EN 12507-1	≤0,3	0,11	2
	Residual penetration	%	EN 1426	≥60	70	7
	Increase in temperature of a softening	°C	EN 1427	≤8	1	2
5	Flash point	°C	EN ISO 2592	≥250	252	2
6	Breaking point (Fraas)	°C	EN 12593	≤-18	-22	10
7	Elastic return at 25 °C	%	EN 13398	≥70	94	2
8	Storage stability Difference of temperatures of a softening	°C	EN 13399 EN 1427	≤5	2	2
9	Storage stability Difference of sizes of a penetration	0,1 mm	EN 13399 EN 1426	≤9	2	2



We have proven experience to  
deliver our bitumen / PMB to  
most remote spots on the Earth



[www.bitumtsr.ru](http://www.bitumtsr.ru)