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COMPANY PROFILE

Targeting production of different roofing and paving grades of bitumen, Hormozan Oil Company was established in 2004 and constructed its manufacturing plant in a strategic location adjacent to Bandar Abbas oil refinery (owned by the NIOC) and close to one of the greatest export harbours of the country.



The plant consists of two complete parallel blowing trains and is fed by the NIOC refinery through two separated pipelines, capable of manufacturing around 60,000 MT on a monthly basis.

Today, after over 15 years, we are the largest independent private bitumen manufacturer in Iran and one of the largest bulk and drum suppliers in the MiddleEast.

MISSIONS

Manufacturing best quality customer's needs products Timely delivery Orientation

Hormozan Oil management insists on creating a safe and healthy workplace by carrying out operations, providing eco-friendly products and services, developing productivity and decreasing high-risk activities which indicates the value and position of safety system in this company and has a decisive role to improve the level of efficiency and production.



VISION

Acquiring the top Bitumen producer position in the region.

Increasing the storage capacity of bituminous products from 35,000 MT to 60,000 MT. Installing another automatic drum production and filling line with a capacity of 5,500 drums per day (1000 MT).



Safety of the personnel and equipment alongside environmental protection on the one hand, and development of production activities and environmental changes on the other hand, have made the HSE unit of high importance to Hormozan oil group.





RESEARCH AND DEVELOPMENT

The Research and Development (R&D) department of the company was launched to centralize research activities and to direct them towards production. Accountability to customer's needs, diversion of products to comply with international standards, reducing environmental pollution, more communication and interacting with well-experienced staff are among the targets of the department.

Since national standards have not been yet defined completely for many new products, a comprehensive method complying with international standards has been defined. As for the products in which international standards fail to satisfy domestic clients, the views of clients have largely been taken into consideration and necessary tests have been conducted.



RESEARCH & DEVELOPMENT



PRODUCTS 01 PENETRATION GRADES

SPECIFICATION	TEST METHOD	UNIT	10/20	40/50	60/70	80/100	AH-70
Specific Gravity @25°C	ASTM D-70		1.01-1.06	1.01-1.06	1.01-1.06	1.01-1.06	1.01-1.06
Penetration @25°C , 100gr , 5 Sec	ASTM D-5	0.1 mm	10-20	40-50	60-70	80-100	60-80
Softening Point , Ring & Ball , °C	ASTM D-36	°C	52-60	52-60	49-56	45-52	46-52
Ductility @25°C , min	ASTM D-113	cm	100.0	100.0	100.0	100.0	100.0
Ductility @10°C , min	ASTM D-113	cm	-	-	-	-	20
Loss on Heating , max	ASTM D-6	%wt	0.8	0.8	0.8	1	1
Drop in Penetrstion after Heating , max	ASTM D-5 & D-6	%wt	20.0	20.0	20.0	20.0	20.0
Flash Point Cleveland open-cup , min	ASTM D-92	°C	230	230	230	230	260
Solubility in CS_2 , min	ASTM D-4	%wt	99.5	99.5	99.5	99.5	99.5
Organic Matter Insoluble in $\mathrm{CS}_{_2}$, max	ASTM D-4	%wt	0.5	0.5	0.5	0.5	0.5
Spot test	*A.A.S.H.T.O.102		Negative	Negative	Negative	Negative	Negative

*These data are according to ASTM D36-95 and UNI EN 1426 standards

PRODUCTS 02 VISCOSITY GRADES

TEST	TEST METHOD	VG-10	VG-20	VG-30	VG-40
Absolute Viscosity @ 60°C , Poises (min)	ASTM D-2171	800	1600	2400	3200
Kinematic Viscosity @ 135°C , cSt (min)	ASTM D-2170	250	300	350	400
Flash Point (Cleveland Open-Cup) , °C (min)	ASTM D-92	220	220	220	220
Solubility in trichloroethylene , % (min)	ASTM D-2040	99	99	99	99
Softening Point , Ring & Ball , °C	ASTM D-36	40	45	47	50
Penetration @ 25°C , 0.1mm , 100 gr , 5sec.	ASTM D-5	80-100	60-80	50-70	40-60
Specific Gravity @ 27/27°C (min)	ASTM D-70	0.99	0.99	0.99	0.99
Tests on residue from TFOT :					
l)Viscosity ratio @ 60°C (max)	ASTM D-2171	4.0	4.0	4.0	4.0
ll)Ductility @ 25°C , cm , after TFOT (min)	ASTM D-113	75	50	40	25

PRODUCTS 03 CUTBACK GRADES (SC)

CUTBACK SPECIFICATION	TEST METHOD	UNIT	SC-70	SC-250	SC-800	SC-3000
Kinematic viscosity @ 60°C (140°F)	ASTM D-2170	cSt	70/140	250/500	800/1600	3000/6000
Flash Point (Tag open-cup) , min	ASTM D-92	°C (°F)	66 (150)	79 (175)	93 (200)	107 (225)
DISTILLATE TEST						
Total to 360°C (680°F) , volume % min/max	ASTM D-402		10/30	4/20	2/12	/5
Solubility in Trichloroethylene , min	ASTM D-2042	%wt	99.0	99.0	99.0	99.0
Kinematic viscosity on distillation residue @ 60°C (140°F) min/max	ASTM D-2170	cSt	400-7000	800-10000	2000-16000	4000-35000
ASPHALT RESIDUE						
Residue of 100 Penetration , min	ASTM D-243	%	50/	60/	70/	80/
Ductility of 100 penetration residue @ 25°C (77°F) min	ASTM D-113	cm	100	100	100	100
Water , max	ASTM D-95	%vol	0.5	0.5	0.5	0.5

PRODUCTS 04 CUTBACK GRADES (MC)

CUTBACK SPECIFICATION	TEST METHOD	UNIT	MC-30	MC-70	MC-250	MC-800	MC-3000
Kinematic viscosity @ 60°C (140°F)	ASTM D-2170	cSt	30/60	70/140	250/500	800/1600	3000/6000
Flash Point (Tag open-cup) , min	ASTM D-92	°C (°F)	38	38	66	66	66
Residue from distillation to 360°C , min	ASTM D-402	%Vol	50	55	67	75	80
DISTILLATE TEST	Disti	llate , volume	percent of tota	l distillate to 3	60°C (437°F)		
to 225°C (437°F) min/max	ASTM D-402		/25	/20	/10	/	/
to 260°C (500°F) min/max	ASTM D-402		40/70	20/60	15/55	/35	/15
to 316°C (600°F) min/max	ASTM D-402		75/93	65/90	60/87	45/80	15/75
		TEST ON RES	IDUE FROM DI	STILLATION			
Penetration @ 25°C min/max	ASTM D-5	0.1 mm	120/250	120/250	120/250	120/250	120/250
Ductlity@25°C (77°F) min	ASTM D-113	cm	100.0	100.0	100.0	100.0	100.0
Solubility in Trichloroethylene , min	ASTM D-2042	% wt	99.0	99.0	99.0	99.0	99.0
Water , max	ASTM D-95	%Vol	0.2	0.2	0.2	0.2	0.2

PRODUCTS 05 CUTBACK GRADES (RC)

CUTBACK SPECIFICATION	TEST METHOD	UNIT	RC-70	RC-250	RC-800	RC-3000
Kinematic viscosity @ 60°C (140°F)	ASTM D-2170	cSt	70/140	250/500	800/1600	3000/6000
Flash Point (Tag open-cup) , min	ASTM D-92	°C (°F)	-	27 (80)	27 (80)	27 (80)
Residue from distillation to 360°C, min	ASTM D-402	%Vol	55	65	75	80
DISTILLATE TEST	Distillate ,	volume percen	t of total distilla	te to 360°C(437	°F)	
to 190°C (374°F) min/max	ASTM D-402		10/	/	/	/
to 225°C (437°F) min/max	ASTM D-402		50/	35/	15/	/
to 260°C (S00°F) min/max	ASTM D-402		70/	60/	45/	25/
to 316°C (600°F) min/max	ASTM D-402		85/	80/	75/	70/
	TEST (ON RESIDUE FRO	OM DISTILLATIO	N:		
Penetration @ 25°C min/max	ASTM D-5	0.1mm	60/240	60/240	60/240	60/240
Ductility@25°C (77° F) min	ASTM D-113	cm	100	100	100	100
Solubility in Trichloroethylene, min	ASTM D-2042	%wt	99.0	99.0	99.0	99.0
Water, max	ASTM D-95	%vol	0.2	0.2	0.2	0.2

PRODUCTS 06 PERFORMANCE GRADES

TEST METHOD	LIMIT	ASTM	AASHTO	PG 58-22	PG 70-16	PG 76-10	PG 64-22
Flash Point (°C)	230 °C Min	D92	T48	303	300	320	312
Rotational Viscosity@135°C	3 Pa.s Max	D4402	T316	0.282	0.425	0.425	0.325
DSR (°C)				58	70	76	64
G*/sinδ (°C) 10 rad/s	1.0 KPa Min	D7175	T315	1.51	1.1	1.2	1.14
RTFOT G*/sinδ (°C) 10 rad/s	2.20 KPa Min	D7175	T315	2.71	2.3	2.25	2.9
Change of mass after RTFOT	1% Max	D2872	T240	0.08	0.12	0.12	0.06
PAV		D5621	R28		100 (110)	(°C) T (°C)	
DSR G*/sinδ (°C) 10 rad/s	KPa 5000 Max	D7175	T315	3330	2440	2720	2950
BBR (°C)				-12	-6	0	-12
Stiffness Mpa	300 Mpa Max	D6648	T313	266	206	176	234
m-value	0.03 Min	D6648	T313	0.309	0.32	0.35	0.3

DRUM PRODUCTION UNIT

14

This method of bitumen packaging is very common. The drum is made of cold-rolled steel in order to protect it against corrosion and is coated with rust-proof black painting. The drum is made in a frilled form to become more resistant.

Here are the technical specifications of this packing:

BITUMEN PACKING 180 KG & 150 KG STEEL DRUM SPECIFICATION

ITEM	NORMAL DRUM (180Kg)	SHORT DRUM (150Kg)
Content Weight	180 ± 2 kg	150 ± 2 kg
Plate grade	ST-12	ST-12
Origin	Isfahan Mobarakeh Complex	Isfahan Mobarakeh Complex
Height of drum	980 mm	830 mm
Diameter of drum	500 ± 2 mm	500 ± 2 mm
Diameter of lid	100 ± 2 mm	100 ± 2 mm
Plate thickness(body)	0.6 mm	0.6 mm
Plate thickness(top & bo om)	0.6 mm	0.6 mm
Drum Weight	9.5 ± 0.2 kg	8.3 ± 0.2 kg





BITUMEN PACKING BULK EXPORT TERMINAL

Hormozan oil's exclusive export terminal has been launched with two shore tanks of 2500 MT each, and six more are under construction and expected to become operational next year (2022). The terminal consists of eight storage tanks with total capacity of 21,000 MT, including truck unloading stations, pump stations and all of the required facilities for loading bitumen-carrying vessels.



Export terminal facilities

- A private pier
- Minimum distance between terminal and the loading dock
- High-speed loading and unloading
- · Inward transit of tankers to the ship
- Loading different grades of bitumen simultaneously
- Capability to increase product temperature in tanks
- Carrying out the administrative affairs of the port within shortest possible time 24/7.
- Storage capacity of 21,000 tons of bitumen and furnace oil
- Ship loading speed up to 340 cubic meters per hour
- Ship loading capacity up to 10,000 tons



BITUMEN PACKING

Hormozan Oil Co, counting on its technical and engineering capability, has started operating jumbo bag filling in the factory. Jumbo bag is an increasingly demanded bitumen packaging system presently and some of its advantages are as follows:

- · Easy transportation due to weight of bags
- Not causing any environmental damages at destination
- Easy melting at destination
- Internal liner material compatibility with bitumen
- Improving bitumen specifications by melting and mixing liner material with packed bitumen
- Easy stuffing and utilizing maximum capacity of the container
- Capability of packing in 250 to 1300 KG bags on demand
- Favorably acceptable in European and African countries

Jumbo bag loading facilities consist of two stations with the loading capacity of 250 MT per day

Jumbo bag station is equipped with accurate weighing loadcells with the tolerance of +/- 1 kg and all instrumentation tools including temperature & pressure sensors, and flow rate controller via drive and PLC; operating in a safe temperature of 100 °C. Jumbo bag can be customized with specific logos, markings and strapping methods.





BITUMEN PACKING FLEXITANK FILLING UNIT



Hormozan oil company has developed major innovation, in bitumen packaging industry by launching Flexitank filling unit. Benefiting from high potential of our engineering and production units, the company has been able to load different grades of bitumen in flexitanks and facilitate bitumen export in large volumes by container ships to several countries. Furthermore, it leads to a notable reduction in the final price of bitumen which helps create a competitive market.

Our Flexitank packaging capacity of this company is 1000 metric tons per day.





COMMERCIAL

Commercial department of Hormozan Oil Company is mainly active in marketing and selling of the products to numerous customers around the world, capable of delivering cargoes of both drum and bulk, based on either FOB or CFR terms. Thanks to our experts' shipping knowledge and strong relationship with shipping lines, we can also handle cross-stuffed shipments to various destinations.

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19



www.hormozan.com





HORMOZAN OIL

 Head
 Office:
 No.41,
 South

 Kheradmand
 St.,
 Tehran,
 Iran.

 Tel:
 (+98-21)
 52
 707

 Fax:
 (+98-21)
 88
 30
 53
 88

 Email:
 Info@hormozan.com

Factory: Hormozan St., North side of Bandar Abbas Refinery, Bandar Abbas, Iran.

Export Terminal: Shahid Rajaee Port Complex , Bandar Abbas, Iran

