

SUPPLY HIGH QUALITY **BITUMEN**





Meet the Middle East's Leading **Bitumen Producer** and Exporter

BLACKSEA TRADING & CONSULTANCY is at the forefront of bitumen supplies, based in the Middle East, with extensive product related networks, and contacts throughout the industry. We are committed to supplying quality bitumen products, sourced exclusively from the reputed refiners in the region, and dedicated to meeting delivery obligations within the shortest period of time.

We are poised to continue to develop international trade, focusing on strategic relationships. Our main areas of business focus are in the Middle East, the Asian Subcontinent, Southeast Asia, China and Africa, where we leverage our in depth understanding of the business culture, relationships and practices. We manage our assets from our offices in Istanbul, and deploy our financial strengths to facilitate the flow of our business interests.

With its extensive experience and reach, BLACKSEA TRADING & CONSULTANCY is, and has always been, committed to delivering the best services available in the industry, with special attention to logistical and documentation challenges, at an optimum price due to its:

- · Collective bargaining power
- Insistence on quality
- Reliability
- · Focus on solution finding
- Business Objectives





Business Objectives

Our business objectives are to deliver exceptional customer service and competitive pricing. In order to achieve our business objectives, **BLACKSEA TRADING & CONSULTANCY** maintains simple principles that are valued across various cultures and markets:

Quality: We ensure that all products being shipped out for our clients are rigorously tested and certified, additional to the third party inspection by reputed inspection companies. We only deal with suppliers that are well known in the market.

Quality Assurance: We inspect and have products tested in reputable local laboratories at regular intervals, and ensure to provide inspection reports to our clients for every supply conducted.

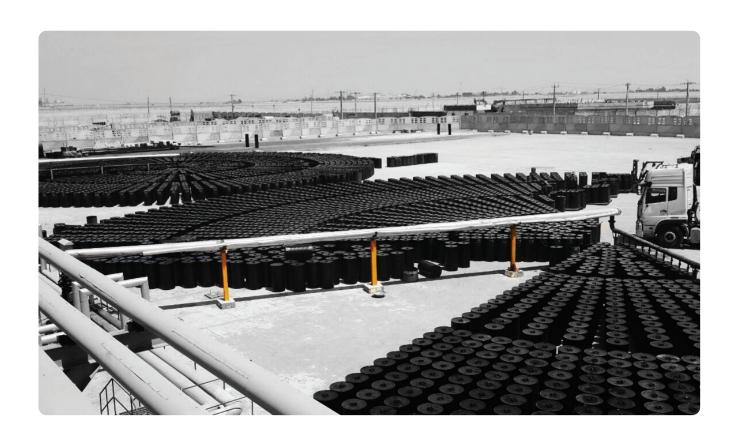
Quantity: We always verify the capacity of our suppliers, at any given time, to ensure that we can continue to meet the delivery schedules of our customers.

Relationships: We firmly believe in developing, maintaining and advancing our relationships, with our clients suppliers, and service providers to the highest level. We believe in transparency with all parties we are associated with to create long term value.

Cost Management: We always purchase directly from the producing source or refinery, and ensure we can share our cost benefits with our clients.

Global Experience: Our team of executives and collaborators have many years of experience in the international markets and offers clients, partners and suppliers premium business advice in any circumstance.

Local Partners: BLACKSEA TRADING & CONSULTANCY places great importance on business partnerships and ensure that we identify and assign reliable and efficient business partners in territories that are necessary. Our main objectives are to deliver exceptional customer service, be cognizant of the local cultures, work within the framework of the law and establish long-lasting business relationships with our clients, suppliers and partners alike.





Our main objective is to support customers through the efficient provision of

COMMERCIAL, FINANCIAL and LOGISTIC SERVICES in international scale

Creating value and satisfactory experience for our customers by offering them high quality products with competitive price and delivery at the right time and in the right place which is desired by them in the most effective way.

BLACKSEA TRADING & CONSULTANCY has aligned its business very strongly with the customers needs and tries to meet the world's growing demand for bitumen. We consider high standards for ourselves and our partners in our all activities



Our Expertise

BLACKSEA TRADING & CONSULTANCY executives have wideranging backgrounds of leadership in the following industries:

- · Industry & Construction
- Shipping & Logistics
- · Supply Chain Management
- Finance
- · Process Works

We can optimize our business operations and pass on the cost savings to our clients and maintain their competitive edge. At the same time, we can convey all events as they are happening on to our clients, for their informed decisions.

We supply all kinds of **high quality petroleum bitumen** in various types of packages including Bulk, Drum and Polybags.





Thought Leadership & Associations

BLACKSEA TRADING & CONSULTANCY aims for continued success at the international scene, and plans to consistently advocate and practice supply of best of breed solutions in the industries we are engaged in, with the main objectives to deliver exceptional customer service and competitive pricing. **BLACKSEA TRADING & CONSULTANCY** strives to promote the interests of the industries we are engaged in, encourage adoption of best business practices in the markets we are involved in as well as win valuable clients and business partners worldwide.



FACILITIES

BARELLING & STORAGES

Our facilities are equipped with modern infrastructure, including advanced temperature control systems, ensuring that bitumen remains within specified temperature ranges for optimal storage conditions.





Automated unit has stablished with a capacity of **5.000 barrels per day** with two production lines.

At the core of our operation is a commitment to delivering bitumen barrels of the highest quality. From the precise heating and preparation of bitumen to the final sealing of each barrel, our automated systems ensure consistency and excellence throughout the production process. We understand the critical role bitumen plays in various industries, and our unit is dedicated to providing a reliable and top-notch solution for your needs.





PACKING

NEW GENERATION

THERMOSTABLE FLEXITANK

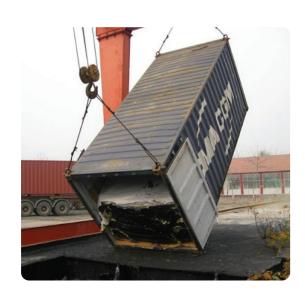
The thermal stability ensures that the cargo remains within the desired temperature range throughout the shipping process, safeguarding the integrity and quality of the transported product.

The thermostable flexitank is specially designed for the transport of temperature-sensitive cargo. Unlike traditional flexitanks, which may not provide adequate insulation, thermostable flexitanks are equipped with materials that offer better temperature regulation.



Carrying bitumen in a flexitank has the following advantages over another bitumen packing:

Flexitank is an eco friendly packing. In flexitank packing, instead of 110 drums per container or 20 jumbo bags per container, only one flexitank is used, which is easier to unload in terms of operation. The price of Flexitank packing is lower than other types of bitumen packing.



PACKING

Bulk

Bulk bitumen shipment is the most economical method of exporting bitumen in medium and large scales. We supply products to all around the world and make it possible for **bulk vessels between 1.000 to 10.000 MT capacity** to berth alongside the jetty. Minimum loading rate is 200 MT per each hour. The largest bitumen vessel with a capacity of 46,000 MT.

Drum

Drum is the most common type of bitumen packing since ever. Bitumen in various sizes as 150 kg, 180 kg and 200 kg which are made by Cold Rolled Steel sheet.

Test	150 KG Bitumen	180 KG Bitumen	200 KG Bitumen
Height (cm)	86 ± 2	98 ± 2	98 ± 2
Diameter (cm)	50	50	50
Body Thickness (mm)	0.6 ± 0.02	0.6 ± 0.02	0.6 ± 0.02
Top/Base Thickness (mm)	0.6 ± 0.02	0.6 ± 0.02	0.6 ± 0.02
Net Weight (kg)	150 ± 2	182 ± 2	210 ± 2
Gross Weight (kg)	158 ± 2	192 ± 2	220 ± 2
Empty Drum Weight (kg)	9.5 ± 1	8.5 ± 1	11 ± 1



Each 20 foot container can load 110 non-palletized and 80 palletized drums. Each 40 foot container can load 150 non-palletized and 137 palletized drums.

Jumbo Bag

Jumbo bags are kinds of environmentally friendly and cost-effective types of packings that are available in various sizes. We offer 1 MT jumbo bags with two inner polymer layers to prevent leakage and two external layers to intensifying the strength. 1 MTs jumbo bags are palletized in wooden boxes or in metal cage and are stuffed safely into containers.

Technical speci cation of jumbo bag

Net Filling capacity	1000±40 kg
Package height	110-115cm
Package Wide	100-110 cm

Each 20 foot container can load 20 palletized jumbo bags. Each 40 foot container can load maximum 26 palletized jumbo bags.



GRADES

Penetration Grade

Description and Applications: Penetration Grade Bitumen is mainly used in road surfacing and some industrial applications. We supply penetration Grade Bitumen which is petroleum based and manufactured from Vacuum Bottom (VB) feedstock. Penetration Grade Bitumen is specified by the penetration and softening point test. Bitumen with lower penetration grade is used in the regions with warm climate while higher penetration grade is used in colder weather.

Test	Method	30-40	40-50	60-70	85-100	200-300
Specific gravity @25/25C	ASTM D70	1/01-1/06	1/01-1/06	1/01-1/06	1/01-1/05	0.99-1/04
Penetration ,25°c,100g 5s,min	ASTM D5	30-40	40-50	60-70	85-100	200-300
Softening point °C	ASTM D-36	55-63	52-60	49-56	45-52	32min
Ductility ,25°c,5cm/min/cm	ASTM D-113	100 min				
Flash Point °C	ASTM-D92	250 min	250 min	250 min	230 min	177 min
Solubility in trichloroethylene (min %)	ASTM-D2042	99.5 min	99.5 min	99.5 min	99.5 min	99.0 min
Spot test	A.A.S.H.T.T102	Negative	Negative	Negative	Negative	Negative
Drop in penetration after heating%	ASTM-D5&D6	20 max	20 max	20 max	20 max	37 min
Loss on heating(%wt)	ASTM-D6	0.2 max	0.2 max	0.2 max	0.5 max	1 max

Viscosity Grade

Description and Applications: Viscosity grades Bitumen are categorized according to Viscosity (degree of fluidity) grading. The higher the grade, the stiffer the Bitumen. In Viscosity Grade, Viscosity tests are conducted at 60°C and 135°C, which represents the temperature of road surface during summer and mixing temperature respectively.

Test	AC-10	AC-20	AC-30	AC-40
Dynamic viscosity @60°c (poise)	1000±200	2000±400	3000±600	4000±800
Kinematic Viscosity @135°c(Min, Cst)	250	300	350	400
Penetration ,25°c,100g 5s,min	80	60	45	35
Flash Point °C	220	220	220	220
Softening point °C	40	45	47	50
Solubility in trichloroethylene (min %)	99.0	99.0	99.0	99.0
Test on residue from thin lm oven test				
Ductility ,25°c,5cm/min/cm	75	50	40	25
Viscosity ratio @60°C Max	4.0	4.0	4.0	4.0



Performance Grade

The most advanced asphalt binder grading system is Performance Graded (PG) System which is based on climate, so the grade notation consists two portions: high and low pavement service temperature.

High temperatue degrees of efficiency	Low temperatue degrees of efficiency
PG 64	-10, -16, -22
PG70	-10
PG58	-16

Viscosity Grade (VG10) Bitumen

PROPERTY		RANGE
Absolute Viscosity	60 Deg. C, Poises, Min.	800
Kinematic Viscosity	135 Deg. C, CST, Min.	250
Flashpoint	C, min.	220
Softening Temperature	Deg. C, Min.	40
Penetration	at 25 Deg.C	80-100
Ductility	at 25 Deg. C, cm., min.	75
Viscosity Ratio	at 60 Deg. C, Max.	4
Solubility in TCE	%, min.	99

Viscosity Grade (VG20) Bitumen

PROPERTY		RANGE
Absolute Viscosity	60 DeQ. C, Poises, Min.	1600
Kinematic Viscosity	135 Deg. C, CST, Min.	300
Flashpoint	C, min.	220
Softening Temperature	Deg. C, Min.	45
Penetration	at 25 Deg. C	60-80
Ductility	at 25 Deg. C, cm., min.	50
Viscosity Ratio	at 60 Deg. C, Max.	4
Solubility in TCE	%, mm.	99

PACKING

Viscosity Grade (VG30) Bitumen

PROPERTY		RANGE
Absolute Viscosity	60 DeQ. C, Poises, Min.	2400
Kinematic Viscosity	135 Deg. C, CST, Min.	350
Flashpoint	C, min.	220
Softening Temperature	Deg. C, Min.	47
Penetration	at 25 Deg. C	50/70
Ductility	at 25 Deg. C, cm., min.	40
Viscosity Ratio	at 60 Deg. C, Max.	4
Solubility in TCE	%, mm.	99

Viscosity Grade (VG40) Bitumen

PROPERTY		RANGE
Absolute Viscosity	60 DeQ. C, Poises, Min.	3200
Kinematic Viscosity	135 Deg. C, CST, Min.	400
Flashpoint	C, min.	220
Softening Temperature	Deg. C, Min.	50
Penetration	at 25 Deg. C	40-60
Ductility	at 25 Deg. C, cm., min.	25
Viscosity Ratio	at 60 Deg. C, Max.	4
Solubility in TCE	%, mm.	99

PACKING

Penetration Grade Bitumen 30/40

PROPERTY	VALUE	TEST METHOD
Specific Gravity @ 25/25 deg. C.	1.01/1.06	ASTM D.70
Penetration @ 25 deg. C.	30/40	ASTM D.5
Softening Point deg. C.	55/63	ASTM D.36
Ductility @ 25 deg. C. CMS	100 min.	ASTM D.113
Loss on heating PCT. WT.	0.2 max.	ASTM D.6
Drop in penetration after heating PCT.	20 max.	ASTM D.5
Flash point deg. C.	250 min.	ASTM D.92
Solubility in CS2 PCT. WT.	99.5 max.	ASTM D.4
Organic matter insoluble in CS2 PCT. WT.	0.2 max.	ASTM D.4
SPOT TEST	Negative	AASH0 T 102-42

Penetration Grade Bitumen 40/50

PROPERTY	VALUE	TEST METHOD
Specific Gravity @ 25/25 deg. C.	1.01/1.05	ASTM D.70
Penetration @ 25 deg. C.	40/50	ASTM D.5
Softening Point deg. C.	52/60	ASTM D.36
Ductility @ 25 deg. C. CMS	100 min.	ASTM D.113
Loss on heating PCT. WT.	0.2 max.	ASTM D.6
Drop in penetration after heating PCT.	20 max.	ASTM D.5
Flash point deg. C.	250 min.	ASTM D.92
Solubility in CS2 PCT. WT.	99.5 max.	ASTM D.4
Organic matter insoluble in CS2 PCT. WT.	0.2 max.	ASTM D.4
Ductility at 25° C, 5cm/min, cm after thin-film oven test	50 min.	ASTM D. 946/D. 946M-09a
SPOT TEST	Negative	AASHO T 102-42

PACKING

Penetration Grade Bitumen 60/70

PROPERTY	VALUE	TEST METHOD
Specific Gravity @ 25/25 deg. C.	1.00/1.06	ASTM D.70
Penetration @ 25 deg. C.	60/70	ASTM D.5
Softening Point deg. C.	49/56	ASTM D.36
Ductility @ 25 deg. C. CMS	100 min.	ASTM D.113
Loss on heating PCT. WT.	0.2 max.	ASTM D.6
Drop in penetration after heating PCT.	20 max.	ASTM D.5
Flash point deg. C.	250 min.	ASTM D.92
Solubility in CS2 PCT. WT.	99.5 max.	ASTM D.4
Organic matter insoluble in CS2 PCT. WT.	0.2 max.	ASTM D.4
Ductility at 25° C, 5cm/min, cm after thin-film oven test	50 min.	ASTM D. 946/D. 946M-09a
SPOT TEST	Negative	AASH0 T 102-42

Penetration Grade Bitumen 80/100

PROPERTY	VALUE	TEST METHOD
Specific Gravity @ 25/25 deg. C.	1.01/1.05	ASTM D.70
Penetration @ 25 deg. C.	80/100	ASTM D.5
Softening Point deg. C.	45/52	ASTM D.36
Ductility @ 25 deg. C. CMS	100 min.	ASTM D.113
Loss on heating PCT. WT.	0.2 max.	ASTM D.6
Drop in penetration after heating PCT.	20 max.	ASTM D.5
Flash point deg. C.	250 min.	ASTM D.92
Solubility in CS2 PCT. WT.	99.5 max.	ASTM D.4
Organic matter insoluble in CS2 PCT. WT.	0.2 max.	ASTM D.4
Ductility at 25° C, 5cm/min, cm after thin-film oven test	50 min.	ASTM D. 946/D. 946M-09a
SPOT TEST	Negative	AASH0 T 102-42

PACKING





PRIMARY COMPANY DETAILS

Company Full Name : Blacksea Trading & Consultancy

Registration Number : 1179

Company Type : Limited Liabilities Company

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Slbt No: 1179 - Pb. No: 1167