

BITUMEN FEELS LIKE GOLD



HATEF Commerce
Engineering



HATEF Ltd. Product's Profile Analysis

You will meet the PRICE and technical GUIDE that never have EXPERIENCED before...

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EXECUTIVE

SUMMARY

Product differentiation is a brand-new marketing strategy which businesses use to distinguish a product from similar offerings on the market. The difference could be something concrete, like speed, power, performance and better service. On the other hand, it could be a more ephemeral quality, such as being more friendly or more stylish than your competitors. For enterprise businesses, a product differentiation strategy may provide a competitive advantage in a market dominated by larger companies.

SET POINTS

#1

Based on our experience and insights we understand the importance of the relationship between ‘Performance’ and the final choice of the ‘Aggregated Crude Derivatives’.

For users of bitumen, this creates concerns about the quality, especially as the European standard **EN 12591** appears to them as insufficient to ensure satisfactory performance of the finished products. The paving industry is therefore more and more confronted with the same problem: how to evaluate the quality of a given bitumen in relation to its intended use?

For improving the **Asphalt Mixture** properties that extends the lifetime of the pavement, the deep collaboration between **IRANIAN** oil refineries and **HATEF Ltd.** will bring forth for our clients Bitumen, wherein the cation of emulsifier is at the interface with bitumen particle. The grades are manufactured in compliance with international standards and are precisely tested prior to the dispatch.

#2

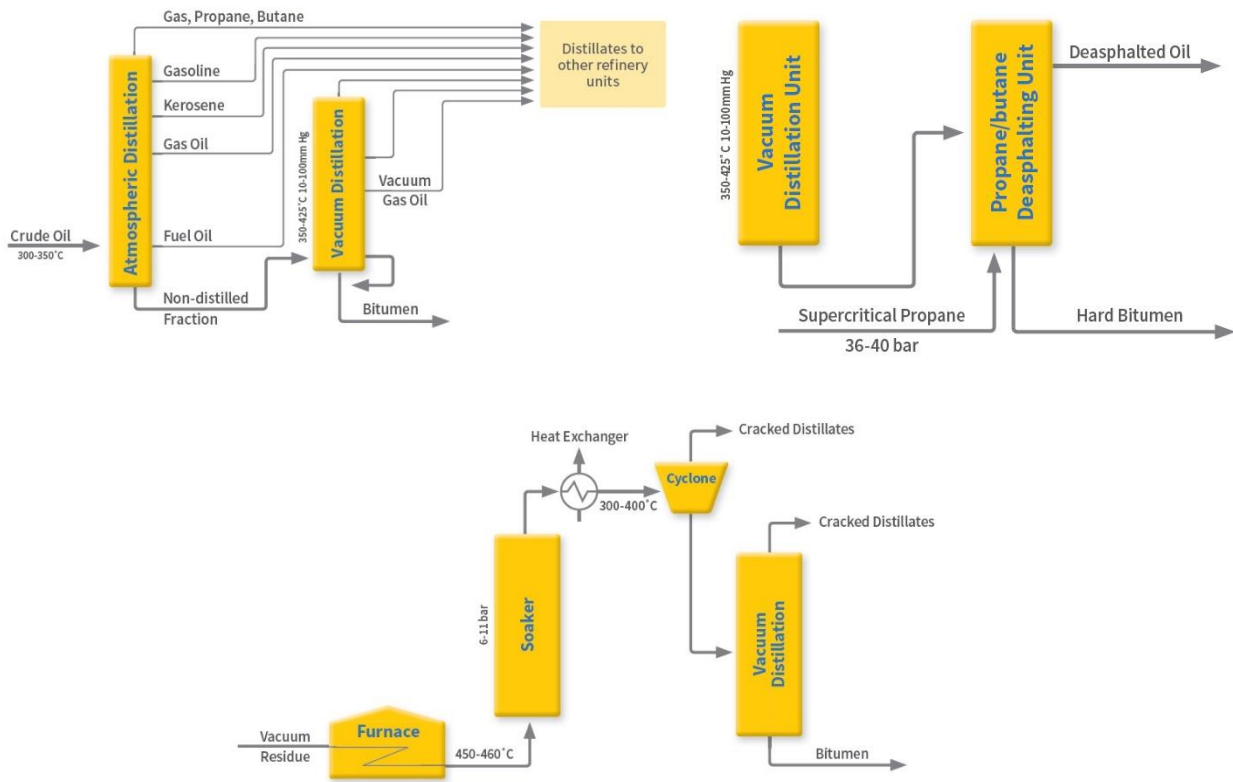
We look forward to be involved in a mutual intend of participation in markets with whoever having desire to enroll in the developing Bitumen business in the target markets. This matter can come off in a win-win manner by a third foreign company who could be “exclusively” authorized by our marketing license or either by an individual trader with the right deep network and business relations.

HATEF's Bitumen Supply Chain and Manufacturing Process

Main Operation

Our Bitumen is primarily obtained by vacuum distillation of carefully selected Iranian crude oil or blends of crude oil. It comprises the non-distillable fraction, often technically referred to as (vacuum) residue. In its simplest form bitumen manufacturing separates the lighter, low boiling point fractions from crude oil resulting in product with high boiling point, high molecular weight with very low volatility.

Properties and quality of bitumen depend mainly on the crude oil(s) used in its manufacture. It is reduced to grade specification either directly by refining or by blending. Bitumen can be further processed to alter its physical properties in order meet certain specifications. Several manufacturing methods are available to produce bitumen depending on the crude source(s) and processing capabilities available within the refineries. Often a combination of processes are selected.



Worldwide Competitive Product

HATEF's Bitumen

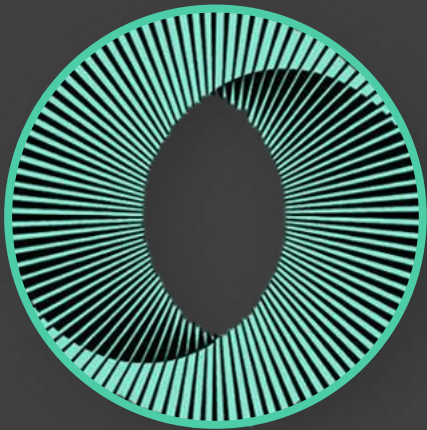
An integral component of premium industries' products...

The strategic position of IRANIAN refineries on the World's Bitumen Market and the proximity of the most of them to major shipping hubs enable it to achieve a high degree of *Flexibility* and *Competiveness* in its export operations. *HATEF Ltd.* is developing policies aimed at consolidating its presence in the export markets where it is already present and boosting its commercial expansion to new geographic areas.



Penetration Grade – ASTM / AASHTO								
Test Method	200-300	150-200	120-150	85-100	60-70	40-50	Unit	Analysis
Limit								
ASTM D70 or D3289	990-1040	1000-1050	1000-1050	1000-1050	1010-1060	1010-1060	kg/m3	Density @ 25°C
ASTM D5	200-300	150-200	120-150	85-100	60-70	40-50	mm/10	Penetration @ 25°C
ASTM D36	32 min	36 min	38 min	42 min	46 min	49 min	°C	Softening Point
ASTM D113	100 min	100 min	100 min	100 min	100 min	100 min	cm	Ductility @ 25°C
ASTM D6	1 max	0.5 max	0.5 max	0.5 max	0.2 max	0.2 max	wt%	Loss on heating
ASTM D5	37 min	20 max	20 max	20 max	20 max	20 max	%	Drop in penetration after heating
ASTM D92	177 min	218 min	218 min	232 min	232 min	232 min	°C	Flash point
ASTM D2042	99.0 min	99.0 min	99.0 min	99.0 min	99.0 min	99.0 min	wt%	Solubility in Trichloroethylene
AASHTO T 102	Negative	Negative	Negative	Negative	Negative	Negative	---	Spot test
ASTM D 2171	200±50	250±50	450±90	1000±200	2000±400	4000±800	P	Viscosity @60°c
ASTM D 2170	80 min	150 min	170 min	250 min	300 min	400 min	cSt	Viscosity@135°c
Test on Residue From Thin Film Oven Test (ASTM D1754)								
ASTM D5	40 min	46 min	46 min	50 min	54 min	58 min	%	Retained Penetration after (T.F.O.T) , %
ASTM D113	100	100	100	75	50	50	cm	Ductility , (25 °C), 5cm/min , cm after TFOT
ASTM D 2171	1250 max	2250 max	5000 max		10000 max	20000 max	P	Viscosity @ 60°c

HATEF's Intelligent Trading System



By unlocking the customer-market value proposition,

We build the finest trading roads so you can all move forward faster.

To ensure that you can progress faster, we build the smart system of solutions.

With our accumulated *know-how*, we are an innovative driver that sets the pace for an entire pavement industry.

Identifying the Inquiries

- Estimating Network Loops
- Determining the financial shape
- Extracting the complicated data

Guidance & Counseling

- Providing competitive price
- Responding effectively
- Resolving the financial hosts

Project Vector Analysis

- Driving convenience to new level
- Modeling competitive landscape
- Developing stronger differentiation

Execute with Insightful Actions

- Helping to benchmark client's value
- Enhancing financial strategy
- Providing Services tailored in line with client's needs

HATEF Engineering & Services [Iran]

The company with intellectual-intelligent trading system and the only authorized “**Exclusive Sale Agent**” of Sealoflex® brand for exporting polymer- modified bitumen. HATEF is privileged to have the confidence resulting from a 12-year experience of being expert in “**dig-in-trading**” for Carbon-Based-Lifeforms products with special applications in targeted markets and industries.



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