

# STANDARD SPECIFICATION OF BITUMEN GRADE 160/220

Bitumen penetration grade **160/220** is semi hard penetration grade bitumen used as paving grade bitumen suitable for road construction and repair also for the production of asphalt pavements with the below technical specification. This grade of Bitumen is mainly used in the manufacturing of hot mix asphalt for bases and wearing courses. Bitumen **160/220** is commonly used bitumen grade and basic material for many bituminous products.

## **Softening point and penetration of bitumen 160/220**

Penetration grade bitumen is pure petroleum grade bitumen, manufactured from vacuum bottom by passing hot air. This bitumen is produced from the remainder of crude oil after cracking and removing its hydrocarbon. Penetration grade bitumen **160/220** has a penetration between **160~220** desi-millimeters and a softening point between 35~43 °C. The penetration grade bitumen **160/220** has thermoplastic property which is similar to a synthetic resin material which becomes softer with heating and hardness when cooled. This grade of bitumen **160/220** has very strong viscosity compared to other grades.

## **Guarantee/warranty of bitumen 160/220**

We guarantee the quality of bitumen **160/220** with the arrangement of international inspectors to check the quality and quantity of the bitumen during the stuffing of the containers. We also guarantee the quality to meet with ASTM/EN 12591.

## **Specification of penetration bitumen 160/220**

Property/Unit	Specification	Method
Density, 25 °C, (Kg./m <sup>3</sup> )	1.010/1.060	ASTM D71 OR ASTM D3289
Penetration, 25 °C, (mm/10)	220/160	D5
Softening point (°C)	35/43	D36
Ductibility, 25 °C, (cm/s)	min>100	ASTM D113
Loss on heating (wt %)	0.2 max	ASTM D6
Drop-in penetration after heating (%)	20 max	ASTM D5
Flash point		ASTM D92
NT (°C)	>250°C	
Solubility in SC2 (wt %)	>99.5	ASTM D4
Spot test	Negative	*A.A.S.H.O.T 102

