



## BITUMEN 160/220 | PENETRATION PAVING BITUMEN GRADE

### A

#### GENERAL DESCRIPTION

Bitumen Penetration Grade 160/220 is a standard penetration grade Bitumen usually used as a Paving Grade Bitumen suitable for road construction and for the production of asphalt pavements with superior properties. This grade of Bitumen is mainly used in the manufacture of hot mix asphalt for bases and wearing courses. Penetration Grade Bitumen supplied by BITUMINA GROUP is petroleum grade bitumen, manufactured from fractional / vacuum distillation of crude oil. The Bitumen supplied by BITUMINA GROUP is produced from vacuum residue (short residue) feedstock. Penetration Grade bitumens are specified by the penetration and softening point test. Designation is by penetration range only. The penetration grade bitumens have a thermoplastic property which causes the material to soften at high temperatures and to harden at lower temperatures. This unique temperature/ viscosity relationship is important when determining the performance parameters such as the adhesion, rheology, durability and application temperatures of bitumen.

### B

#### CHARACTERISTICS

BITUMINA GROUP guarantees that the Bitumen Grade 160/220 it supplies under its offers is produced in compliance to and is in conformity to European Standard DIN EN 12591:99 and meets the following specification requirements.

### C

#### SPECIFICATIONS | EUROPEAN NORM EN 12591

CHARACTERISTIC	TEST METHOD	UNIT	MIN.	MAX.
Penetration - 25°C, 100g, 5s	EN 1426	mm	160	220
Softening Point (Ring & Ball)	EN 1427	°C	35	43
Kinematic Viscosity @ 135°C	EN 12595	mm <sup>2</sup> /s	135	-
Solubility with toluene or Xylene	EN 12592	%	99	-
Flashpoint (Cleveland Open)	EN 22592	°C	220	-
<b>Performance after RTFOT Method Test to EN 12607-1:</b>				
- Change in mass (m/m)	EN 12607-1	%	-	1.0
- Retained Penetration 25°C, 100g, 5s	EN 1426	%	37	-
- Increase in softening point (R&B)	EN 1427	°C	37	-
- Softening point after hardening	EN 1427	°C	-	12

### D

#### LEGAL NOTES

The information, and, in particular, the recommendations relating to the application and end-use of BITUMINA GROUP products, are given in good faith based on BITUMINA GROUP current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with BITUMINA GROUP recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. BITUMINA GROUP reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

