PÖRNER PERFORMANCE BITUMEN

BITUROX[®] ROAD PAVING BITUMEN POLYMER-MODIFIED BITUMEN

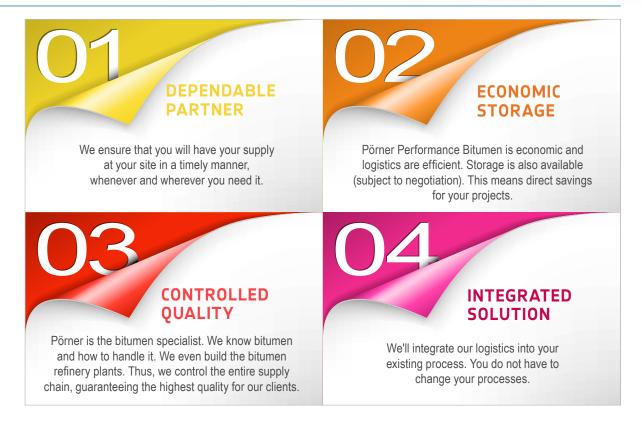




WWW.POERNERBITUMEN.COM

QUALITY PERFORMANCE BITUMEN

SOLUTIONS FOR YOUR BUSINESS: WE UNDERSTAND YOU.



PÖRNER BITUMEN NETWORK

Pörner offers the complete bitumen network at your fingertips. With our network of suppliers with Biturox[®] plants, as well as with the Pörner Bitumen Bag Packing System, we are able to provide the full bitumen supply chain to you, the end user. We control the supply chain at all levels of the bitumen industry, so we are able to coordinate the entire process, from the production of quality bitumen from different sources, the logistics and delivery to your final site.

ORIGINAL PÖRNER BITUMEN BAG™

The innovative Pörner Bitumen Bag[™] has been developed and patented by Pörner. The bag is designed as a self-stabilizing container made of plastic material, consisting of a multi-layer outer bag (flexible recyclable fabric) and an inner liner (special-purpose film). The Pörner Bitumen Bag[™] can hold up to 1,300 kg of bitumen. Its shape and volume is optimized for maximum loading. The bag can be transported by any common transport system (truck, standard container, rail, ship). The bag is UV-protected and suitable for every climate. The filled bag can be stored without energy or infrastructure, e.g. a bitutainer.



Our supply chain makes use of the unbeatable logistics and economic advantages of the original bag technology. We let our clients get full advantage of this without having to change any of their current processes, by providing a full-scope service all the way to their site. **WWW.BITUMENBAG.COM**

BITUMEN PRODUCTS



BITUROX[®] ROAD PAVING BITUMEN 50/70 & 85/100



For more than 40 years, Biturox[®] bitumen has been known for exceptional quality, economy and reliability by providing best performance.

Biturox[®] enhances the characteristics of our quality bitumen to so-called "multigrade" characteristics. Meaning the bitumen behaves like a stiff grade at high and soft grade at low temperatures. This all from one product! Therefore these bitumens have high consistency against rutting as well as good resistance to fatigue, combined with excellent aging stability. <u>WWW.BITUROX.COM</u>

Our standard product grades are 50/70 and 85/100. Other specifications are available on request.

| Road paving bitumen | Unit | Test method | 50 / 70 | 85 / 100 | |
|-----------------------------|------------|-------------------------|---------------|---------------|--|
| Specific Gravity @ 25/25 °C | °C | ASTM D3289 | 1.010 - 1.060 | 1.010 - 1.050 | |
| Penetration 25 °C | 1/10 mm | 1/10 mm ASTM D5 50 - 70 | | 85 - 100 | |
| Softening point | °C | ASTM D36 46 - 54 | | 42 - 50 | |
| Ductility at 25 °C | % | ASTM D113 | min. 100 | min. 100 | |
| Flashpoint | °C | ASTM D92 | min. 232 | min. 232 | |
| Organic solvent solubility | wt-% | ASTM D4 | min. 99.5 | min. 99.5 | |
| Loss in Heating | wt-% | ASTM D6 | max. 0.2 | max. 0.2 | |
| Residue testing TFOT | AMST D1754 | | | | |
| Increase of Softening Point | °C | ASTM D36 | max. 9 | max. 9 | |
| Retained Penetration | % | ASTM D5 | min. 52 | min. 47 | |
| Spot Test | | AASHTO 102 | neg | neg | |

PÖRNER POLYMER-MODIFIED BITUMEN - PMB 45/80-65

Pörner PMB 45/80-65 is a ready-to-use polymer-modified binder for the paving of heavy load and high-traffic roads as well as other high-stress surfaces. Other specifications on request.

| Polymer-modified bitumen | Unit | Test method | PMB 45 / 80 - 65 | | | |
|--------------------------------------|---------|-------------|------------------|--|--|--|
| Penetration at 25 °C | 0.1 mm | EN 1426 | 45 / 80 | | | |
| Softening point | °C | EN 1427 | min. 65 | | | |
| Flashpoint | °C | EN ISO 2592 | min. 235 | | | |
| Force ductility | J / cm² | | min. 3 @ 5 °C | | | |
| Kinematic viscosity at 135 °C | mm² / s | EN 12595 | max. 3,000 | | | |
| Fraas breaking point | °C | EN 12593 | min15 | | | |
| Elastic recovery at 25 °C | % | EN 13398 | min. 85 | | | |
| Resistance to hardening RTFOT 163 °C | | | | | | |
| Change of mass | % | EN 12607-1 | max. 1 | | | |
| Retained penetration | % | EN 1426 | max. 60 | | | |
| Increase in softening point | °C | EN 1427 | max. 7 | | | |
| Elastic recovery at 25 °C | % | EN 13398 | min. 80 | | | |



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