

High Temperature Abrasive Filaments



Perlon[®] – The Filament Company

Perlon[®] – The Filament Company – is an innovative, global group of companies specialized in the manufacture of synthetic filaments. Perlon[®] generates annual sales of about 135 million euros, employs more than 850 people and has a production capacity of over 20,000 tons. We operate from locations in Germany, in the USA and in China.

Through our technical expertise and strength in innovation we develop premium quality products for our customers. The comprehensive product portfolio is based on a variety of raw materials. In line with the intended application, these are modified and processed into high quality, application-specific filaments. The consistent high quality of our products sets worldwide benchmarks.

For when things get heated

The majority of standard engineering polymers used in filament production offer end users a maximum continuous working temperature of 80–100°C.

The high rotational speeds which abrasive tools operate at often raise application temperatures well above the maximum continuous working temperature of conventional polyamides. To counteract this, most applications in metal processing require the use of coolants to keep temperatures down and avoid unwanted smearing on the surface of the metal.

Using coolants often involves a messy working environment through leakage, and in the case of wood or textile processing, coolants cannot be used.

Our range of high temperature resistant abrasive filaments offer customers a flexible alternative.

AbraMaXX[®]

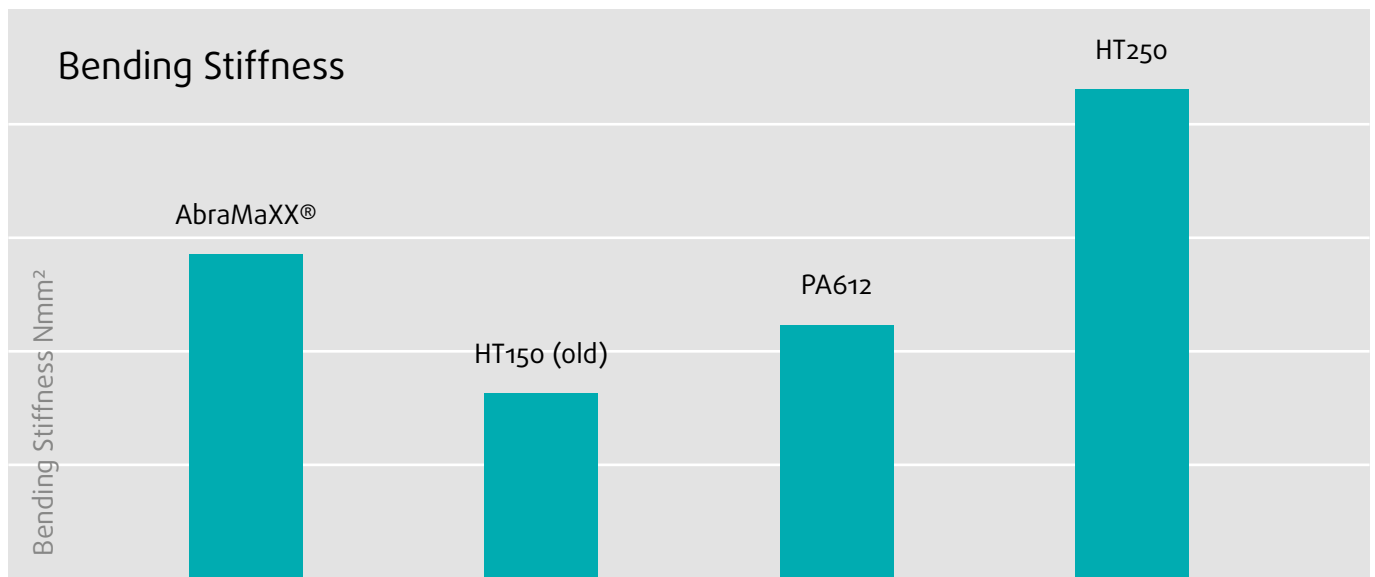
AbraMaXX[®] filaments are manufactured from a newly developed high temperature polyamide thermoplastic and abrasive grit. This optimized recipe of raw materials and other additives delivers strength and bending stiffness not previously seen in standard abrasive polyamide filaments and more importantly an increase in lifetime under extreme working conditions.

Key features

- Maximum continuous working temperature 150°C
- Approximately 20% higher bending stiffness than PA612 for same diameter
- Good flexibility
- Excellent UV stability

Product range

- Diameter range: 0,25mm–2,00mm
- Grit types: SiC, KK, DM
- Grit sizes: 36–1000



HT250

HT250 filaments are manufactured from a high temperature thermoplastic and diamond grit. This high end combination of heat resistant polymer and specially treated DM grit delivers maximum abrasive performance at continuous working temperatures of 250°C.

For optimum performance it is recommended to fill brush tools as densely as possible so that the filaments work together as a block, rather than with long trim lengths.

Key features

- Maximum continuous working temperature 250°C
- Very low moisture absorption
- High stiffness

Product range*

- Diameter range: 0,25mm–1,60mm
- Grit types: DM
- Grit sizes: 46–1000

*made to order only