

# Technical Brush Filaments



## Abrasive Brush Filaments

**AbraMaXX<sup>®</sup>**



### Perlon<sup>®</sup> – The Filament Company

Perlon<sup>®</sup> - The Filament Company - is an innovative and global group of companies specialising in the production of synthetic filaments. We produce at sites in Germany, Poland, China, India and the USA. We offer an extremely diverse product portfolio for almost every technical application. We are constantly creating new solutions for unique products - Our Engineering. Your success.

### For when things get heated

The majority of standard engineering polymers used in abrasive filament production offer end users a maximum continuous working temperature of 80 – 100°C (176 – 212 °F).

The high rotational speeds, at which abrasive tools operate, generate temperature due to friction. This temperature can directly influence filament stiffness. The higher the temperature, the higher the reduction in stiffness.

A soft filament will bend more under pressure and provide less force to the tip of brush. This leads to a loss of grinding capacity, less brushing precision and a shorter brush lifetime. In addition to this, in metalworking applications, often the temperature can reach the polymer melting point and smearing can occur on the surface of the metal.

### AbraMaXX<sup>®</sup> – The ultimate abrasive filament

AbraMaXX<sup>®</sup> filaments are manufactured from a newly developed high temperature polyamide thermoplastic. 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 even under extreme working conditions.

AbraMaXX<sup>®</sup> is a response to the demand from customers looking for a higher level of abrasion, better precision and faster brushing operations.

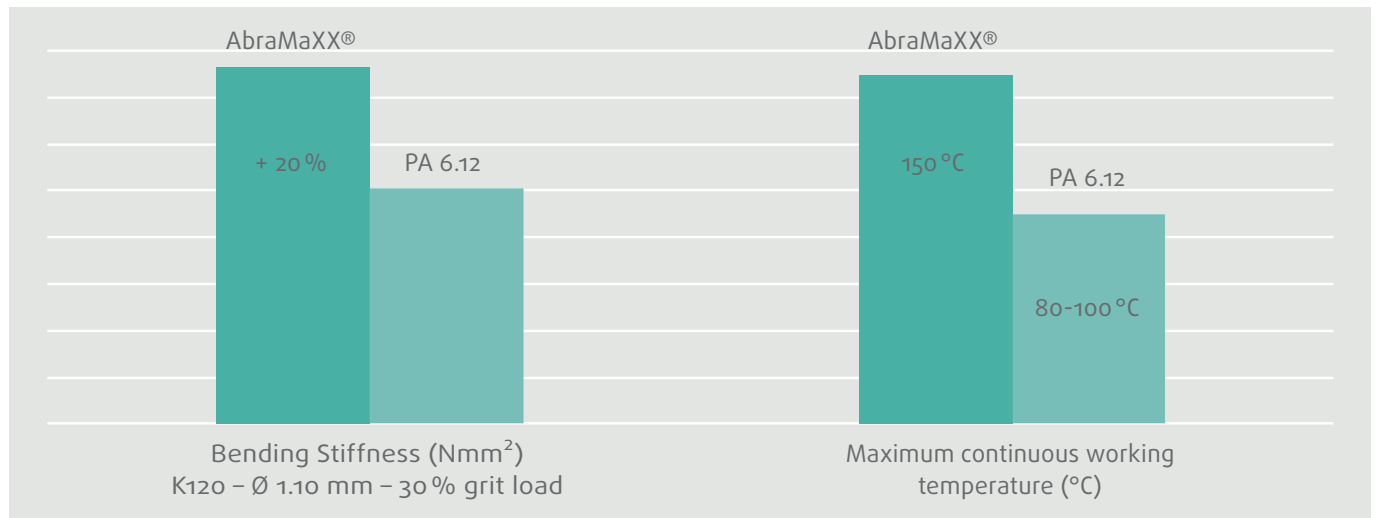
### Key features

- High bending stiffness
- Temperature resistance up to 150 °C
- Superior abrasive performance
- Better brushing precision / tolerances
- Shorter cycles
- Faster brushing operations
- Biobased 70 %

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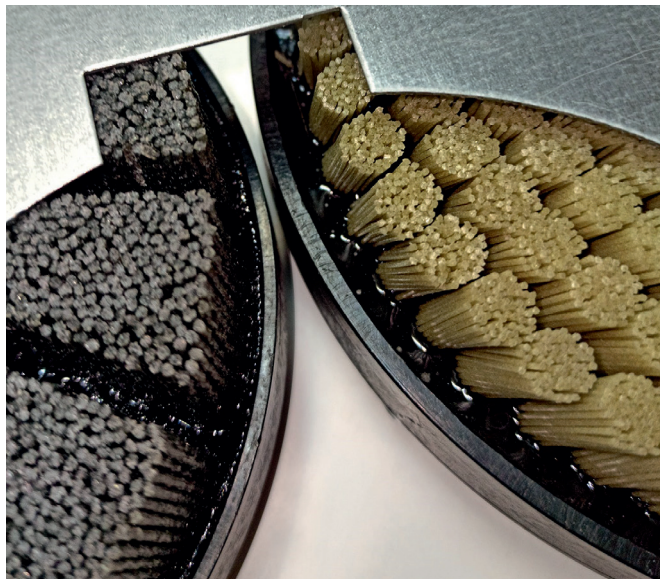
### AbraMaXX® vs PA 6.12



### AbraMaXX® - product range

We manufacture AbraMaXX® in a wide range of grits and diameters:

- Diameter range: 0.18 mm – 2.00 mm
- Grit types: SiC, KK, DM
- Grit sizes: 36 – 3500
- Standard grit load:  $36 - 320 \leq 30\%$ ,  
 $\geq 500 \leq 23\%$



### AbraMaXX® DM fine grit standard

The need for fine diameter and fine grit DM abrasive filaments continues to grow for existing and new areas of application. These products are typically only required in very small quantities. In order to facilitate purchasing small quantities at short notice, we offer several products available from stock in minimum order quantities of 1 hank (approx. 1.7 kg).

This product information has been compiled to the best of our knowledge and with the greatest of care. We cannot, however, assume any liability for the accuracy, integrity or timeliness of its content. The technical parameters and the behaviour of the filament can vary depending on diameter and production technique.