

## GENERAL INFORMATION AND PRODUCT INFORMATION

# LUKAS high-quality technical brushes

## FILAMENT QUALITY

### High quality steel wire

We use high-quality steel wire with high tensile strength, which ensures an exceptionally long and economical tool life.

### Stainless steel wire

This wire is used where residues from normal steel wire would impair surfaces such as stainless steel, aluminium and other non-ferrous metals.

### Abrasive impregnated nylon filaments

Abrasive impregnated nylon filaments are very flexible and optimally follow the contour of the workpiece without being too aggressive. During use, new abrasive grains are constantly exposed, thus achieving a consistent performance and long tool life.

## TYPES

We supply brushes in both wire qualities with crimped or twist-knotted filaments. Compared to crimped types, brushes with twist-knotted steel wire generally offer a longer tool life and more rugged abrasive performance and are thus suited for extreme requirements. We also supply brushes in high quality crimped steel wire embedded in a resin bond, thus enhancing their performance. These brushes are ideally suited for achieving uniform surfaces and precise edges.

## APPLICATIONS

A wide range of jobs can be performed with steel wire brushes. Here are just a few examples: deburring, descaling, derusting, surface cleaning, roughening and paint stripping. Brushes with abrasive impregnated nylon filaments are perfect for removing stains on metal surfaces, graining soft wood, car body repair jobs, stripping off paint residues etc.

## WORKING MODE AND POWER TOOLS

Technical brushes are flexible tools that follow the contours of the workpiece. In order to achieve best results, only the tip of the filament should be in contact with the workpiece. Elasticity of the brush depends on the exposed length of the filaments, and in the case of steel wire brushes, on the wire thickness. Brushes with very long filaments are very flexible and should only be used with low pressure. Excessive pressure reduces the life of the brush and results in premature wearing. Technical brushes can be used on stationary and handheld power tools.

## OPERATING SPEEDS

Steel wire brushes have a harder effect at higher speeds and a softer effect at low speeds. We recommend the following operating speeds for crimped types to achieve the desired results:

- Machining steel: approx. 30 m/s
- Machining non-ferrous metals: approx. 18 – 20 m/s
- Machining plastic: approx. 15 m/s

Higher operating speeds can be selected for twist knotted types e.g.:

- Machining steel: approx. 40 m/s

Brushes made from nylon filaments achieve best results at operating speeds of 18 to 22 m/s, depending on the material to be machined.

## SAFETY ADVICE

Technical brushes are manufactured according to a rigorous quality control (according to EN 1083-2). However, it is always advisable to wear safety clothing when working with technical brushes.