GREMOTOOL

PRECISION ENGINEERING

Gremotool GQT

Gremotool GQT-post-treatment of machining tools

swiss made

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Overview

Gremotool GQT-post-treatment of machining tools

Product presentation

Gremotool GQT-post treatment of machining tools

Quality tools are expensive, so it is even more important to be able to use them in a reliable process as long as possible.

GQT post-treatment increases the performance of your cutting tools. The service life is significantly increased, as the accuracy and surface quality of your machined workpieces. Our GQT post-treatment enables cost savings and more efficient processes in production without having to evaluate or purchase new tools. The results of GQT post-treatment are immediately recognisable and measurable thanks to its fast and uncomplicated implementation. No changes need to be made to the programming of the processing machine or the cutting values of the processing tools.

Applications areas

Gremotool GQT-post-treatment of machining tools

Base materials

The Gremotool GQT post-treatment can be used with all processing tools for metals, plastics and wood. It is not only effective for carbide machining tools, but also achieves the best results with HSS (high-speed-processing-steel) machining tools and tool steels for mould processing.

Suitable tool types

All machining tools are suitable for GQT post-treatment. The size and type of the machining tools to be treated do not matter. The best experiences with the optimising effect of GQT post-treatment have been achieved with the following tool types:

- **inserts (milling, turning, drilling, boring)**
- **Shank type milling cutter (roughing-, plain-, trochoidal-, hart- cutter)**
- **Hob cutter**
- **Form cutter**
- **Reamers**
- **Screw tappers, Threadformers**
- **Drill**
- **Gun-drill**
- **Centre-drill**
- **Counterbore**
- **Bandsaw blades**
- **Circular-saw blades**

Advantages

Gremotool GQT-post-treatment of machining tools

Increased tool durability

The base materials of the cutting tools all benefit from the grain refinement or carbide refinement that occurs during Gremotool GQT post-treatment. Both have a positive effect on the toughness and wear resistance of the base material. This improvement not only takes place in the surface layer, but also penetrates right into the core. By optimising the base material, the service life of the tools can be greatly increased with little effort while maintaining the same cutting values, without geometric change to the dimensions.

Surface quality

In order to achieve the required surface quality on the workpieces reliably and economically, the machining tools must be suitable for this. This means that the tools must only show minimal signs of wear. If the surface of the machining tool is too rough, wear marks will appear very quickly, which will affect the accuracy and surface quality of the workpieces as the remaining tool life decreases. Gremotool GQT post-treatment improves the surface of the tool coating, and the machining tools themselves and counteracts wear.

Process reliability

In automated production, the machining tool is assigned a central role. It must consistently offer the highest quality and stability in the process. This means that the accuracy and surfaces of the workpieces must be consistent over several inspection intervals. GQT post-treatment strengthens this property of the tool. This improvement not only has an optimal effect in automated production, but also in man-made or small batch to single part production.

Advantages

Gremotool GQT-post-treatment of machining tools

Precision

In material-removing production, large forces are generated at the cutting edge, whether it is sharp or blunt. These forces affect the entire tool, machine and workpiece. This causes them to deform, which ultimately leads to a loss of accuracy in the finished workpiece. GQT post-treatment starts with the core material and optimises it so that the cutting edge remains sharp for longer, the core material is more stable, and accuracy remains high for longer with the same tool.

Coatings

GQT post-treatment can be applied to tools from many different industries. It can be applied to carbide cutters for steel processing, cutter head inserts for wood processing and mould inserts for plastic injection moulding. For all these tools, the existing coating and surface are irrelevant for GQT post-treatment. The coating is not removed but optimised together with the core material.

For metal, plastic and wood processing

With many finely ground, polished or lapped surfaces on the tools, as well as with PVD and CVD coatings, GQT post-treatment can demonstrably improve the surface roughness on the tool. Even with finely polished surfaces, treatment in the sub-micron range can often reduce or eliminate polishing steps. The micro-hardness of PVD coatings is enhanced by GQT post-treatment, which also has a positive effect on tool life with consistent cutting values.

Service

Gremotool GQT-post-treatment of machining tools

Your expert for GQT post-treatments

Roman Kasé

Machining tools and coatings

«MY passion is getting the most out of every material and every tool. »

Our services

We are looking forward to supporting you in identifying the machining tools that will increase their performance with GQT post-treatment. We carry out GQT post-treatment on the machining tools at our own premises:

Contact our specialist at

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