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MISTRAL



W1200791512

Developed by ToolDesign



MISTRAL

New Solutions for Aluminium Alloys



MISTRAL

The Objective: Enhanced Tool Life, More Flexible Application

2 Definition of the development target

Based on the increased demands to thread quality, tool life and flexibility within the group of aluminium alloys, our team has defined a set of targets for a new product line in the high-end machining segment.

4 Serial production

1 Analysis of workpiece requirements

Together with leading automotive suppliers in Germany, SCHUMACHER's R+D team has analyzed the most recent trends in machining aluminium and non-ferrous metals.

3 Design

Geometry, honing procedure and surface treatment were designed in an 'all-new' way, supported by ToolDesign and ToolSimulation. The results were tested in serial production of German premium segment producers over a period of two years.

Technology

Tool properties:

- Upgrade of basic substrate to HSS-E / PM (Powder-metallurgical steel | 8 % Cobalt)
- Turn-key re-design of cutting geometry (consisting of flute geometry, cutting angles and reliefs)
- Optimized honing / finishing process – tailored to machining requirements of latest aluminium workpiece materials
- Innovative coating technology, adapted to aluminium alloys: extremely hard surface at cutting edge through diamond-like coating layer (DLC). Additional base version in Chromium Nitride coating.

... customized to your requirements:

- Our new MISTRAL technology can be modified from the standard version to meet special requirements in just few work days:
- Special lengths and constructional dimensions
- Versions with central and radial internal coolant
- Modifications of chamfer and coating

Service + Support:

SCHUMACHER Service-Hotline: +49-21 91 97 04-0 | info@schumachertool.de

