

WJX - HIGH FEED MILLING CUTTERS

Mitsubishi Materials has added a series of high feed cutters to its comprehensive range of indexable milling tools. WJX has been designed to be multi-functional and able to perform at high feed rates to ensure usability and efficiency across a wide choice of applications.

The high feed capability of this new cutter means it is ideal for rough machining under the demands of modern high efficiency conditions. WJX achieves stable machining and lowers cutting noise at high depths of cut and even during interrupted machining. This is due to its ability to reduce the cutting resistance generated at the initial point of contact between the insert and material.

Inserts

The double-sided negative inserts with the complex-shaped flank face provides excellent economy, increased sharpness and strength. The unique cutting edge geometry forms short chips and helps to prevent chip tangling to further enhance usability. To cope with the loads at high feed rates, the increased insert thickness provides the strength needed and helps to prevent sudden fracturing. Furthermore, a straight section of the cutting edge extends along the insert to enable high feed machining even at maximum depths of cut. The chip pocket area is left clear by use of a dovetail geometry that prevents the insert from lifting and provides stable clamping without the need to use a clamp bridge. In addition, the dovetail insert pocket geometry helps to absorb cutting forces. The cutting edge also has a small wiper face that provides good



surface finishes for rough machining. Overall, the geometry of the inserts provides the best features of traditional single sided inserts, namely good ramping performance and sharpness, whilst also having the best double sided features of cost efficiency and strength.

Grades and sizes

Five different grades of insert with Mitsubishi's latest generation of coatings are available to cover an extensive range of materials. This multiple choice of grades permits the high efficiency machining of steels and stainless, cast iron, heat resistant alloys, titanium and hardened steels.

The face mill type cutter bodies are available in Ø63, 80, 100, 125 and 160mm. Whilst the shank type is available in Ø50mm.



MULTI-FUNCTIONAL



DOUBLE BENEFITS



SINGLE SIDED FEATURES
Positive rake, Sharpness

DOUBLE SIDED FEATURES
Cost effective, Strength