

WSF406W - INDEXABLE FACE MILLING FOR CAST IRON

Mitsubishi Materials has added an indexable insert face milling cutter to its extensive range of high performance tools. The new WSF406 is a series of cutters for face milling applications. Featuring economical double-sided inserts with 8 cutting edges, WSF406W has been manufactured to the highest standards to meet all the requirements of a modern face milling cutter.

Precision and reliability for machining cast iron

The overall design achieves low cutting resistance and provides an adjustable cutting edge run-out system. These key features help to produce excellent surface finishes and increase productivity for both roughing and finish face milling applications.

Easy to use adjustable run out system

Highly accurate adjustment of the cutting edge is straightforward. The main clamp should be half tightened while the adjustment screw is turned until the insert is in the required position, then the main clamp is fully tightened. These simple operations enable the highest axial accuracy and adjustments of 0.01 mm or less and therefore ensures the highest efficiency and a great cost performance ratio of the M-class inserts.

Special geometry specifically for cast iron

The unique carbide inserts feature Mitsubishi Materials' double sided Z geometry, with 8 usable cutting edges that offer lower costs and excellent process reliability thanks to a negative seating geometry but provides a positive, sharp cutting action. This generates low cutting forces and together with the special corner chamfer, helps to prevent chipping at the edge of the workpiece that can occur when machining cast iron. A wiper geometry insert is also available to cater for when the very best surface finishes are required.



New MC520 CVD coated carbide grade

Improved peeling resistance of the MC520 coating layers is provided by the Tough Grip technology and is ideal for grey cast iron milling. This extra resistance is achieved by optimising the coating layer and improving the adhesion with the cemented carbide base material, and between the Al₂O₃ and TiCN coating layers. This highly effective combination of coating layers also suppresses plastic deformation of the cutting edge. The overall result is outstanding tool life.

Applications and availability

A wide range of different cast irons can be machined at highly effective depths of cut up to 7.5 mm, and at cutting speeds from Vc 90 m/min up to Vc 250 m/min dependant on the material and workpiece stability.

WSF406W facemills are available from Ø80 mm up to Ø250 mm.



Axial runout adjustment

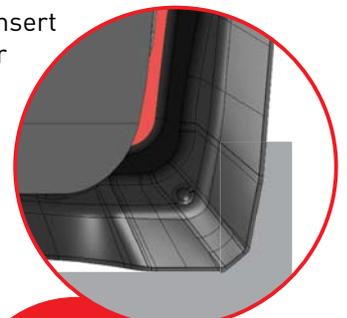


MC520
Standard
insert



MC520
Wiper insert

WSF - Insert
chamfer



Conventional insert
Cracks and chipping at the edge