

Technical Information

Insert Geometries for Milling

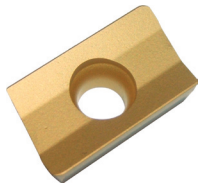
222.79.400 / 500 / 600

Inserts with optimized geometries and large selection of radii from 1/32" - 5/32" for steel, cast steel and aluminum alloys. Very effective with high metal removal rates in medium and heavy duty milling.



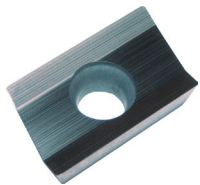
222.79.400

This pressed insert has extra chip control molded into the top of the insert allowing for high machining rates in semi-finishing and rough milling operations.



222.79.500 / 600

High shear radial angles allow for good performance in all applications and materials. Precision ground.



222.79.510 / 610

Sharp rake angles on this precision ground insert make these inserts the first choice for all aluminum machining applications, as well as other non-ferrous materials.



222.79.550

Inserts are precision ground and polished, which reduces frictional resistance during machining and have sharp primary wiper edges for reduced cutting forces and burring. The perfect combination of geometry and grade make this insert ideal for aluminum machining, in either high speed or conventional milling applications.



222.79.564

Inserts used in medium and rough milling applications, offering good performance, mainly under poor conditions, i.e., chattering, vibration, unstable situations, long extended tools or shoulder milling with a small width of cut. Smoother cutting action under poor conditions.



222.79.572 / 222.79.574

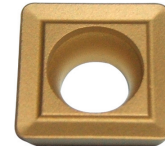
Inserts with highly positive and stable geometry, thus reducing power consumption and vibrations. To be used for steel, stainless steel, and cast iron.

222.67.1..



Strong stable geometry for a variety of work piece materials.

SDNT / SPNT / SPNX



Strong stable geometry suitable for most work piece materials.

AONT



-MH

Positive and stable geometry for roughing. For best results in stable machine and workpiece conditions.



-MM

Positive and stable geometry for medium machining. The positive stabilized cutting edge improves the milling action.



-ML

The highly positive geometry for smooth and soft cutting action. Geometry for finishing and light roughing operations. Specially developed for reducing cutting forces and power consumption of machine tools.

BDMT



-ML

Light edge preparation, reduced cutting force. For finishing applications with highest degree of accuracy. For cast iron, steel and alloy steel.



-MS

Sharpest edge, reduced cutting force up to 20%. For low carbon and stainless steels.

BDGT



-AL

Peripheral ground with polished rake face optimized for aluminum applications.

Technical Information

Insert Geometries for Milling

HPGT / HPPT



-LD

for light machining

-GD

for general face milling in steels and cast irons



-AL

optimized for aluminum applications



-3W

wiper insert geometry when exceptional surface finish is required (3 wiper edges)

HNGJ / HNPJ



-LD

Honed edge preparation used in light machining.

-GD

Medium T-land and honed edge preparation used in medium machining. Good first choice for general-purpose use.

-HD

0° to negative T-land and hone edge preparation used in heavy machining. Good first choice for heavy feeds and severely interrupted cuts.

HNGJ



-LDJ

Precision ground and polished geometry for aluminum

XNGJ-GD



-3W

Chamfer-protected edge preparation. Identifies “Wiper” inserts that allow for a finer finish and are used in combination with -GD geometry inserts to permit roughing and finishing in one pass.

XNGJ-LDJ



-LDJ

Wiper insert geometry used in conjunction with HNGJ-...LDJ insert to permit roughing and finishing in one pass. Specifically for aluminum.

M270BR / BF



-BR

Roughing and semi-finishing geometry for contouring in a variety of workpiece materials.

-BF

Precision ground finishing and semi-finishing for contouring in a variety of workpiece materials.

M270TF / HF



TF

Precision ground with corner radius and back taper for helical and pocket milling of pre-hardened and hardened materials.



HF

The design of this insert allows for high speeds and high feed rates with shallow depth of cut. Forces are directed upwards towards the spindle helping to eliminate vibration and deflection allowing for heavy chip loads.

RCMT, RDGT, RDHT, RDMT, & RDMW

Positive free cutting materials



RCMT-43M

Free-cutting geometry for roughing and finishing, provides excellent surface finish. Outstanding chip control, especially with light depths of cut. Preferred geometry for alloy and plain carbon steels.



RDGT

Highly positive geometry with polished to rake face. Giving reduced cutting forces. Ideal for non-ferrous materials.

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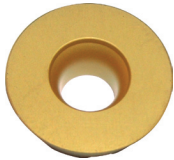


RDHT

Tolerance class H with ground diameter of +13 µm tolerance for semi-finishing and finishing.

RDMT

Particularly for milling with long overhangs.



RDMW

Particularly for vibration-prone applications, because it is less positive.

SDMT

Positive geometries and strengthened cutting edges guarantee trouble-free machining of a wide range of materials. 4 usable cutting edges.



-ML

For cast iron machining and finishing on non-rigid machines and setups



-MH

For most applications

SDMX

-MM

Positive pressed geometry engineered to reduce cutting forces enabling increased feed rates.



-MH

Similar to the MM but with re-enforced cutting edge for heavy duty milling

SPKR

-MS

Special trough-shaped geometry, cutting forces reduced by the increased cutting angle. This improves machining of thin-walled and unstable parts. Higher cutting speeds are also possible on less powerful machines.



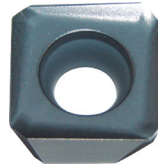
SNKT / SNMT

Geometries with positive rake angles and reinforced cutting edges to reduce cutting forces and improve milling performance.



-20

Particularly positive geometry for light alloy milling work.



-21

General milling of cast irons and finishing of steel.



-31

Roughing and finishing of steel.

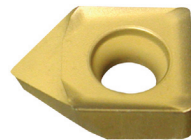
XNKT

For use in conjunction with SNKT-1205 -21 and -31 inserts



-11

Wiper edge for cast iron



-12

Wiper edge for steel