NEW - GW Grooving and Parting-off series

Mitsubishi Materials extensive range of high quality turning tools has been expanded to include a brand new series of grooving and parting-off tools, called GW.

Simple and efficient
Simplicity and efficiency; in addition to the pre-requisite high quality and performance, were the benchmarks defined during the design phase of the new GW series. The simplicity was taken care of by using the tool blade itself to clamp the insert without any screws. By using a unique wrench, it is possible to remove and replace the insert with one simple action, thereby making it efficient for everyday use in the workshop. Added security and rigidity is provided by the reverse taper geometry that prevents extraction during machining. The design also incorporates three large convex location faces for precise insert location repeatability, and in combination with a small location key, gives provision for increased reliability during machining.

Double through coolant holes
Two through coolant holes positioned close to the cutting edge simultaneously supply cutting fluid to the rake and flank faces. This provides effective cooling and lubrication for increased wear resistance that in turn provides the end user with longer tool life and lower costs. Up to 7MPa coolant pressure can be used to provide the best conditions for reducing heat generation.

Flexibility
There are 6 coolant ports on the tool block, facilitating easy input configuration for the coolant. Further flexibility and ease of use is provided by the elongated coolant outlet that feeds into the blade. The overhang length is also easily set by using the simple scale etched onto the blade. A wide range of overhang settings within the zone clearly marked on the tool block and blade can be fed with coolant via the elongated supply ports.

Performance and reliability
A range of applications and materials from alloy and stainless steels, plus cast irons through to difficult to cut materials are covered by four of Mitsubishi’s high tech coated grades. The versatile PVD coated VP20RT inserts are highly versatile and suitable for multi material use, thereby saving on inventory costs. Other grades, such as the MY5015 is for steels as well as cast iron machining up to 300m/min, whilst the VP10RT grade covers the harder range of steels, stainless steels, heat resistant and titanium alloys. Two different chipbreakers are offered, the GS type for both parting off and grooving, plus the GM type that specialises in high performance parting off. All inserts are available in widths from 2mm to 5mm.