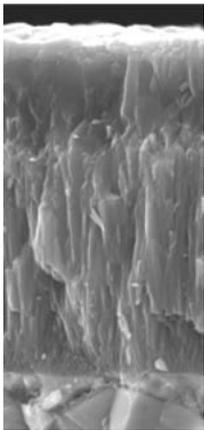


## RANGE EXPANSION OF TURNING INSERTS FROM MITSUBISHI MATERIALS

Mitsubishi's proven range of inserts for high performance steel turning has been expanded with an additional grade; MC6035, for interrupted in lower speed machining. MC6035 a CVD coated grade incorporates the latest technology that alleviates tensile stresses in the coating layers. This helps to prevent crack development that is the typical cause of damage during interrupted cutting. This provides a higher degree of reliability when compared to conventional grades and adds process security to large batch production.

New grades alone don't provide all the answers. Without modern chipbreaking geometries any large enhancements in performance would be difficult. With this in mind, MC6035 grade inserts have been matched with the LP, MP, MA and RP range of chipbreakers.



A smooth coating surface provides excellent welding resistance. The thickened TiCN layer also achieves superior wear and chipping resistance for extra stability.



**MC6035**

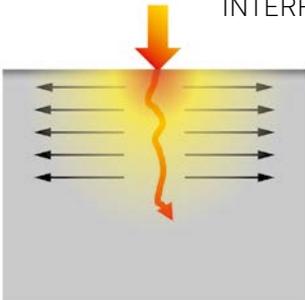
Each chipbreaker has been carefully designed to suit a wide range of applications, ranging from the lighter cutting area; LP, the versatile, general purpose breakers MA and MP through to the heavy duty breaker RP. This heavy duty breaker has a strong leading edge, balanced with a lower cutting resistance that makes it suitable for interrupted cuts and for removing scale.

The MC series also includes the MC6025 grade that utilises Mitsubishi's 2 in 1 coating technology and a newly developed substrate that merge perfectly to provide the ultimate overall cutting performance. The smooth surface of the coating prevents chip welding and combines with the  $Al_2O_3$  and TiCN coating layers to deliver the excellent heat and wear resistance needed for outstanding tool life during high efficiency machining. The substrate of MC6025 also uses a new technology that provides a tough outer edge layer for vastly improved resistance to crack development.

MC6015 is the third grade in the MC series and is ideal for high speed machining in the ISO P05 to P15 range. The Nano texture, optimised crystal growth coating technology used on MC6015 provides outstanding wear resistance and durability during the high speed, high productivity levels demanded by today's metal cutting industry.

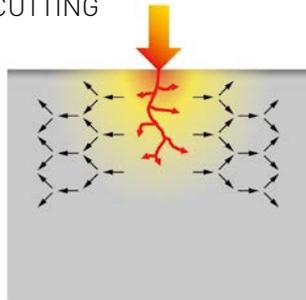
The complete MC series contains a huge range of negative and positive geometries ranging from CNMG through to WPMT types and all are matched with an ideal chipbreaker to provide the ideal combination for high performance and reliability.

IMPACT STRESSES DURING INTERRUPTED CUTTING



CONVENTIONAL COATING

Conventional products can fracture during interrupted cutting due to the transmission of tensile stresses deep into the coating layer.



**MC6035**

MC6035 has succeeded in alleviating tensile stresses in the coating layer. This helps to prevent crack development during interrupted cutting.