

New PVD aluminium oxide coating for ISO M and ISO S materials

ISO indexable inserts made from Tiger•tec® Silver PVD, for stainless and difficult-to-cut materials

The new, positive ISO indexable inserts have been developed by Walter on the basis of the high-performance cutting tool material, Tiger•tec® Silver. A PVD aluminium oxide coating protects the indexable inserts against wear, particularly at high machining temperatures. This makes them ideal for machining ISO M and ISO S materials.

During the PVD process, deposition takes place at a low application temperature. That is how the micrograin carbide substrate retains its toughness. The special type of smoothing on the cutting surface restricts the development of heat, since it reduces friction. Result: The tool wear is considerably reduced so the user benefits from a longer tool life. The most obvious advantage of the thinner PVD coating thicknesses: They can produce very sharp cutting edges – ideal for soft cutting actions, low cutting forces, reduced operating temperatures and preventing material surface hardening.

Walter is launching three new PVD grades: WSM10S, WSM20S and WSM30S. At the moment there are three positive geometries available: FM4 for finishing operations, MM4 for universal use, and RM4 for roughing operations. They are typically used in the medical, chemical and food industries, aerospace technology and, increasingly, the automotive sector, e.g. machining turbochargers.



Tiger•tec® Silver WSM10S, WSM20S, WSM30S