

## **PRECISION TOOLS**

FOR THE MEDICAL AND MICROMECHANICAL INDUSTRY



- **TURNING AND CUT-OFF TOOLS FOR SWISS TYPE LATHES**
- ID TURNING TOOLS FROM Ø 0.5 MM
- THREAD WHIRLING WITH UP TO 12 CUTTING EDGES
- **CUTTING TOOL SYSTEMS FOR SWISS TYPE LATHES**
- CLAMPING SHIM SYSTEM WITH INTEGRATED COOLING











For more than 100 years we have been developing, producing and distributing premium quality cutting tools for micromechanics, watch- and medical technology.

UTILIS AG is one of the world's leading suppliers of precision tools for the metal working industry.

Ever since the company was founded in 1915 it has been our declared goal to forge ahead in the production of high quality cutting tools for micromechanics that are valuable and beneficial for our customers. For us, as a traditional, midsized, family runed Swiss business, it is only natural that we place the greatest value on precision, service and our customers. We consciously decided to produce our multidec® brand products in Switzerland.

It is the only way that we can ensure the established and proven quality of UTILIS brand products that we currently sell in 57 countries around the world. A positive side effect: we ensure, create and maintain employment in Switzerland.





For more than a quarter of a century we have been developing innovative precision tools under our own brand "multidec®", which is specifically designed to meet the challenges of the watch, medical and dental implant industries.

By using state-of-the-art, advanced technology and our extensive know-how in the manufacture of our "multidec® product line", we are positioning ourselves as a specialist and as one of the leading companies in the market for cutting tools in the metal cutting industry.



We have a market-oriented strategy which makes the sustainable benefit of our customers the main focus of our actions. We stand by our claim of being better than the competition.

Within the scope of our corporate strategy, both global networking and direct presence play a decisive part on all of the markets that are relevant to us. We are therefore anxious to make our own multidec® brand comprehensive available directly on site via our international representatives.

The general catalogue 2018/2019 is excellent for this purpose – as well as personal discussions and our E-Shop.

We wish you every success with our multidec® products, and we welcome you to UTILIS

Mario Macario, Managing Director (CEO)

## *Indexable insert tools*

**multidec®-CUT** is most commonly used in OD turning or alternatively in ID turning. All inserts are easy to replace and known for their great repeat accuracy. For cutting of all common materials we offer ideally adjusted micrograin carbide grades, both coated and uncoated.

A wide range of high-quality standard holders and holders with "IC" internal cooling, specific to the Swiss type automatic lathes, completes multidec®-CUT. 5 systems differ in the cutting depths and widths and their application in machining: multidec®-CUT 500, -CUT 1600, -CUT 1700, -CUT 3000 and -CUT 3600.

**multidec®-ISO** provides a very wide range of ISO standardized inserts for Swiss type machining and precision turning. All inserts consist of two edges and are easily indexed or changed. At the same time multidec®-ISO provides a very stable and sharp cutting edge with a maximum radius of between 0 and 0.8 mm. Innovative solutions involving coated and uncoated inserts made of carbide, cermet and diamond tips have been designed for cutting very difficult materials. For all mechanical cutting conditions a large choice of sintered and ground inserts with a wide variety of chip grooves are available.

**multidec®-TOP** is a further developement of the rhombic 35° inserts and offers an ideal system for Swiss type and precision turning. The specific chip breaker exercises very good control over the chip flow during the different machining operations. The "TOP" system with drag-cut facilitates an increase of the feed rate of up to 100% compared to conventional ISO inserts.

A wide range of high quality standard-holders and holders with "IC" internal cooling, specific to the Swiss type automatic lathes, completes multidec®-ISO/ TOP.





**multidec®-BORE MICRO** provides a wide range of inserts for miniaturized ID turning (diameter between 0.5 and 8 mm). Sharp edges, small radii and ground surfaces guarantee accurate cutting. multidec®-BORE MICRO is excellent for machining common materials as well as exotic alloys. multidec®-BORE MICRO carbide tools are available with wear-resistant coatings as well as uncoated.



**multidec®-BROACH** is for multi-sided punching, which is a chip-removing procedure for manufacturing inner profiles in holes which are not usually continuous. During this procedure, the tool is pushed into a hole in several so-called strokes, and the outline of the broaching tool is introduced into the workpiece. We can supply square, hexagonal and TORX broaching tools made from carbide from our standard product range. We can also manufacture customised shapes and intermediate sizes on request.



**multidec®-DRILL** contains of a wide range of high-precision solid carbide drills and centre drills. This includes the range from Ø 0.5 to 5 mm and centre drills with tip angles of 90°, 120° or 140°. multidec®-DRILL is characterised by its high stability and precision, and makes a decisive contribution to achieving high quality because of its excellent positioning capability and self-centering characteristic, and makes the work easier. The design also provides good chip removal and the tool life is increased significantly because of the coating.



**multidec®-THREADMILL** offers a wide range of full profile milling cutters with one or more teeth for economic production of small threads from M1 or UNF/ UNC from 80T/INCH.



**multidec®-GRAVER** is for engraving, which is a chip-removing procedure with which ornaments, text and decorations are cut into the material. The removal of the material creates a surface structure which visually stands out against the background. Engravings manufactured in this way have the advantage of greater durability than other procedures.

The product range includes standardised, finished-ground carbide gravers which provide extremely good performance in all materials and also pre-ground semifinished products for grinding yourself.





**multidec®-WHIRLING** is a multiple cutter tool system designed to significantly improve productivity – essential in today's mass production. Unlike single point threading which requires multiple passes, thread whirling produces a finished thread free from burr in a single pass. The use of up to 12 cutting inserts greatly reduces machining time.

For optimized use, UTILIS supplies variants for specific machines with different cutting diameters and lengths.









**multidec®-SHORT** is a range of holders with short holders multidec®-CUT, -ISO and -TOP indexable inserts. All holders are equipped with internal cooling.

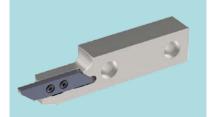


**multidec®-BACKTOOLS** is a product range used for reverse-side machining on Swiss type turning machines with counter spindles. The tool enables a part to be fully machined in a single operation. This modular system is characterized by outstanding stability and versatility.



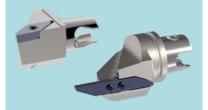
**multidec®-MODULINE** is a modular tooling system with an ideal range of options designed to meet the requirements of different machines available on the market.

A specific MODULINE tool holder plate can replace the original plate. This way, gains in reliability and tool changeover speed are very high.



**multidec®-TECKO** is a modular tooling change system from automatic-lathes with the advantage to increase the number of insert-holders in the machine. The system consists of base plates adapted on the current machines and insert-holders, which can be fixed fast and with high precision, due to the two "Quicklock"-screws.

UTILIS propose adapted toolholders for inserts multidec®-CUT and multidec®-TOP.



**multidec®-KM**<sup>TM</sup> is a precise and robust quick-change system for automatic lathes with an interface to ISO standard 26622.

For the KM Micro, KM Mini and TS systems UTILIS offers suitable holders for multidec®-CUT, multidec®-TOP inserts and for multidec®-BORE MICRO cutting edges.



**multidec®-HSK** is for the HSK connection with a standardised ISO 12164/ DIN 69893 interface, and has spread continuously in the last few years. This system makes the customer independent from specific tool system, which is a great advantage. Simplicity, precision and reliability: these are the criteria that customers place on modern tool systems. HSK tools largely satisfy these demands and help to maximize productivity.

**multidec®-PSC** (Capto®) is a flexible and modular quick change toolholdersystem, with a polygon-connection compliant with ISO 26623-1 standard. High torque transmission is one basic advantage of the system.

The program includes tool holders suitable for turning machines with multidec®-CUT, multidec®-TOP and multidec®-BORE MICRO inserts.

**multidec®-MULTITASK** is a sophisticated range of tools which offers ideal solutions for modern turning and milling centres with the HSK-E40, HSK-T32, HSK-T40, HSK-A40 and PSC 40 (Capto® C4) spindles.







**multidec®-ESCOMATIC** is a range of tools for ESCOMATIC machines. UTILIS has a range of holders for inserts for various types of machine.



**multidec®-TORNOS DECO** is a range of tools for a wide range of TORNOS machines such as DECO 7, DECO 10, EvoDECO 10, DECO 13, EvoDECO 16, DECO 20, DECO 26 and EvoDECO 32. UTILIS provides suitable basic tool holders and modules for multidec®-CUT and -TOP cutting edges.

## **TORNOS**





With **multidec®-LUB**, UTILIS has implemented a new clamping shim system. Cost-efficient processing of modern materials increasingly requires accurate control of the coolant at the cutting edge. Because of the high precision and pressure, it is possible to discharge the chip quickly and safely from the cutting edge and the workpiece, which protects the cutting edge of the insert.

The newly developed **coolant connections** at high or low pressure from UTILIS ensures optimal delivery of coolant to the insert.

**multidec®-TAPER-IN** are Monoblock tool holders with the highest possible stability, developed specifically for use in Swiss type automatic lathes.

**Collets** are made in-house by UTILIS and can be supplied from stock. They are manufactured for universal use with all screw-fitted milling cutters which have the same interface-specific application.

**Reduction sleeves** allow you to fit small tools into machine tool fixtures with larger diameters.

**TORX Screwdrivers** with maximum possible hardness combined with high toughness are essential for any high-quality tool. Safe working conditions and a long tool life are guaranteed with this screwdriver.

Distributed by:



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