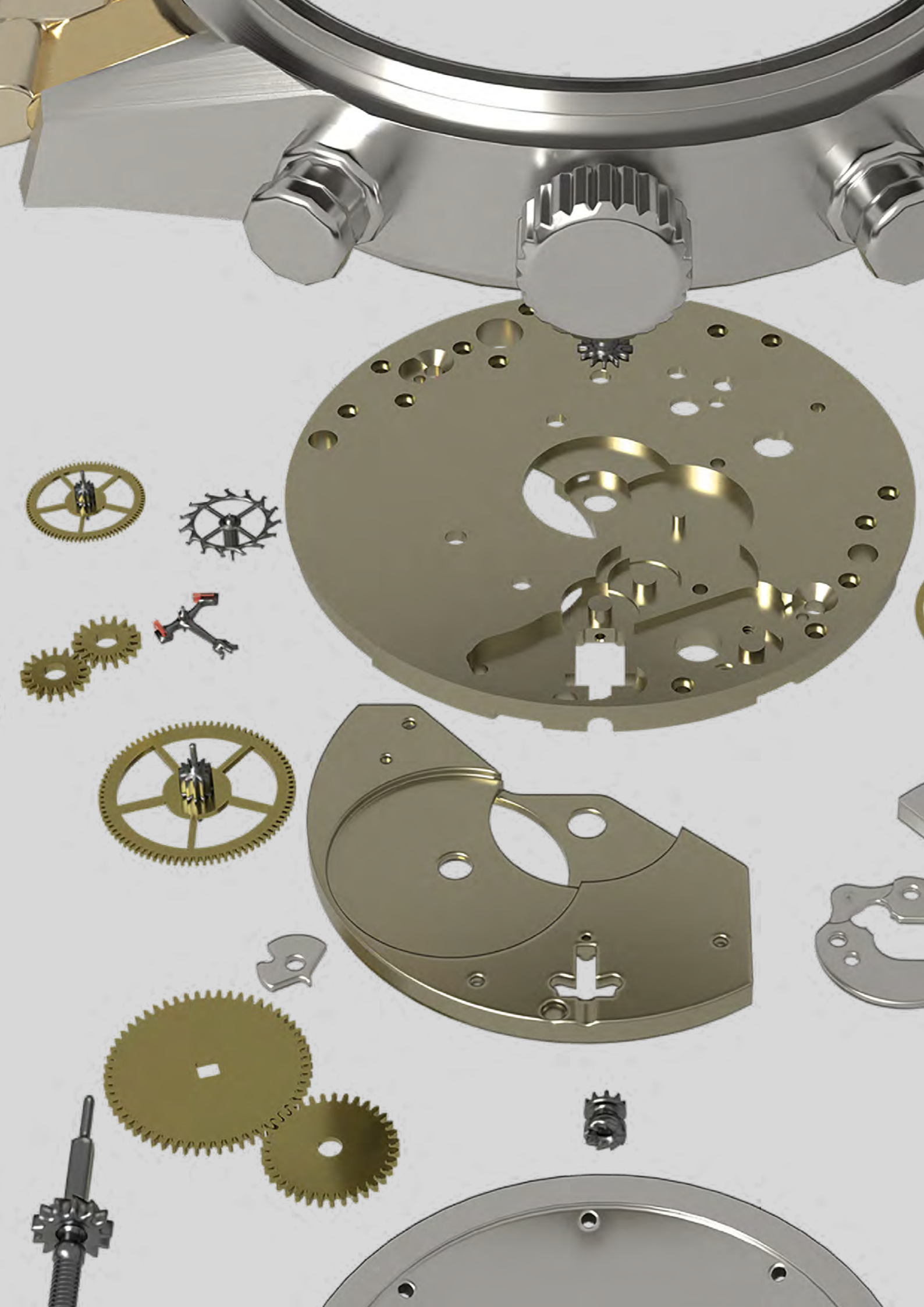


Horlogerie





The background of the entire page is a collection of various watchmaking components, including gears, springs, and metal plates, rendered in a clean, metallic style. A large, stylized watch movement is visible in the upper left corner.

HORLOGERIE

CUTTING TOOLS FOR THE WATCHMAKING INDUSTRY

Cutting tools play a crucial role in the world of watchmaking. The precision and finesse of manufacturing operations require the use of tools with tight tolerances, often in the order of a few microns, with edge sharpness specific to watchmaking materials.

All this is part of our daily work at DIXI Polytool. We are passionate about precision, and our role is to offer you innovative solutions so that we can meet new challenges together. We strive for excellence through our innovative solutions. To achieve this, a technical and sales team is at your disposal.

The following pages illustrate our range of products for your applications through various machined components. The use of tungsten carbide, polycrystalline diamond, or monocrystalline diamond tools will guarantee you an optimal finish. In addition, our COOL+[®] lubrication system will enable you to achieve unparalleled performance, regardless of the material being worked on.

We are proud to be your partner in the creation of meticulous, high-quality mechanisms, which are the hallmark of luxury and precision watchmaking.

Movement Baseplate

ROUGH MILLING

DIXI 7342

High performance slot drill with reinforced shank developed for the machining of tough materials. Ø0.10 to 12.00 mm.



DIXI 7443 COOL+®

High performance end mill with reinforced shank and variable helix. With COOL+® lubrication system. Ø0.30 à 10.00 mm.



DRILLING

DIXI 1106

90° spotting drill. Ø1.00 to 12.00 mm.



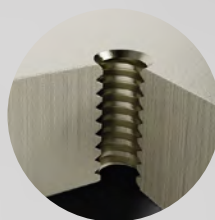
DIXI 1111

Helical gun drill developed to achieve high-precision holes. Ø0.10 to 2.00 mm.



DIXI 1137

Self-centering twist drill with reinforced shank, cutting length, developed for the drilling of lead-free brass and high tech materials. Ø0.15 to 6.00 mm.



WHIRLING

DIXI 1737

Whirling tool, full profile. No burrs thanks to the full profile. S0.50 to S1.40 - M1.00 to M3.00



* Only for non-ferrous materials.

«SP» products are special tools that are custom-made and adapted to different uses.



MILLING FINISHING

DIXI 7060

Straight flute end mill with flat bottom and polished flute.

Ø0.50 to 6.00 mm.



DIXI 7063

Left hand end mill, right hand cut, with flat bottom, with polished flute faces and reliefs.

Ø0.40 to 4.00 mm.



DIXI 7233

Straight flute end mill with polished flute and reliefs.

Ø0.50 to 6.00 mm.



*DIXI 70600 PCD COOL+® SP

PCD end mill with COOL+® lubrication system.



*DIXI 70600 PCD

PCD end mills with flat bottom developed for burr-free machining.

Ø0.50 to 10.00 mm.



*DIXI 70630 PCD

PCD superfinishing cutter, to obtain transparent finishes.

Ø3.00 to 12.00 mm.



SHAPE MACHINING

*DIXI 76530 PCD SP

Shaped cutter for precise and fast machining to optimize cycle time and component quality.



ENGRAVING

DIXI 7017

1/2 engraving tools.



*DIXI 70170 DIA

Monocrystalline diamond engraving tool.



*DIXI 70070 PCD

Engraving cutters developed for high end engraving.



Movement Bridge

CHAMFERING

*DIXI 76230 DIA

Monocrystalline diamond chamfering tool developed for mirror finish machining.



DIXI 7625

Chamfering tool for inner corners developed to minimise manual bevelling operations.



DIXI 7624

Double taper chamfering tool developed for 45° bevelling and counter-bevelling.



DIXI 7623

90° chamfering tool.



ENGRAVING

DIXI 7017

1/2 engraving tools.



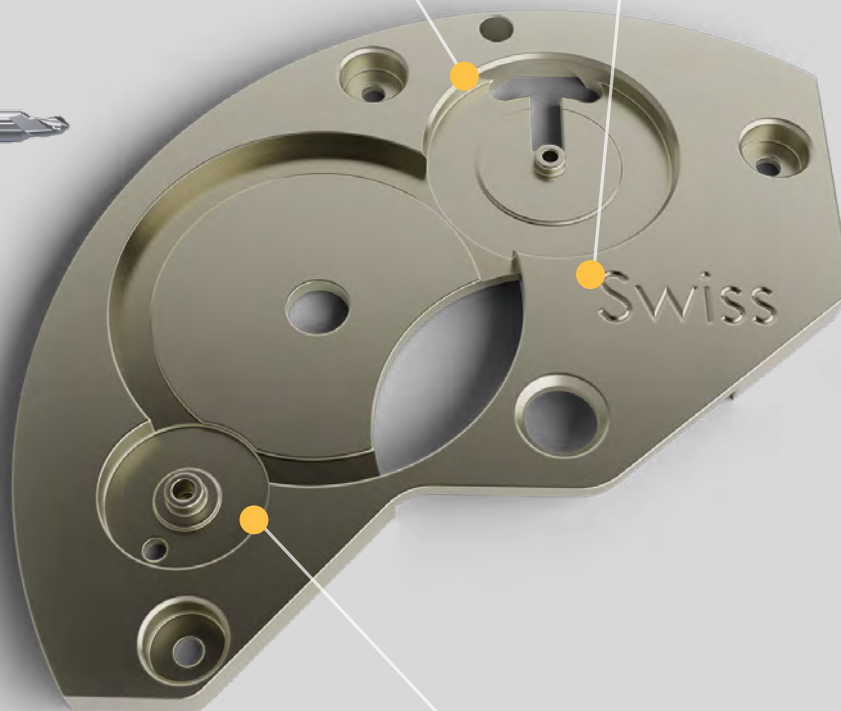
DIXI 7007

3/4 engraving tool developed for general engraving.



*DIXI 70070 PCD

Engraving cutters developed for high end engraving.



CHAMFERING BY PLANING

*DIXI 20770 DIA SP

Planing tool for shiny chamfering without feed marks. (non-rotating tool).



* Only for non-ferrous materials.

«SP» products are special tools that are custom-made and adapted to different uses.

Movement

Cogwheel

GEAR CUTTING

DIXI 1672 SP

Monobloc hob cutter for epicyclic teeth developed for generation hobbing of small gears and wheels (NIHS, EVJ, CETEHOR standards...). Ideal for direct collet clamping on sliding head turning machines. Re grindable logarithmic profile.



DIXI 1673 SP

Monobloc module cutter developed for radial, frontal and conical tooth-by-tooth hobbing. Ideal for direct collet clamping on sliding head turning machines. Re grindable logarithmic profile



ROLLING

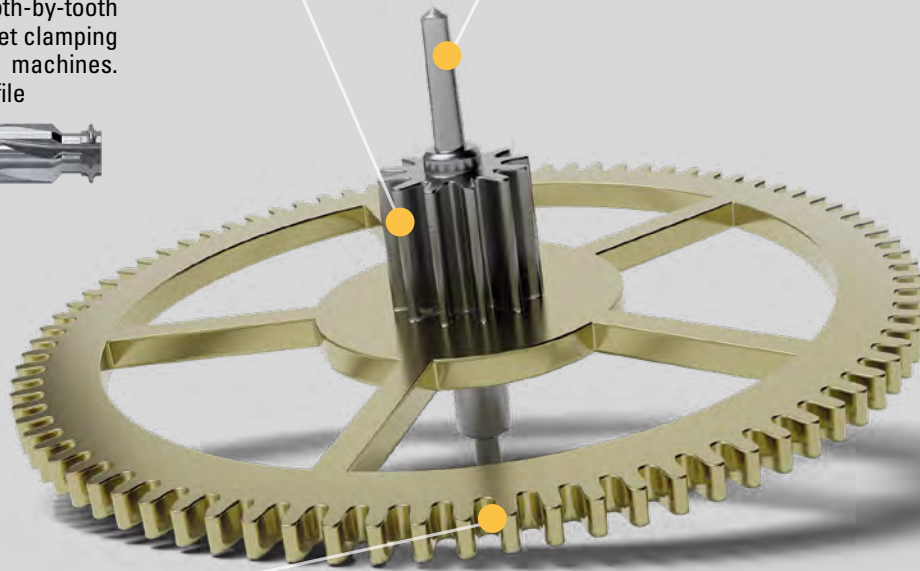
DIXI 0700 SP

Supporting disc, up to 8 slots.



DIXI 0710 SP

Supporting disc, up to 24 slots.



CUTTING BY GENERATION

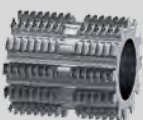
DIXI 1675 SP

Hob cutter for epicyclic teeth developed for generation hobbing of gears and wheels (NIHS, EVJ, CETEHOR standards...). Re grindable logarithmic profile.



DIXI 1676 SP

Double milling cutter with two cutting zones, one side for roughing and the other for finishing. Re grindable logarithmic profile.



DIXI 1685 SP

Index cutter for column wheel teeth, ink wheel, or star-shaped profile. Resharpenable logarithmic profile. Multiple working areas possible.



Movement Barrel

LATHE TURNING

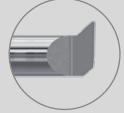
***DIXI 26500 PCD**
Turning insert.



INNER FINISHING TURNING

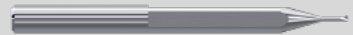
DIXI 2567

Micro boring and chamfering tool developed for boring and counter-bevelling of small turned parts.



DIXI 2577

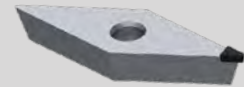
Micro boring and chamfering tool developed for boring, bevelling and counter-bevelling of small turned parts.



FINISHING TURNING

***DIXI 26420 PCD**

ISO Insert in polycrystalline diamond. (forms V, C, D)



MILLING

DIXI 7657 SP

Milling cutter combining two cutting profiles. Ideal for milling barrels.



SLITTING

DIXI 1675 SP

Hob cutter for epicyclic teeth developed for generation hobbing of gears and wheels (NIHS, EVJ, CETEHOR standards...). Regrindable logarithmic profile.



DIXI 1685 SP

Index cutter for column wheel teeth, ink wheel, or star-shaped profile. Resharpenable logarithmic profile. Multiple working areas possible.



DIXI 1673 SP

Monobloc module cutters developed for radial, frontal and conical tooth-by-tooth hobbing. Ideal for direct collet clamping on sliding head turning machines. Regrindable logarithmic profile



* Only for non-ferrous materials.

«SP» products are special tools that are custom-made and adapted to different uses.

Movement

Balance wheel

LATHE TURNING

***DIXI 26500 PCD**
Turning insert.



MILLING

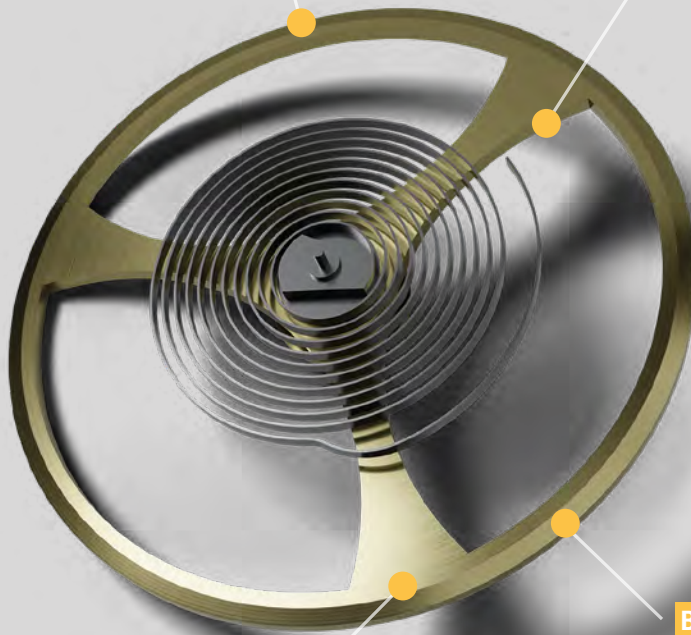
DIXI 7342

High performance slot drill with reinforced shank developed for the machining of tough materials.
Ø0.10 to 12.00 mm.



DIXI 7343

High performance end mill with reinforced shank and variable helix, developed for the machining of tough materials.
Ø0.30 to 16.00 mm.



CHAMFERING

DIXI 7624

Double taper chamfering tool developed for 45° bevelling and counter-bevelling.



DIXI 7653 SP

Biconical bur designed for 45° angling and counter-angling in a single pass.



*DIXI 76230 DIA

Monocrystalline diamond chamfering tool.



BALANCE WHEEL BALANCING

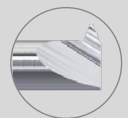
DIXI 1137

Self-centering twist drill with reinforced shank, cutting length, developed for the drilling of lead-free brass and high tech materials.
Ø0.15 to 6.00 mm.



DIXI 1739

Whirling tool, partial profile, developed for the milling of micro threads.



DIXI 1712

Micro cutting tap developed for the machining of materials with good machinability. Thread according to NIHS 06-10 (ISO 1501 / DIN 14) and ISO 965 (DIN 13).



DIXI 1516 SP

T-slot cutter used for balancing the balance wheel.



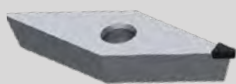
Movement

Oscillating weight

FINE MILLING

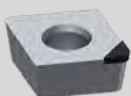
*DIXI 26420 PCD

ISO Insert in polycrystalline diamond.
(forms V, C, D)



*DIXI 26420 CVD

ISO Insert in monocrystalline diamond.
(forms V, C, D)



*DIXI 26420 DIA

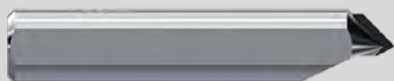
ISO Insert in monocrystalline diamond.
(forms V, C, D)



DECORATION

*DIXI 20150 PCD SP

Superfinishing PCD engraving tool for
obtaining a satin finish.



MILLING FINISHING

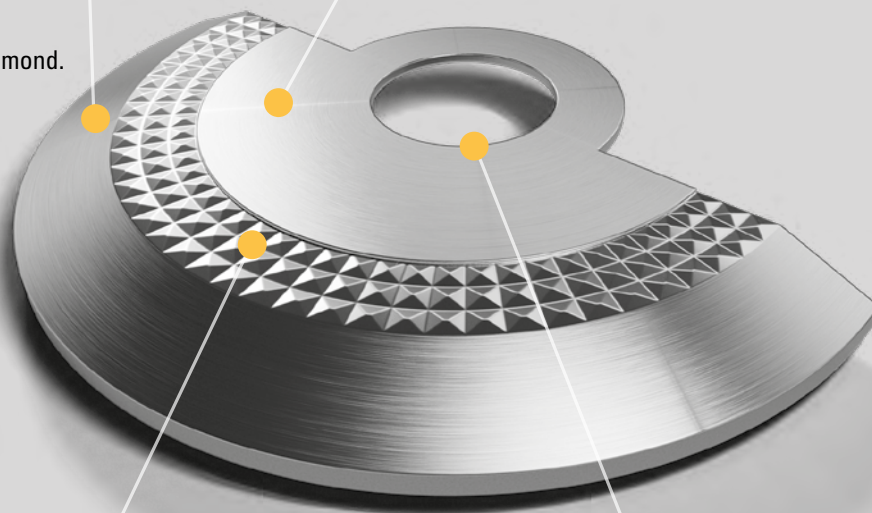
DIXI 7060

Straight flute end mill with flat bottom
and polished flute.
Ø0.50 to 6.00 mm.



*DIXI 70600 PCD

PCD end mills with flat bottom
developed for burr-free machining.
Ø0.50 to 10.00 mm.



CHAMFERING

DIXI 7623

90° chamfering tool.



*DIXI 76230 DIA

Monocrystalline diamond chamfering tool
developed for mirror finish machining.



* Only for non-ferrous materials.

«SP» products are special tools that are custom-made and adapted to different uses.

Watch case

caseband

DRILLING

DIXI 1108

90° spotting drill developed for preparing crimping and drilling bar holes.

Ø0.50 to 2.50 mm.



ROUGH MILLING

DIXI 7220

Roughing end mills developed for the machining of difficult materials.

Ø3.00 to 16.00 mm.



*DIXI 72150 PCD SP

PCD roughing end mill for fast machining and low wear, especially in abrasive materials.



MILLING FINISHING

DIXI 7343

High performance end mills with reinforced shank and variable helix. developed for the machining of tough materials.

Ø0.30 to 16.00 mm.



DIXI 7443 COOL+®

High performance end mills with reinforced shank and variable helix. With COOL+® coolant system.

Ø0.30 to 10.00 mm.



*DIXI 70520 PCD COOL+® SP

PCD end mills with corner radius. With COOL+® coolant system.



DRILLING

DIXI 1105

90° spotting drill, with reinforced shank.

Ø1.00 to 10.00 mm.



DIXI 1137

Self-centering twist drill with reinforced shank, cutting length, developed for the drilling of lead-free brass and high tech materials.

Ø0.15 to 6.00 mm.



DIXI 1501 SP

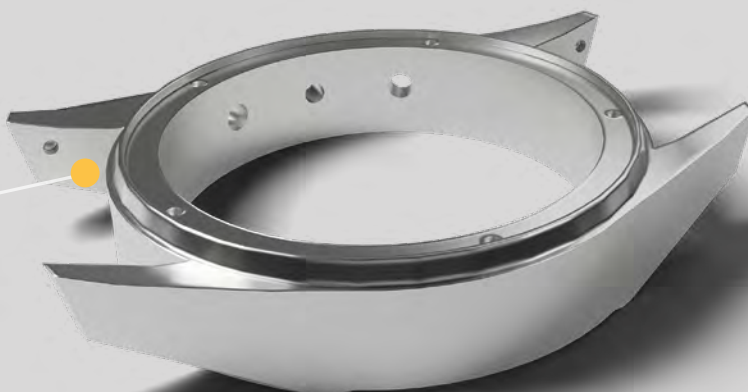
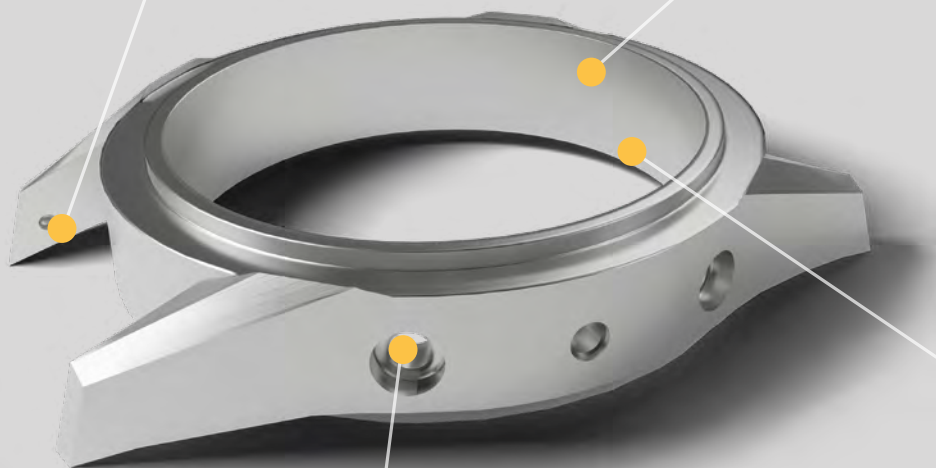
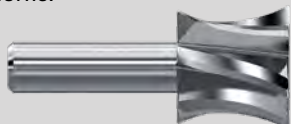
Stepped drill bit. For shape machining.



MILLING

DIXI 1516 SP

Shaped cutter for finishing between horns.



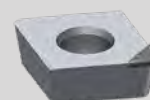
Watch case

Bezel, caseback and pusher



FINISHING TURNING

***DIXI 26420 DIA**
ISO Insert in monocrystalline diamond.
(forms V, C, D)



ENGRAVING

***DIXI 70070 PCD**

Engraving cutters developed for high end engraving.



DIXI 7007

3/4 engraving tool developed for precision machining.



SLITTING

DIXI 1685 SP

Index cutter for column wheel teeth, ink wheel, or star-shaped profile. Resharpenable logarithmic profile. Multiple working areas possible.



DIXI 1516 SP

Double taper T-slot cutter for profile-by-profile machining.



DRILLING

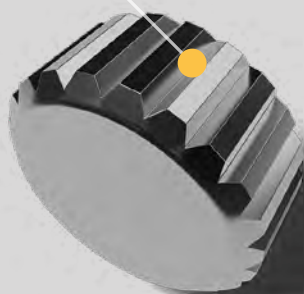
DIXI 1502 SP

Stepped drill bit.



DIXI 1105

90° spotting with reinforced shank. Ø1.00 to 10.00 mm.



ENGRAVING

DIXI 1539

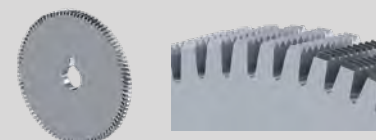
Extra fine teeth slitting saws developed for shallow grooving.



THREADING

DIXI 1660 - DIXI 1661

Hob cutters developed for the external thread milling on sliding head turning machines.



* Only for non-ferrous materials.

«SP» products are special tools that are custom-made and adapted to different uses.

Watch face and display

Index and hand

ROUGH MILLING

DIXI 7242

Slot drill with reinforced shank, for a clean finish.
Ø0.10 to 20.00 mm.



MILLING FINISHING

*DIXI 70610 DIA

Monocrystalline diamond face milling cutters developed for mirror-polished finish machining.



*DIXI 72310 DIA

Monocrystalline diamond micro end mill with centre cut.
Ø0.40 to 2.00 mm.



MILLING

DIXI 7691 SP

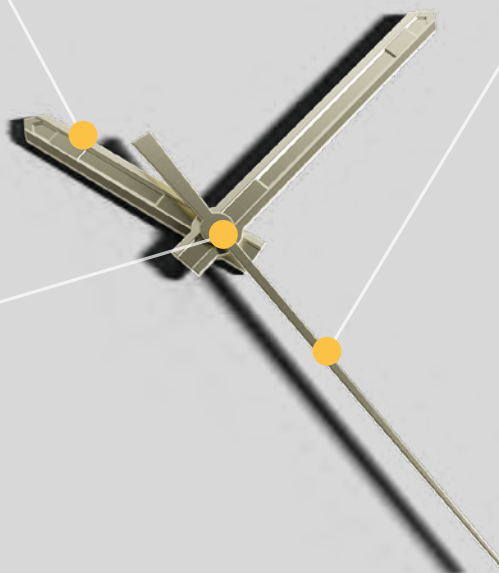
Hollow cutter for wall light bases.



MILLING

DIXI 7242

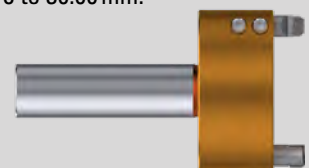
Slot drill with reinforced shank, for a clean finish.
Ø0.10 to 20.00 mm.



DIAMANTAGE

*DIXI 82000 DIA

Face milling heads developed for mirror finish machining. The heads are delivered balanced and already assembled with PCD insert for roughing and DIA insert for finishing.
Ø0.18 to 30.00 mm.



DRILLING

DIXI 1111

Helical gun drills developed to achieve high-precision holes.
Ø0.10 to 2.00 mm.



Watch face and display

Watch face

MILLING

DIXI 7242

Slot drill with reinforced shank, for a clean finish.
Ø0.10 to 20.00 mm.



***DIXI 72420 PCD**

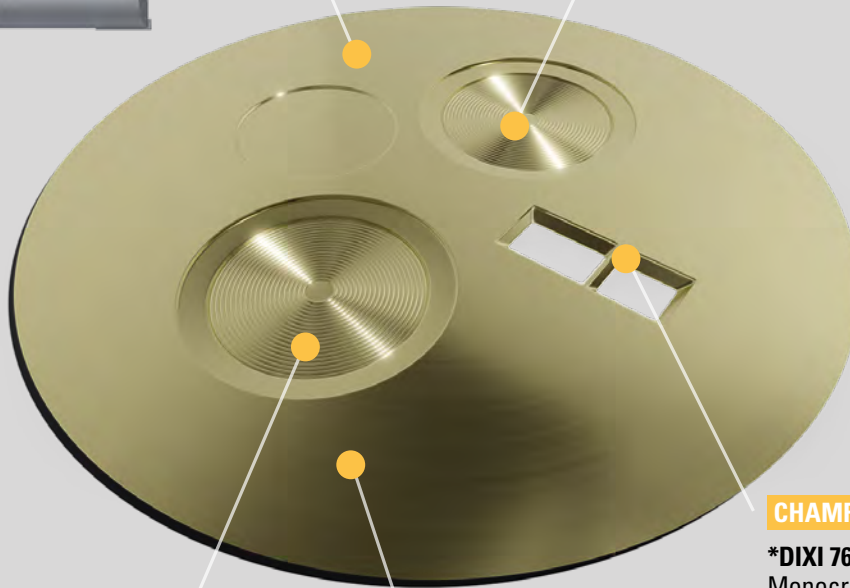
PCD end mills with centre cut and through coolant.
Ø3.00 to 20.00 mm.



DRILLING

DIXI 1137

Self-centering twist drills with reinforced shank, cutting length, developed for the drilling of lead-free brass and high tech materials.
Ø0.15 to 6.00 mm.



CHAMFERING

***DIXI 76230 DIA**

Monocrystalline diamond chamfering tool developed for mirror finish machining.



FRAISAGE DE FORME

***DIXI 76530 PCD SP**

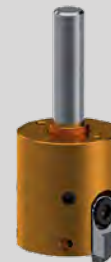
Shaped cutter for producing grooved profiles.



DIAMOND CUTTING

***DIXI 81000 DIA**

Face milling heads developed for mirror finish machining of non-ferrous materials and precious metals. The heads are delivered balanced and already assembled.
Ø40.00 à 125.00 mm.



* Only for non-ferrous materials.

«SP» products are special tools that are custom-made and adapted to different uses.

Bracelet

Link and folding buckle

ROUGH MILLING

DIXI 7220

Roughing end mills developed for the machining of difficult materials.
Ø3.00 to 16.00 mm.



MILLING FINISHING

DIXI 7343

High performance end mills with reinforced shank and variable helix, developed for the machining of tough materials.

Ø0.30 to 16.00 mm.



DIXI 7443 COOL+®

High performance end mills with reinforced shank and variable helix. With DIXI COOL+® lubrication system.

Ø0.30 to 10.00 mm.



TRONÇONNAGE

DIXI 1640

Parting off slitting saws, right cut, developed to cut-off turned workpieces without cutting pins. Short chip formation contrary to turning inserts.



DRILLING

DIXI 1410

High-performance pilot drills with reinforced shank and through coolant developed for guiding deep-hole drills.



DIXI 1448

High-performance twist drills with reinforced shank and through coolant developed for deep drilling



DIXI 1537

Parting off slitting saws, right cut, developed to cut-off turned workpieces without cutting pins. Short chip formation contrary to turning inserts.



ROUGH MILLING

DIXI 7220-3D

Roughing end mills developed for the machining of difficult materials.
Ø3.00 to 8.00 mm.



DRILLING

DIXI 1137

Self-centering twist drills with reinforced shank, cutting length, developed for the drilling of lead-free brass and high tech materials.

Ø0.15 to 6.00 mm.

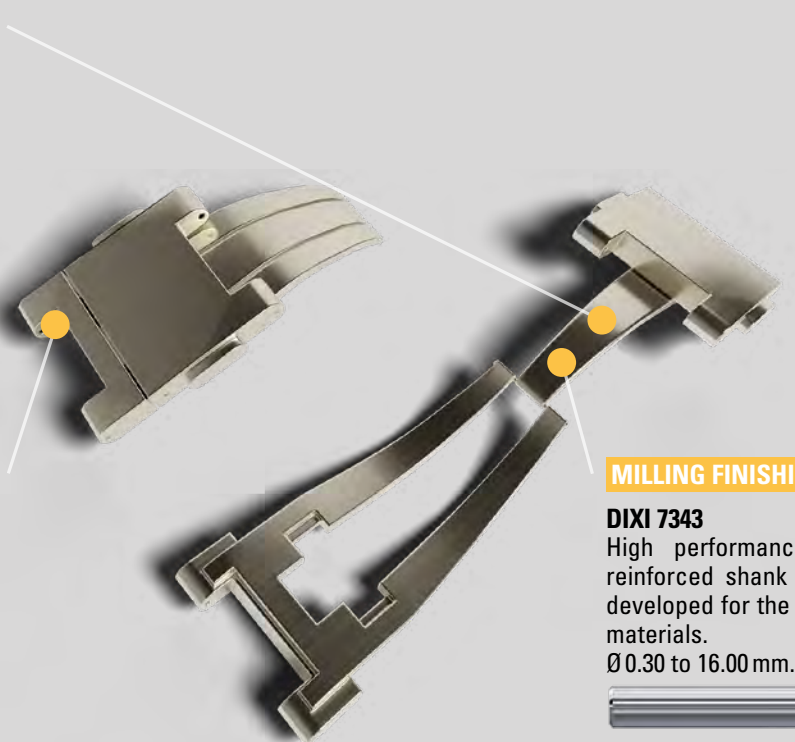
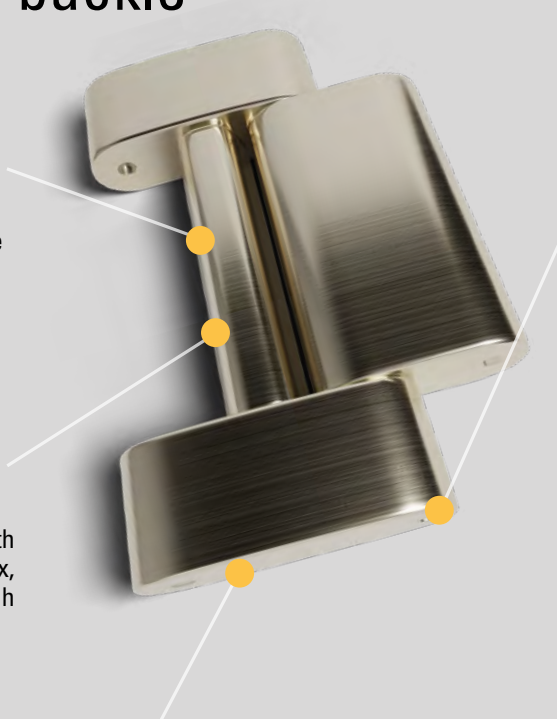


MILLING FINISHING

DIXI 7343

High performance end mills with reinforced shank and variable helix, developed for the machining of tough materials.

Ø0.30 to 16.00 mm.





DIXI POLYTOOL S.A.
Av. du Technicum 37
CH - 2400 Le Locle
T. +41 (0)32 933 54 44
dixipoly@dixi.ch
www.dixipolytool.com