

PCD and TCT TOOLS



metal-working industry



global tool partner



A family company with more than 40 years dedicated to the manufacturing of precision tools.
Offering a wide range of innovations from the initial project development to the overall tool management.





TÜV

CERTIFICATE

The Certification Body of Quality Management Systems
TÜV Internacional Grupo TÜV Rheinland, S.L.

hereby certifies that the company



HERRAMIENTAS PREZISS, S.L

for their location in

**Polígon Industrial Les Pedreres Nau A1
E-08390 Montgat (Barcelona)**

has established and applies a Quality Management System for the activities of

**Design, manufacturing and commercialization of cutting tools of polycrystalline diamond (DP) and tungsten carbide (HW)
Design, manufacturing and commercialization of hydrocentric clamping chucks.**

in accordance with the requirements of the standard

UNE – EN ISO 9001:2000

Certification Registration No: **0.04.04363**

C. Romero

Head of the Certification Body
of Quality Management Systems
TUV Internacional Grupo TÜV Rheinland, S.L.

ENAC
CERTIFICACIÓN
Nº 14 / C - S C 0 2 7



TÜV Internacional
Grupo TÜV Rheinland

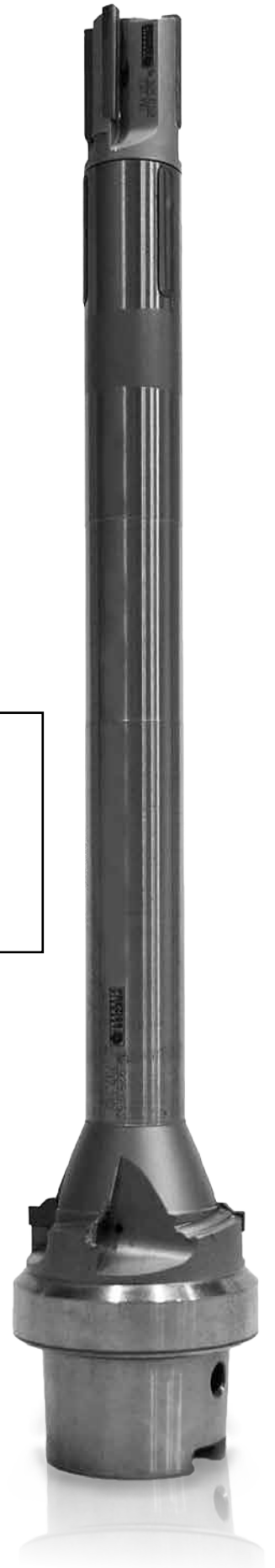


company profile
facilities
innovation
tool management



global tool partner

Products.

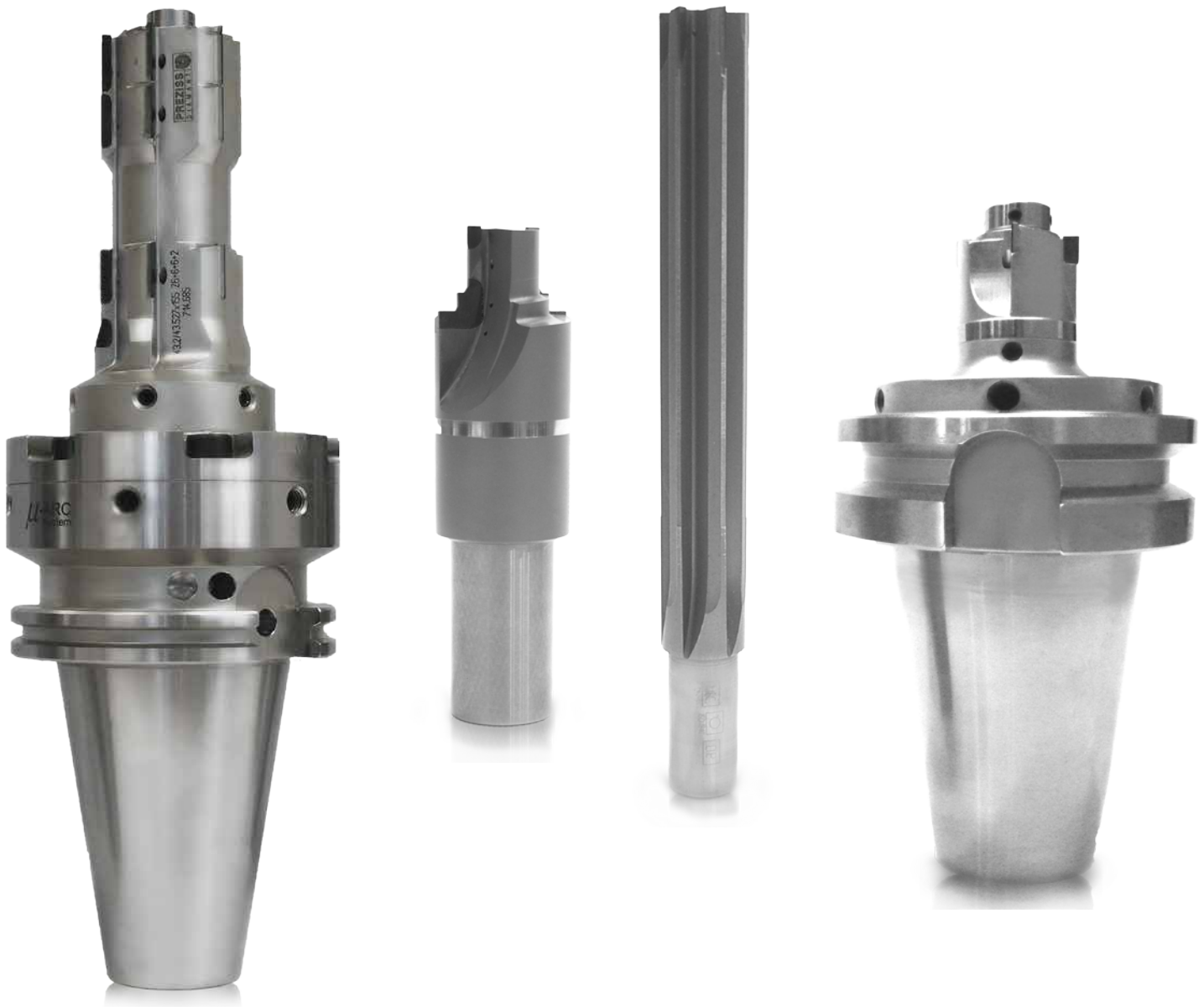


PCD TOOLS

Precision fine boring tools, profile tools and circular milling tools.

Reaming and drilling operations requires the best quality tool manufactured with the maximum precision to achieve the hole finishing challenge and the dimensional precision in the final product. PREZISS DIAMANT is a name of quality as a global tool partner. PCD fine boring tools can be combined in a several multitask combinations to get unimaginable machining processes “all in one”

Stepped tools with chamfers and radii can be combined to get an all in one. Even roughing / finishing with the same tool achieving a reduction to the cycle times during the machining processes. the fine boring tools can be combined with spot facing too. all of this with the maximum tolerance of roundness and concentricity.



PCD TOOLS

Precision fine boring tools and drilling.

drilling operations require the maximum dimensional stability in the tool.

The Preziss Diamant manufacture principle for PCD drilling tools, guarantees few microns of tolerance, thanks to its roughing and finishing geometry, the helical shape and guide pads.

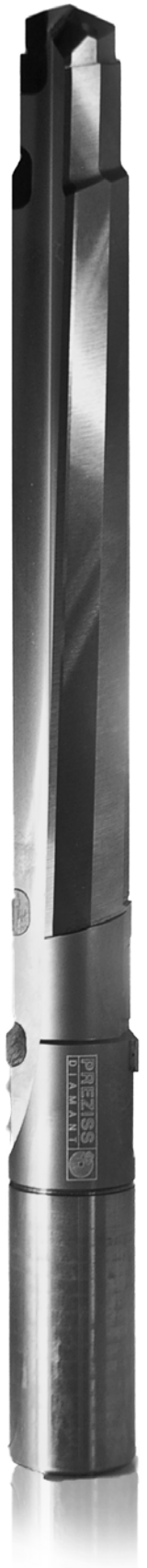
a revolutionary drill plunge shape concept developed by Preziss Diamant gives the possibility to achieve the drilling process, on blind holes and through holes as well as reamed holes using only one tool.

Preziss Diamant guarantees the maximum dimensional stability as well as the concentricity, thanks to a precision grinding quality.





global tool partner



PCD TOOLS

Circular milling and profile tools

PCD HL milling tools by Preziss Diamant. HL-end mill, HL-ball head, designed with neutral or share angle, positive and negative angles plus the PCD hardness properties and the toughness of the hard metal, offers the best machining options for an effective milling operation.

the appropriate HL-milling tool choice affects directly to the performance of the tool as well as the surface finishing quality and the reduction of the power consumption, making all together a successful machining process and the very positive effect in the tool life.

the HL-spiral tool geometry allows extremely high rates of stock removal in rough milling operations.

all tools can be equipped with PCD plunge blade, so that some drilling operations can be achieved.

The Whole tool range can be manufactured with internal coolant supply to achieve the best conditions and best chip removal.

the HL range starts at 4 mm diameter to 63 mm. from Z=1 to Z=6 depending on the tool diameter.

the shank can be manufactured with a cylindrical execution in tungsten carbide or steel body base. also all taper types can be manufactured as morse, SK, BT, and HSK in monoblock style or flexible adjustment system.





global tool partner



125x10 C.l
755.205/1



global tool partner



SPECIAL TOOLS

with ISO elements and cartridges.

Cost efficient reaming and bore machining technology from Preziss Diamant using inserts. Tools are designed to produce accurately sized and round bores with fine surface finishes. using the latest cutting materials and coatings, the maximum tool life is achieved, together with the shortest preparation time and the lowest cost for tool logistics, ensure economic and reliable production.



SPECIAL TOOLS

with ISO elements and cartridges.

PCD and carbide blades are carefully selected for maximum tool life and performance.

blades tipped with PCD (polycrystalline diamond) are carefully grinded for exact tolerances and top performance on certain materials like high-silicon aluminium, composites and other abrasive materials.

carbide blades are available with or without coated edges. in every case, advised should be requested for a better performance.

Carbide blades are double edged for extending life time while PCD tipped blades are single edged.

Multiple guide pads offer a rigid support to the single blade for exceptional stability and alignment during the machining process.

Guide pads

Blade adjustmen screws





global tool partner



internal cooling supply

PCD reaming element



PCD FACE MILLING HEADS.

PCD cartridges elements and PCD brazed tips.

PCD face milling heads for machining flat surfaces with high stock removal rates processes, offering the best finishing quality even for special defined surface.

a wide range of cutting geometries for every finish surface together with a friendly use and fast tool setting, makes it a versatile system to achieve the most economical machining process.

IT-HEAD system designed by Preziss Diamant offers the advantage of keeping both diameter and length with constant dimensions with just one adjustment screw, even after resharpenings.

An aluminium body offers an extremely light weight tool construction to prevent the centrifugal forces in the machine achieving accurate results.

the PCD cartridge face milling head is equipped with internal coolant supply as standard for better cleaning and anti-build up of debris on the teeth.

high quality balancing of G2,5 ISO 1940/1 achieved by lateral balancing screws.

thread holes for locking screws made of hardened steel for Long durability of the threads.





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PREZISS
DIAMANT

125x12 216
706.793

PCD FACE MILLING HEADS.

PCD brazed tips for high performance machining.

PCD face milling heads with brazed tips for the machining of flat surfaces with high stock removal processes, offers the best finishing quality for special defined surface. Cutting depth UP to 12 mm is possible thanks to its high number of teeth and the monoblock tool body concept. particularly designed to achieve a high stability without compromising the work piece. from diameter 40 mm to diameter 125 mm equipped with Z=10 to Z=22 teeth, internal coolant supply and fine balancing screws. manufactured in Hsk and SK tapers.



PREZISS
DIAMANT



Preziss Diamant

engineered PCD tools.

The Catalan company H.Preziss with more than 40 years of experience in the production of PCD and special tool solutions, has become a perfect global tool partner for tooling solutions offering a complete range of tools for the metal-working industry.

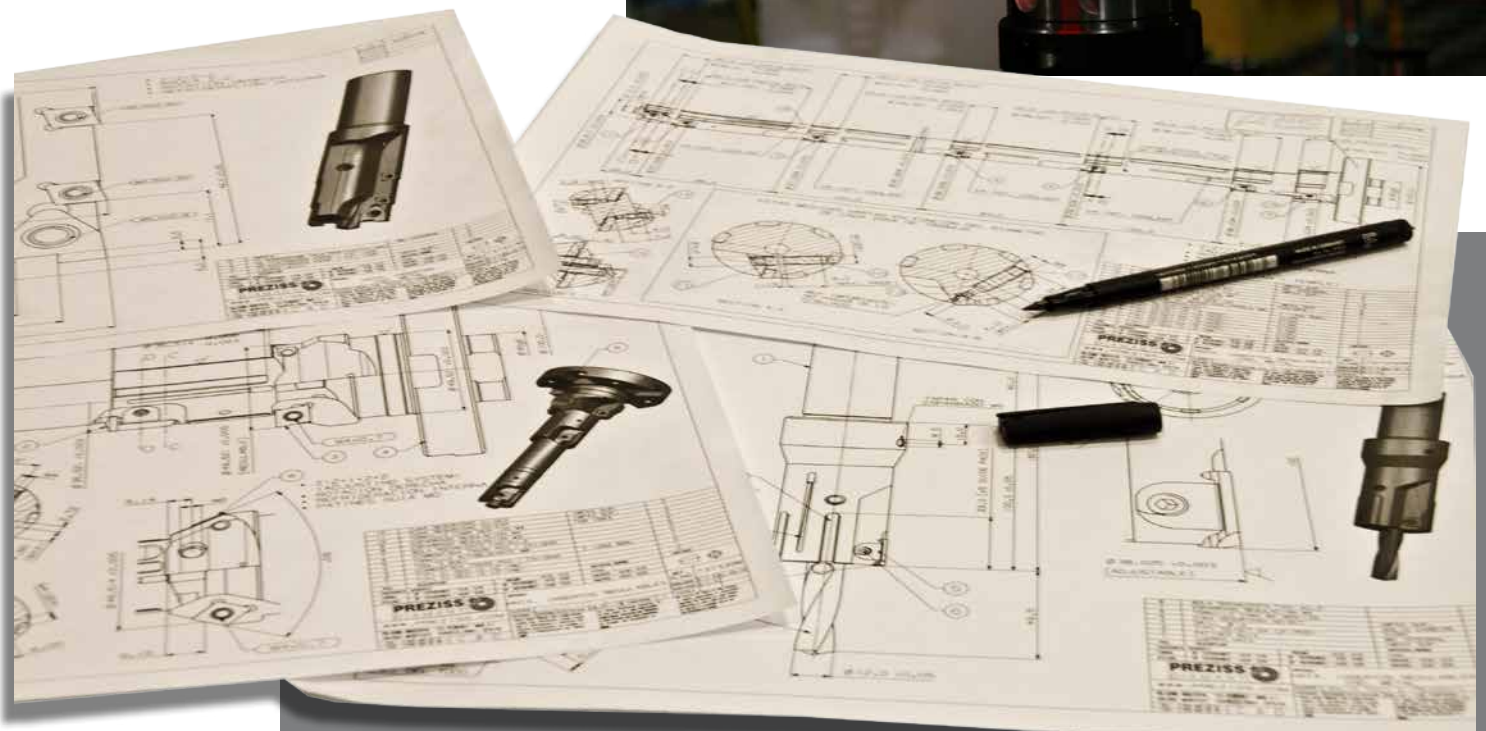
We strive to produce highly technological PCD and special tools to reduce costs by advising the best tool for every application and reducing down times.

Therefore, Preziss will always help you to optimize your machining process and reduce your costs considerably.

Knowledge and decades of experience in helping our customers, contributing to transfer integral solutions.







Preziss Diamant

engineered PCD tools.

innovation

We like working close to our customers to find out, from first hand, their worries and needs and be able to transfer our ideas and *know-how* and help them innovating with specific state of the art tooling solutions. For us it is an important issue to have customer participating in the development of new ideas by imputing their machining knowledge and personal experiences.

New ideas are developed every day ...





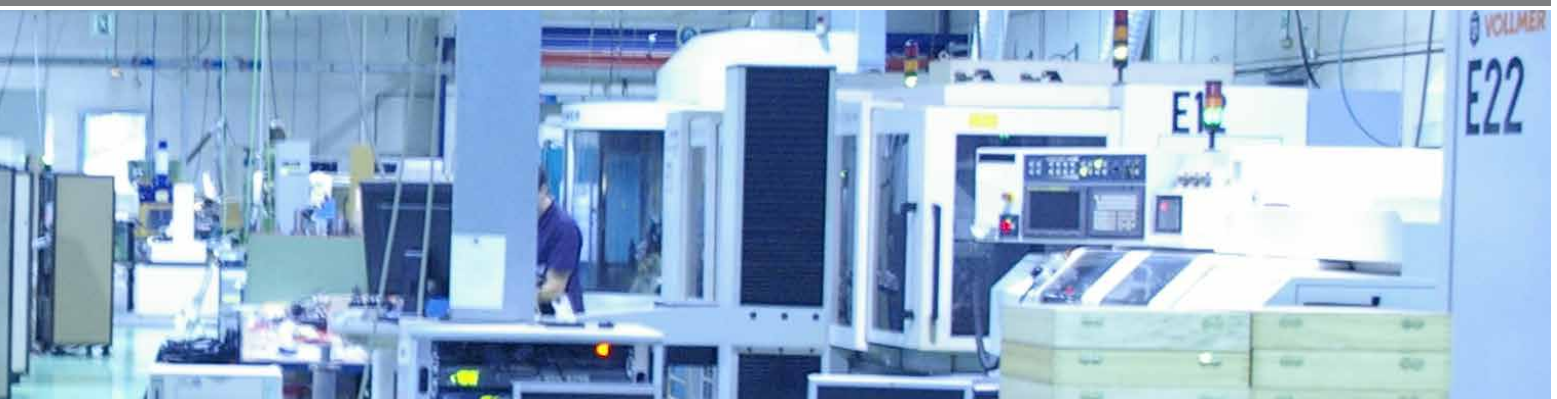
Preziss Diamant

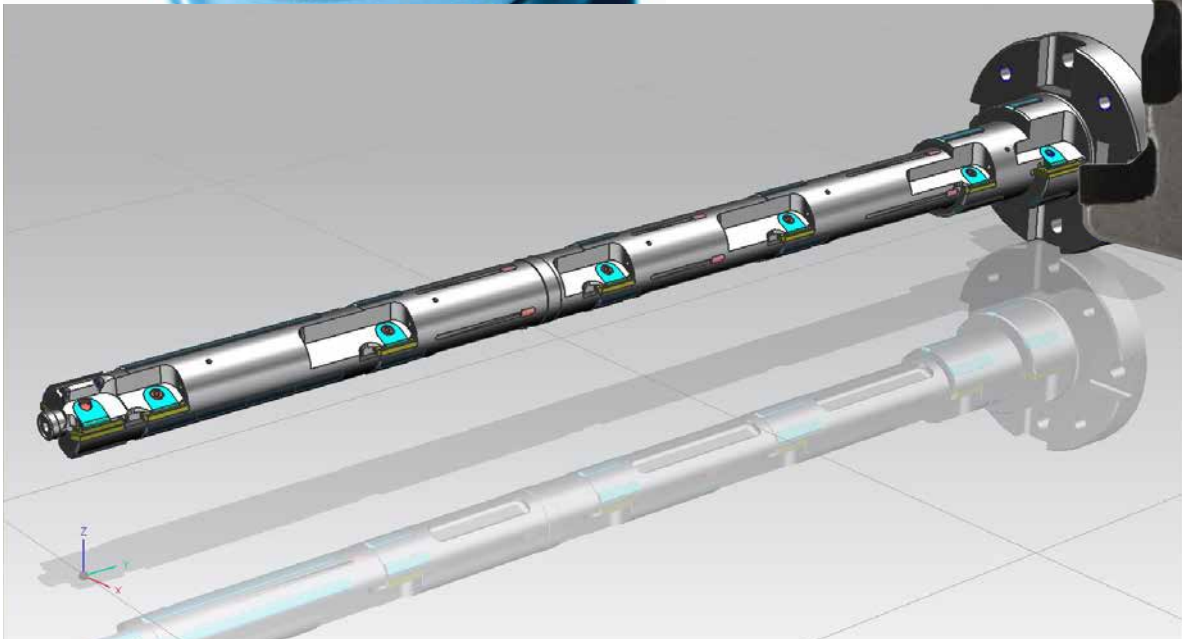
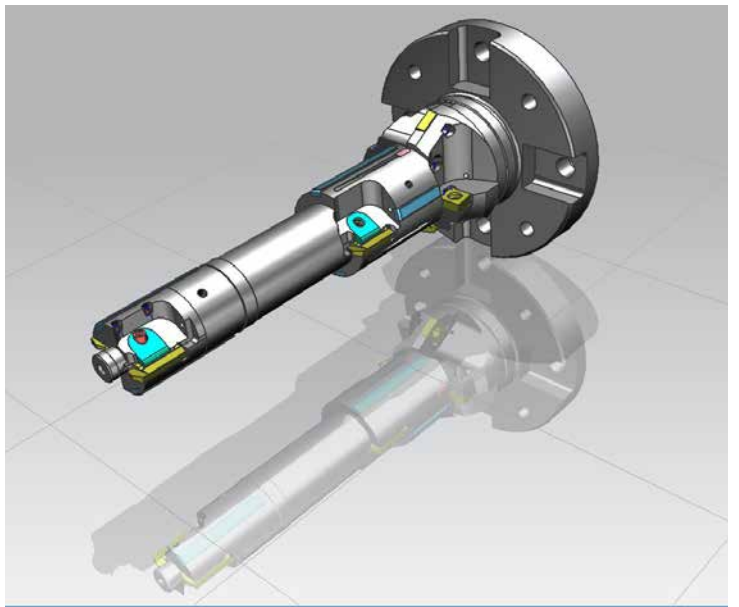
Engineered PCD tools.

Technology

Preziss Diamant is continuously investing in new equipment and technology allowing the company to offer to our customers the best quality and solutions. We work closely with our suppliers to develop better and more technologically advanced products to improve day by day the new customers demands.

Today Preziss Diamant is one of the most modern tooling facilities in Europe.





Preziss Diamant

Engineered PCD tools.

New PCD and tools with ISO elements

Preziss Diamant is a specialist in manufacturing a complete range of state of the art PCD tools (polycrystalline diamond), PCBN tools and carbide special tools with ISO and sliding cartridge Elements as well as special solid carbide tools, from a small drill bit to complete a machining line.

PCD reamers, tungsten carbide reamers and reamers with ISO elements.

PCD and Carbide stepped reamers.

PCD and Carbide form tools.

PCD cartridges and ISO elements.

PCD and Carbide end mills.

Face milling cutters with brazed teeth or cartridges.

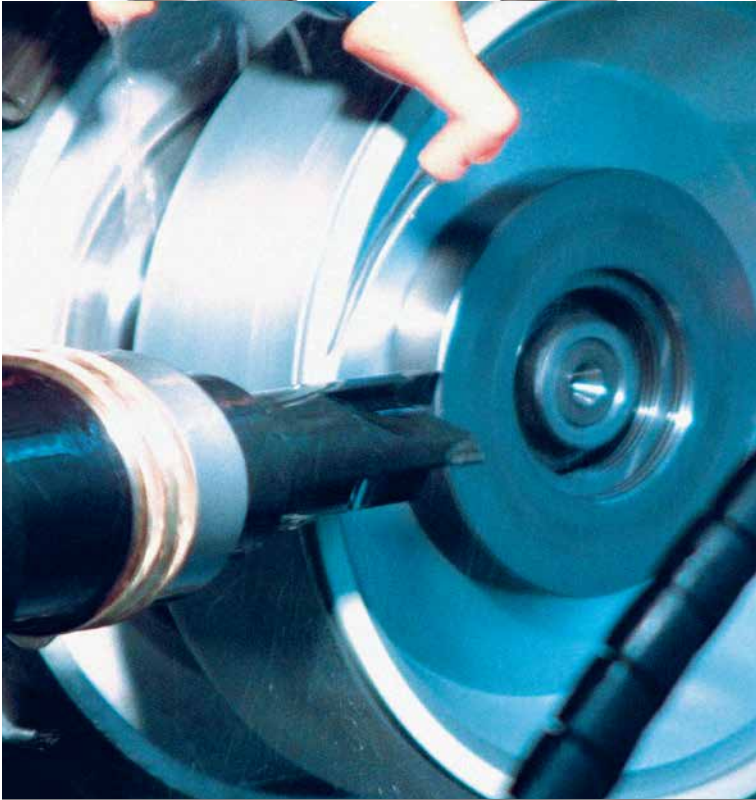
PCD and Carbide drill bits for boring and sinking.

special threading tools.

and MORE...

Preziss Diamant is synonymous of high quality with 40 years experience in the production of precision tools for many different applications and fields.





Preziss Diamant

Engineered PCD tools.

Re-conditioning & service fast and easy

with the same idea of reducing costs, we offer a full service program based on re-newing the tools by using the same Production process used for new tools. the result is that serviced tools are delivered again to the customer as if they were completely new, keeping always constant tool dimensions and geometries.



A modern tool repair management guarantees the reliability of the production cells against unforeseen events.



Preziss Diamant

Engineered PCD tools.

Advantages

for every component and every material, Preziss Diamant have the right tool solution. We offer PCD and solid carbide cutting materials and tooling solutions for reaming, drilling and sinking, milling and threading to achieve reliability, and production challenges.

benefits are:

- Less production down time.
- Shorter cycles production times due to the significantly increased in cutting speeds and feed rates.
- Increased dimensional accuracy and process reliability.
- High quality finish.
- Tool optimisation and better cost effectiveness thanks to a combination of multiple operations in one tool reducing machine costs.
- Modern regrinding and reconditioning tool service.
- Years of experience.



tool management service.

EXPRESS TOOL MANAGEMENT.

Preziss Diamant offers the **TFC** trouble free consignment stock system based on a contract "customer-Preziss" to avoid the stopping of production.

TFC express tool management refers to new tools, designed and produced in the Preziss facility that are on contract for an amount and period during which time they are repaired and kept in stock.







herramientas Preziss S.L.
PREZISS DIAMANT

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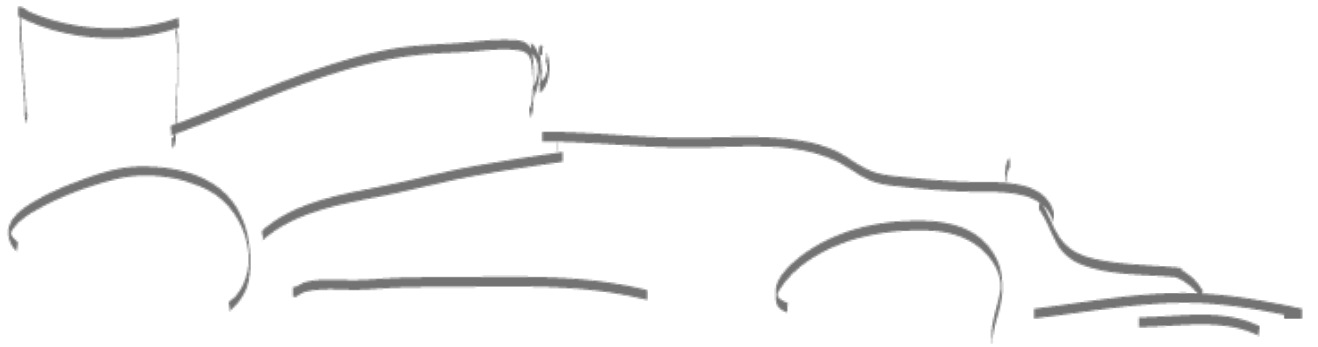
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