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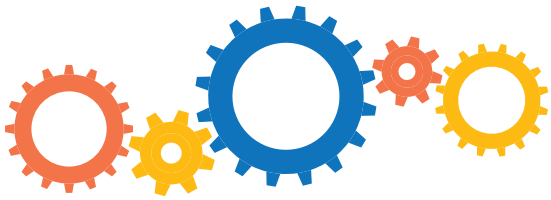

ISCAR

INDUSTREALIZE

IDEAS BECOME REALITY

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IDEAS BECOME REALITY

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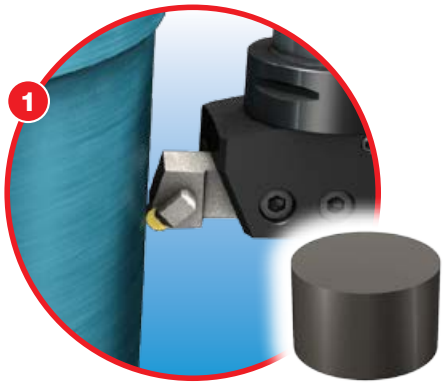
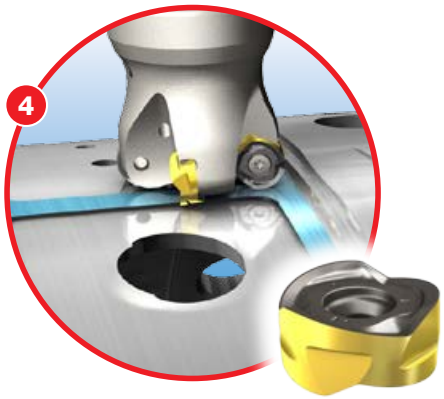
Jet Engine Case

The jet engine case is a pressure chamber designed to carry jet engine inner core components while withstanding drastic temperature changes and mechanical stresses. The inner structure of the jet engine is composed



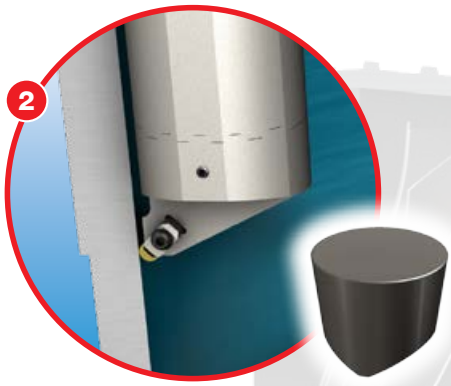
ISOTURN

External Rough Turning



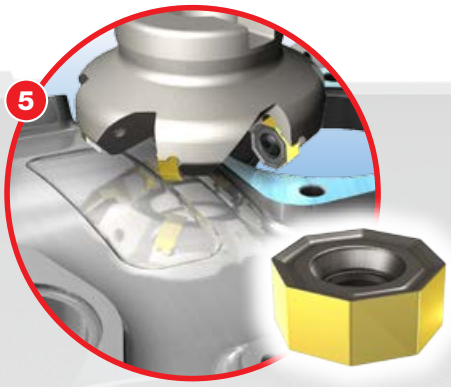
HELIDO
ROUND H606 LINE

Outer Profile Milling



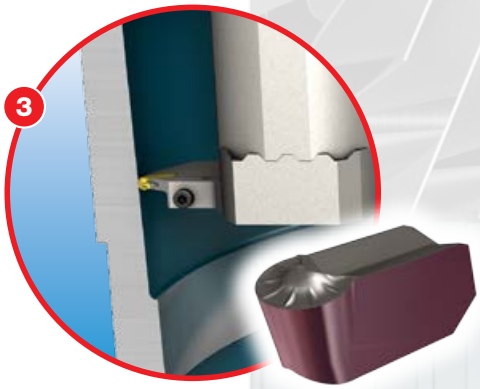
ISOTURN

Internal Rough Turning



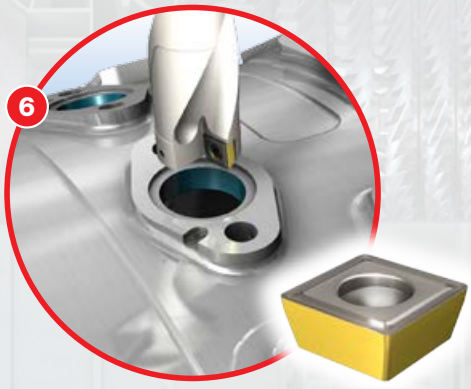
16MILL

Face Milling



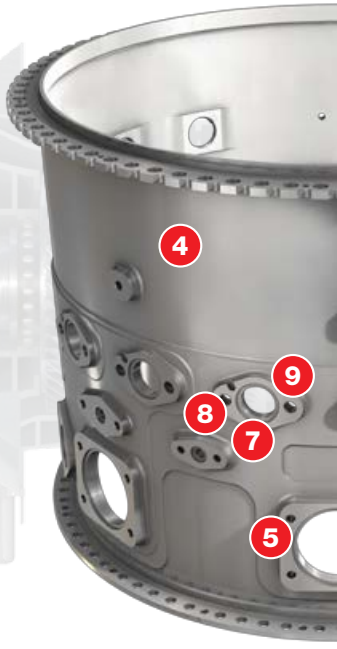
CUTGRIP

Internal Groove Turning

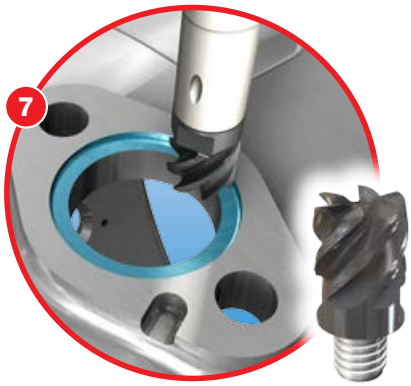


DR-TWIST
INDEXABLE DRILL LINE

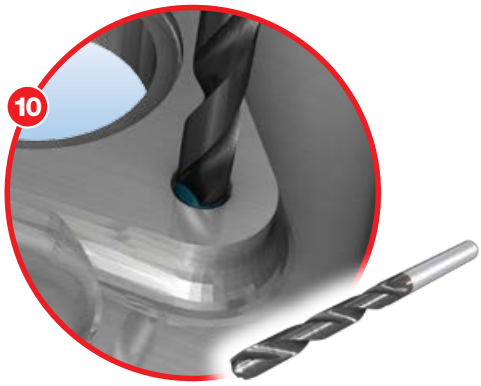
Drilling



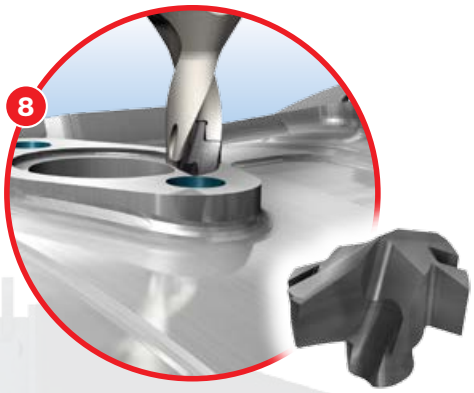
of stationary and rotational parts. The jet engine case is typically manufactured on CNC machining centers for a variety of different materials based on their structural location. The casing is cold and made of Titanium and composite materials while the hot area is made of superalloys such as Inconel, Hastelloy and Waspalloy which tend to have high strength machinability resistance.



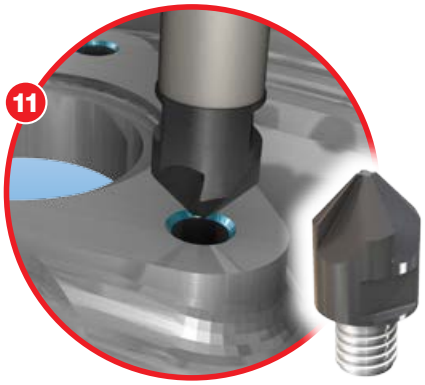
MULTI-MASTER
INDEXABLE SOLID CARBIDE LINE
Shoulder Milling



SOLIDDRILL
Drilling

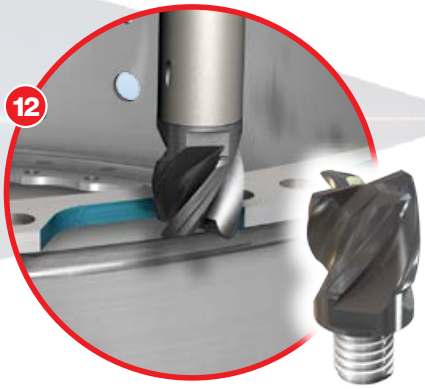


SUMOCHAM
CHAMDRILL LINE
Drilling



MULTI-MASTER
INDEXABLE SOLID CARBIDE LINE
Chamfering

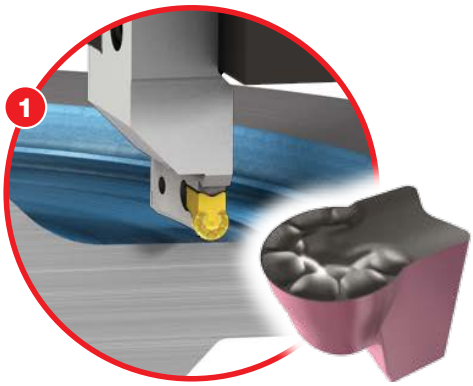
SOLIDH-REAM
Reaming



CHATTERFREE
MULTI-MASTER LINE
Shoulder Milling

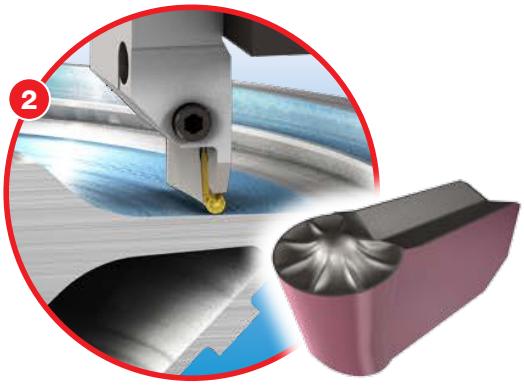
Titanium Blisk

A blisk is a turbomachine component comprising both rotor disks and blades which are made of removable single-part blade rings. Blisks may be integrally cast, machined from a solid piece or made by welding the individual blades to a rotor disk. Each structure requires a different machining



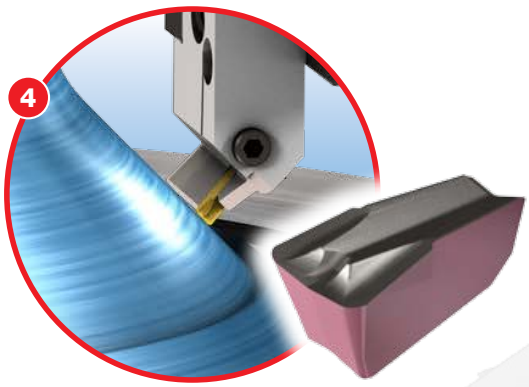
SUMO-GRIP
HEAVY DUTY LINE

Face Pocket Rough
Zigzag Turning



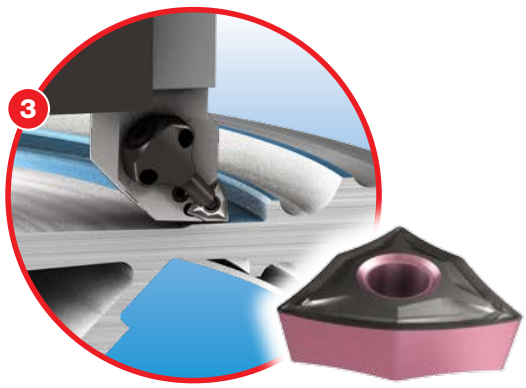
CUT-GRIP

Face Profiling



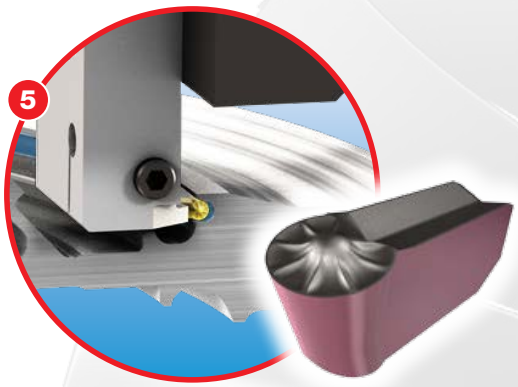
CUT-GRIP

Outer Profiling



ISOTURN

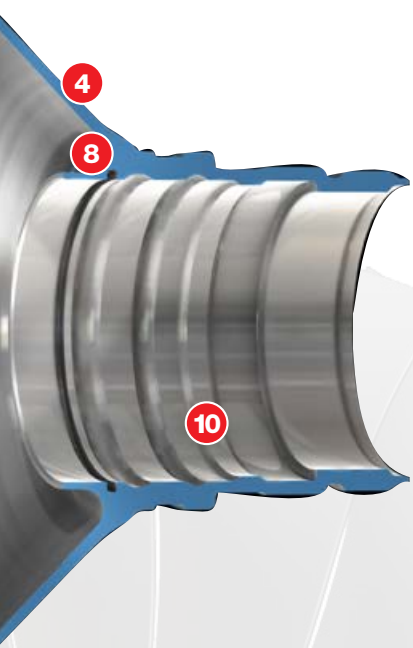
Face Turning Finishing

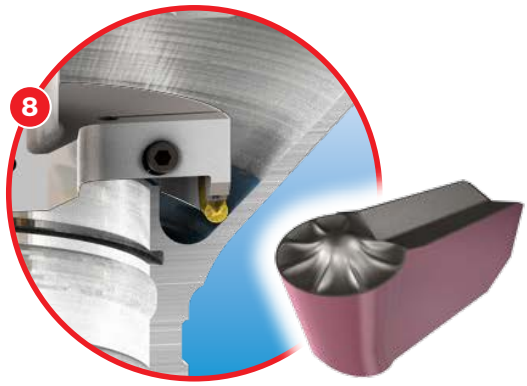


CUT-GRIP

Outer Radial Grooving

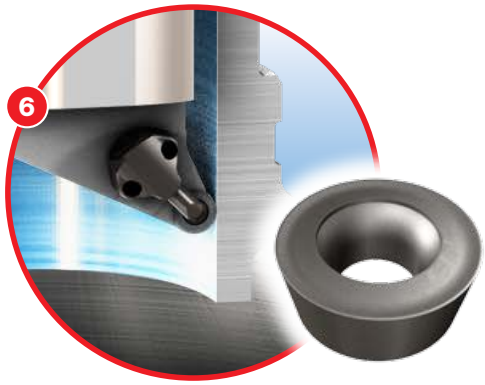
technology. ISCAR has developed a variety of substrate materials for inserts intended to machine and sustain high temperatures. Titanium blisks are used for the fan disk at the front end, while superalloy blisks are made for high temperature and pressure compressor zones.





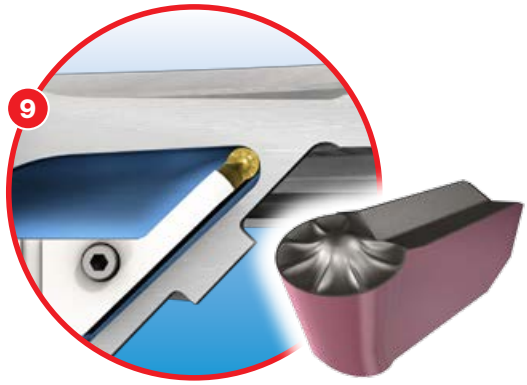
CUTGRIP

Inner Pocket Rough Grooving and Finish Profiling



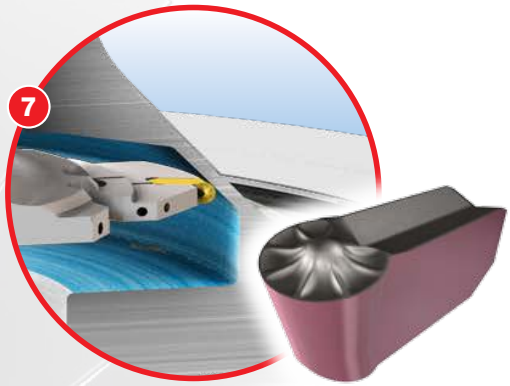
ISOTURN

Rough Inner Diameter Machining



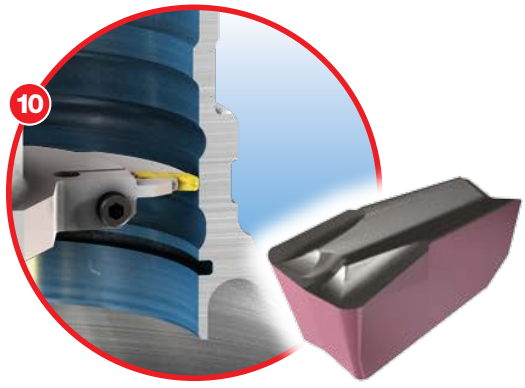
CUTGRIP

Inner Pocket Machining
Zig Zag Turning and Finish Profiling



CUTGRIP

Inner Pocket Rough
Zigzag Turning

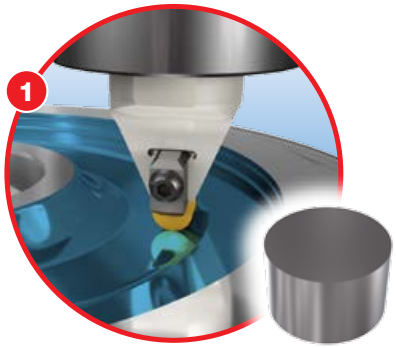


CUTGRIP

Inner Profiling, Rough
Finish and Grooving

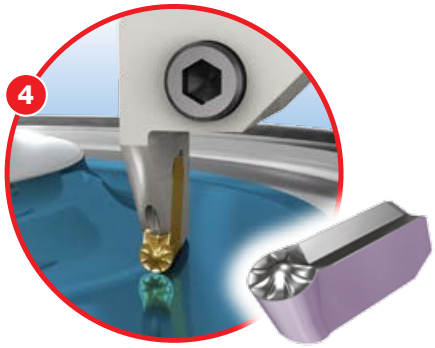
Inconel Blisk

A blisk is a turbomachine component comprising both rotor disks and blades which are made of removable single-part blade rings. Blisks may be integrally cast, machined from a solid piece or made by welding the individual blades to a rotor disk. Each structure requires a different



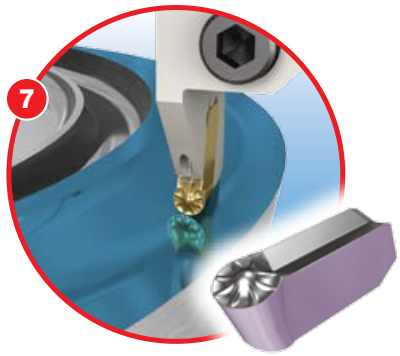
ISOTURN

Rough Face Turning



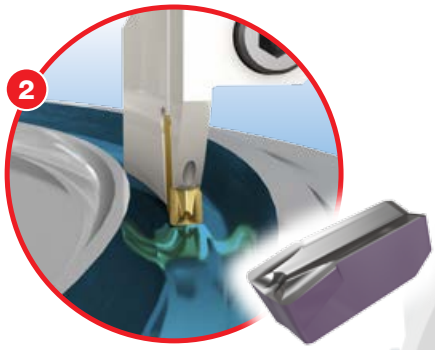
CUTGRIP

Face Profile Turn Grooving



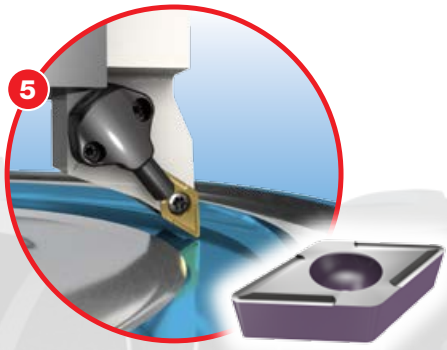
CUTGRIP

Rough Blade Profiling



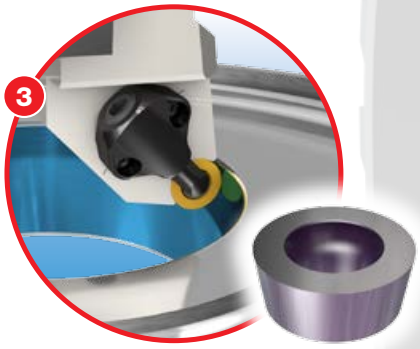
CUTGRIP

Rough Face Grooving



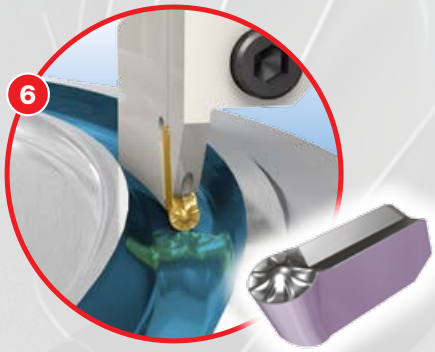
ISOTURN

Finish Face Turning



ISOTURN

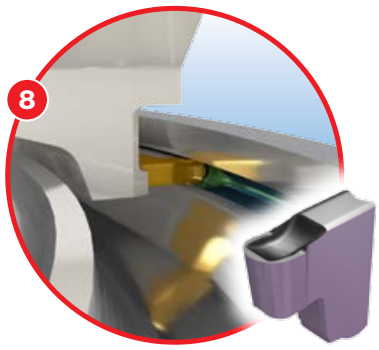
Inner Diameter Turning



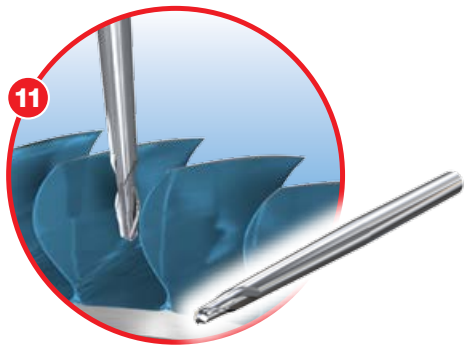
CUTGRIP

Face Profile Turn Grooving

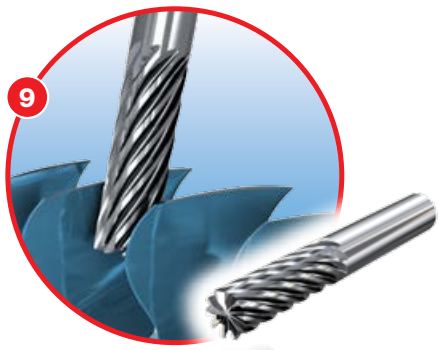
machining technology. ISCAR has developed a variety of substrate materials for inserts intended to machine and sustain high temperatures. Titanium blisks are used for the fan disk at the front end, while superalloy blisks are made for high temperature and pressure compressor zones



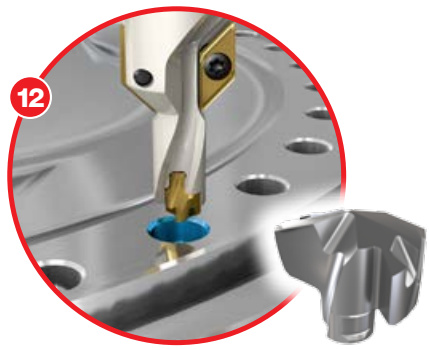
TANG-GRIP
PARTING LINE
Finish Inner Grooving



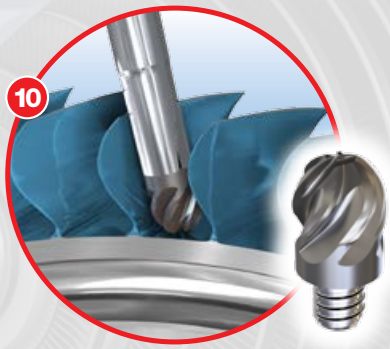
SOLIDMILL
PREMIUM LINE
Finish and Bottom Radius Milling



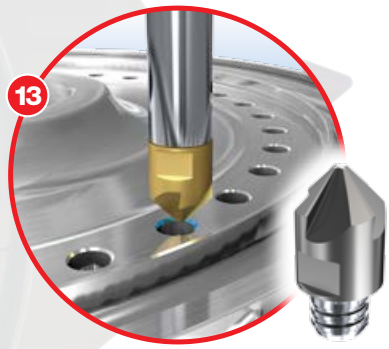
SOLIDMILL
PREMIUM LINE
Rough Trochoidal Milling



SUMOCHAM
CHAMDRILL LINE
Drilling and Chamfering



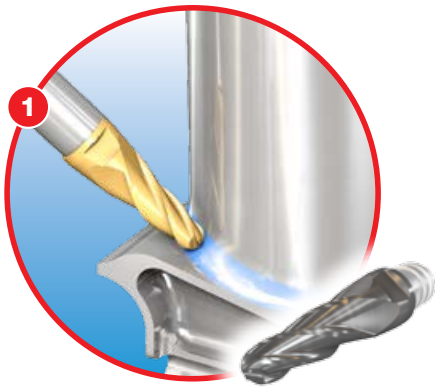
MULTI-MASTER
INDEXABLE SOLID CARBIDE LINE
Semi Finish Profile Milling



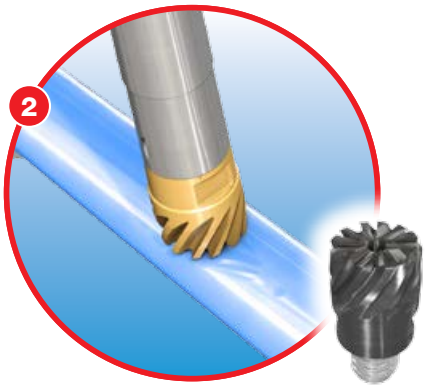
MULTI-MASTER
INDEXABLE SOLID CARBIDE LINE
Chamfering

Turbine Blade

Turbine blades are part of the jet engine's hot section (combustor and turbine) rotational part. The blades extract the energy from the high temperature and high-pressure gas produced by the combustor for rotational propulsion. To

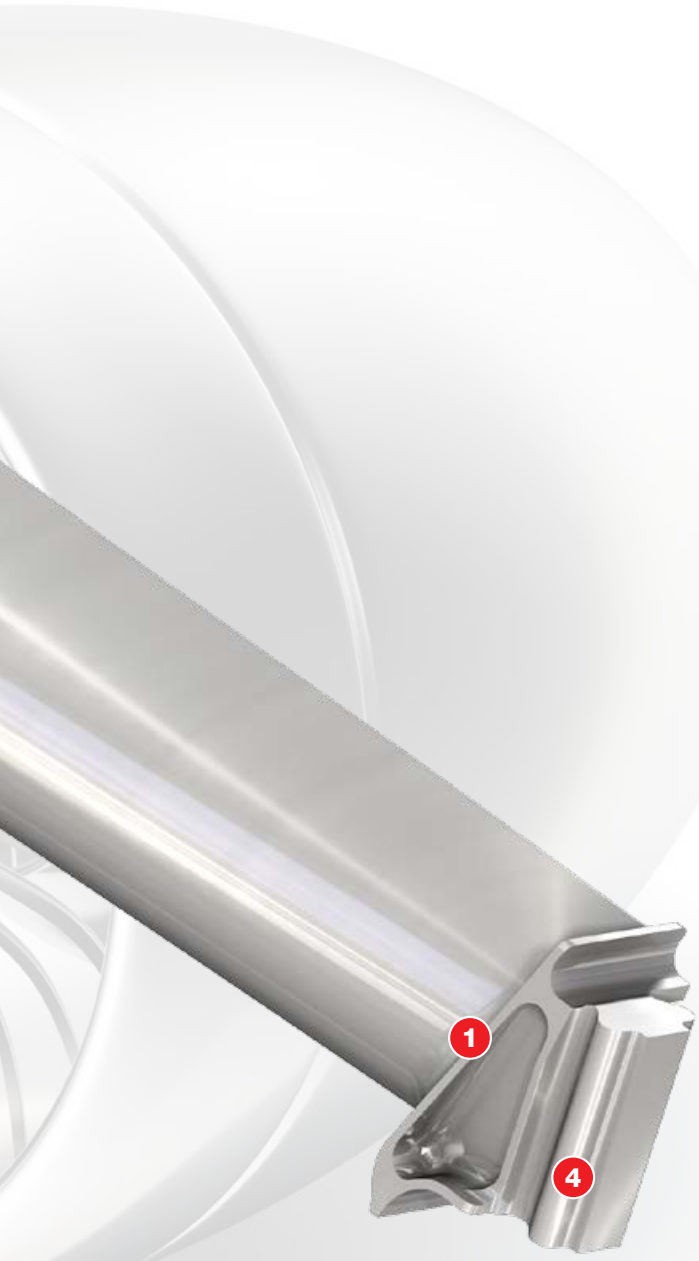


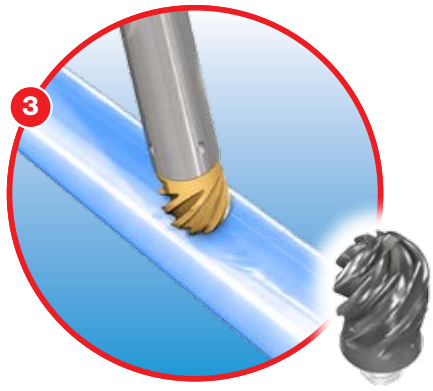
MULTI-MASTER
INDEXABLE SOLID CARBIDE LINE
Blade Root Radius Milling



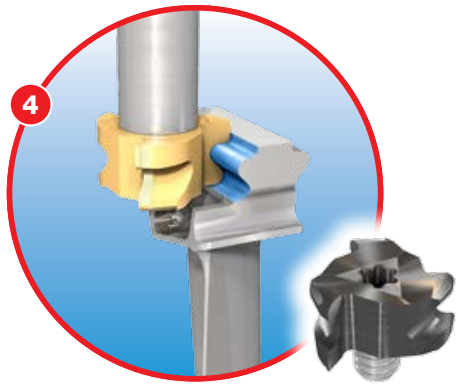
MULTI-MASTER
INDEXABLE SOLID CARBIDE LINE
Airfoil Rough Milling

survive this difficult environment, turbine blades are made of special Nickel-based super alloy materials. There are few common machining methods to produce blades according to the shape and size they are made of.





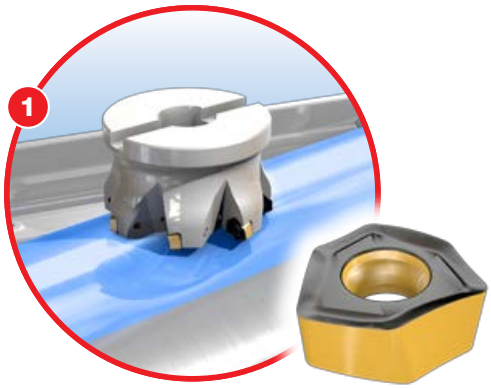
MULTI-MASTER
INDEXABLE SOLID CARBIDE LINE
Airfoil Finish Milling



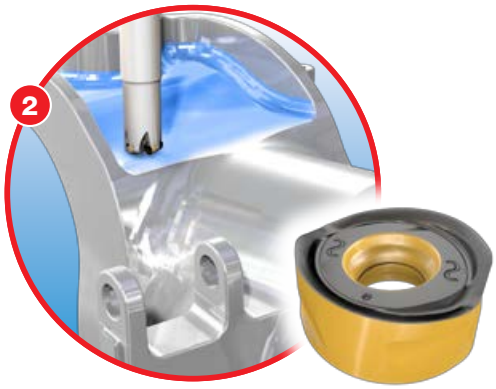
MULTI-MASTER
INDEXABLE SOLID CARBIDE LINE
Root Profile Milling

Landing Gear

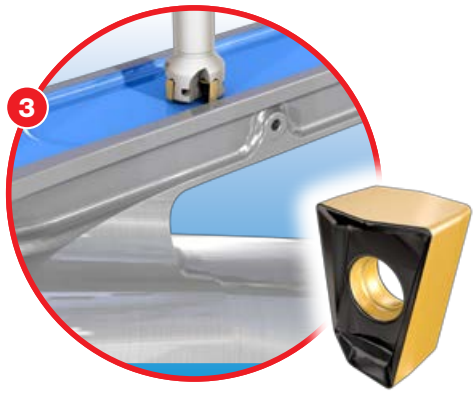
Landing gear is categorized in three types; nose, body, and wing landing gear; designed and manufactured to withstand drastic temperature changes, outstanding loads, and mechanical stresses. The majority of landing gear is



HELIDO
600 UPFEED LINE
High Feed Milling

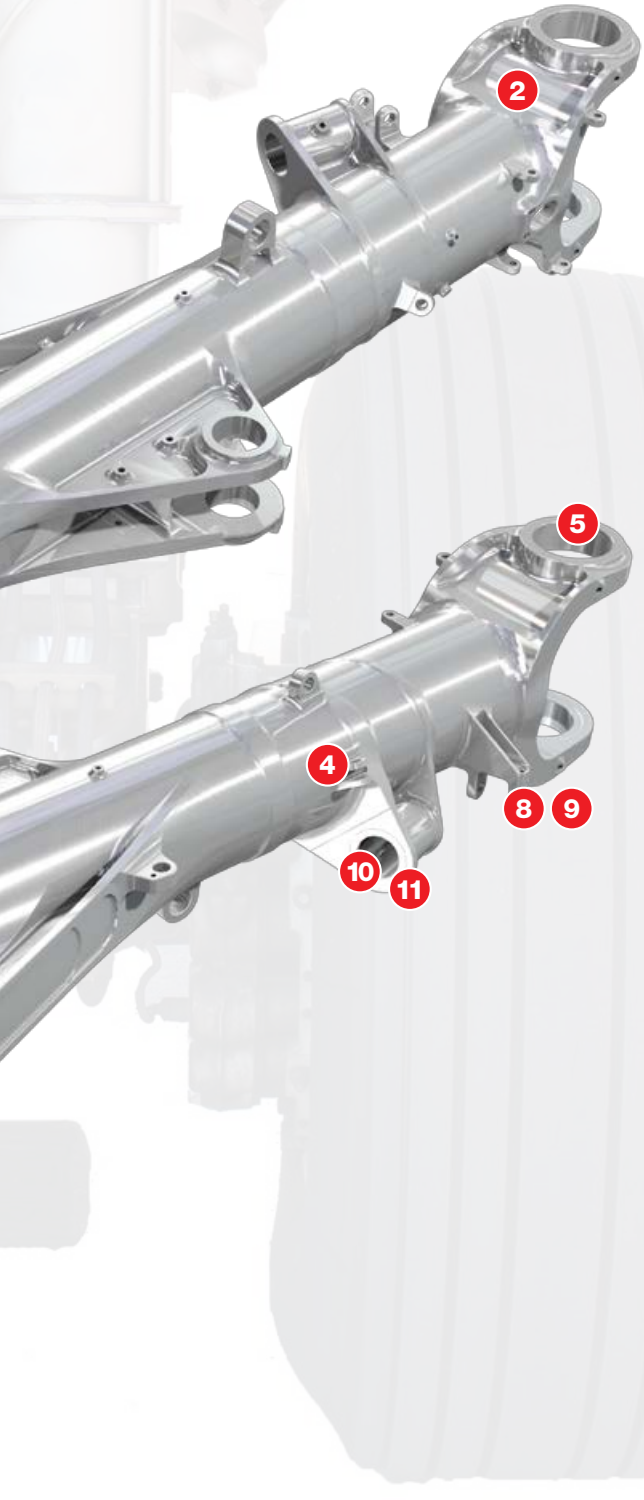


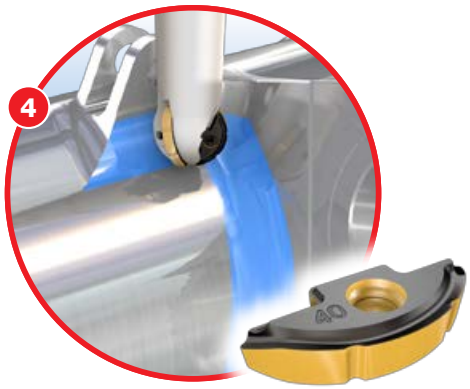
HELIDO
ROUND H400 LINE
Profile Milling



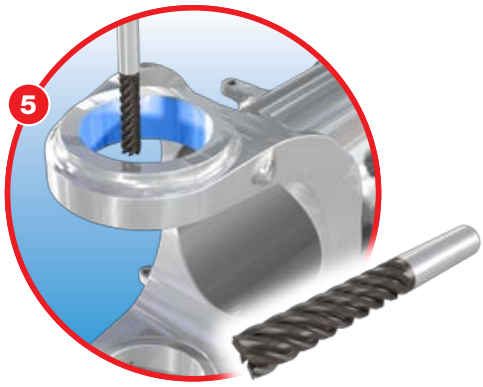
HELIDO
490 LINE
Pocket Rough Milling

manufactured from high strength steel M300, Ti. 5-5-5-2 and Ti. 10-2-3. There are several methods to produce landing gear, some of which combine dedicated deep drill machining with multi-task or milling center machines.

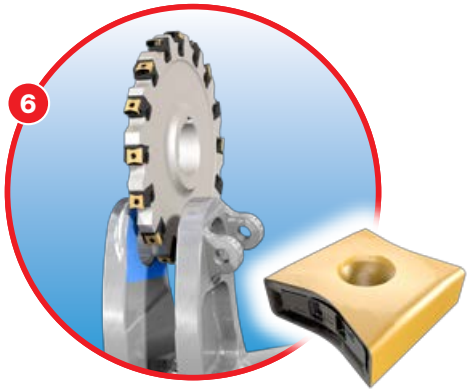




DROPMILL
3 FLUTE BALL NOSE
Profile Milling



SOLIDMILL
PREMIUM LINE
Semi-Finish Milling

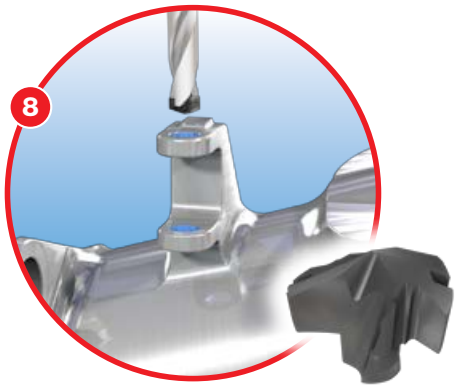


TANGMILL
TANGENTIAL LINE
Slot Milling

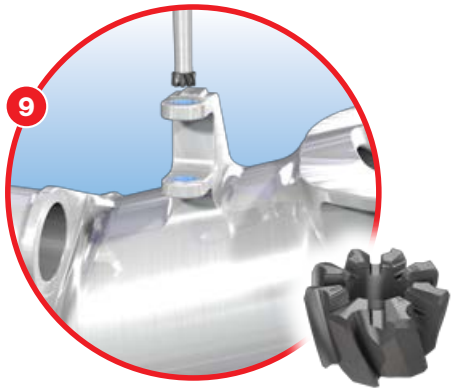
Landing Gear

Landing gear is categorized in three types; nose, body, and wing landing gear; designed and manufactured to withstand drastic temperature changes, outstanding loads, and mechanical stresses. The majority of landing gear is

MULTI-MASTER
INDEXABLE SOLID CARBIDE LINE
Small Pocket Milling

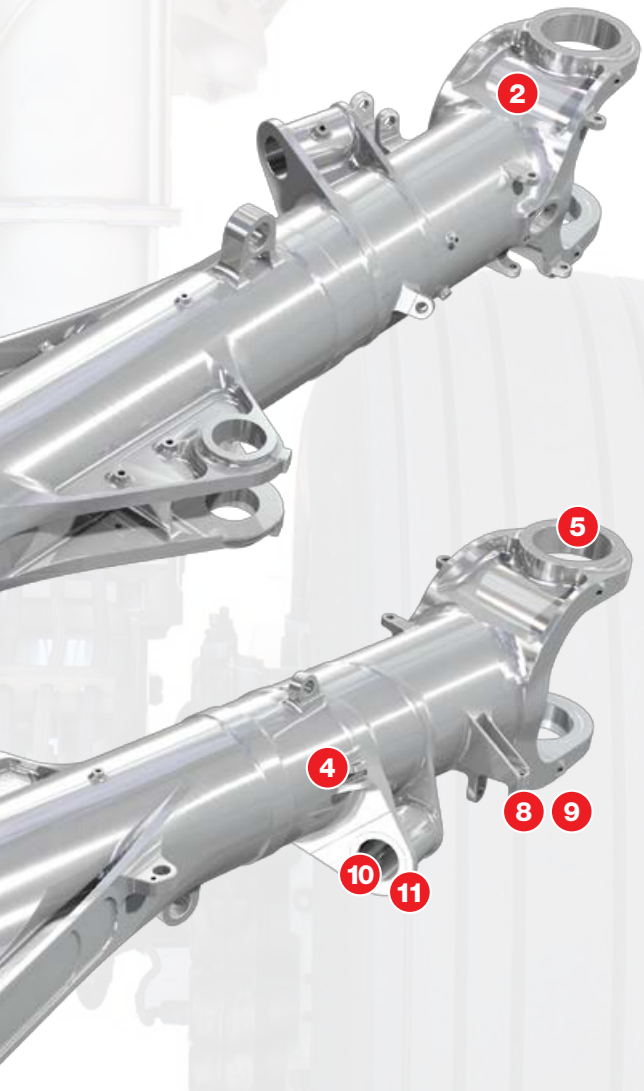


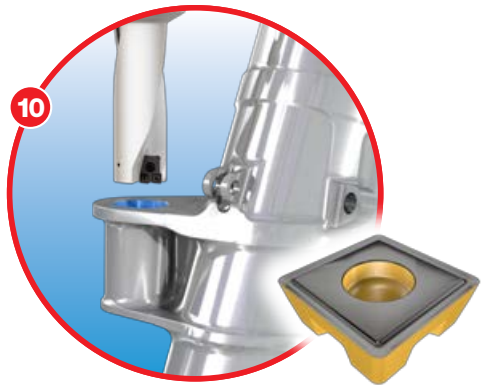
SUMOCHAM
CHAMDRILL LINE
Drilling



BAYOT-REAM
Reaming

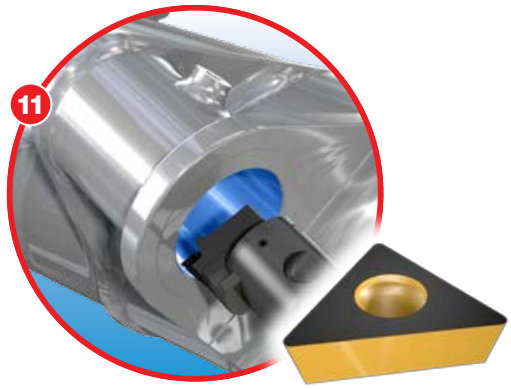
manufactured from high strength steel M300, Ti. 5-5-5-2 and Ti. 10-2-3. There are several methods to produce landing gear, some of which combine dedicated deep drill machining with multi-task or milling center machines.





DRDRILLS

Drilling

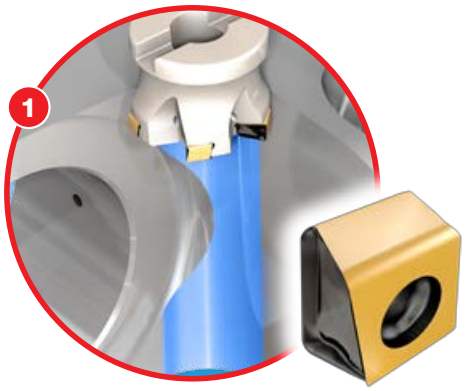


ITSBORE

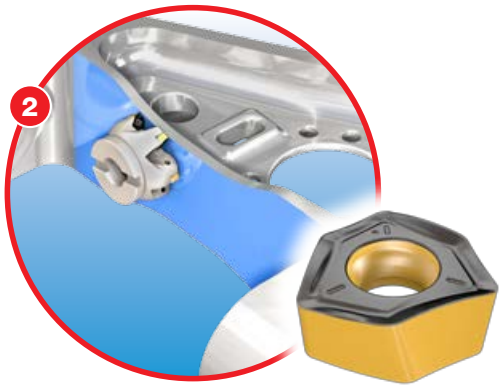
Fine Boring

Torque Link

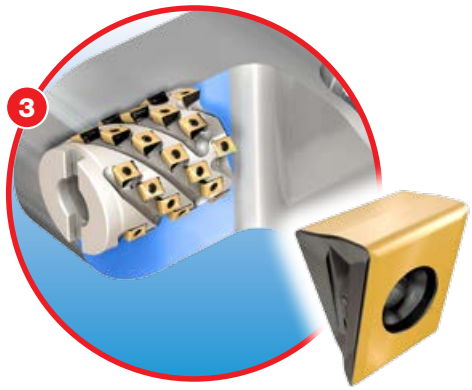
Torsion links are made of Ti alloy frames which couple the inner and outer cylinders of a landing gear strut together. Typically manufactured in machining centers with relatively high metal removal stock.



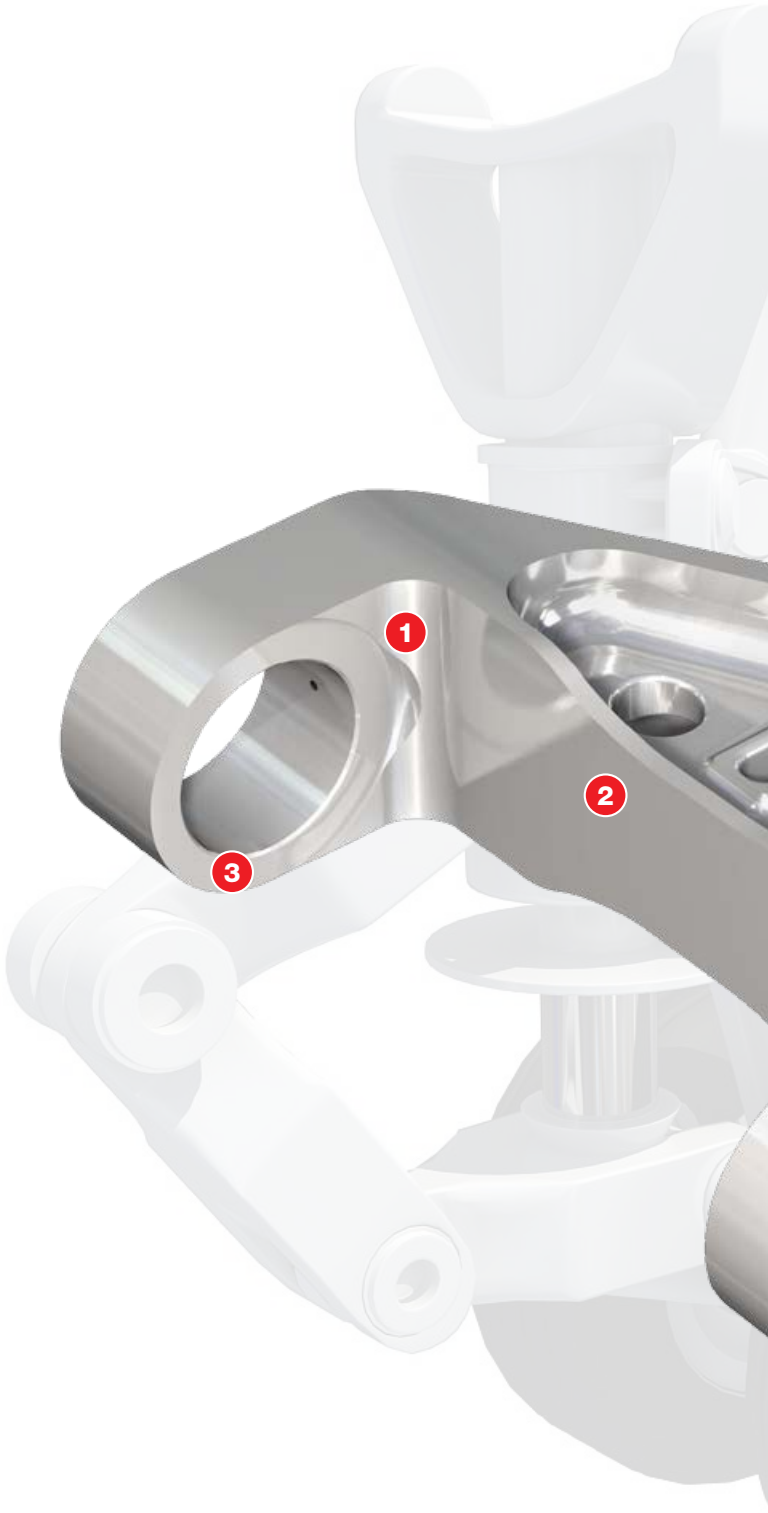
TANGPLUNGE
PLUNGING LINE
Plunging

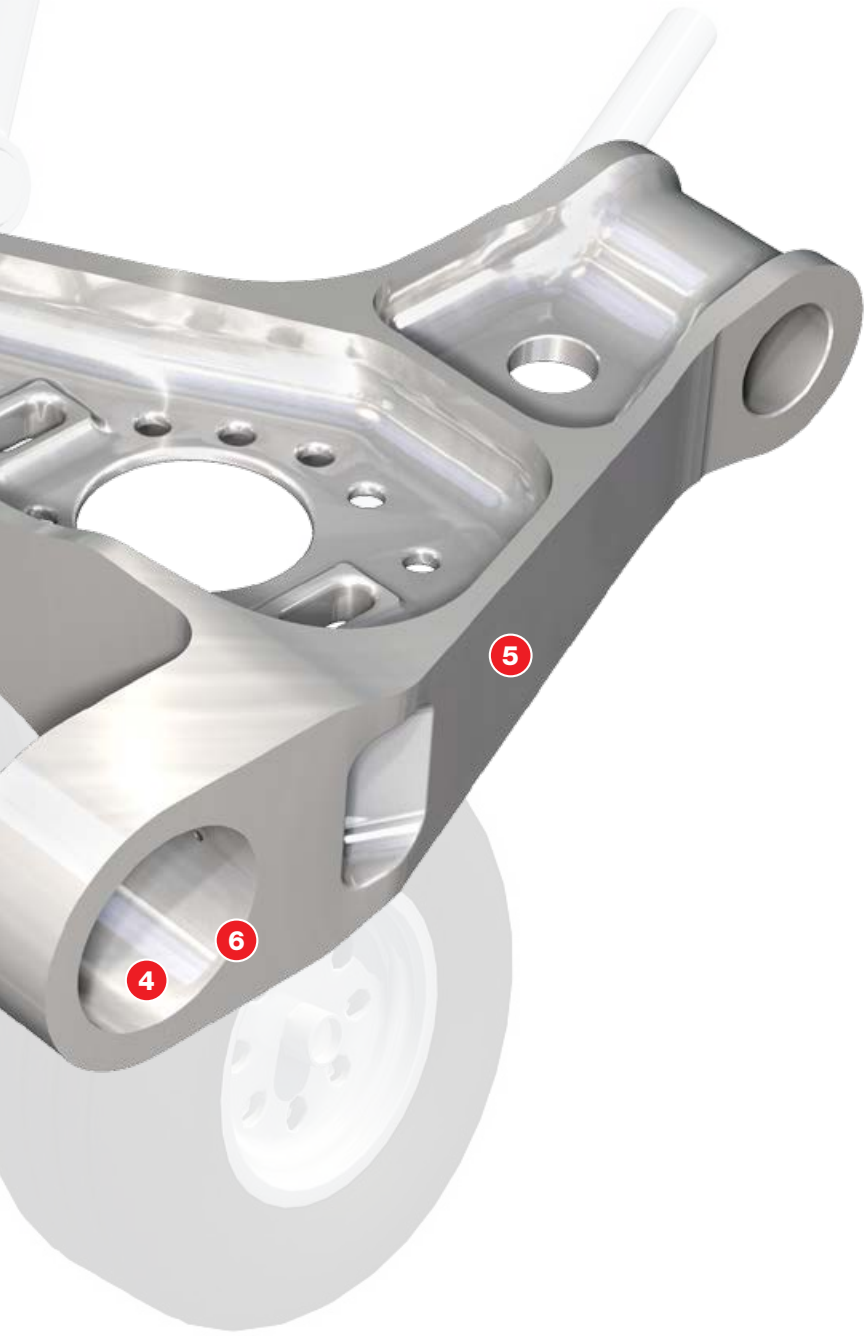


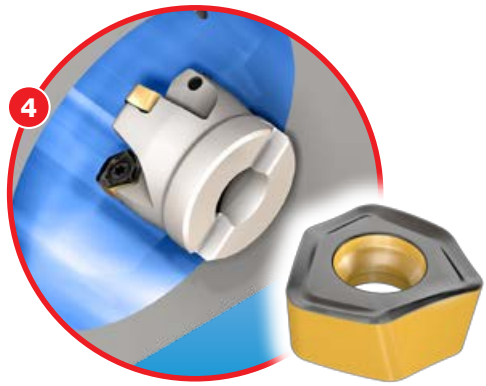
HELIDO
600 UPFEED LINE
High Feed Milling



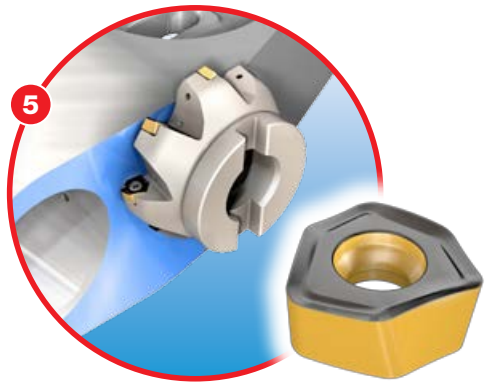
HELITANG
T490 LINE
Shouldering



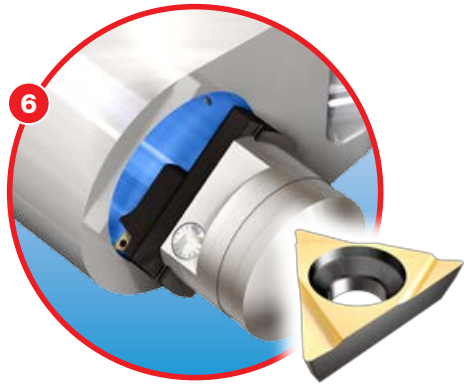




HELIDO
600 UPFEED LINE
Helical Interpolation Milling



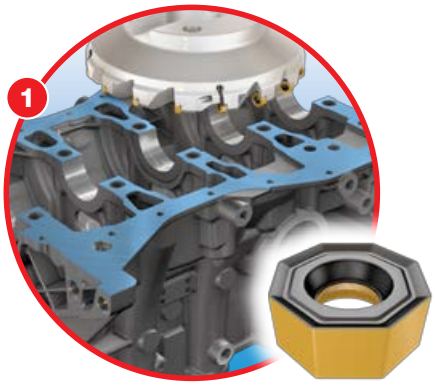
HELIDO
600 UPFEED LINE
High Feed Milling



ITSBORE
Fine Boring

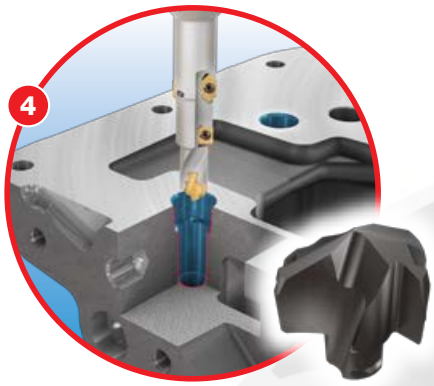
Cylinder Block

The cylinder block is the supporting structure portion of the engine between the cylinder head and sump (oil pan), traditionally manufactured from cast iron and was upgraded to a bi-metal block design (aluminum block with



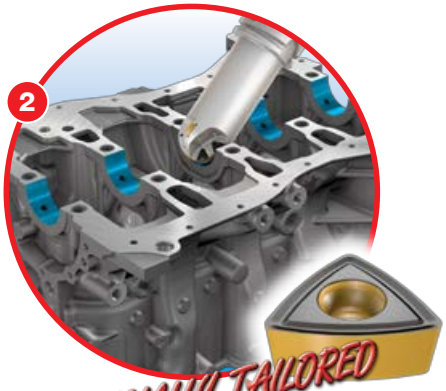
HELIDO
800 LINE

Engine Bottom Block
Face Milling



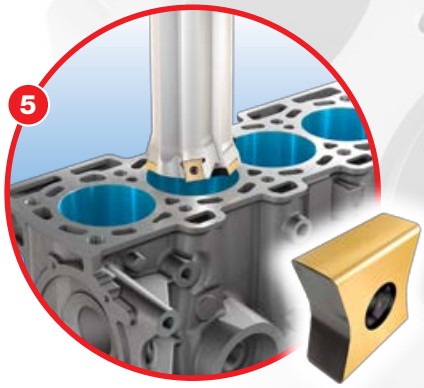
SUMOCHAM
CHAMDRILL LINE

Bush Rods Hole
Step Drilling and Chamfering



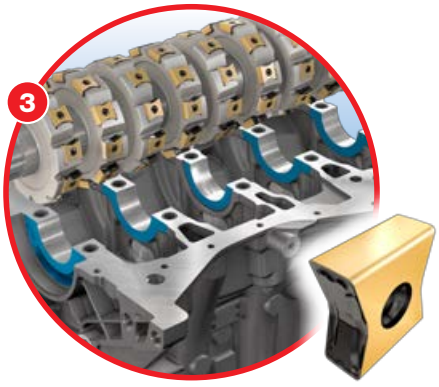
SPECIALLY TAILORED

Bearing Seats
Rough Milling



TANGMILL
TANGENTIAL LINE

Cylinder Bore Rough Boring



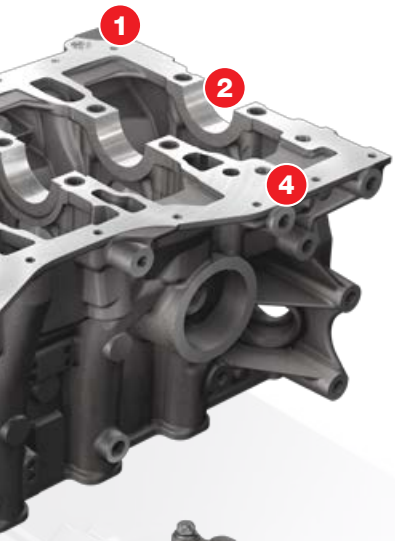
TANGMILL
TANGENTIAL LINE

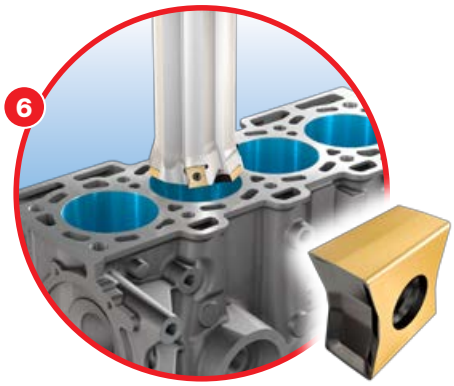
Side Bearing Caps
Gang Milling

ISCAR
INDUSTREALIZE
IDEAS BECOME REALITY

inserted cast iron liners) to reduce weight. Nowadays, newer technology of thermal spray coating processes on the cylinder bore is being used on aluminum blocks.

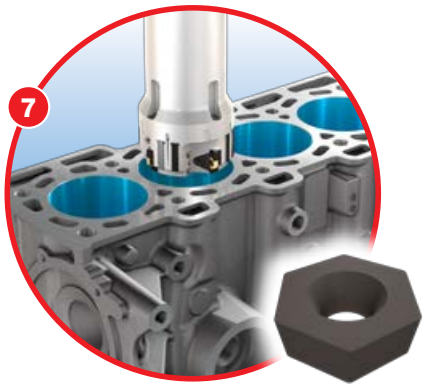
ISCAR provides a wide range of standard and special tooling and machining technology for a variety of block configurations, sizes and materials.





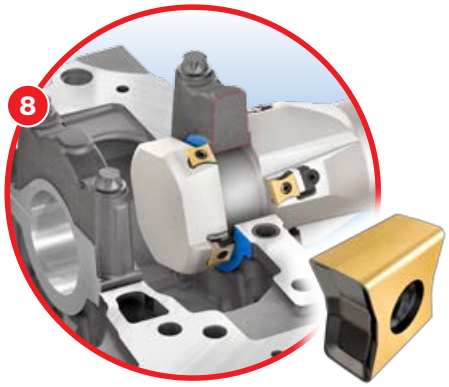
TANGMILL
TANGENTIAL LINE

Cylinder Bore Semi-Finish Boring



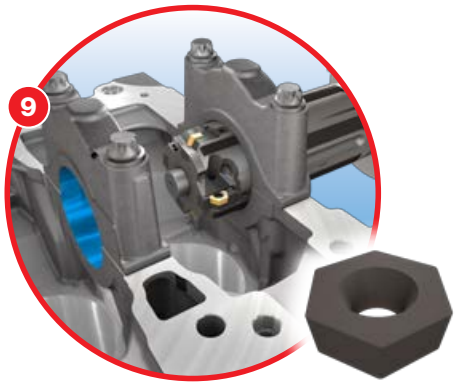
ISCARREAMER

Cylinder Bore Finish Boring



TANGMILL
TANGENTIAL LINE

Thrust Face Milling

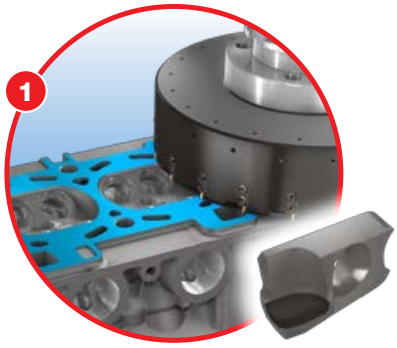


ISCARREAMER

Bearing Seats Pilot Reamer and Long Reamer Finishing

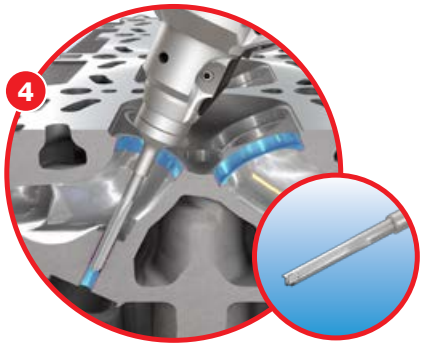
Cylinder Head

Cylinder heads perform several functions in the car engine. These includ housing the exhaust and intake valves, the fuel injector, necessary linkages and passages for the fuel and air mixture. They are commonly produced from gray cast iron or cast aluminum for



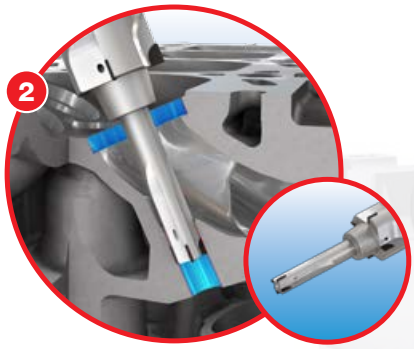
ALUFRAISE

Top and Bottom
Face Milling



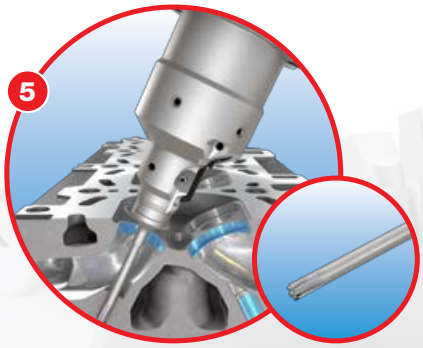
ISCARREAMER

Valve Line Intake and Exhaust
Semi-Finish Reaming



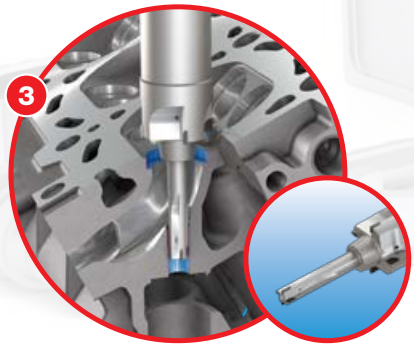
ISCARREAMER

Valve Line Intake (before press in)
Boring and Spot Facing



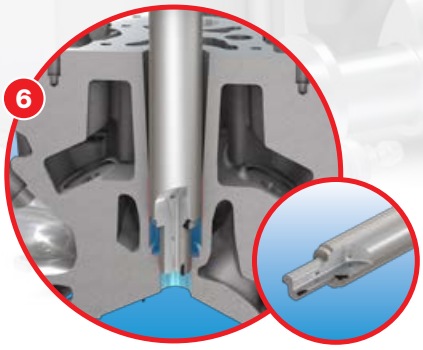
ISCARREAMER

Valve Line Intake and
Exhaust Finish Reaming



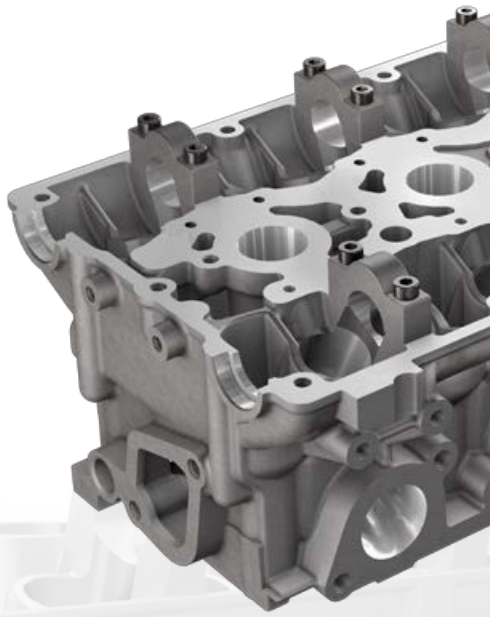
ISCARREAMER

Valve Line Exhaust
Boring and Spot Face

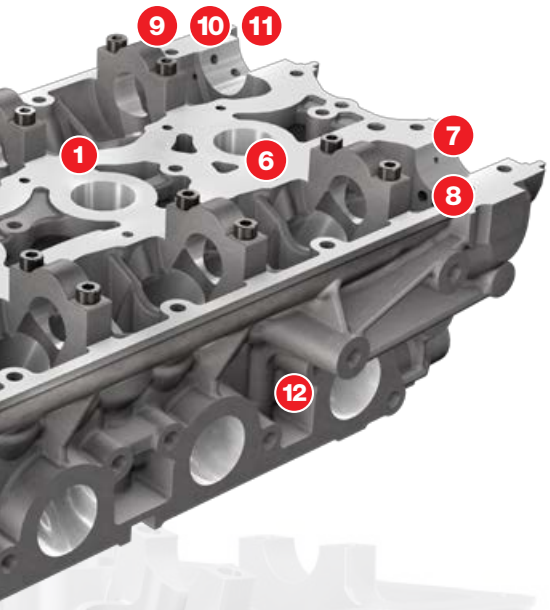


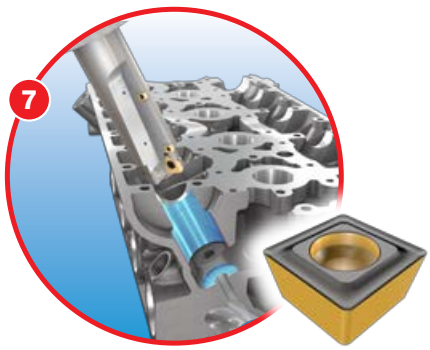
ISCARREAMER

Injector Hole Boring
and Spot Face



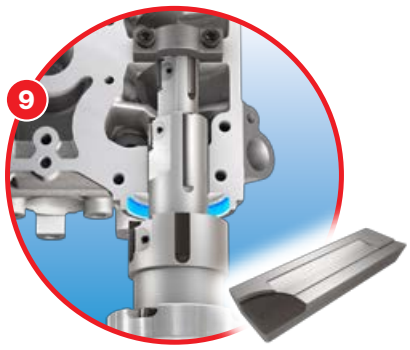
the newer light weight vehicles.
ISCAR provides a wide range of standard and special tooling and machining technology for a variety of cylinder head configurations, sizes and materials.





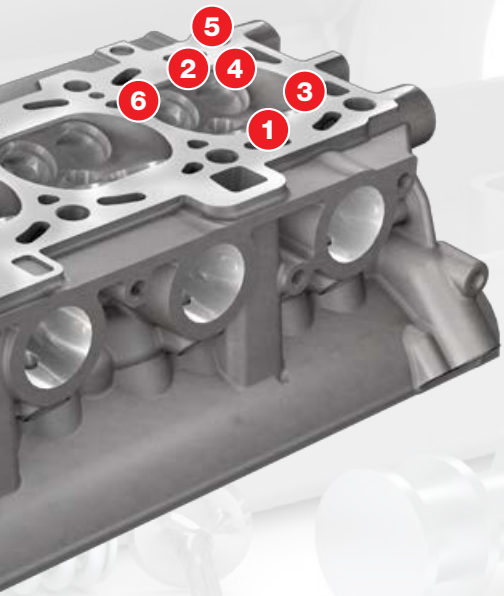
DR-TWIST
INDEXABLE DRILL LINE

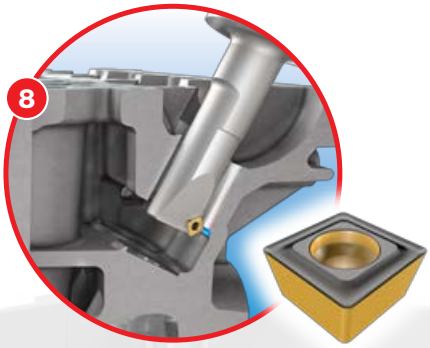
Spring Seat Boring
and Bottom Facing



INDEXH-REAM

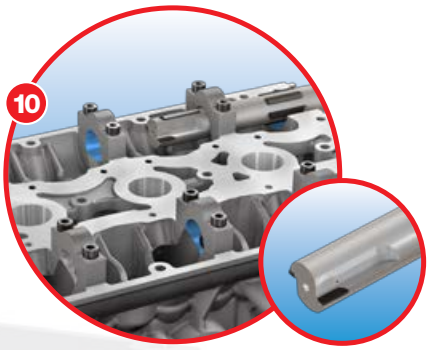
Cam Axis Inlet
and Exhaust Reaming





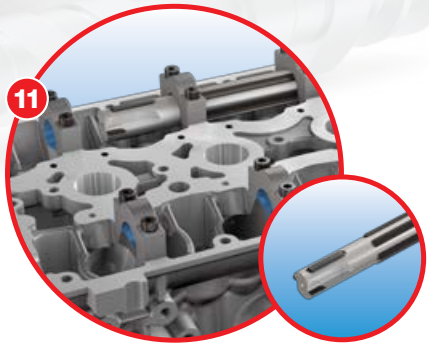
DR-TWIST
INDEXABLE DRILL LINE

Spring Seat
Back Chamfering



ISCARREAMER

Cam Shaft Axis
Pilot Boring

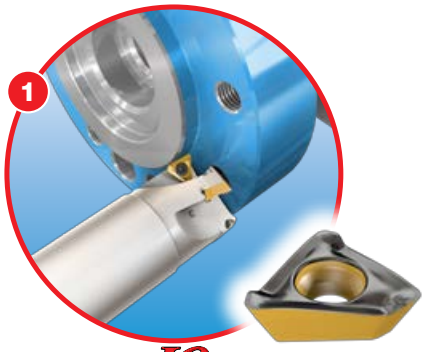


ISCARREAMER

Cam Shaft Axis
Boring and Spot Facing

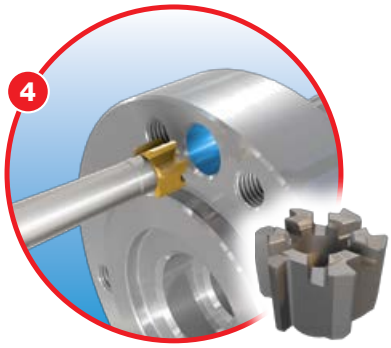
Crank Shaft

A crankshaft translates the linear reciprocating motion of the piston into the rotational motion. This is accomplished by connecting the pistons to the crank throws, which are then offset from the central axis of the crankshaft to create a rotation of that axis. Crankshafts can be monolithic (made in a single piece) or assembled from several pieces.



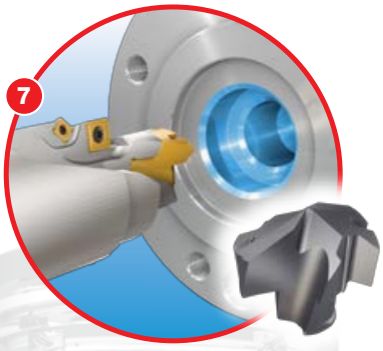
HELIIQMILL 390 LINE

Shoulder Face Milling



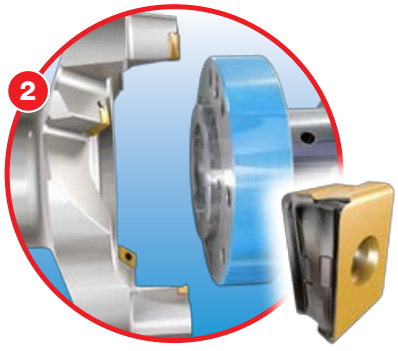
BAYOT-REAM

Reaming Locating Pin



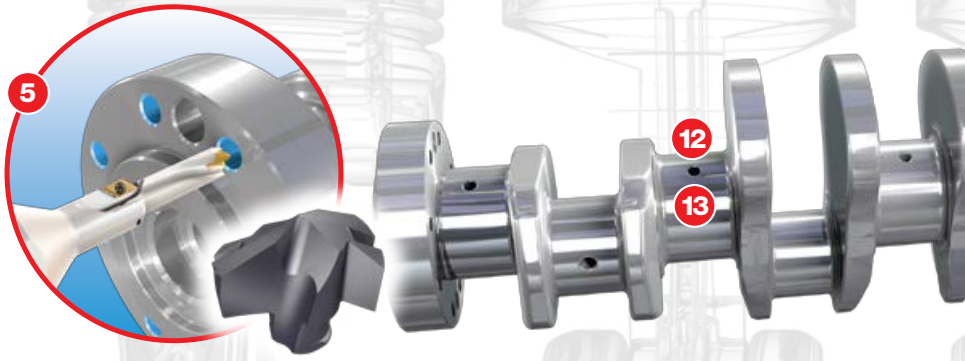
SUMOCHAM CHAMDRILL LINE

Flywheel Mounting Flange Step Drilling and Chamfering



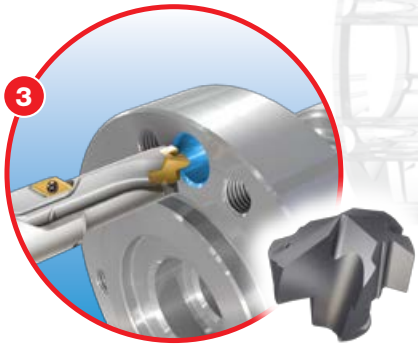
TANGPLUNGE PLUNGING LINE

Outer Diameter Plunge Milling and Chamfering



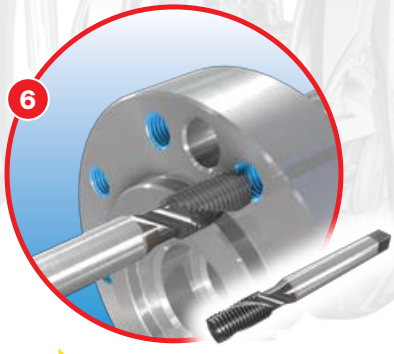
SUMOCHAM CHAMDRILL LINE

Flywheel Flange Hole Making and Chamfering



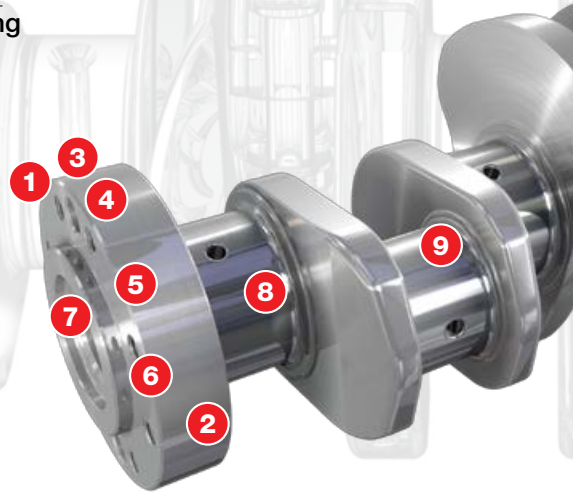
SUMOCHAM CHAMDRILL LINE

Locating Pin Hole Making and Chamfering

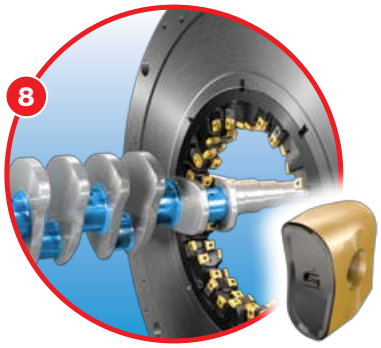


HSS

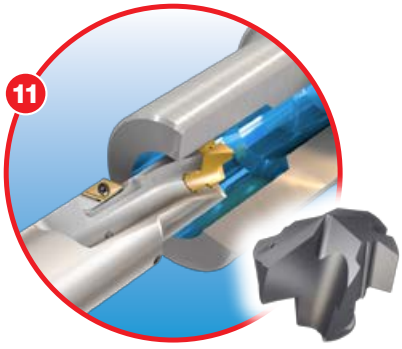
Flywheel Flange Tapping



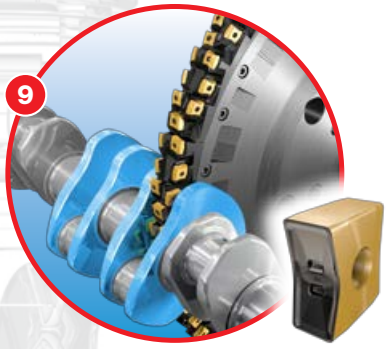
Monolithic crankshafts are most common, but some smaller and larger engines use assembled crankshafts. Crankshafts can be forged from a steel bar usually through roll forging or cast in ductile steel. Today, more and more manufacturers tend to favor the use of forged crankshafts due to their lighter weight. Crankshafts can also be machined out of a billet, often a bar of high quality vacuum remelted steel. Machining or remanufacturing crankshafts are precision machined to exact tolerances without odd size crankshaft bearings or journals. ISCAR has developed long solid carbide drills for crankshaft oiling holes. For bearings or journal cranks, ISCAR's milling, turning and tooling solutions assure high productivity.



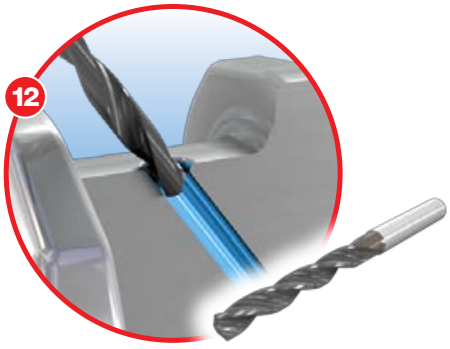
TANGMILL
TANGENTIAL LINE
Internal Milling



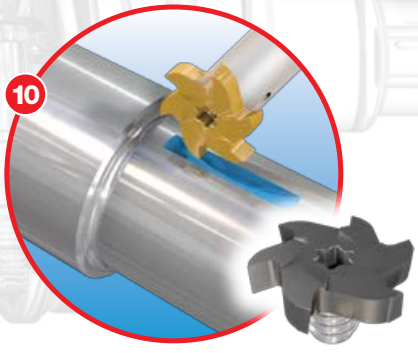
SUMOCHAM
CHAMDRILL LINE
Crank Nose Hole Making and Chamfering



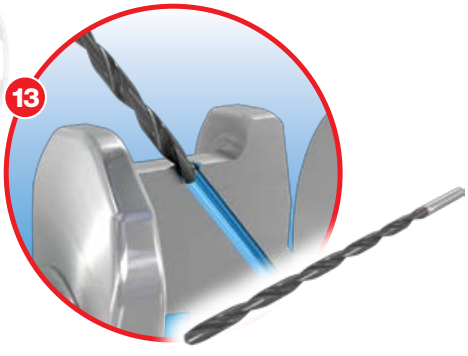
TANGMILL
TANGENTIAL LINE
Crankpin Journals External Milling



SOLIDDRILL
Oil Hole Pilot for Deep Drill



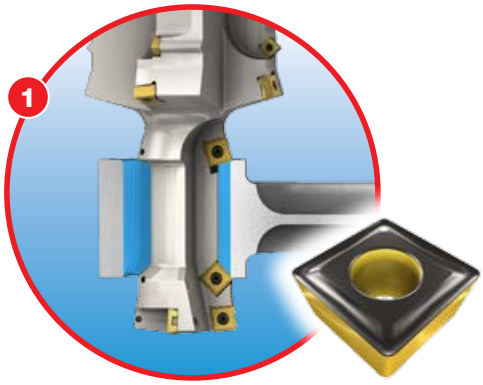
MULTI-MASTER
INDEXABLE SOLID CARBIDE LINE
Crank Nose Keyway



SOLIDDRILL
Main Journal Oilway Hole Making

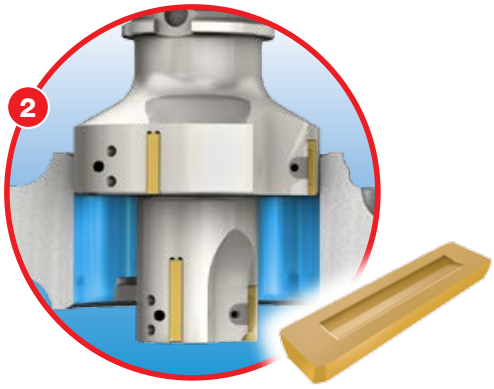
Connecting Rod

Con-rods are part of the engine component that transfers motion from the piston to the crankshaft and functions as a lever arm. Connecting rods are commonly made from cast aluminum alloys and steel alloys which are designed to withstand dynamic stresses from combustion and piston movement. Connecting rods are produced as one-piece or two-piece components. A rod cap is the



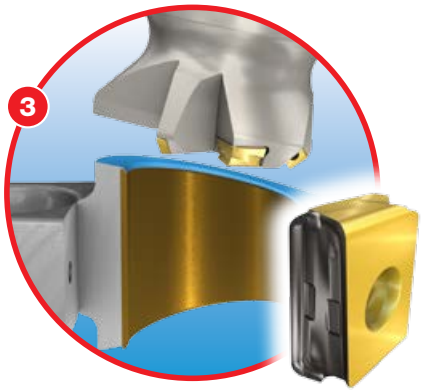
ISCARDRILL

Boring and Chamfering (Main and Pin)



INDEXH-REAM

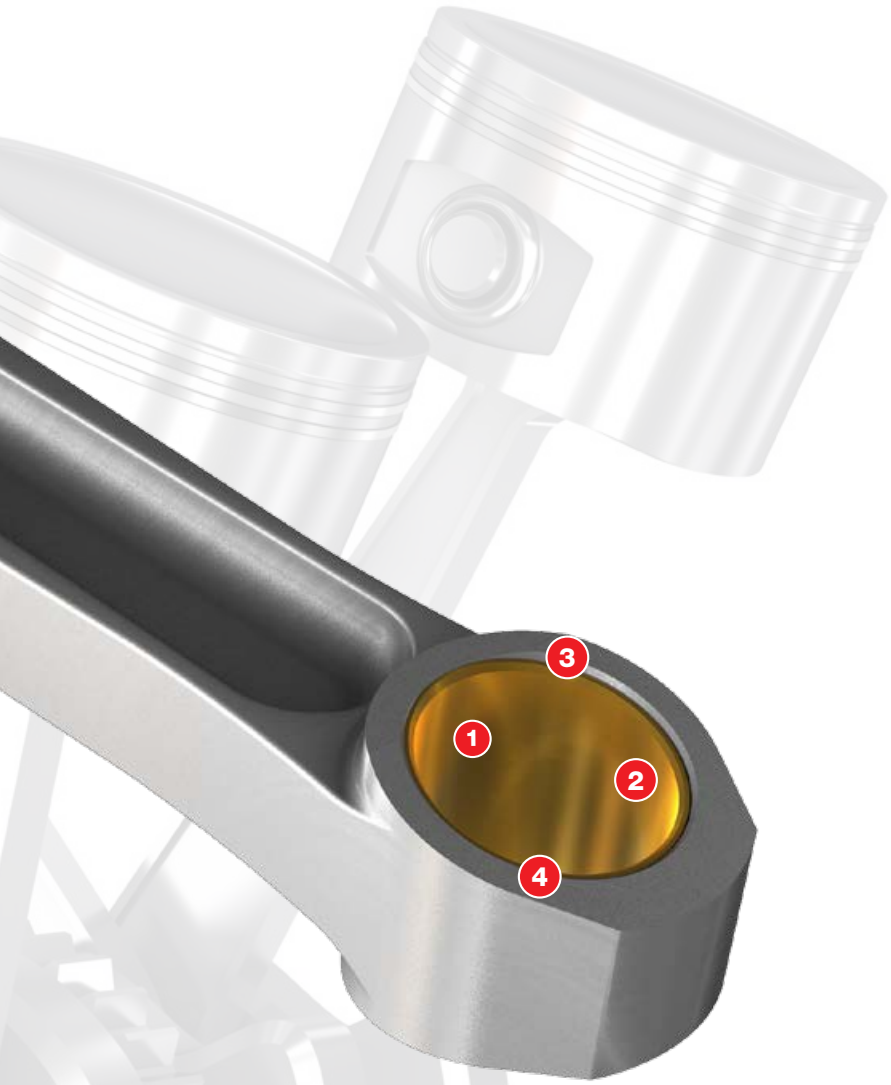
Reaming (Main and Pin)

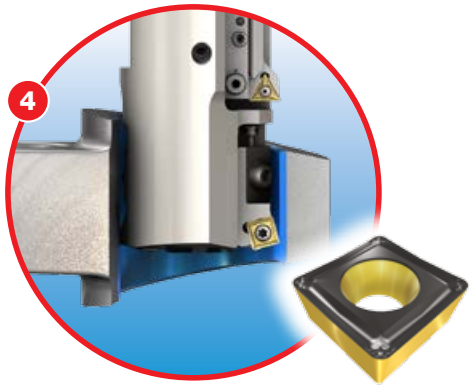


TANGPLUNGE
PLUNGING LINE

Spot Facing and Chamfering (pin)

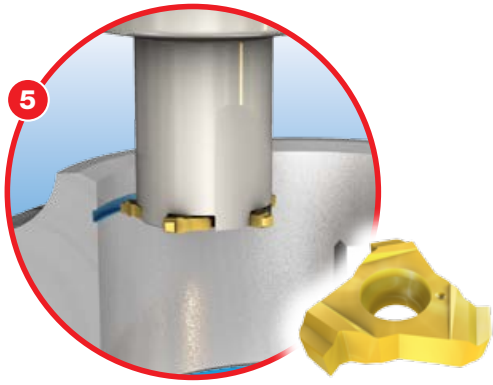
removable section of a two-piece connecting rod that provides a bearing surface for the crankpin journal. The rod cap which is being sawed or cracked is attached to the connecting rod with two cap screws for installation and removal from the crankshaft. ISCAR provides a wide range of standard and special tooling and machining technology for con-rods.





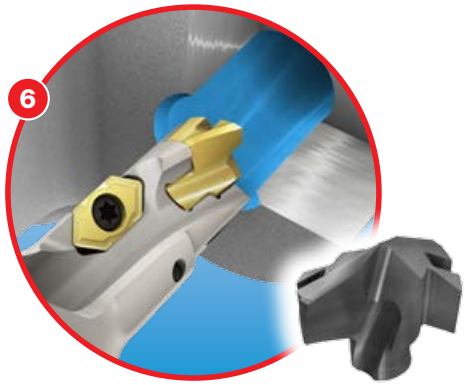
ISOTURN

Boring on Brass Bushing
Semi-Finish and Finishing



CHAMSLIT

Slot and Slot Chamfering

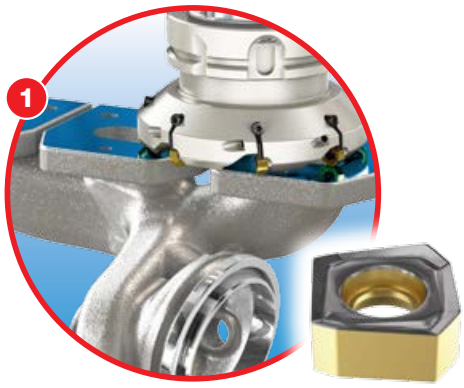


SUMOCHAM
CHAMDRILL LINE

Drilling and Chamfering

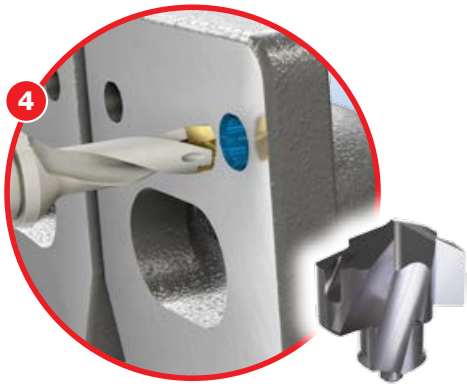
Turbine Housing With Exhaust Manifold

The turbocharger plays a key role in increasing an engine's performance by reutilizing the wasted exhaust gasses into the engine's combustion chambers, resulting in air/fuel mixture which significantly increases the engine's efficiency. An unwelcomed consequence of the



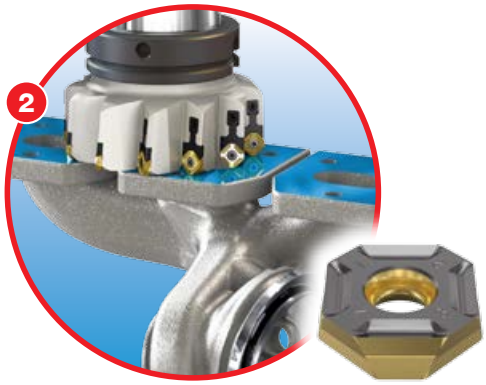
HELIDO 800 LINE

Flange Face Rough Milling



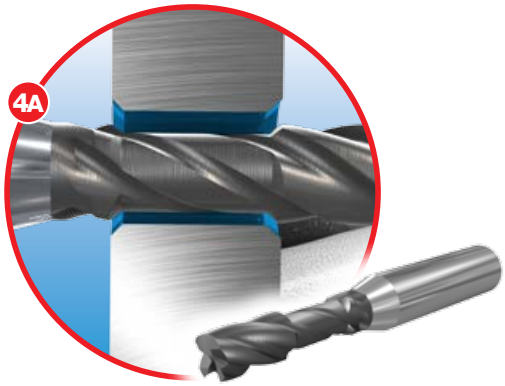
SUMOCHAM CHAMDRILL LINE

Screw Clamp for Elliptical Hole Drilling



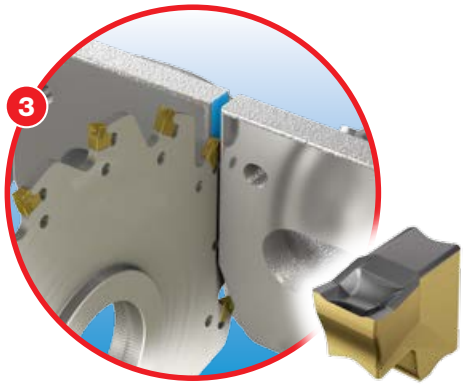
DOVEIQMILL 845 LINE

Flange Face Finish Milling



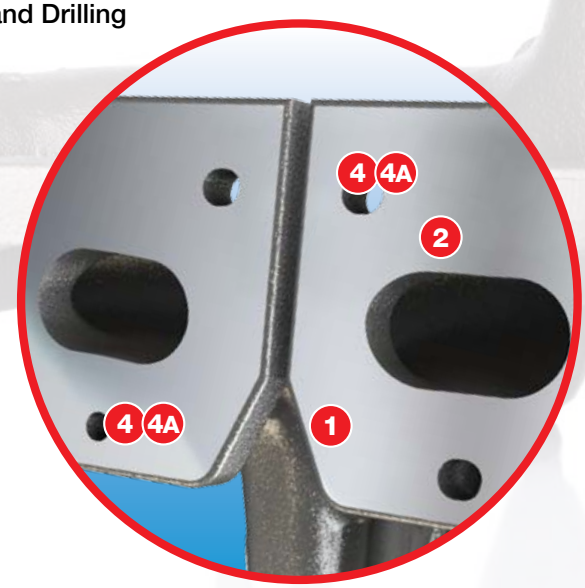
SOLIDMILL PREMIUM LINE

Screw Clamp for Elliptical Hole Chamfer Milling and Drilling

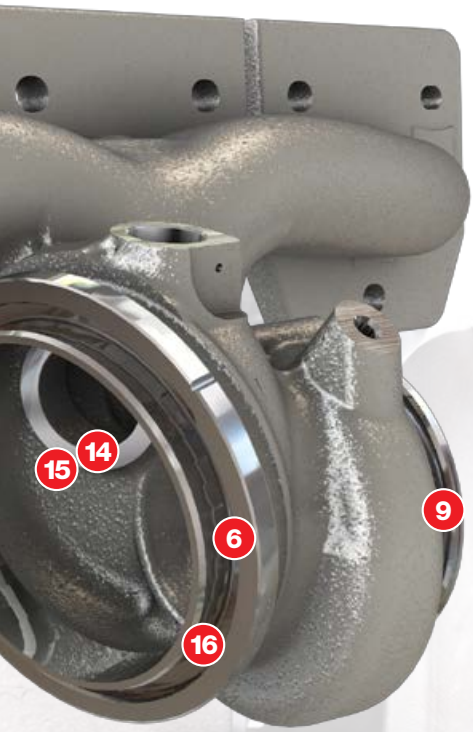


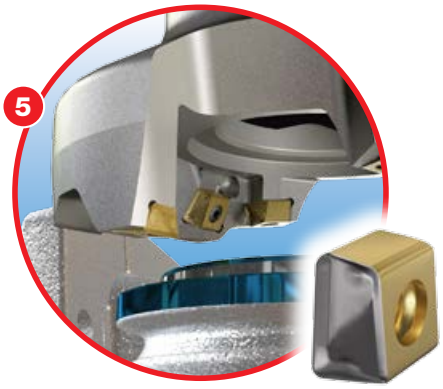
TANGSLIT

Slot Milling



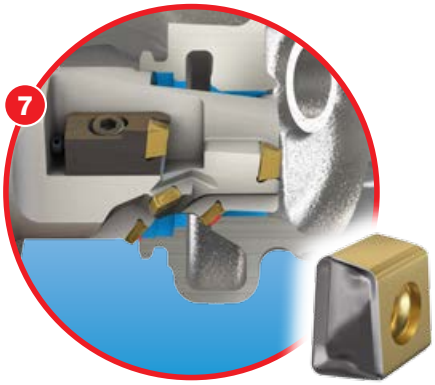
turbocharger's output is by running the turbine housing temperatures to 900°C in diesel engines, and up to 1100°C in gasoline powered units. To withstand these high temperatures, turbine housings are manufactured from austenitic, heat-resistant cast steels, which have relatively high-creep strength, good thermal stability, and excellent castability. ISCAR developed special combine tools, chipformers and unique coating edge technology to meet the market challenges in producing millions of turbo chargers all over the world year by year.



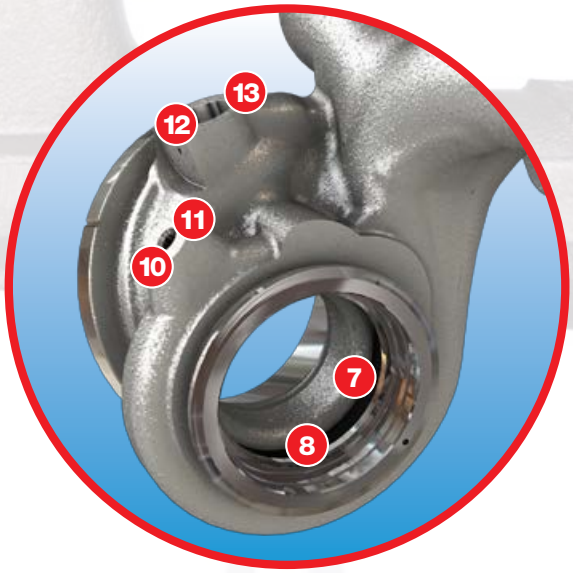


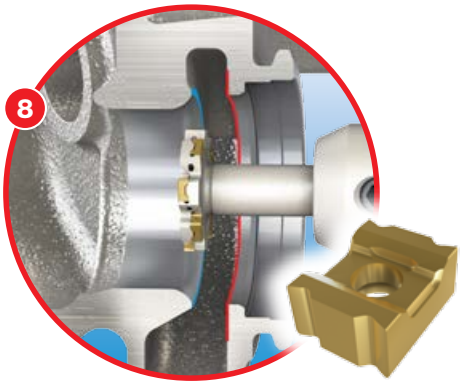
TANGPLUNGE
PLUNGING LINE
Big V-Band Plunging

HELIFACE
Big V-Band Grooving and Chamfering



TANGPLUNGE
PLUNGING LINE
Contour Turbine Wheel Plunging, Roughing and Chamfering





MINI-TANGSLOT
Safety Cut Milling

Turbine Housing With Exhaust Manifold

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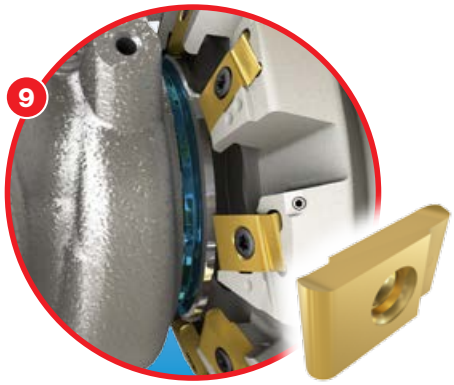
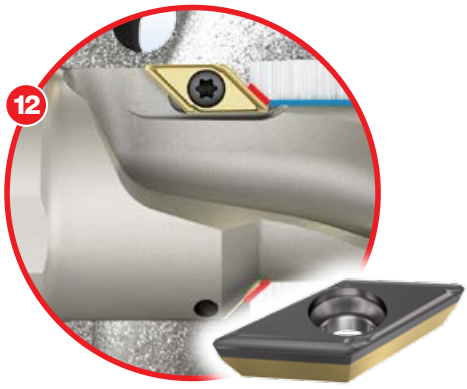


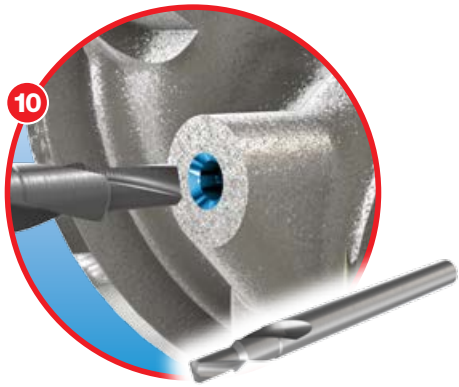
TANGMILL
TANGENTIAL LINE

Small V-Band
Circular Interpolation Milling



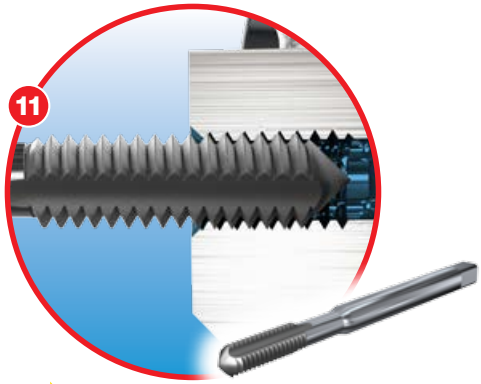
ISOTURN

Bush Boring Control Valve
Drilling and Chamfering



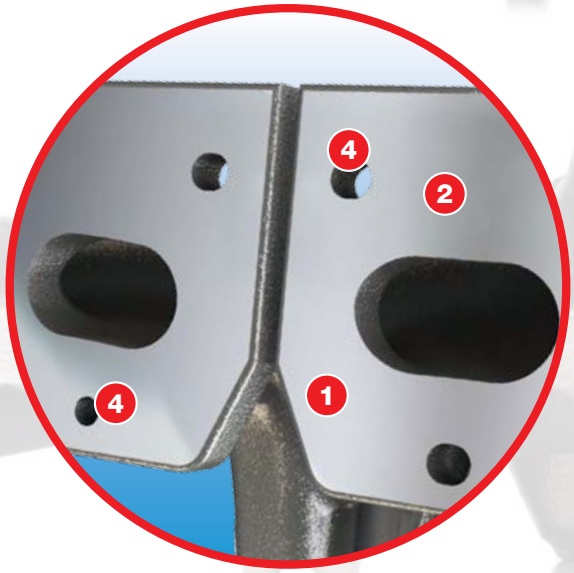
PRETHREAD

Pre-Thread
Solid Carbide Drilling



HSS

Fixation Hole Tapping



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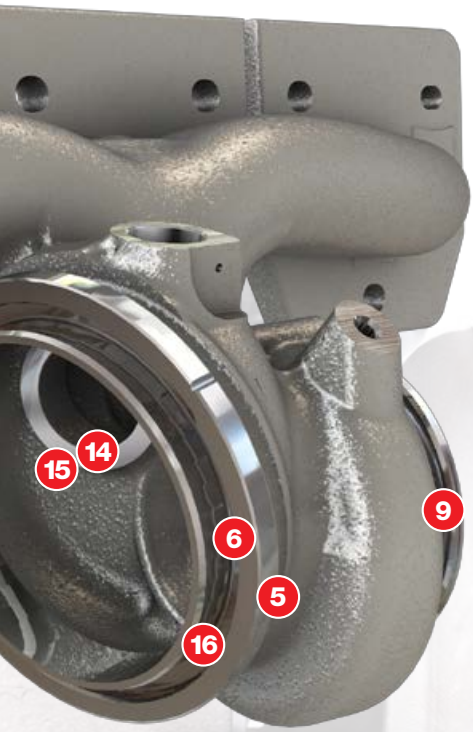
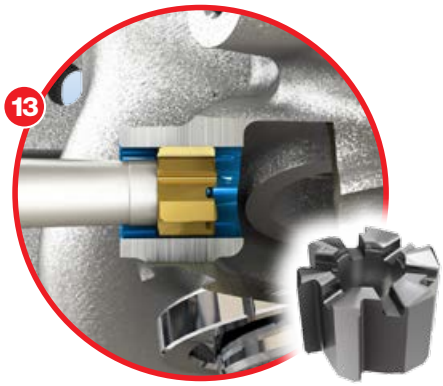
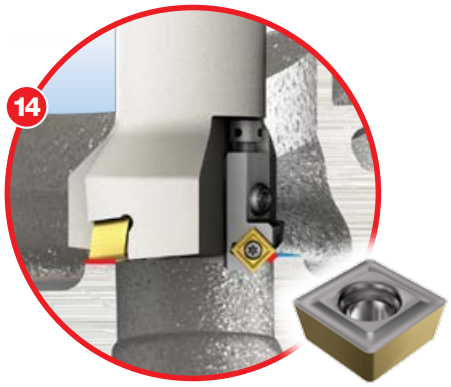




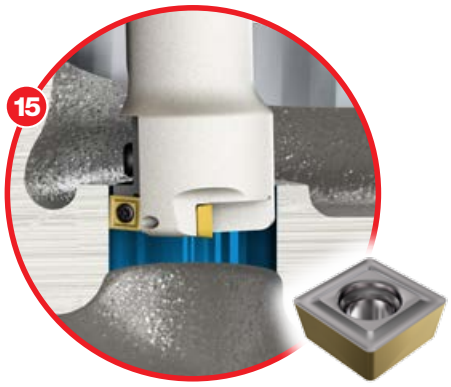
BAYOT-REAM

Bush Boring Control
Valve Reaming



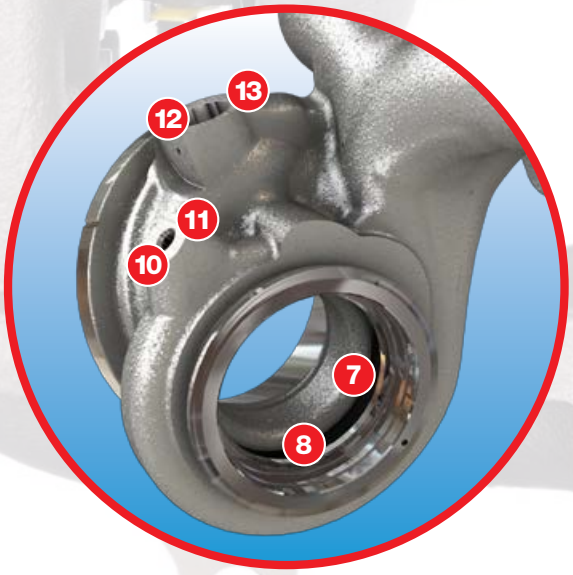
DR-TWIST
INDEXABLE DRILL LINE

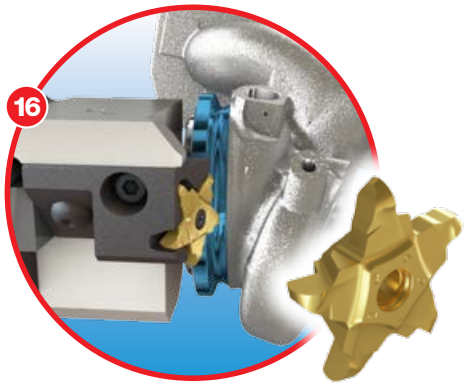
Waste Gate Facing
and Chamfering



DR-TWIST
INDEXABLE DRILL LINE

Waste Gate
Bore Finishing



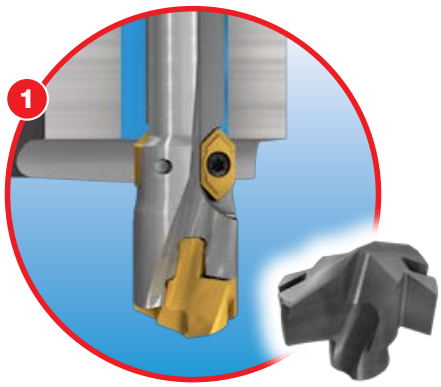


PENTACUT

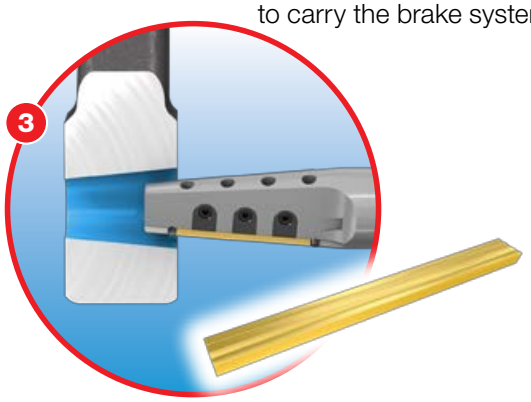
Big V-Band Circular
Interpolation Milling

Steering Knuckle

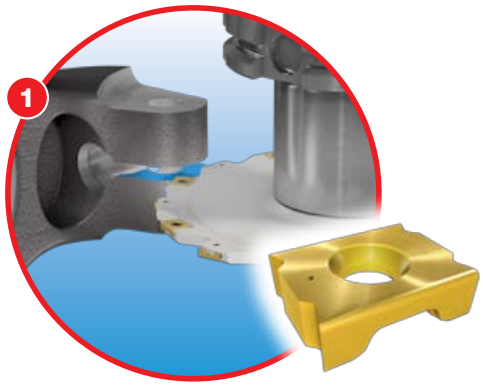
A steering knuckle is a key part of the vehicle suspension system coming in different shapes, depending on the suspension type (McPherson strut, multi-link, trailing-arm, etc). They are designed to link the front wheels to the steering system, strut dampers, and to carry the brake system components.



SUMOCHAM
CHAMDRILL LINE
Drilling, Chamfering and Back Chamfering

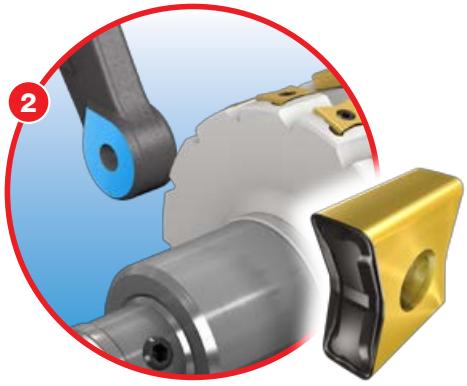


INDEXH-REAM
Conical Reaming

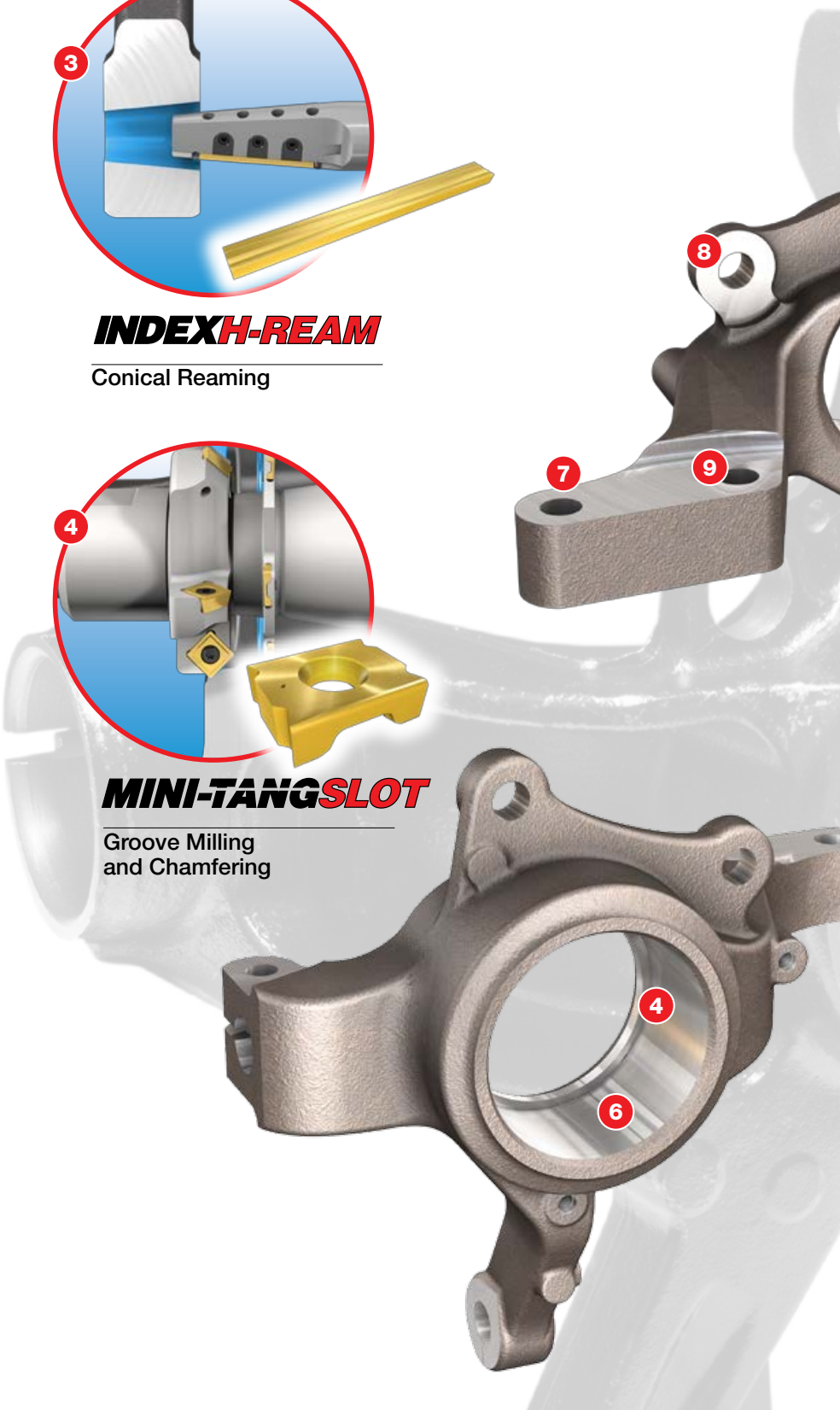


MINI-TANGSLOT
Slotting

MINI-TANGSLOT
Groove Milling and Chamfering

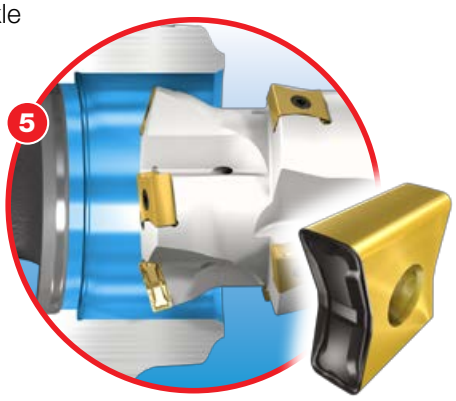


TANGMILL
TANGENTIAL LINE
Milling



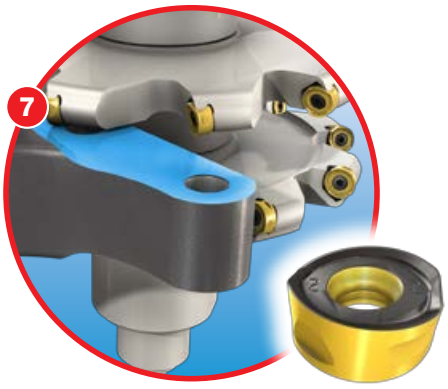
ISCAR
INDUSTREALIZE
IDEAS BECOME REALITY

Traditionally, steering knuckles are made of nodular cast iron and forged steel (rarely). Steering knucles are also made of aluminum alloy casts for new type vehicles. Aluminum alloy cast parts contribute to low weight vehicles and efficient automotive manufacturing. ISCAR offers a wide range of knuckle machining technologies depending on the workpiece material, the customer's machine type (transfer line, single-spindled machining centers, tween or triple spindled CNCs, etc.) and part holding fixtures.



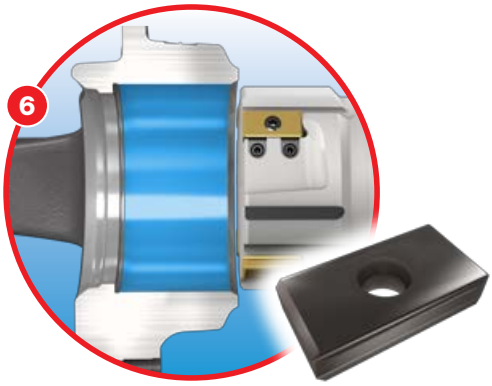
TANGMILL
TANGENTIAL LINE

Rough Boring and Chamfering



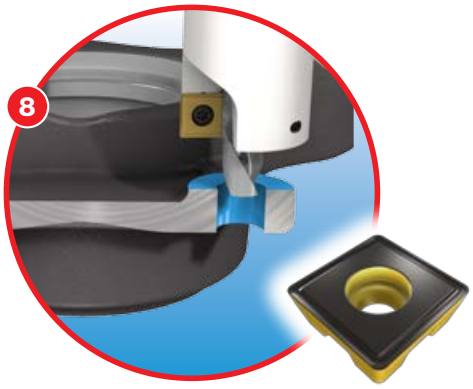
HELIDO
ROUND H400 LINE

Milling



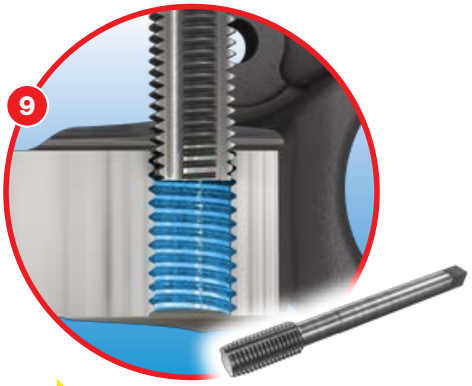
ISCARREAMER

Tangential Reaming



DR-TWIST
INDEXABLE DRILL LINE

Spot Face Plunging, Drilling and Chamfering

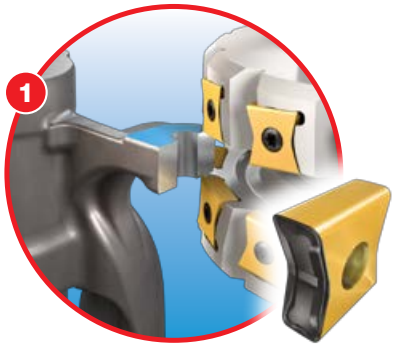


HSS TAPS

Tapping

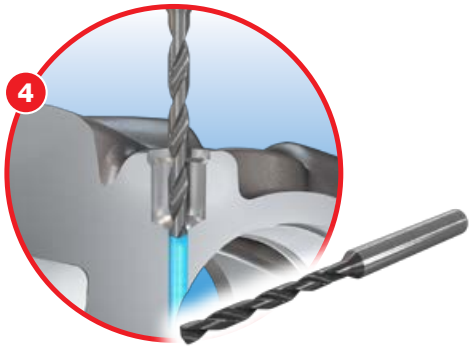
Brake Caliper

Brake calipers are a vital part of your vehicle's braking system; they squeeze the brake pads against the surface of the brake rotor to slow or stop the vehicle. Brake calipers



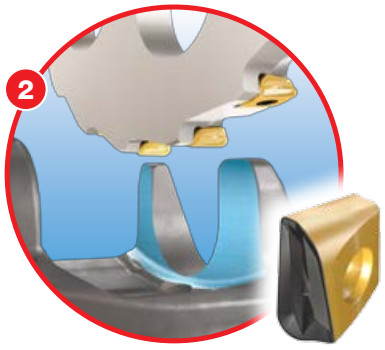
TANGMILL
TANGENTIAL LINE

Cylinder Side Milling



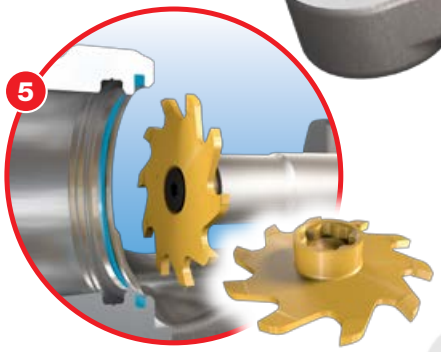
SOLIDDRILL
TEC LINE

Oil Drill On Cylinder
Side Hole Drilling



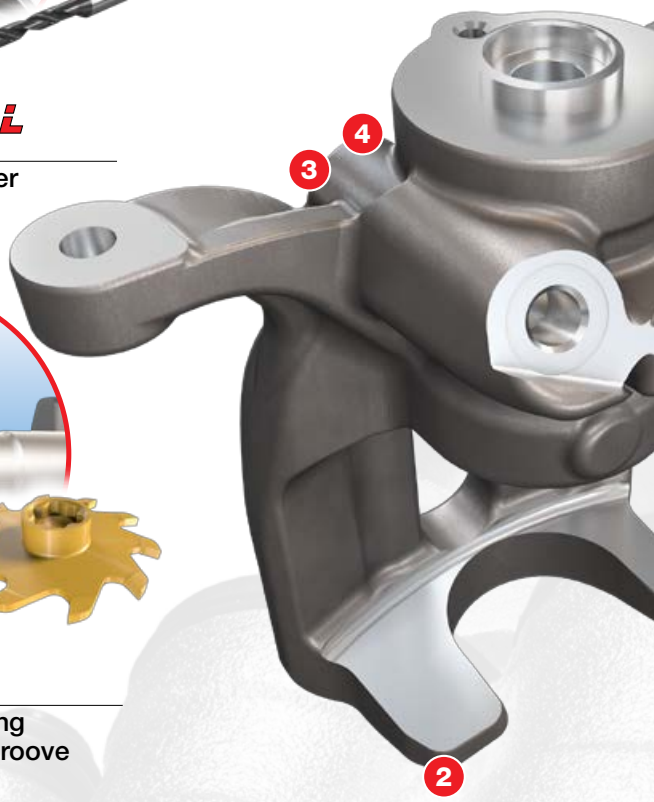
HELITANG
T490 LINE

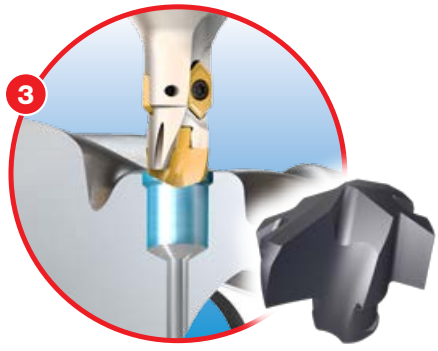
Caliper Body
Face Milling



T-SLOT

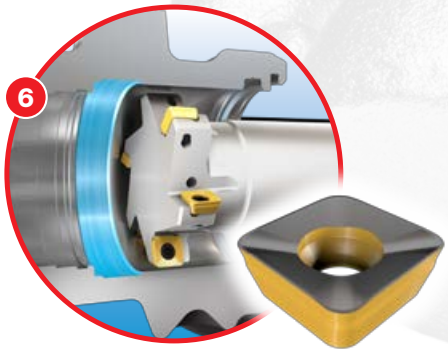
Interpolation Milling
Spring Retainer Groove





SUMOCHAM
CHAMDRILL LINE

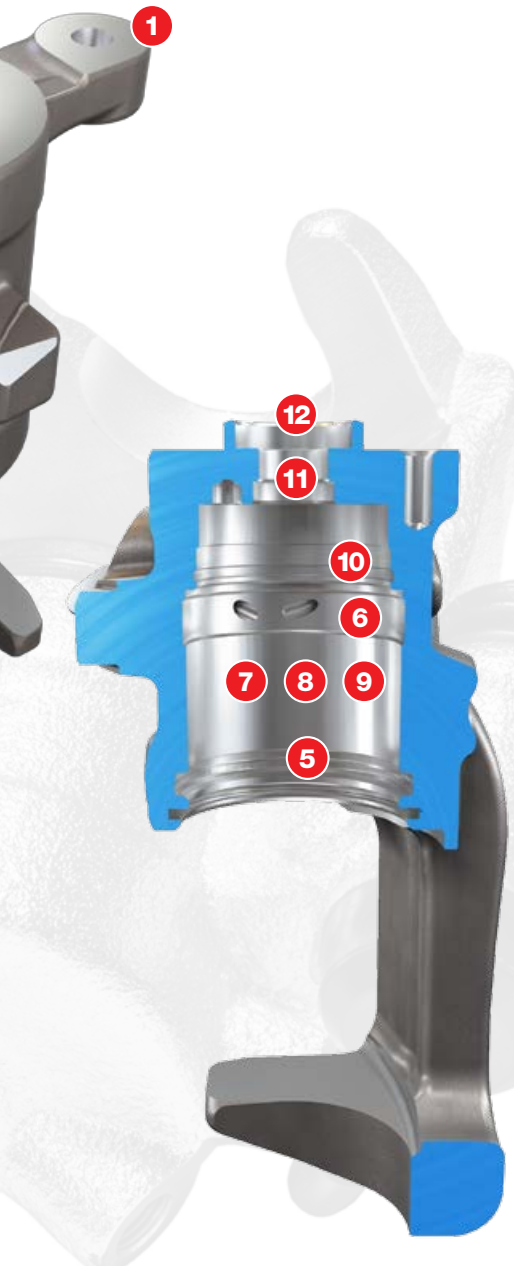
Cylinder Side Hole
Drilling and Chamfering

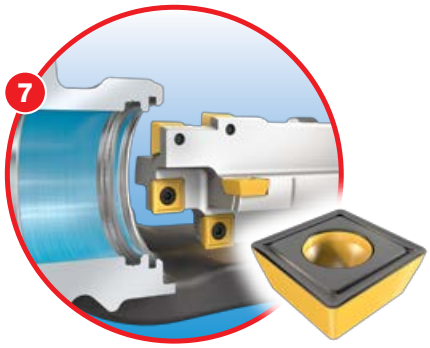


QUAD2000

Interpolation Grooving

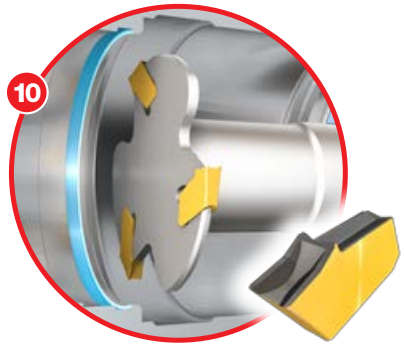
are made of cast iron with inner and outer pistons made from stainless steel. ISCAR offers standard and special tooling and machining technology for brake calipers.





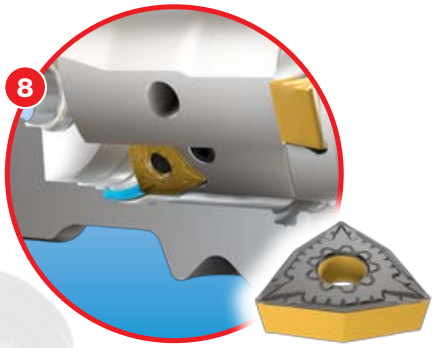
DR-TWIST INDEXABLE DRILL LINE

Cylinder Area Rough Boring



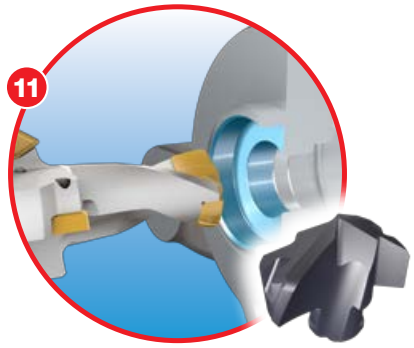
SELF-GRIP

Internal Slitting Interpolation



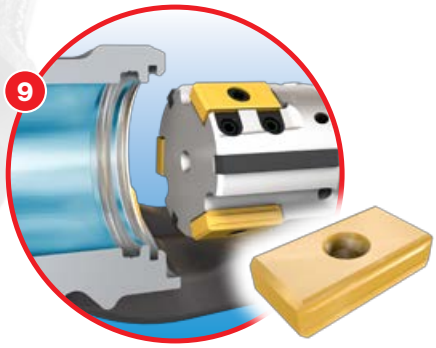
ISOTURN

Cylinder Area Plunging, Boring, Chamfering and Spot Facing



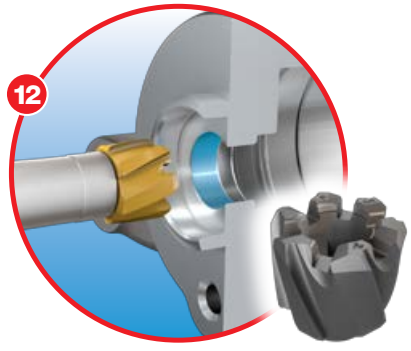
SUMOCHAM CHAMDRILL LINE

Mounting Bolt Drilling, Chamfering and Spot Facing



INDEXH-REAM

Cylinder Area Reaming

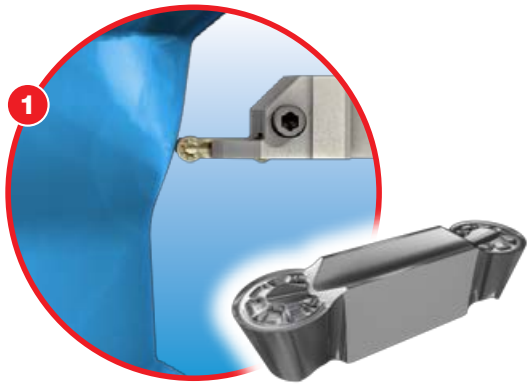


BAYOT-REAM

Main Journal Oilway Hole Making

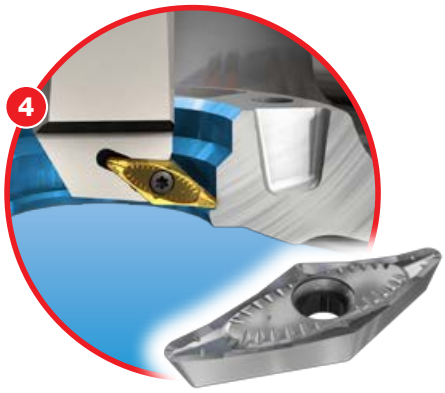
Aluminum Wheels

Aluminum wheels are made of magnesium aluminum alloys casting, which typically provides lighter weight with no compromise to structural strength, and are often produced with PCD type



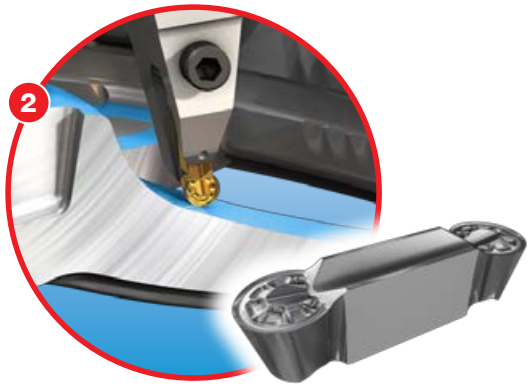
FIXGRIP

Outer Diameter
Grooving and Turning



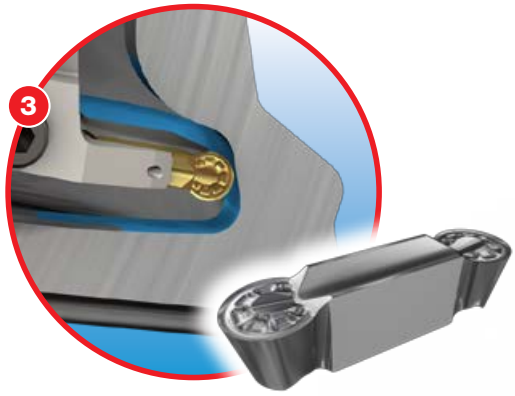
ISOTURN

Bore Turning



FIXGRIP

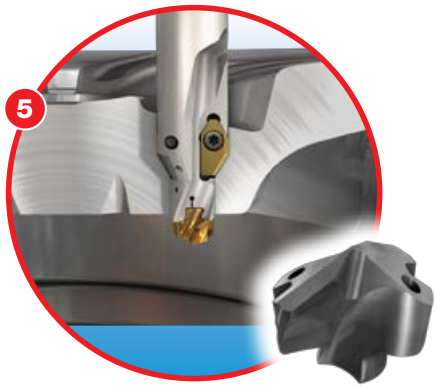
Inner Diameter
Grooving and Turning



FIXGRIP

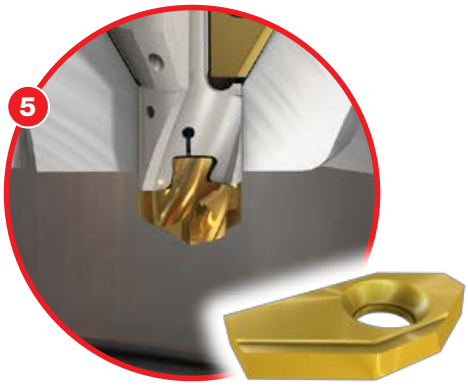
Undercuting Grooving and Turning

tooling for roughing and finishing operations. ISCAR has developed unique PCD special tools, inserts with chip formers and polished edges for optimized chip formation and prolonged edge life.



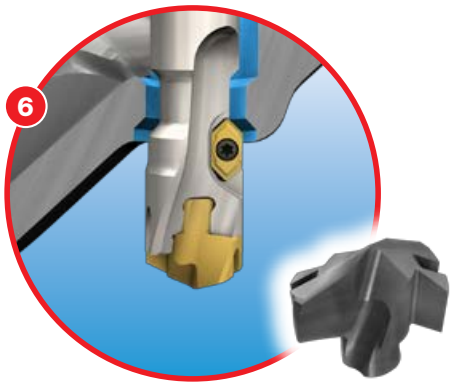
CHAMDRILLJET

Lug Hole Drilling



V-LOCK

Lug Hole Chamfering



SUMOCHAM
CHAMDRILL LINE

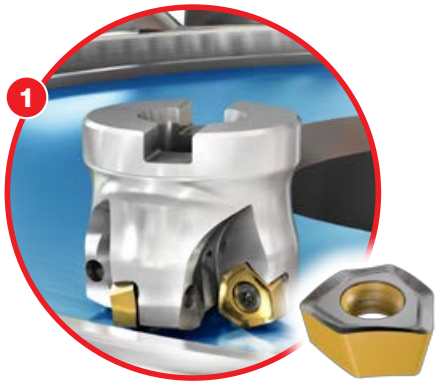
Valve Hole Drilling

PRETHREAD

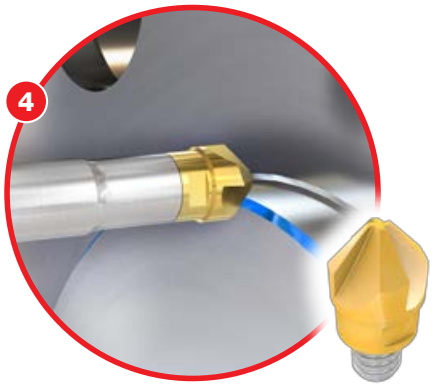
Valve Hole Back Chamfering

Hydro Pelton Blade

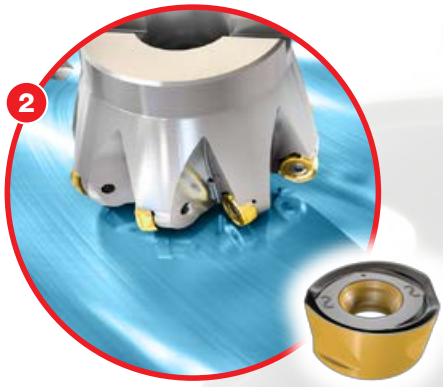
A Pelton blade is an impulse-type water turbine which extracts energy from the impulse of moving water, as opposed to the water's dead weight like the traditional overshot water wheel. The Pelton blade is either produced from stainless steel alloys, cast iron, cast steel



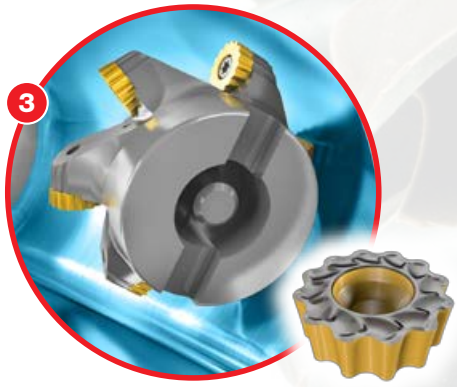
HELIDO
600 UPFEED LINE
Interpolar Face Milling



MULTI-MASTER
INDEXABLE SOLID CARBIDE LINE
Chamfering

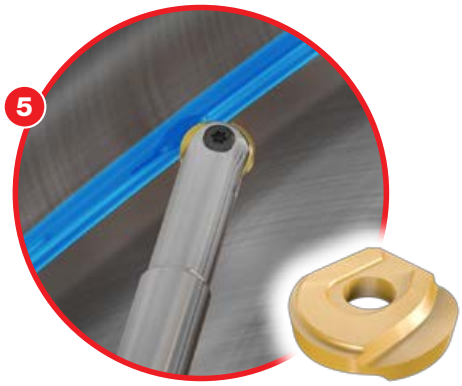


HELIDO
ROUND H400 LINE
Profiling and Semi-Finishing



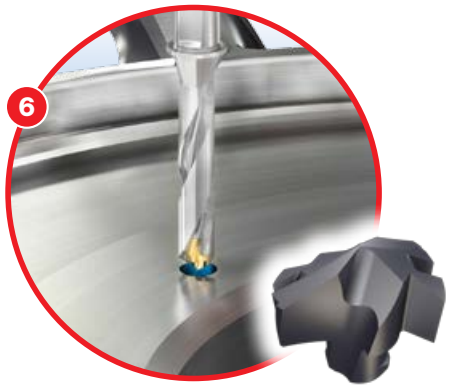
MILLSHRED
ROUND LINE
Blade Profiling and Roughing

bronze or stainless steel depending upon their design configuration and size. ISCAR offers unique machining technology for Pelton blades based on standard and special turrning, drilling and milling tools.



BALLPLUS

Radius Profiling and Finishing

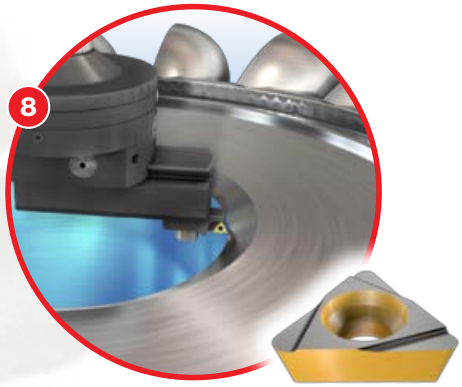


SUMOCHAM
CHAMDRILL LINE

Drilling

SOLIDTHREAD

Thread Milling

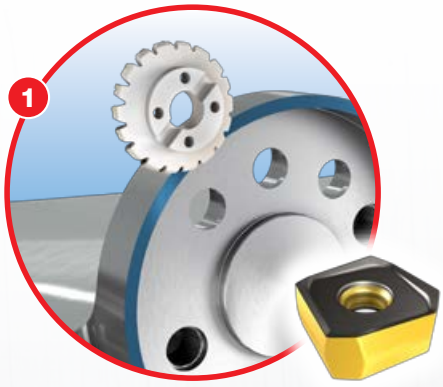


ITSBORE

Fine Boring

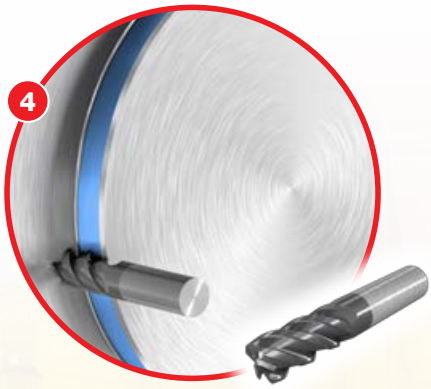
Kaplan Blade

The Hydro Kaplan Blade turbine is a propeller-type water adjustable blade turbine with outward flow reaction. The working fluid changes pressure as it moves through the turbine and gives up its energy. Power



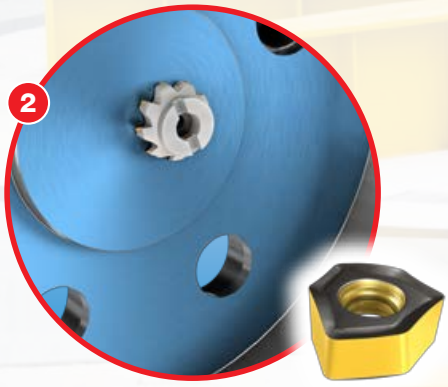
HELIDO 800 LINE

Face Rough Milling



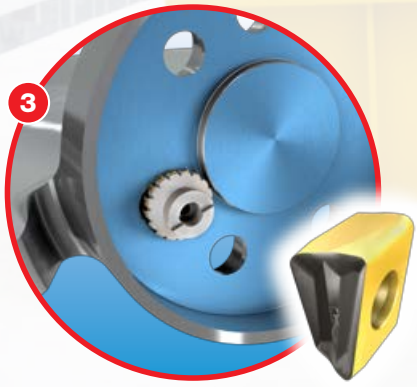
CHATTERFREE SOLID MILL LINE

Shoulder Finishing



HELIDO 600 UPFEED LINE

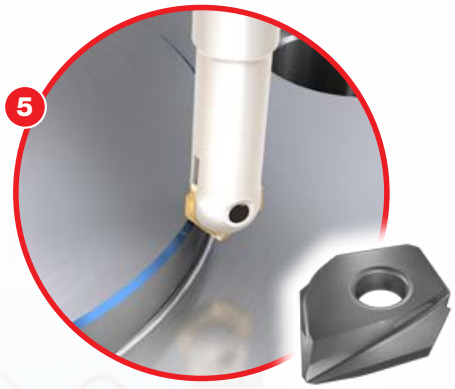
Inner Face Rough Machining



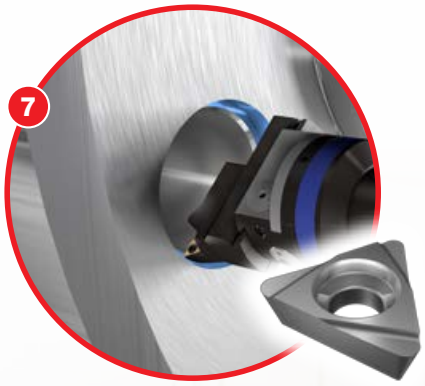
HELITANG T490 LINE

Inner Face Finish Machining

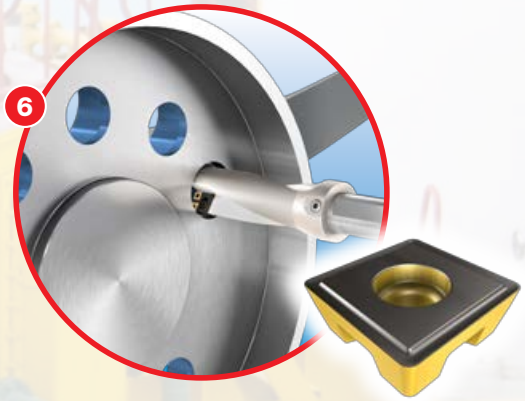
is recovered from both the hydrostatic head and from the kinetic energy of the flowing water. ISCAR offers standard milling, drilling, turning and threading tools for the production of casted stainless steel Kaplan blades.



BALLPLUS
Chamfering

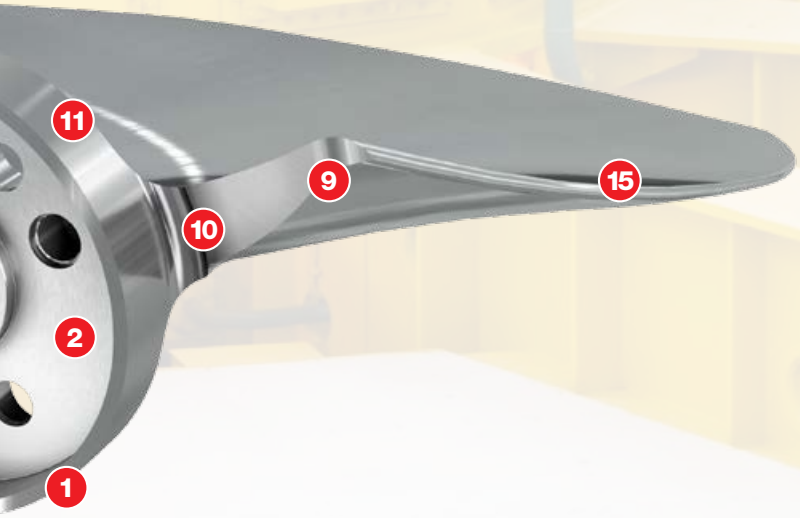


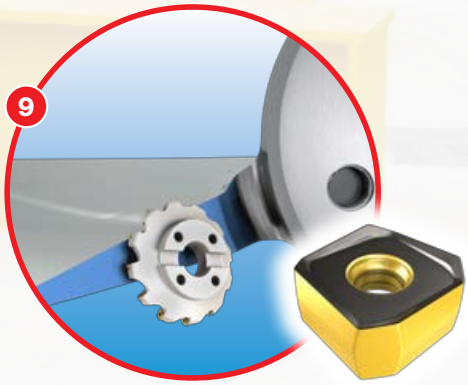
ITSBORE
Fine Boring



DR-TWIST
INDEXABLE DRILL LINE
Drilling

DR-TWIST
INDEXABLE DRILL LINE
Back Facing By
Helical Interpolation

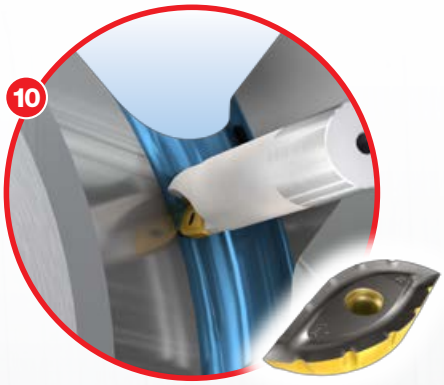




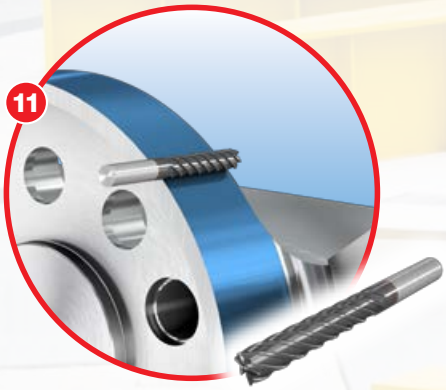
HELIDO
845 LINE
Face Milling

Kaplan Blade

The Hydro Kaplan Blade turbine is a propeller-type water adjustable blade turbine with outward flow reaction. The working fluid changes pressure as it moves through the turbine and gives up its energy. Power



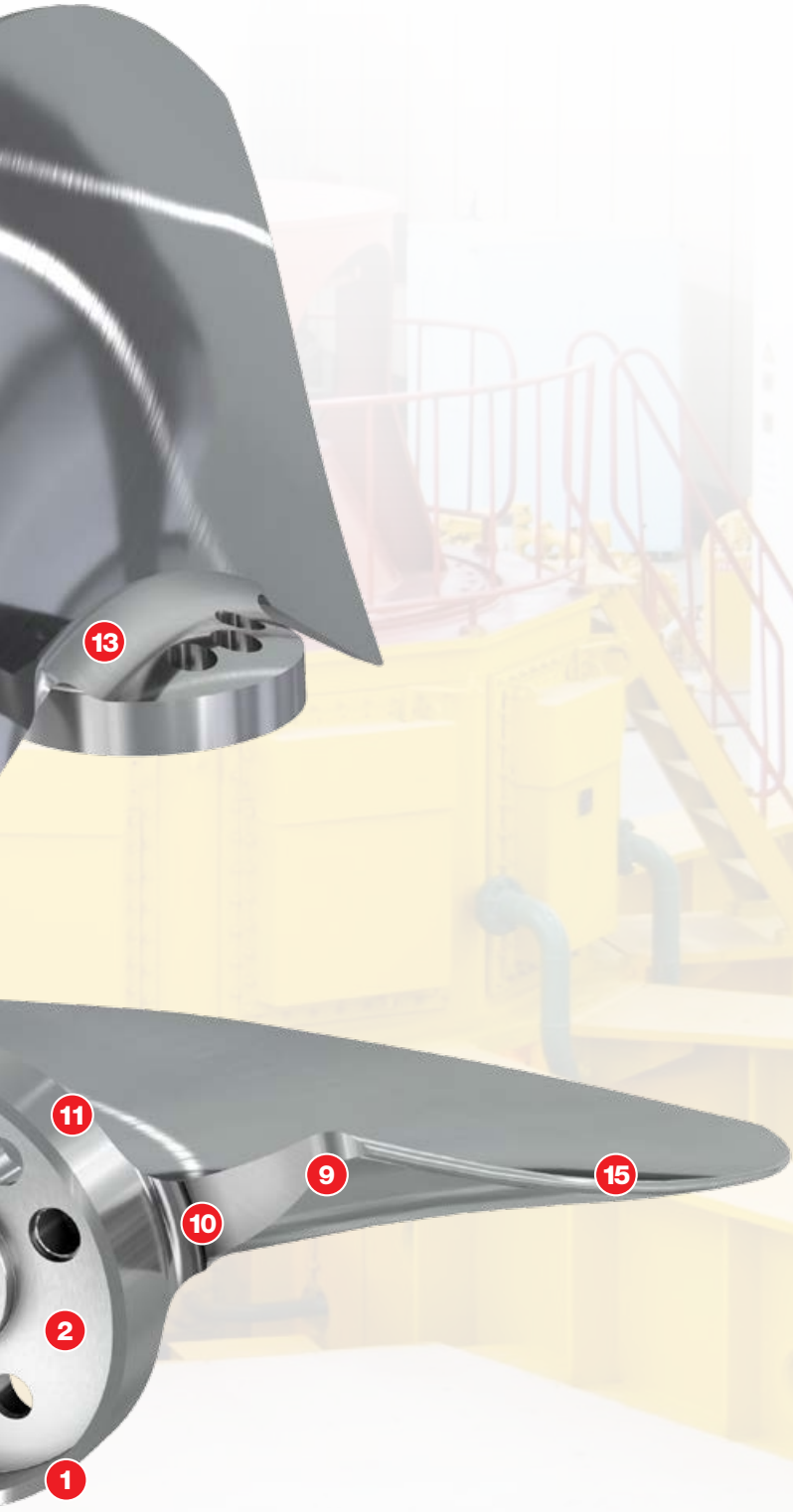
DROPMILL
3 FLUTE BALL NOSE
Interpolar Under Cutting

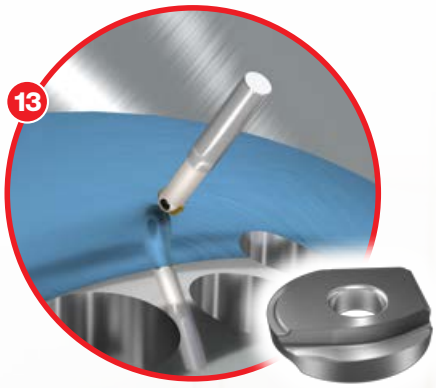


SOLIDMILL
SOLID CARBIDE LINE
Shoulder Finishing

HELIDO
ROUND H400 LINE
Blade Profile Roughing and Finishing

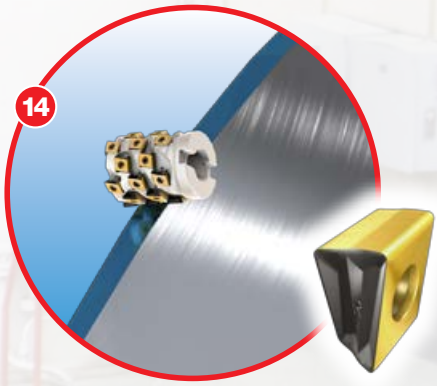
is recovered from both the hydrostatic head and from the kinetic energy of the flowing water. ISCAR offers standard milling, drilling, turning and threading tools for the production of casted stainless steel Kaplan blades.





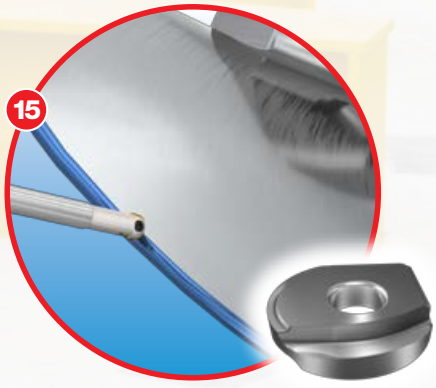
BALLPLUS

Radius Finish Profiling



HELITANG T490 LINE

Rough Shouldering

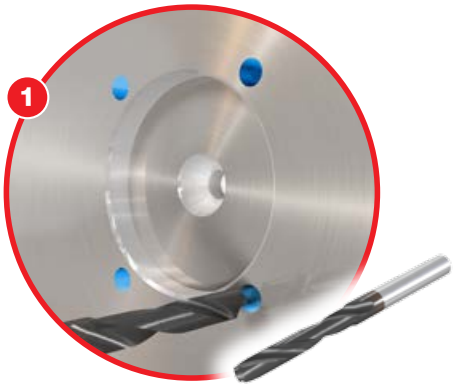


BALLPLUS

Finish Shouldering

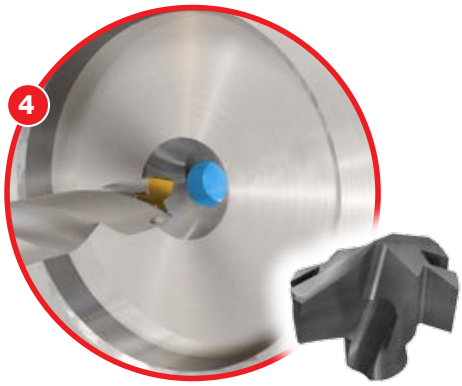
Steam And Nuclear Turbine Rotor

Turbine HP rotors are the rotational part of power generation for either steam, gas or nuclear stations. Steam turbine utilizes the pressure and flow of the steam to rapidly turn the rotor blade assembly, thus generating electricity. High temperature rotors are made of



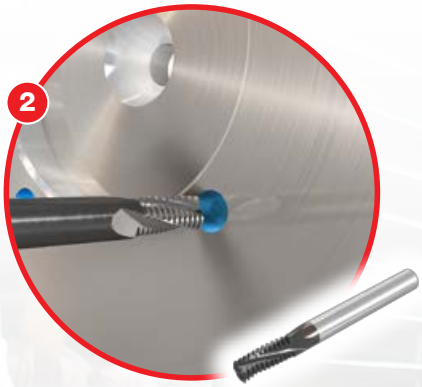
SOLIDDRILL

Drilling



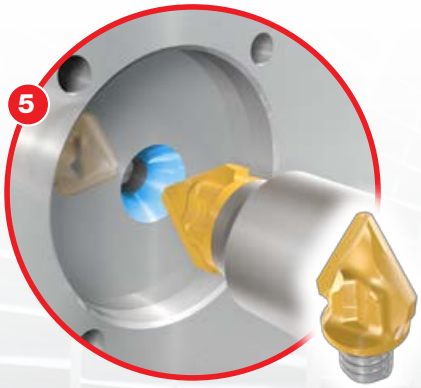
SUMOCHAM
CHAMDRILL LINE

Drilling



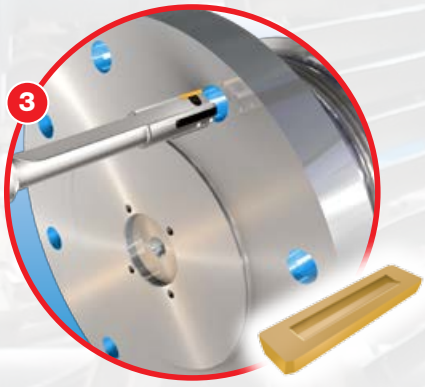
SOLIDTHREAD

Thread Milling



MULTI-MASTER
INDEXABLE SOLID CARBIDE LINE

Chamfering



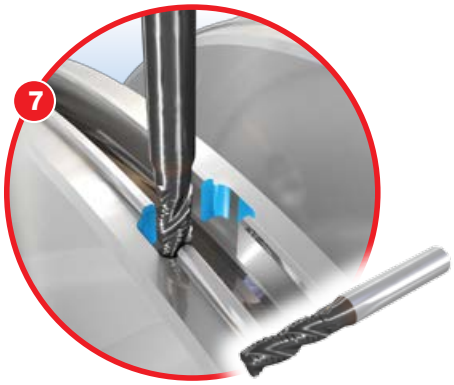
INDEXH-REAM

Reaming

SOLIDMILL
SOLID CARBIDE LINE

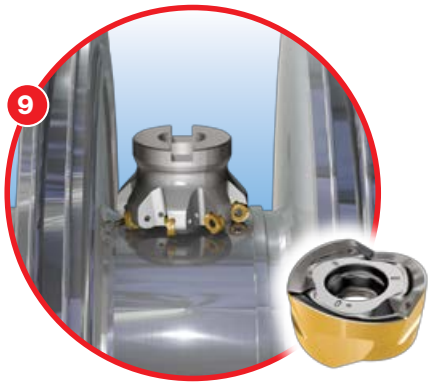
Keyway Milling

high tensile strength forged Chromium Molybdenum Vanadium steel. (Cr Mo V) ISCAR offers a wide range of standard and special turning, deep grooving, drills, deep drills, and milling tools for the production of turbine HP rotors.



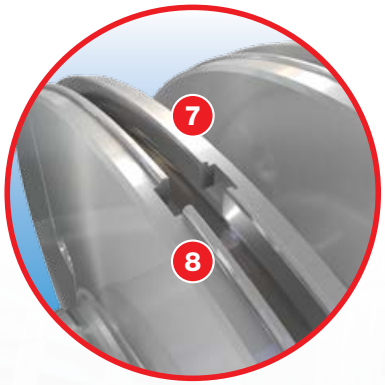
SOLIDSHRED

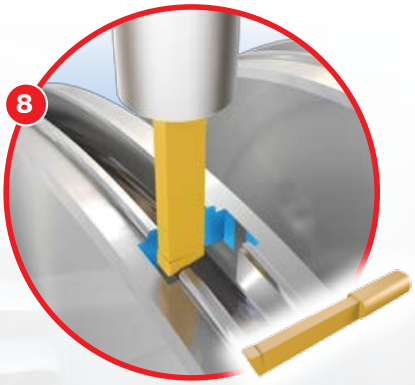
Rough Milling



HELIDO
ROUND H606 LINE

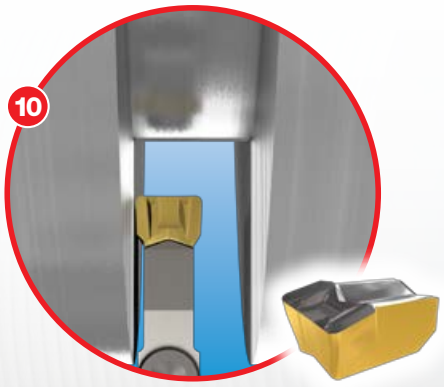
Inner Shaft Circular Rough Milling





ISCARBROACH

Broaching



CUTGRIP

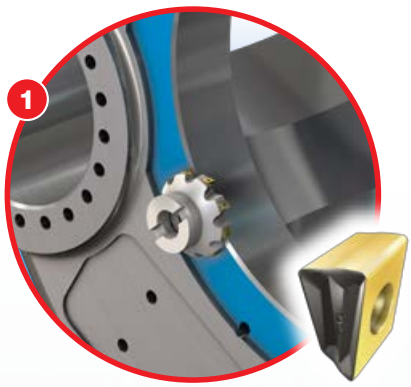
Grooving

CUTGRIP

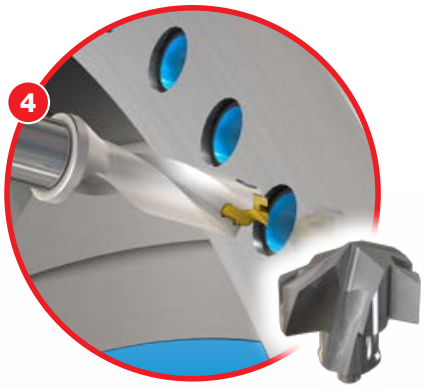
Inner Face Grooving

Rotor Hub

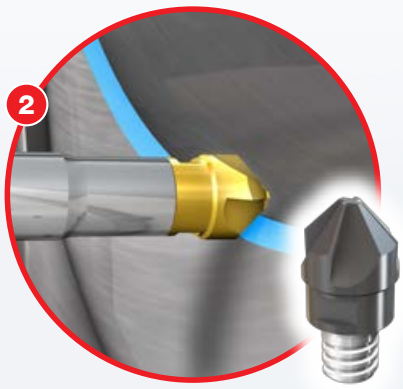
The windmill hub is a huge scale case made of cast iron and functions as the rotational housing. It generally connects the three blade rotational assembly to a linear low speed shaft, which connects to the turbine's gearbox. Most modern turbine hubs contain a pitch



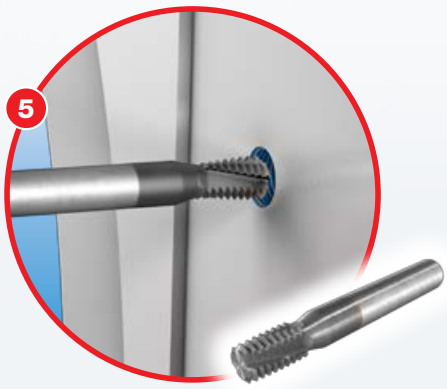
HELITANG
T490 LINE
Shouldering



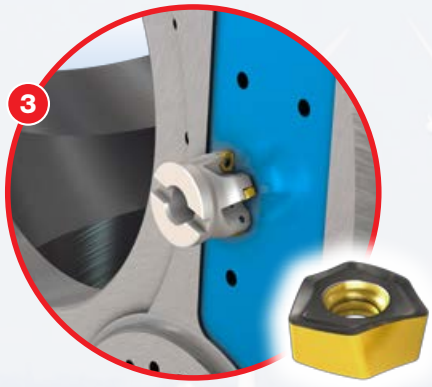
SUMOCHAM
CHAMDRILL LINE
Drilling



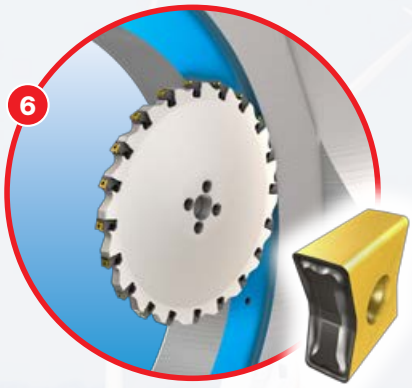
MULTI-MASTER
INDEXABLE SOLID CARBIDE LINE
Chamfering



SOLIDTHREAD
Mill Threading

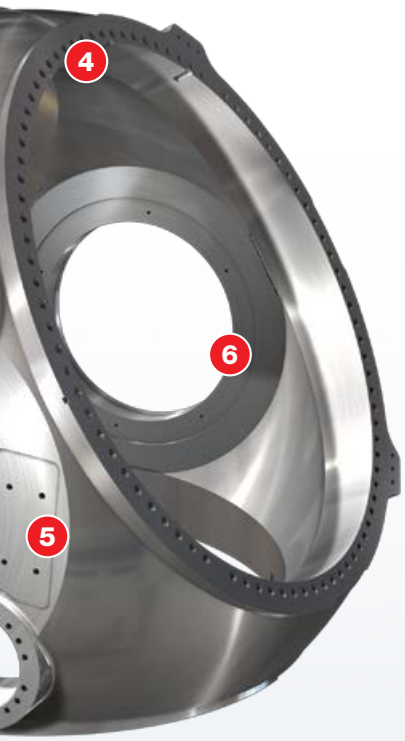


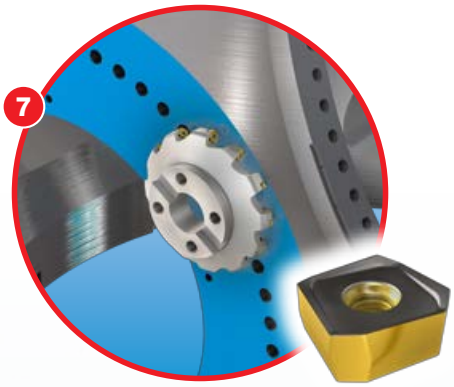
HELIDO
600 UPFEED LINE
Rough Pocketing



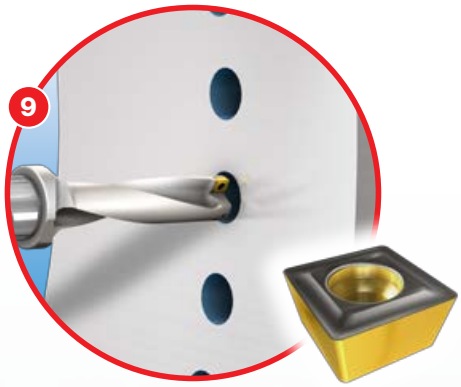
TANGSLOT
Back Milling

system to adjust the angle of the blades by rotation of a bearing at the root of each blade. This controls the power and slows down the rotor as required. ISCAR offers a wide range of standard mills, drills, boring and thread milling tools for the production of these windmill hubs.

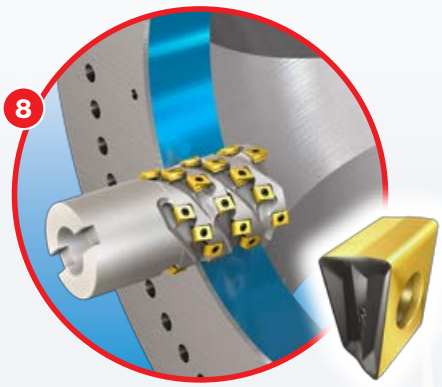




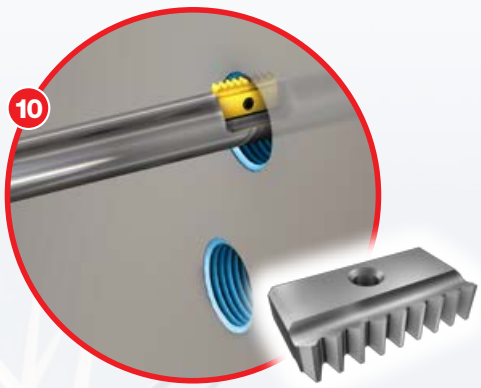
HELIDO
SOF 26 LINE
Face Milling



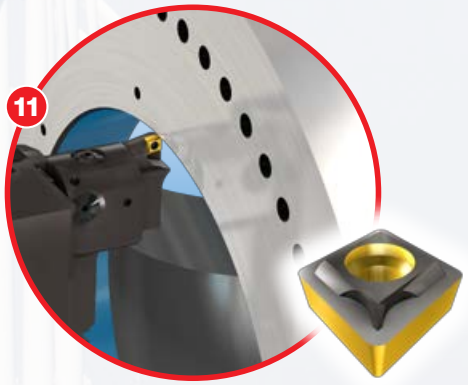
DR-TWIST
INDEXABLE DRILL LINE
Drilling



HELITANG
T490 LINE
Helical Interpolation
Rough Boring



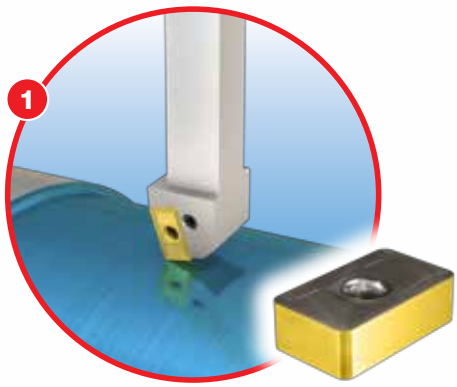
MILLTHREAD
Threading



ITSBORE
Fine Boring

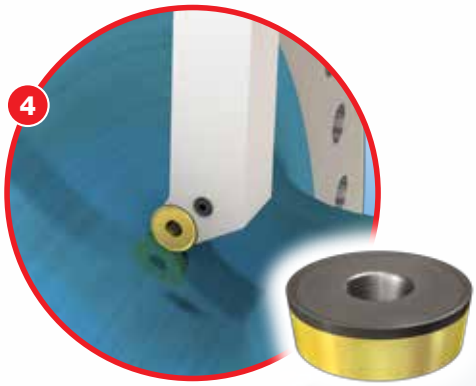
Gear Main Shaft

The windmill's main shaft gear is usually made of forged hardened and tempered steel.
The main shaft transmits the low speed rotational force from the rotor hub. Kinetic wind energy to the gearbox enables high speed rotation, which



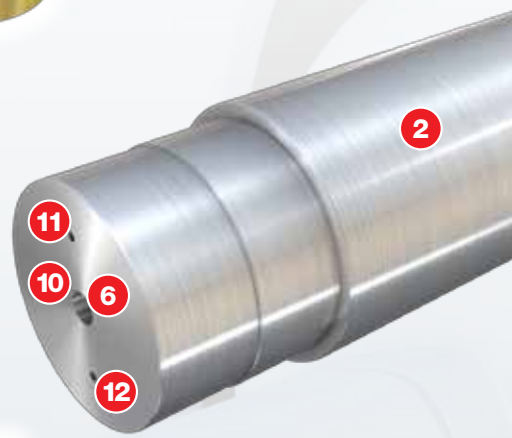
HEAVY SUPER TURN

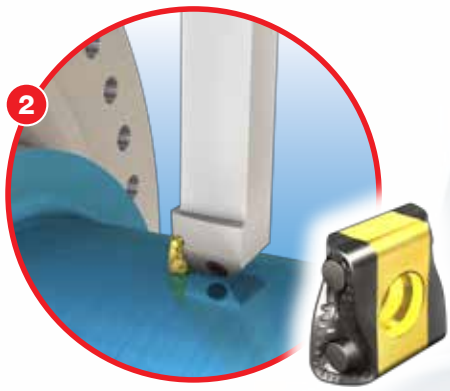
External Rough Turning



ISOTURN

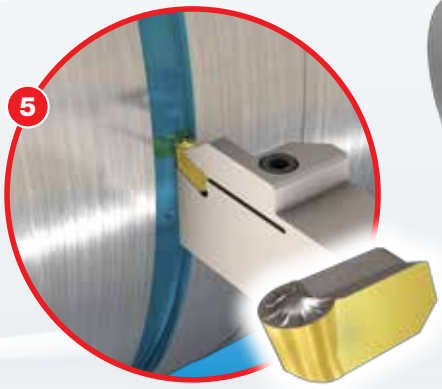
External Turning
(Finishing)





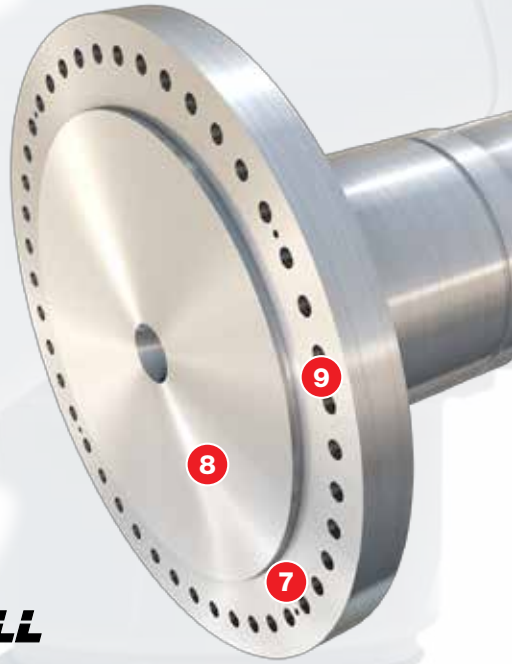
HELITURN
LAYDOWN LINE

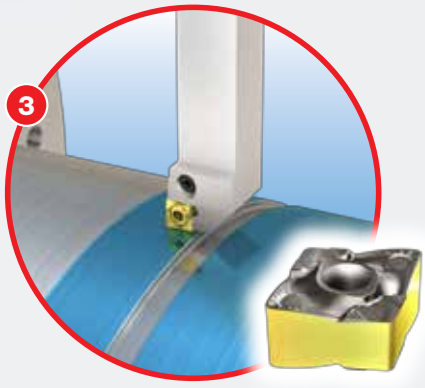
Outer Diameter
Rough Turning



CUTGRIP

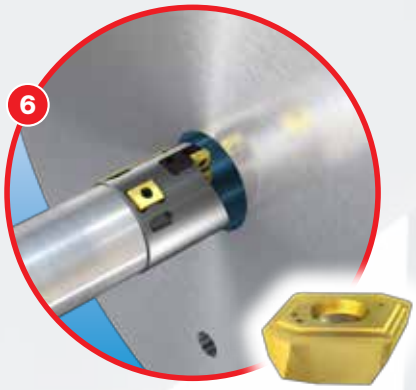
External Side
Turning and Grooving





HELITURN TG

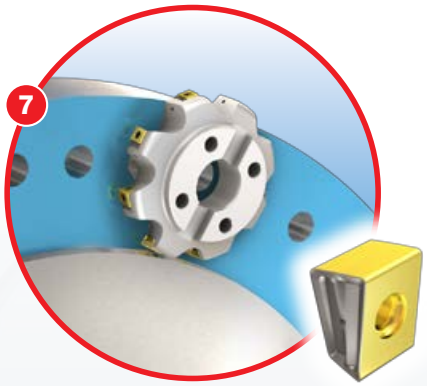
External Rough Turning



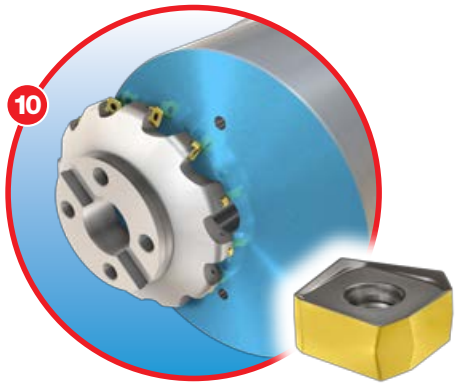
ISCARDEEPDRILL

Deep Drilling

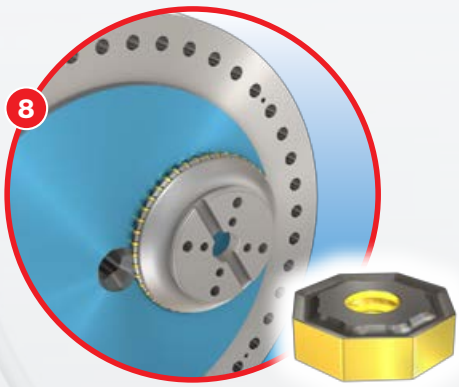
spins the generator and thus creates electrical energy. ISCAR offers a wide range of standard drills, deep drills, turning and thread milling tools for the production of main shaft machinary.



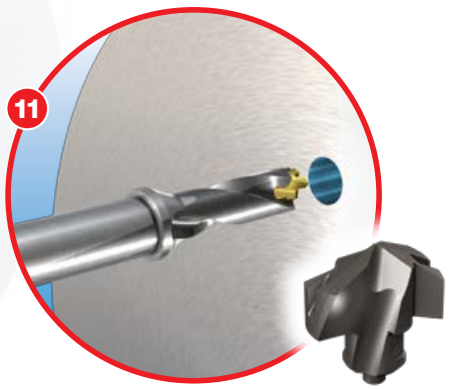
HELITANG T490 LINE
Finish Face Milling



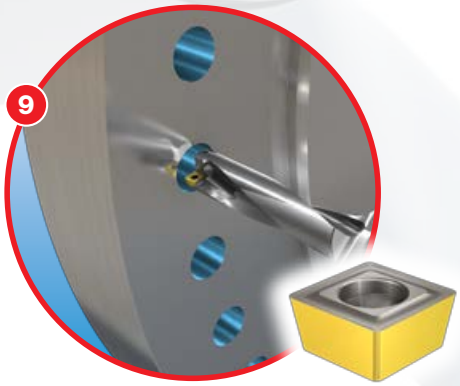
HELIDO SOF 26 LINE
Face Milling



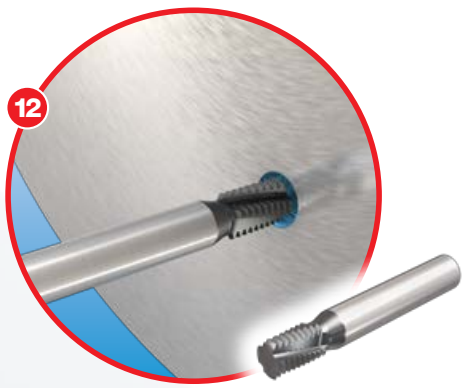
HELIDO SOF 26 LINE
Finish Face Milling



SUMOCHAM CHAMDRILL LINE
Drilling



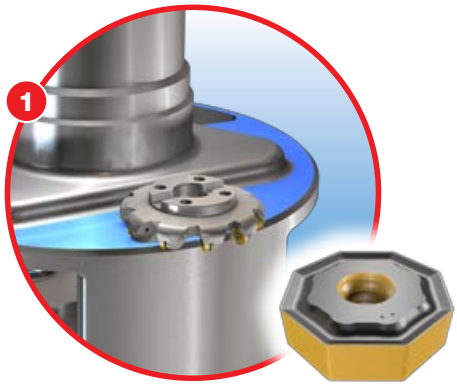
DR-TWIST INDEXABLE DRILL LINE
Drilling



SOLIDTHREAD
Threading

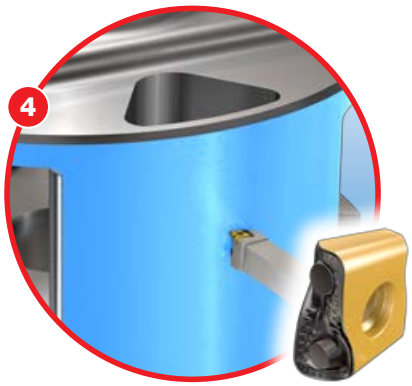
Planetary Carrier

The rotary gear planetary carrier, a part of the gear assembly, is made of nodular cast iron. It functions to increase the slow rotation speed of the main shaft, transferred as higher rotation



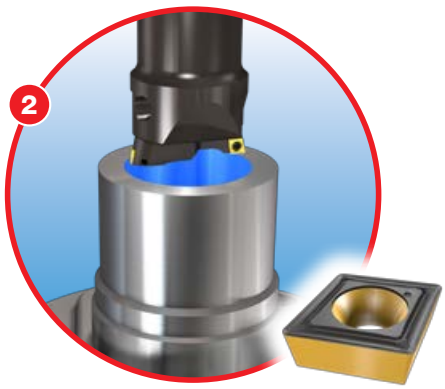
16MILL

Face Milling



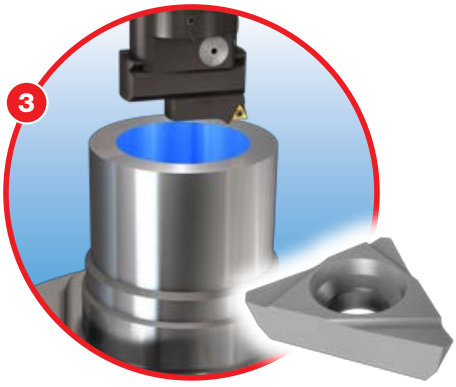
HELITURN TG

Turning



ITSBORE

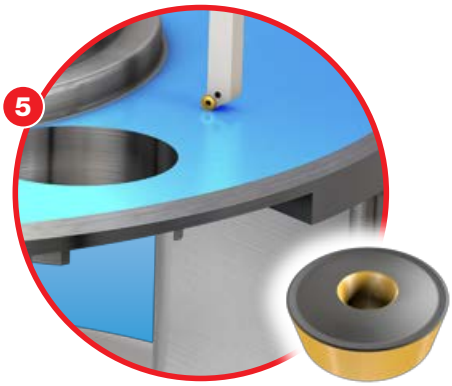
Rough Boring



ITSBORE

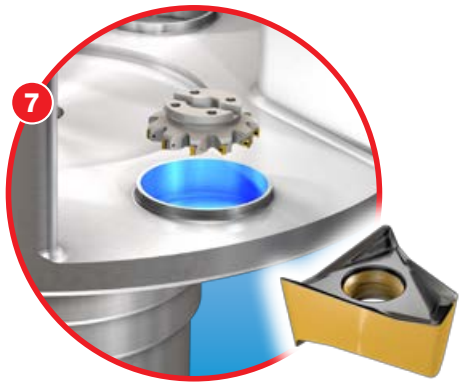
Fine Boring

to the generator. ISCAR offers a wide range of standard mills, drills, boring, long extension adaptation, turning and thread milling tools for the production of planetary carriers.

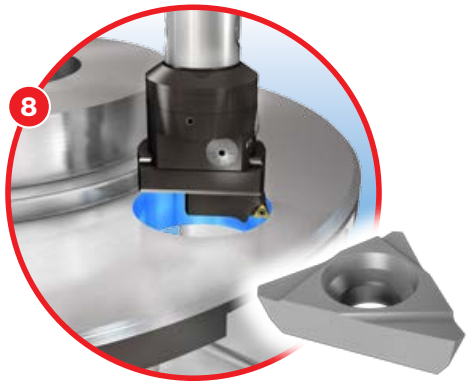


SUMOTURN
HEAVY DUTY LINE
Turning

MILLSHRED
ROUND LINE
Rough Helical Interpolation



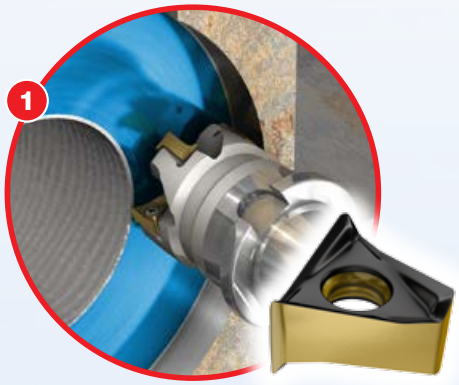
HELIDO
690 LINE
Finish Helical Interpolation



ITSBORE
Fine Boring

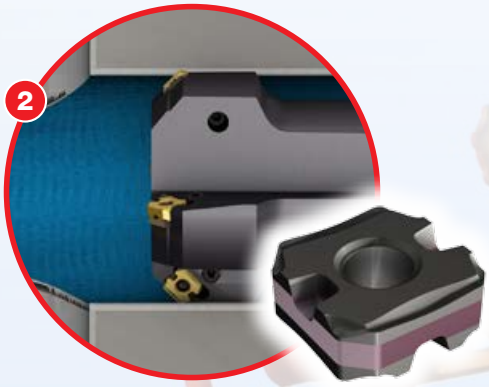
Wellheads

A wellhead christmas tree is the general term used to describe a structure that is installed at the top of an oil and gas well. Its main function is to ensure a safe operation and manage the pressure and flow of oil or gas from the well into the gathering system. It is a system composed of valves, spools and assorted adapters that control the pressure of the production well.



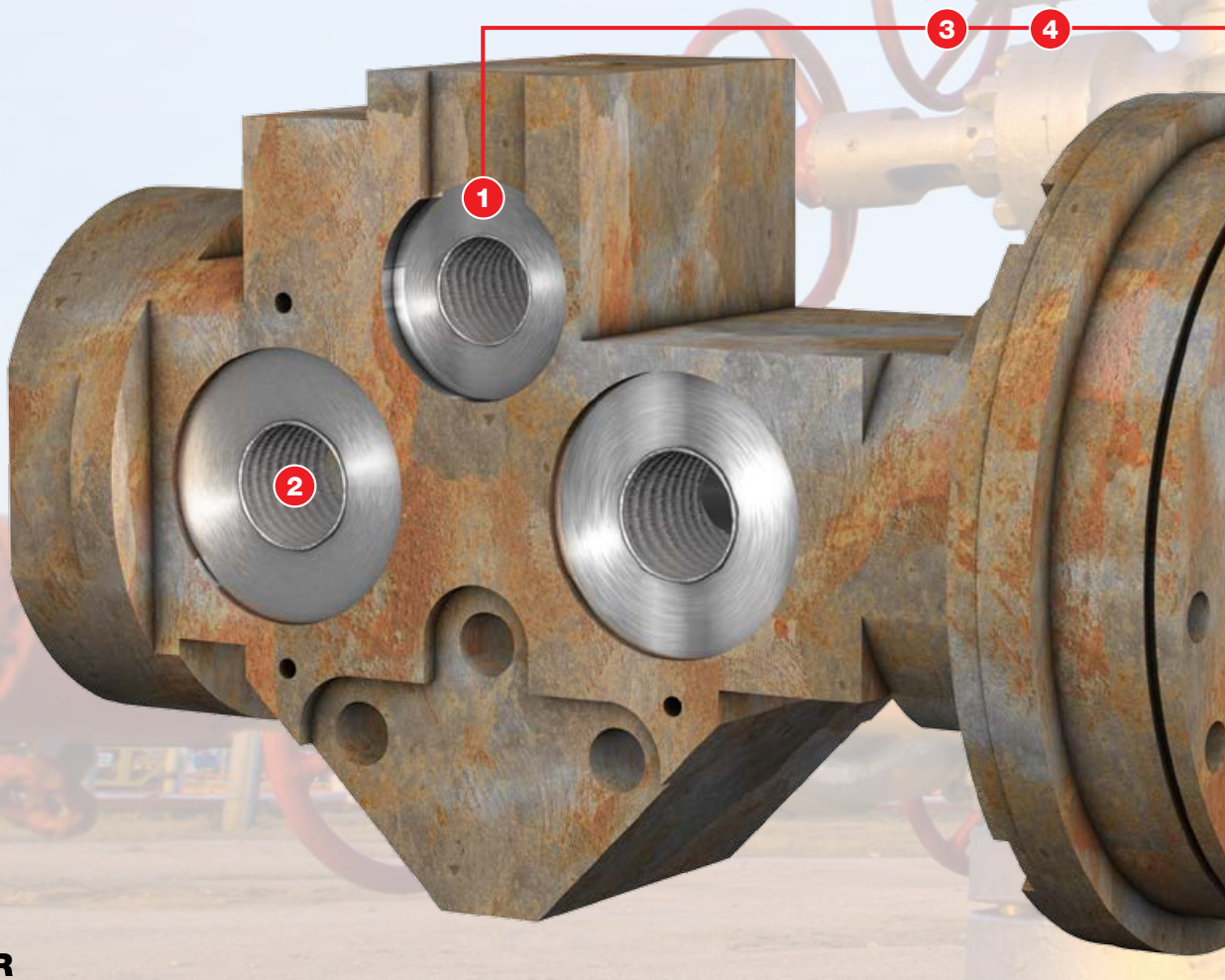
HELIDO 690 LINE

Face Milling

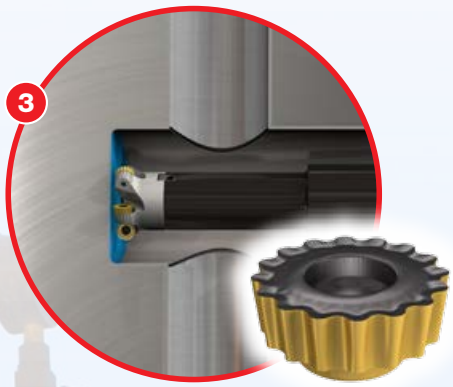


ISOTURN

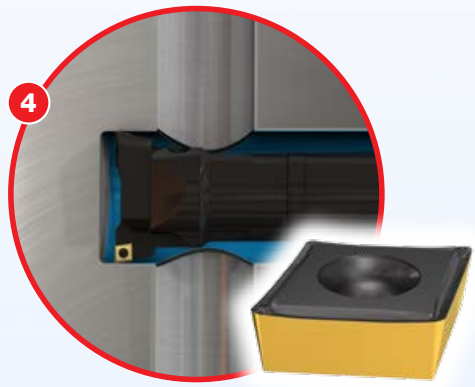
Rough Boring



The surface pressure control is provided by a christmas tree, which is installed on top of the wellhead. Wellheads are typically welded onto the first string of casing, which has been cemented in place during drilling operations, to form an integral structure of the well.
A tree and wellhead are separate pieces of equipment. The wellhead is used without a christmas tree during drilling operations. Wellhead components need to be precision engineered out of the very best material such as alloy steels. For the production of well head components, ISCAR offers a wide range of standard and special drills, deep drills, mills, mill threading and boring tools.



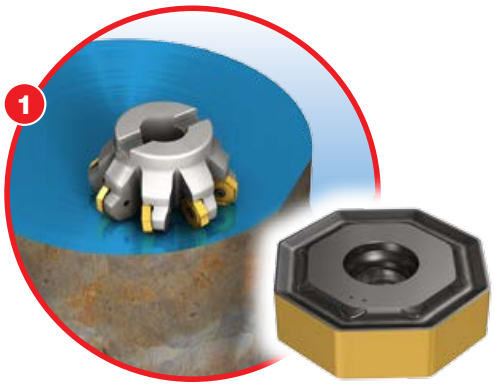
MILLSHRED
ROUND LINE
Rough Helical Interpolation



ITSBORE
Precise Boring

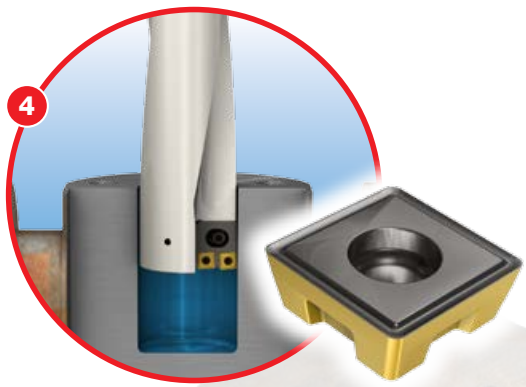
Pressure Valve

Valves, fittings and pumps are popular components in pressure control systems, providing the requested security at heavy duty conditions for surface and subsea operations. The high strength of stainless steels, duplex and



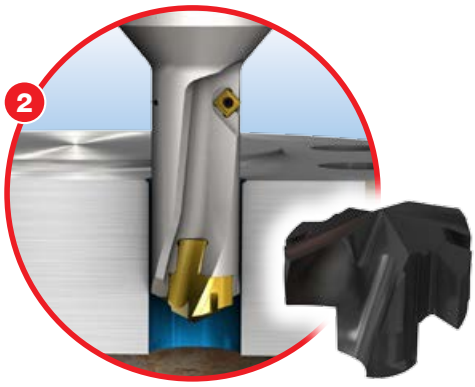
16MILL

Face Milling



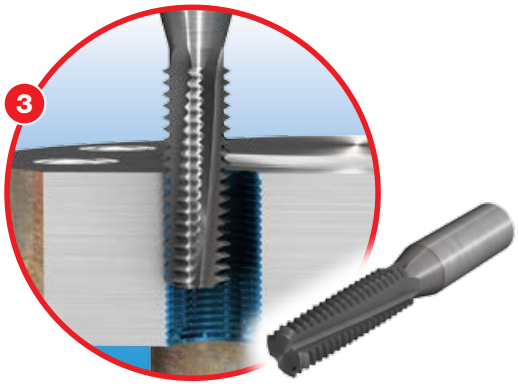
DR-TWIST
INDEXABLE DRILL LINE

Hole Making



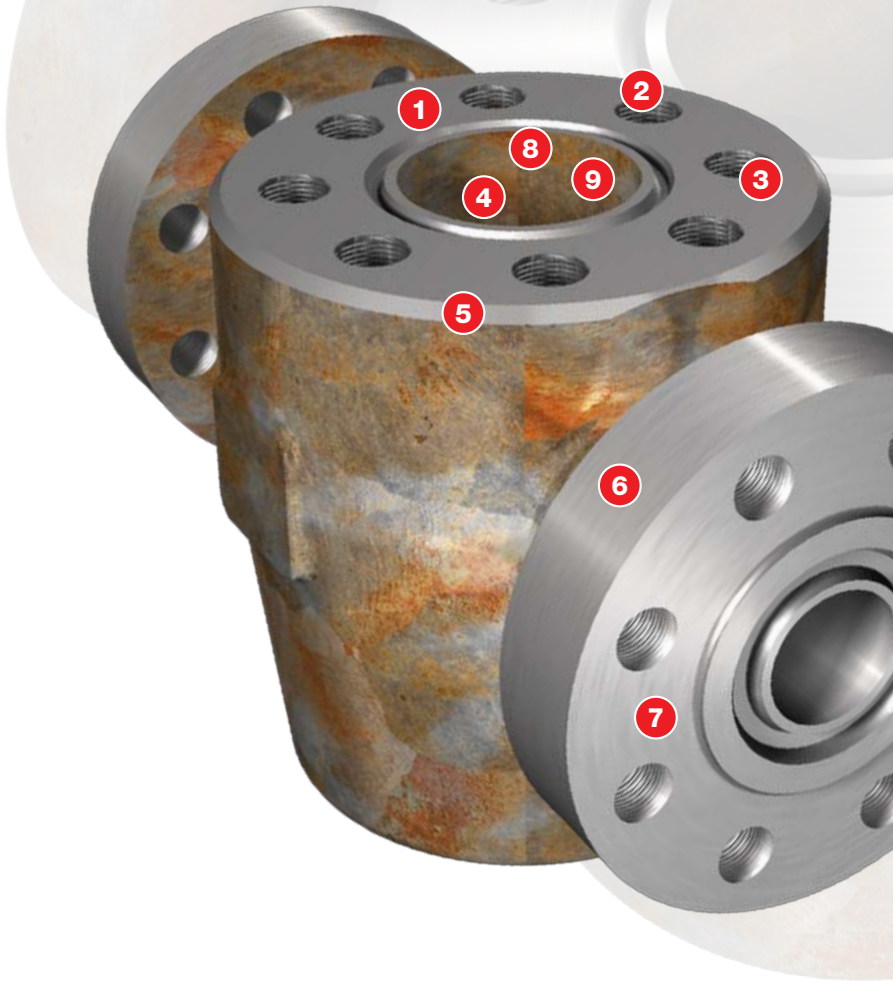
SUMOCHAM
CHAMDRILL LINE

Hole Making and Chamfering



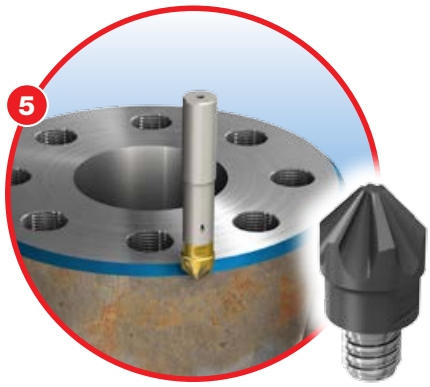
SOLIDTHREAD

Thread Milling

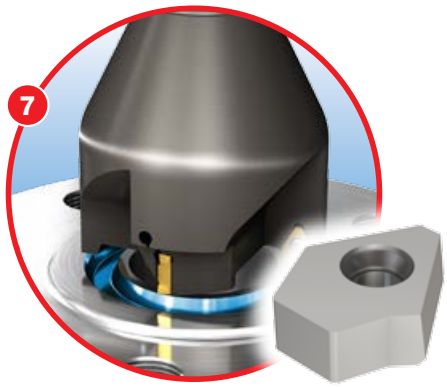


super duplex alloys assure long lasting pressure systems and are very common in the pressure control system field. Other exotic materials such as titanium, Inconel, powder metals and forging are also well-known in this sector.

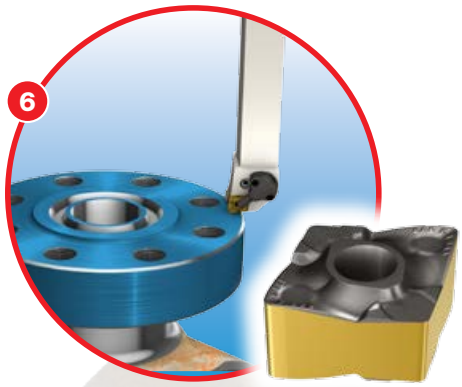
ISCAR offers a wide range of standard and special drills, deep drills, mills, mill threading and turning and boring tools for the production of pressure valves.



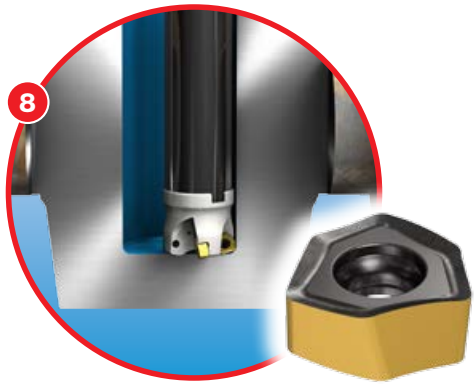
MULTI-MASTER
INDEXABLE SOLID CARBIDE LINE
Internal and
External Chamfering



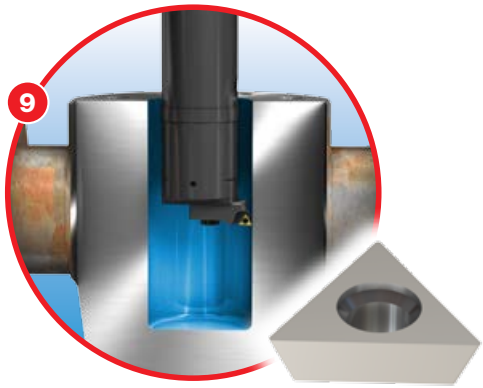
CUTGRIP
Ring Groove Tooling
Face Trepanning



JETCUT
Turning Tools for
High-Pressure Coolant



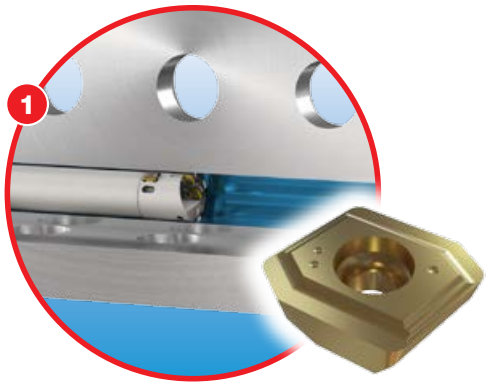
HELIDO
600 UPFEED LINE
Rampdown Milling Interpolation



ITSBORE
Fine Boring

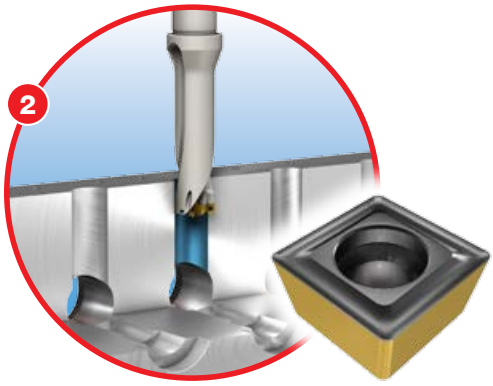
Frac Pump

Hydraulic fracturing is the process of injecting liquid at high-pressure into subterranean rocks and boreholes. The process involves high-pressure injection of 'fracking fluid' (primarily water, containing sand or other proppants) into a wellbore



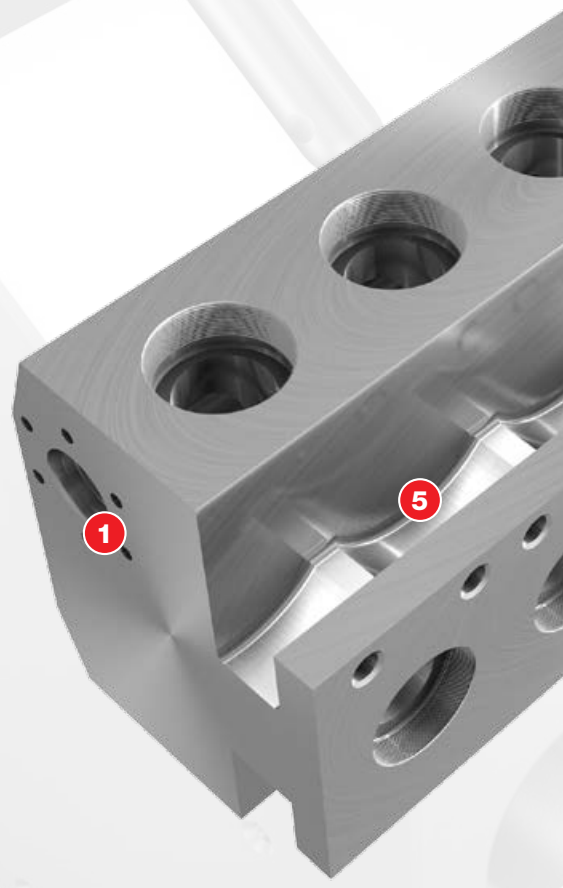
ISCARDEEPDRILL

Deep Drilling

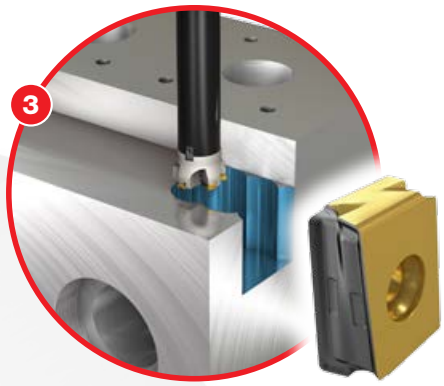


COMBICHAM

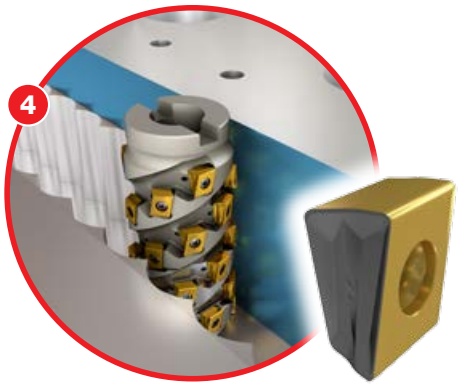
Hole Making 5XD
Large Diameters



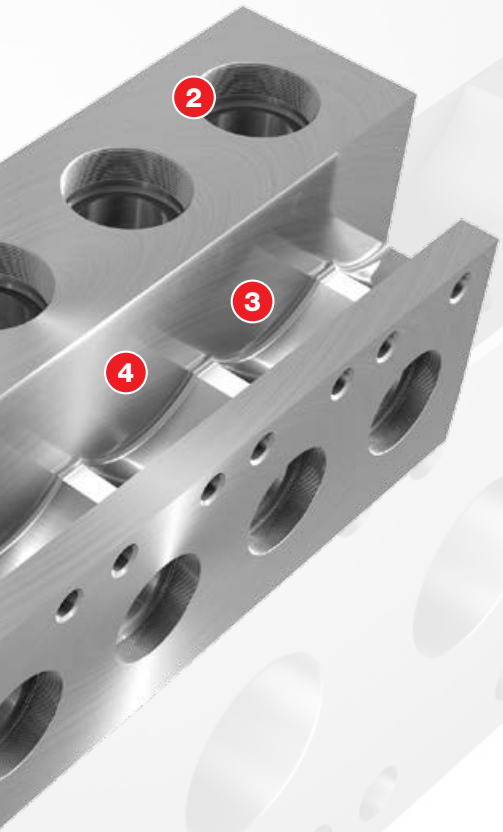
to create cracks in the deep-rock formations through which natural gas, petroleum, and brine will flow more freely. The pumping equipment is the key to the success of the hydraulic fracturing process. Common material used to produce the Frac pump is alloy steel and stainless steel. ISCAR offers a wide range of standard and special drills, deep drills, mills, mill threading and boring tools for the production of Frac Pumps.

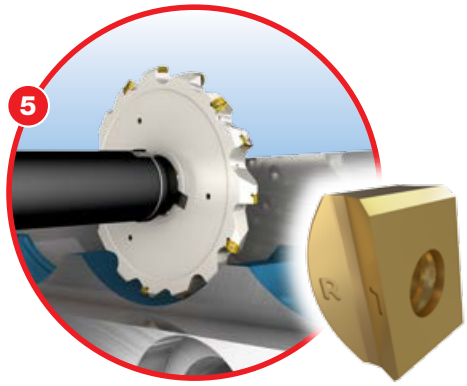


TANGPLUNGE
PLUNGING LINE
Plunge Milling with Side Plunger



HELITANG
T490 LINE
Shoulder Milling

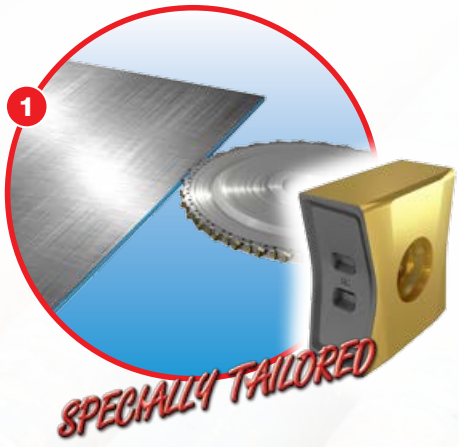




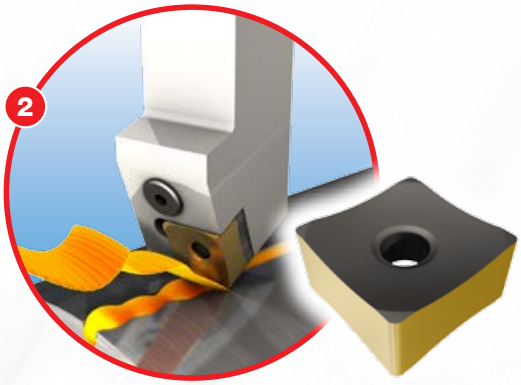
TANGSLOT
Accurate Slot Milling Through Coolant Tool

Seamless Pipes

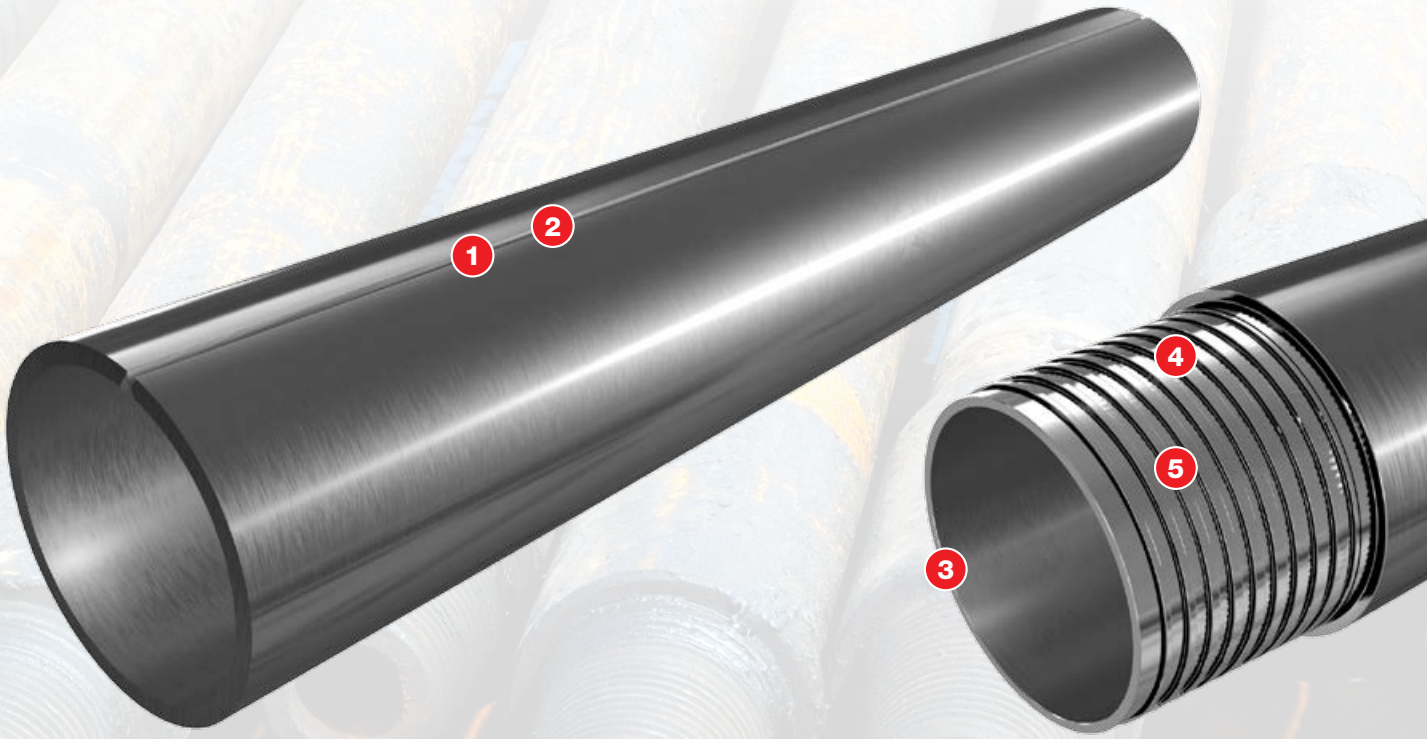
Oil Country Tubular Goods (OCTG) is a family of rolled products used in the petroleum industry (onshore and offshore), consisting of drill pipe, oil pipe, casing and tubing subjected to loading conditions according to their specific application. Drill pipe is a heavy seamless tube that rotates the drill bit and circulates drilling fluid. Casing lines the borehole and is particularly exposed to axial



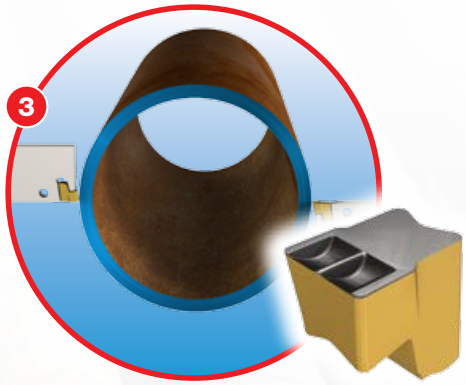
Welding Edge Preparation
Chamfer Milling Cutter



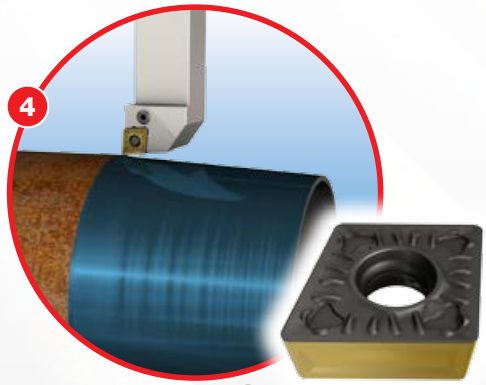
External Weld Seam Skiving



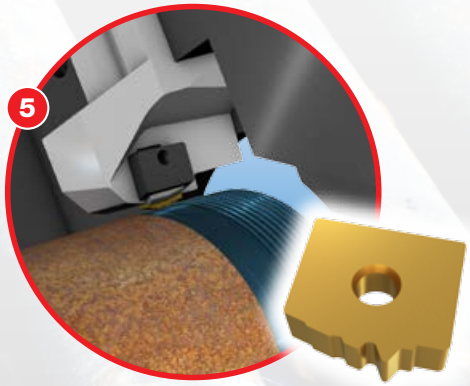
tension and internal pressure by the pumped oil or gas emulsion. Tubing is the pipe through which the oil or gas is transported from the wellbore. Traditionally, OCTG grades were carbon-manganese steels or Mo-containing grades up to 0.4% Mo. In recent years, deep well drilling and reservoirs containing contaminants that cause corrosive attack have created a strong demand for higher strength materials resistant to hydrogen embrittlement and SCC (Stress Corrosion Cracking).
The manufacturing processes of these parts require dimensional accuracy, good repeatability and fair tool life to reach a reasonable cost-benefit rate.



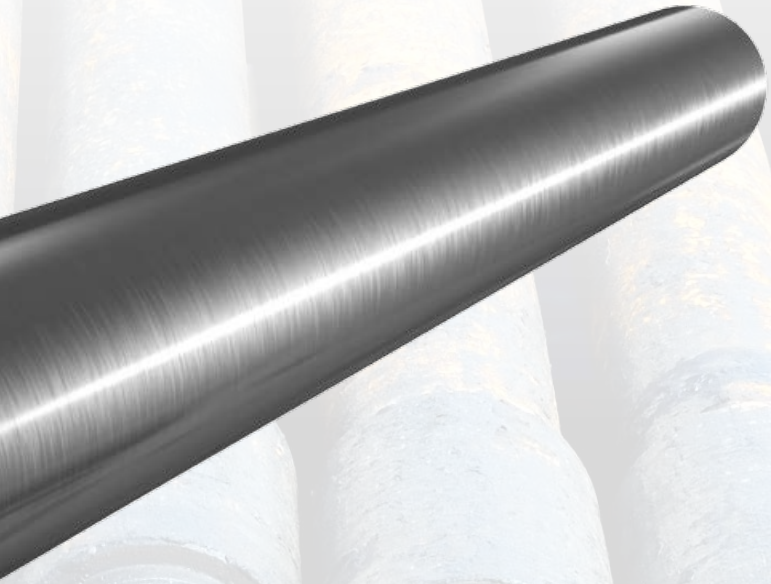
TANG-GRIP
PARTING LINE
Tube End Parting



DOVE IQ TURN
HEAVY DUTY LINE
External Rough Turning

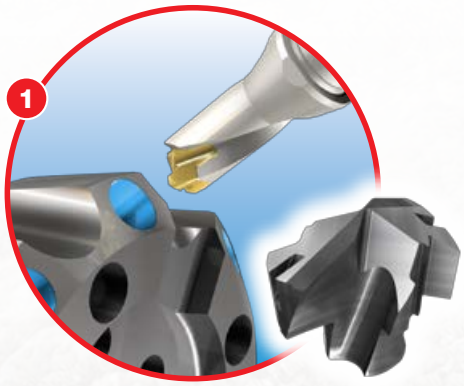


ISCAR THREAD
Oilfield Threading

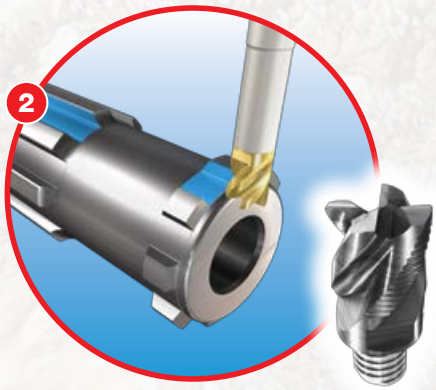


Rock Bits

Drill bits are tools used for deep drilling in onshore or offshore oil explorations (wellbore) such as crude oil and natural gas. There are two types of drill bits; a fixed cutter and a roller cone (or rock bits). Fixed cutter bits can either

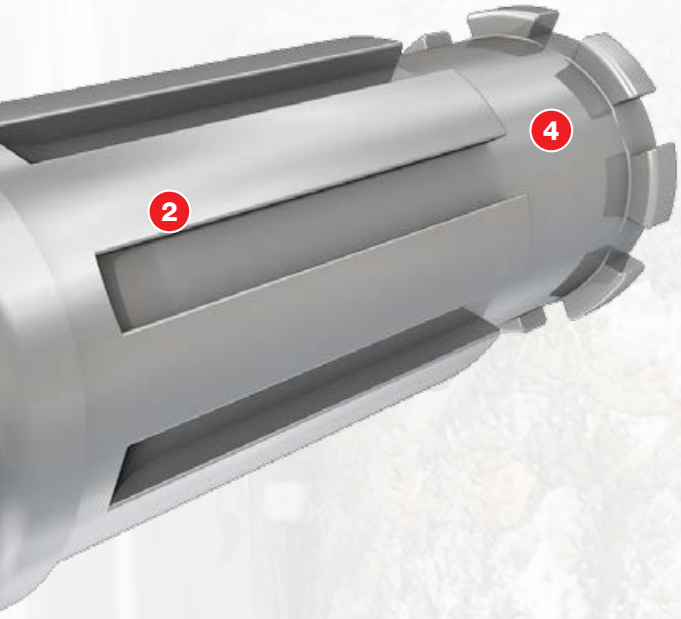


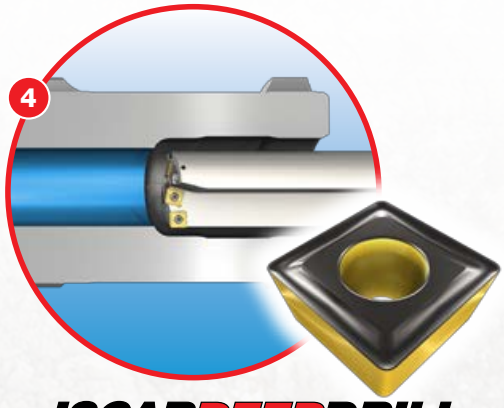
SUMOCHAM
CHAMDRILL LINE
Carbide Bit Holes



MULTI-MASTER
INDEXABLE SOLID CARBIDE LINE
Slot Milling

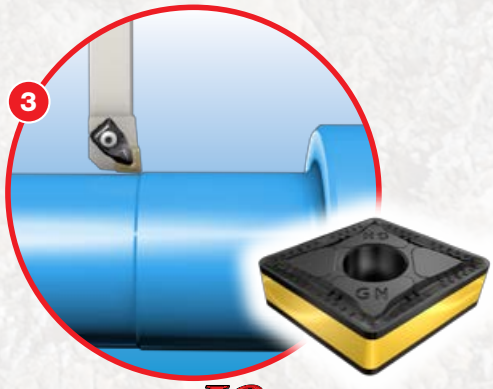
be polycrystalline diamond compact (PDC) grit hot-pressed inserts (GHI) or natural diamond. Roller cone bits can be either tungsten carbide inserts (TCI), for harder formations or illed tooth (MT) for softer rock. The common material for roller cone bit heads is alloyed steel. ISCAR offers a wide range of standard and special turning tools, drills, deep drills and mills for the production of roller cone bit heads.





ISCARDEEPDRILL

Deep Hole Drilling

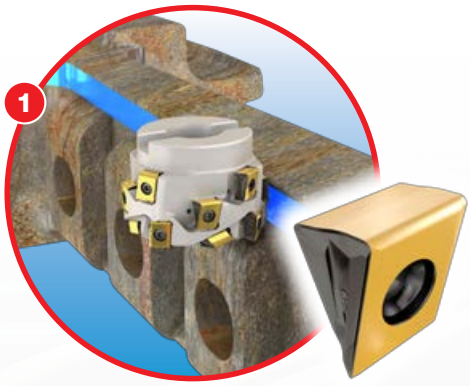


DOVEIQTURN
HEAVY DUTY LINE

External Rough Turning

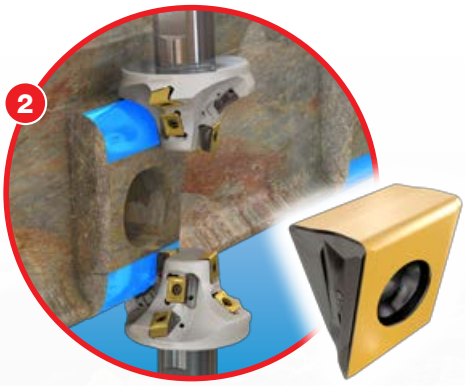
Switcher Frog

The switcher, also known as the frog , refers to the crossing point of two rails. This can be assembled by several appropriately cut and bent pieces of rail or can be a single casting of alloy



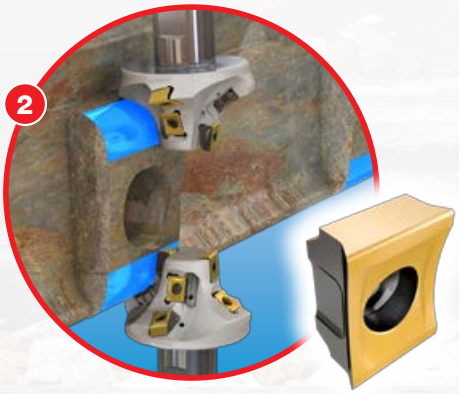
HELITANG T490 LINE

Shouldering
90 Degree Countering



HELITANG T490 LINE

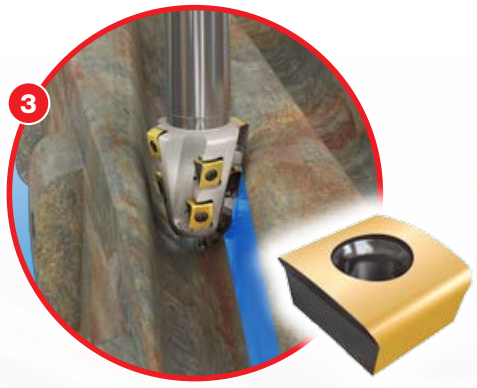
Shouldering Radius Contour



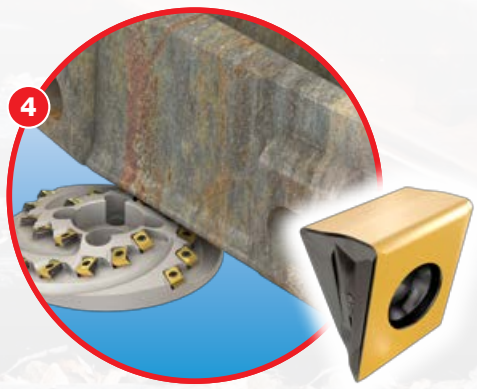
HELITANG T490 LINE

Shouldering Radius Countering

manganese steel. ISCAR offers a wide range of standard and specially designed mills and drills for the production of switchers.



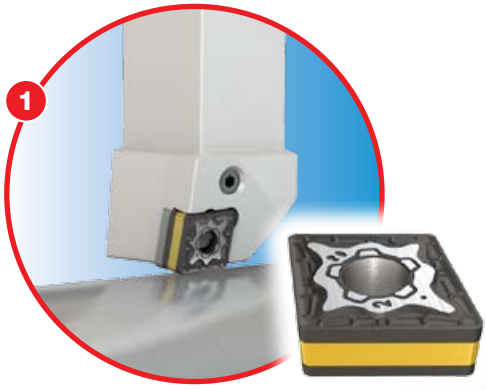
HELITANG
T490 LINE
Shouldering Conical Profile A



HELITANG
T490 LINE
Shouldering and Chamfering

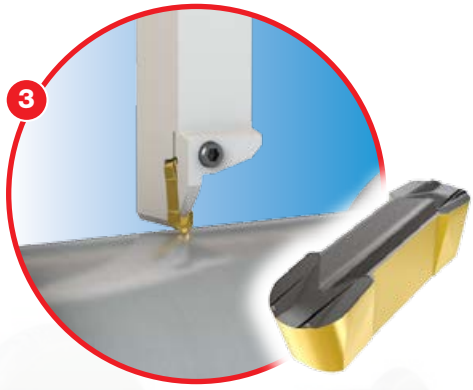
Axle Shaft

The rail bogie axle shaft is part of a wheelset railroad car axle wheel assembly. Rail axle shafts are made of forged and rolled heat-treated high



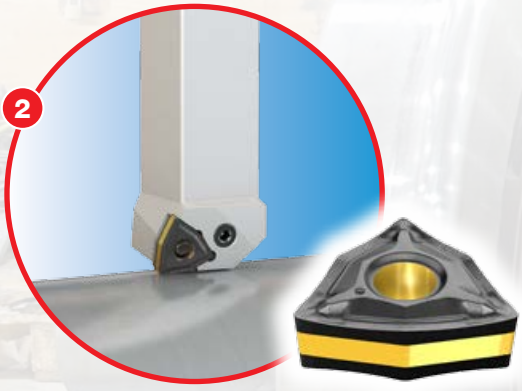
ISOTURN

Rough External Turning



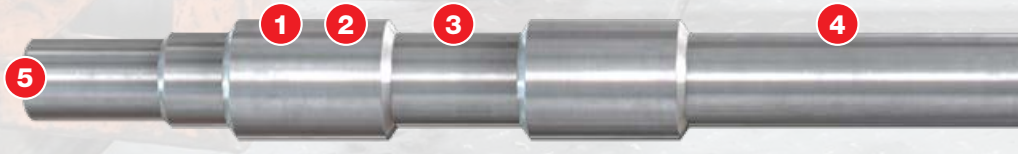
GROOVETURN

External Grooving

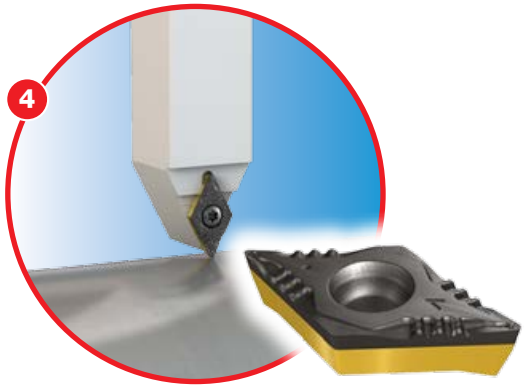


ISOTURN

Semi-Finish External Turning

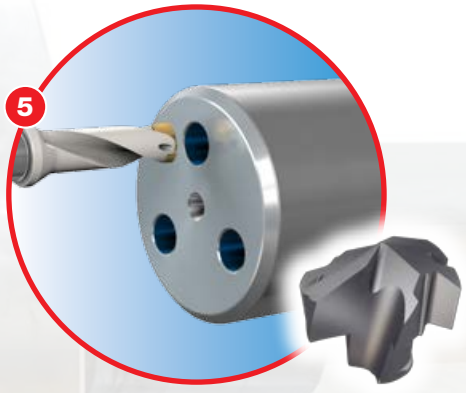


strength steel. ISCAR offers standard turning, drills and mill threading tools for the production of rail axle shafts.



ISOTURN

Semi-Finish Turning

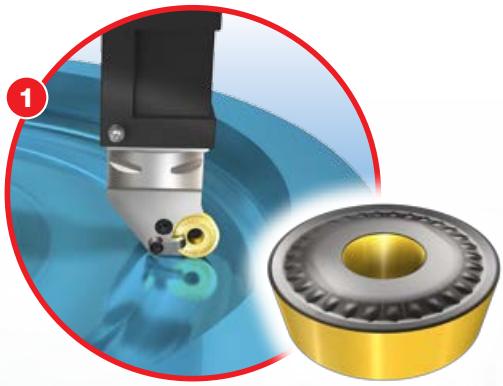


SUMOCHAM
CHAMDRILL LINE

Drilling

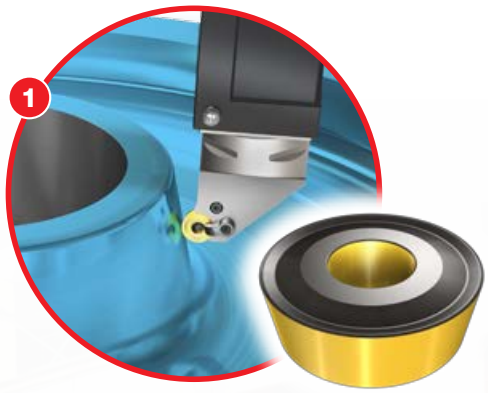
New Wheel

Rail wheels are made from forged and rolled heat-treated high strength steel and can reach from 650mm to 1250mm diameters according to the wheel form and type. New wheels are turned,



ISOTURN

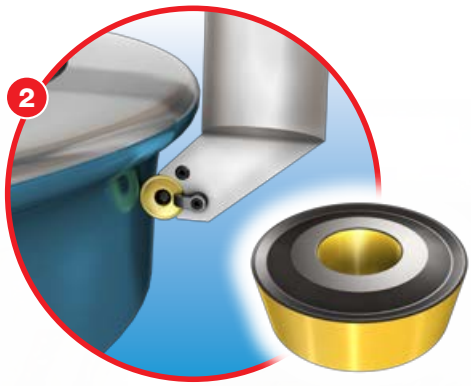
Rough and Finish
Turning Side A



ISOTURN

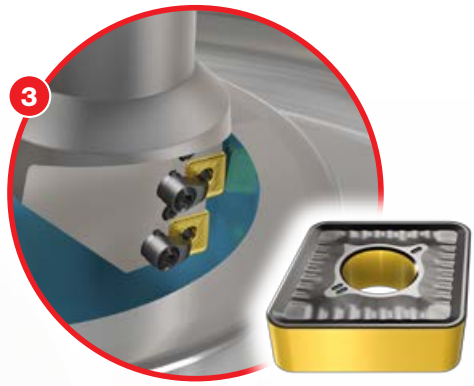
Rough and Finish
Turning Side B

using a lathe, to a specific profile before being pressed onto an axle. ISCAR offers standard and special turning and boring tools for the production of rail wheels.



ISOTURN

Side Turning Rims

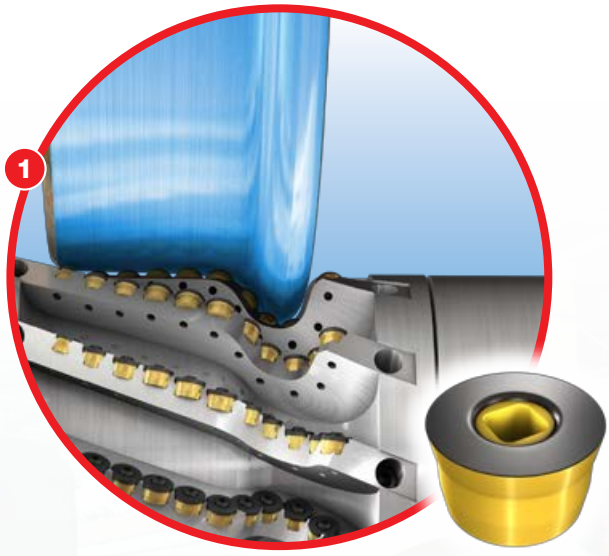


ISOTURN

Boring

Under Floor Type Machine

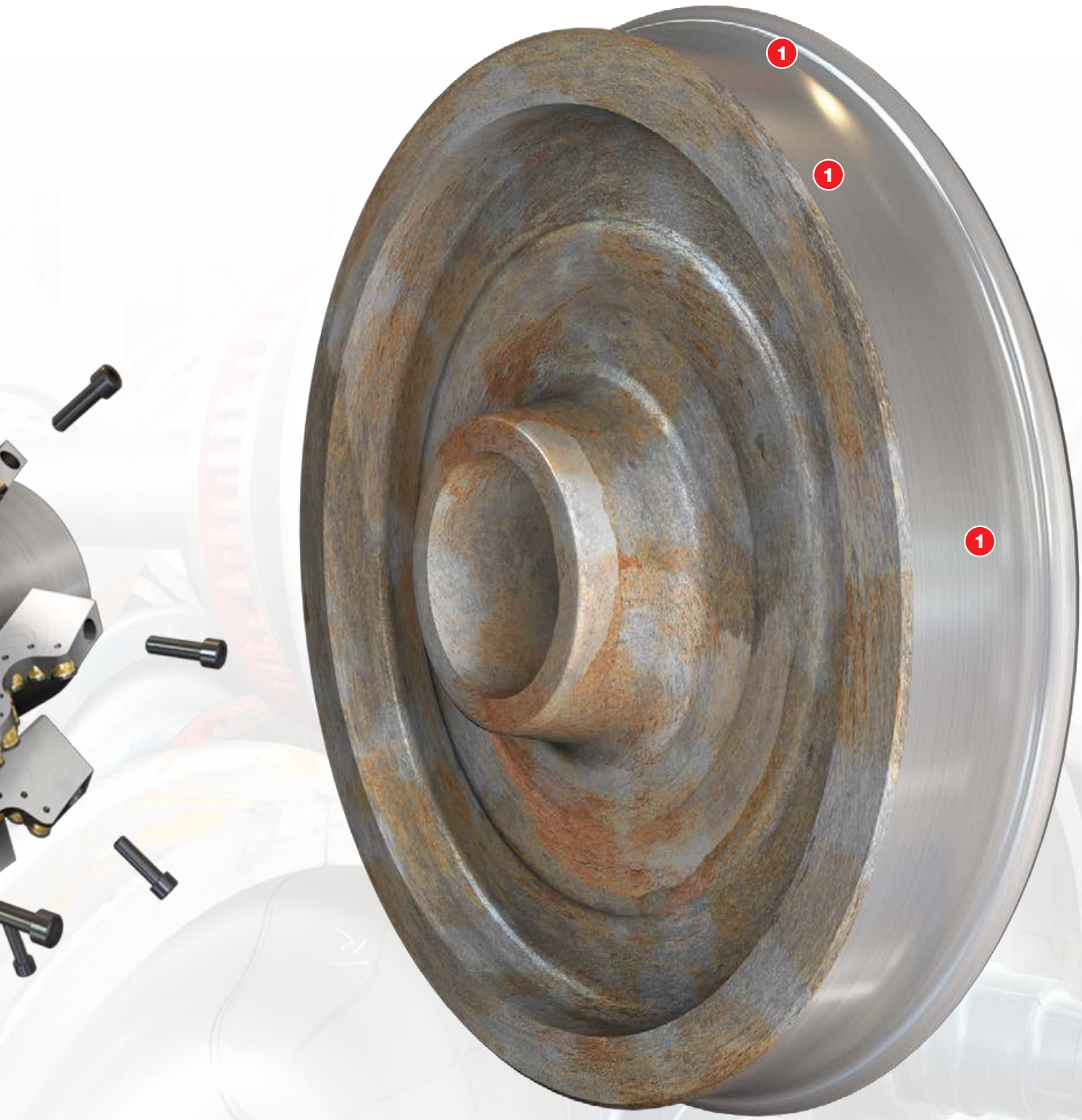
Underfloor, counter-wheel machines are used for locomotive wheels reprofiling. They are are capable of simultaneously reprofiling both left and right wheels while providing high profile accuracy



ISOMILL

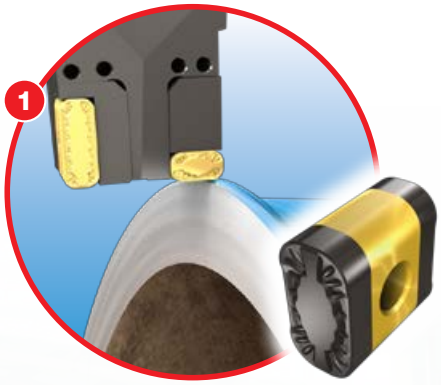
Under Floor Wheel Mill

and preserving the dimensions and profile of the wheels. ISCAR offers specially designed mills with interchangeable cartridges for locomotive wheel reprofiling.



Portal Type Wheel Lathe

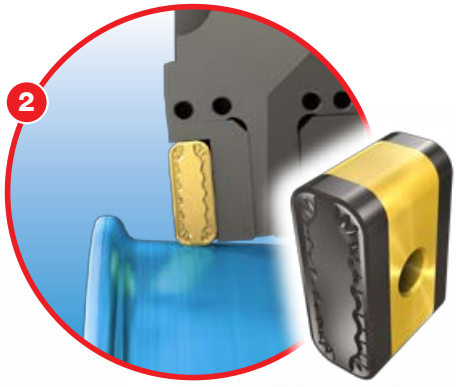
Portal CAM or CNC counter-wheel machines are used for re-turning wheelsets. Capable of simultaneously re-turning both left and right wheels while providing high profile accuracy and preserving the dimensions and profile of



ISOTURN

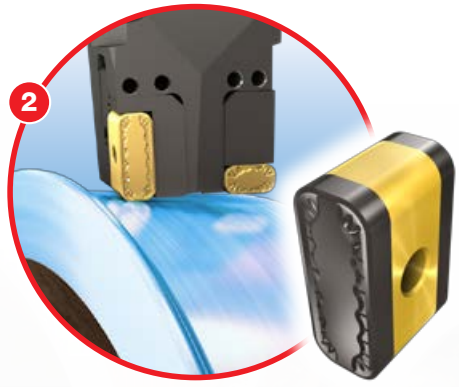
Side Turning Rim Area

the wheels. ISCAR offers standard tools with interchangeable cartridges and tangential inserts, sizes 19 & 30mm, with a wide range of geometries and carbide grades for the wide spectrum of wheel set forms and sizes for re-turning.



ISOTURN

Side Turning Rim Area



ISOTURN

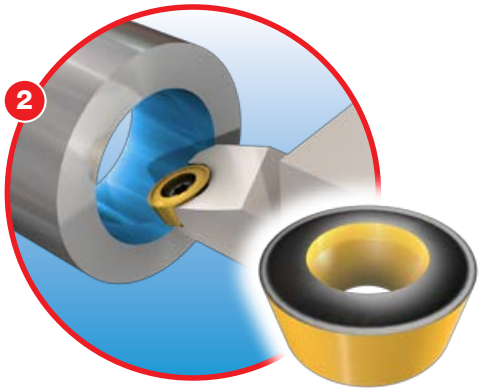
Side Turning

Ball Bearing Outer Ring

Bearings are necessary for almost any mechanical system and many other maching elements that require rotational movement. Ball bearings are the most popular bearing types in the market. Ball bearings are made from 100cr6 material and vary in size from 2 mm for electronic

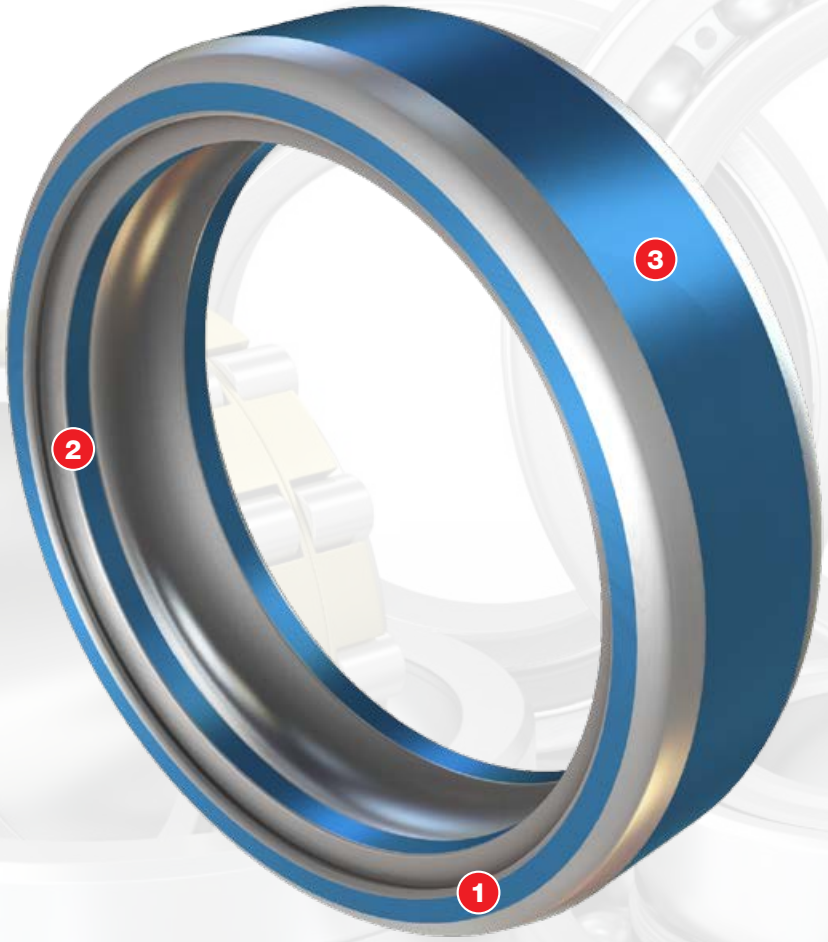
PENTACUT

Parting

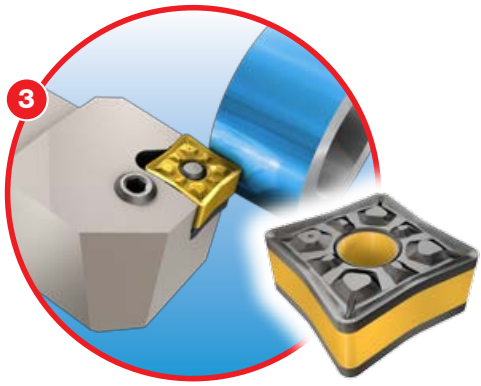


ISOTURN

Inner Diameter Turning

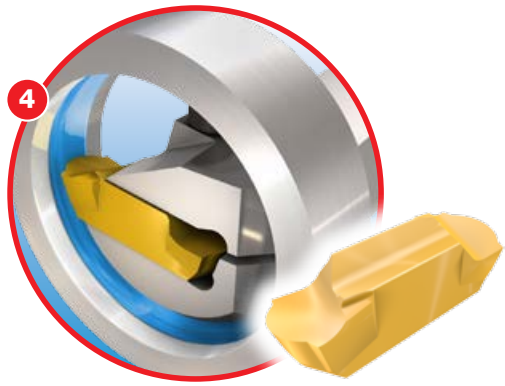


systems, and up to 3000 mm for powers stations. ISCAR's experienced engineers are capable of supporting any ball bearing size with advanced machining solutions that can ensure maximum performance, efficiency and preciseness.



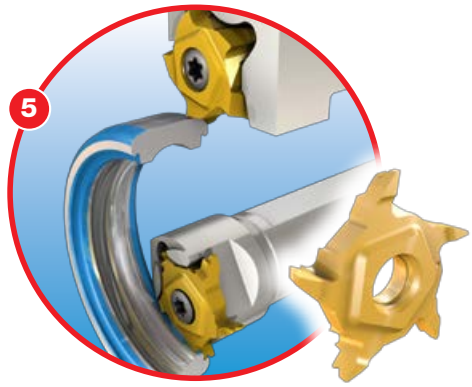
ISOTURN

Outer Diameter Turning



CUTGRIP

Ball Bearing Raceway



PENTACUT

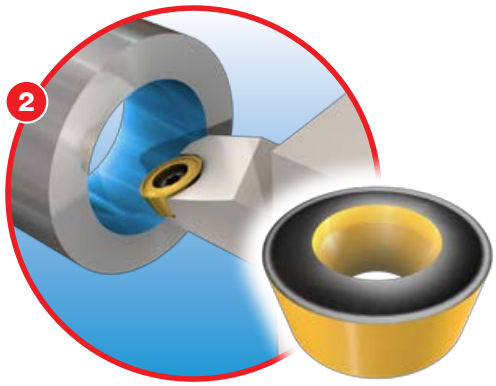
Radius Chamfer and Seal Groove Machining

Ball Bearing Inner Ring

Bearings are necessary for almost any mechanical system and many other maching elements that require rotational movement. Ball bearings are the most popular bearing types in the market and are made from 100cr6 material. They vary in sizes from 2mm for electronic

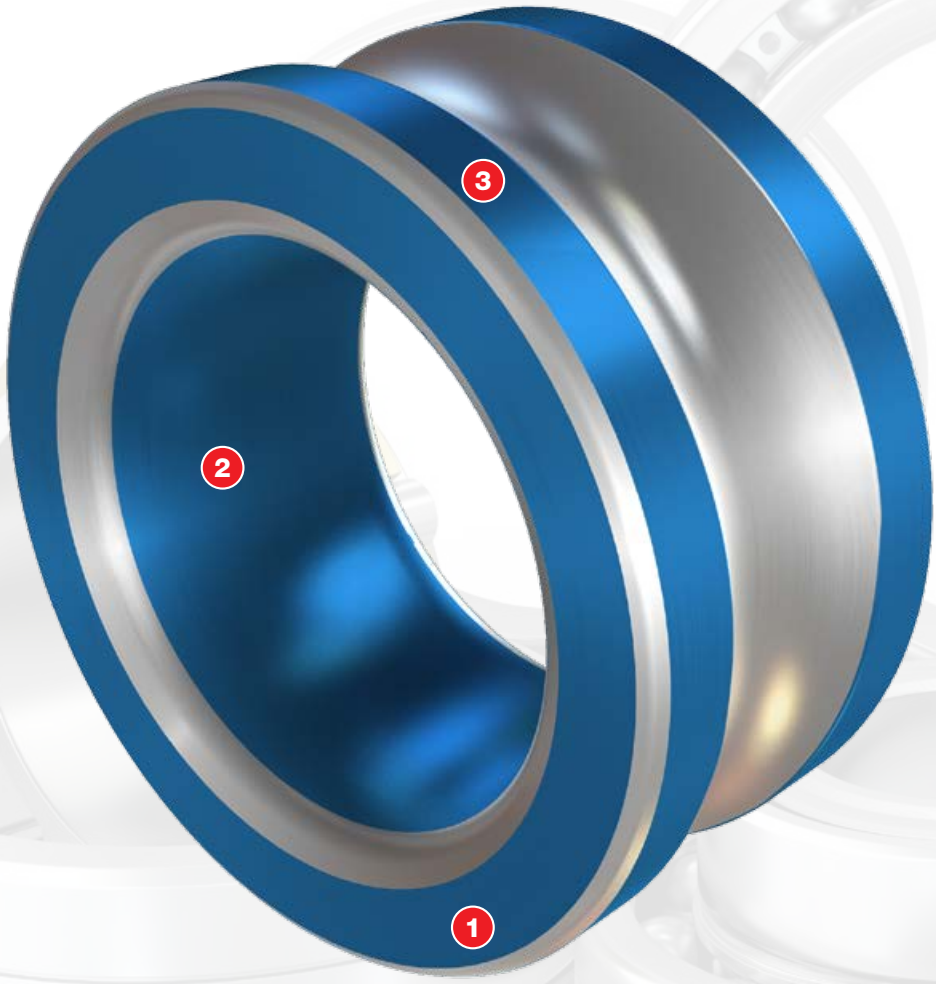
PENTACUT

Parting

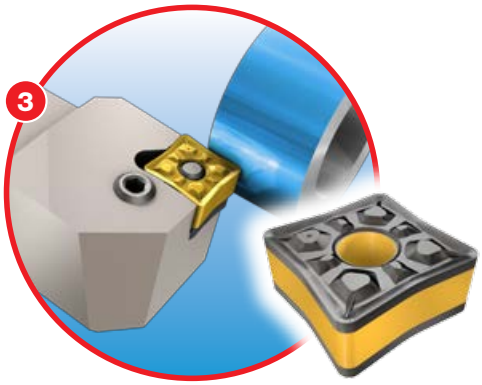


ISOTURN

Inner Diameter Turning

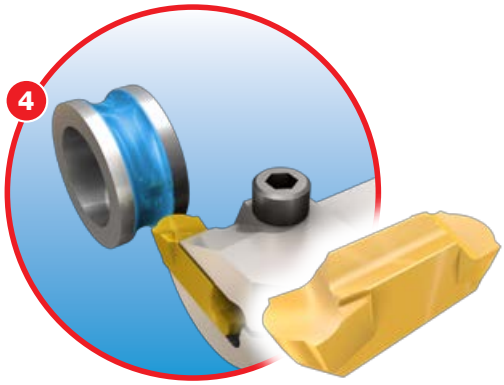


systems and up to 300mm for powers stations. ISCAR's experienced engineers are capable of supporting any ball bearing size with advanced machining solutions that can ensure maximum performance, efficiency and preciseness.



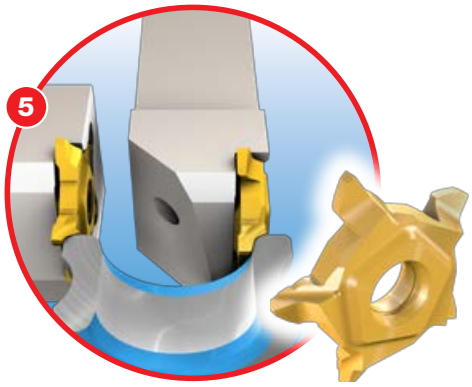
ISOTURN

Outer Diameter Turning



CUTGRIP

Ball Bearing Raceway

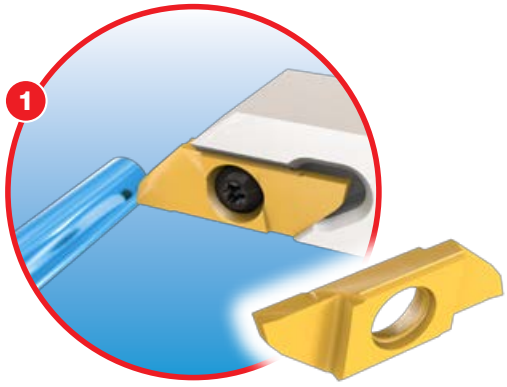


PENTACUT

Radius Chamfer
Internal and External

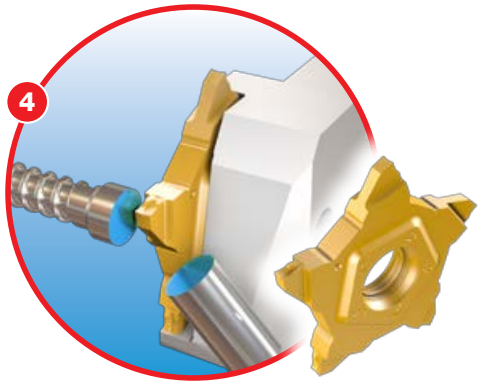
Dental Screw

Bone screws are used to secure a variety of orthopedic implants, primarily for repairing fractured bones with plates and surgeries to stabilize or correct the spine. Bone screws are machined from titanium or stainless steel,



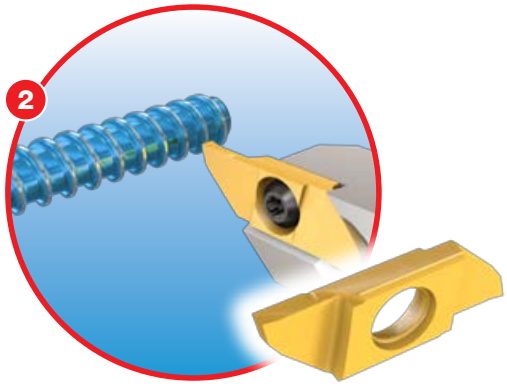
SWISSCUT

Rough Outer Diameter Turning



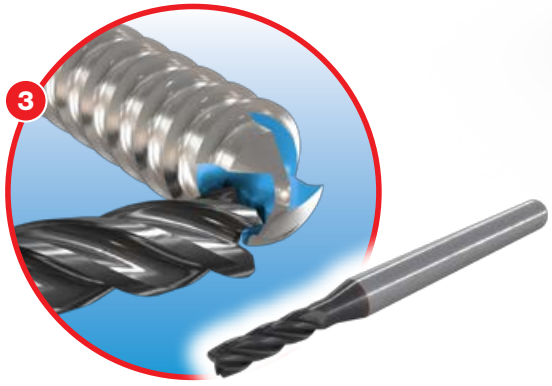
PENTACUT

Parting



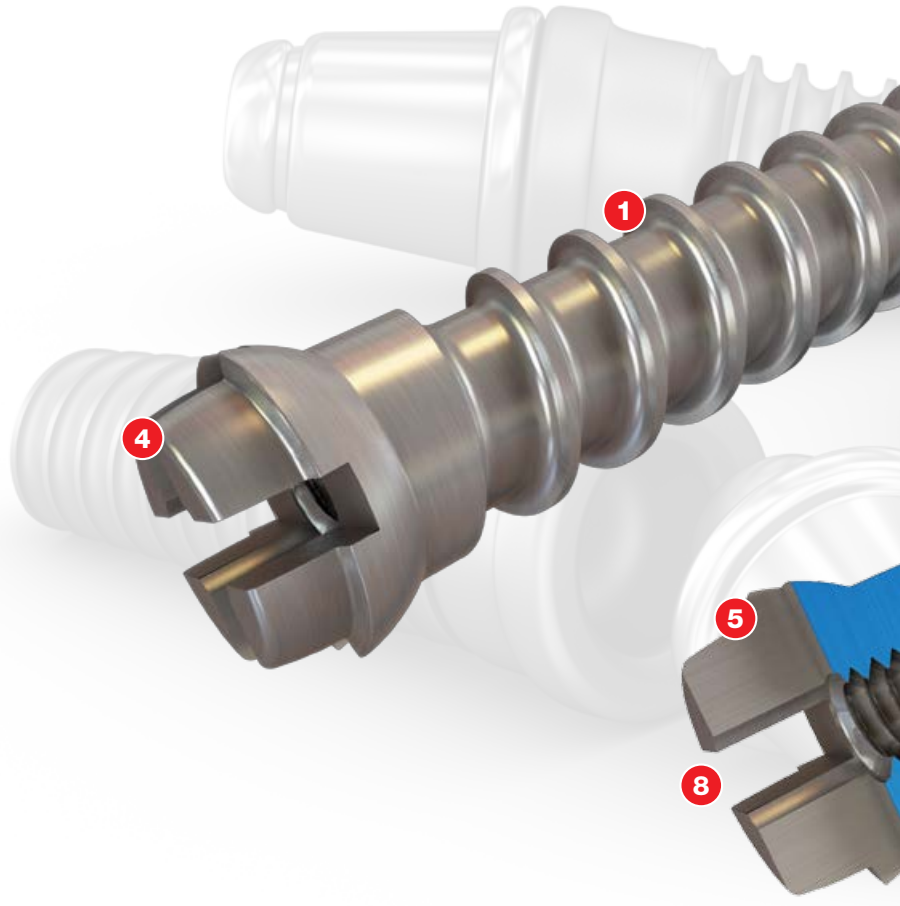
SWISSCUT

Turn Threading



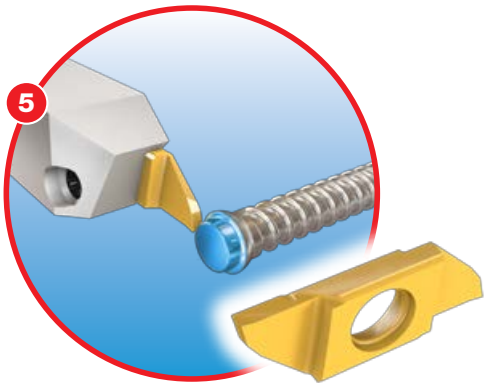
CHATTERFREE
SOLID MILL LINE

Slot Milling



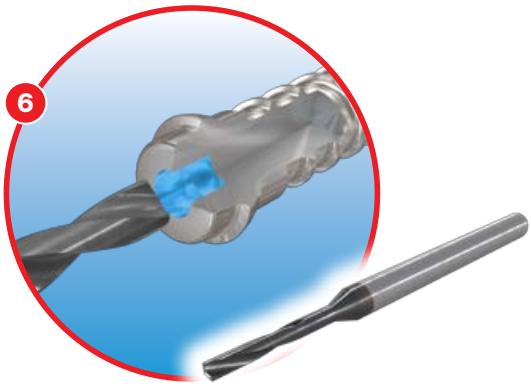
ISCAR
INDUSTREALIZE
IDEAS BECOME REALITY

depending on the surgical demand and application. ISCAR offers a wide range of standard and special turning, threading, mills and drills to produce bone screws on Swiss-Type automatic machines.



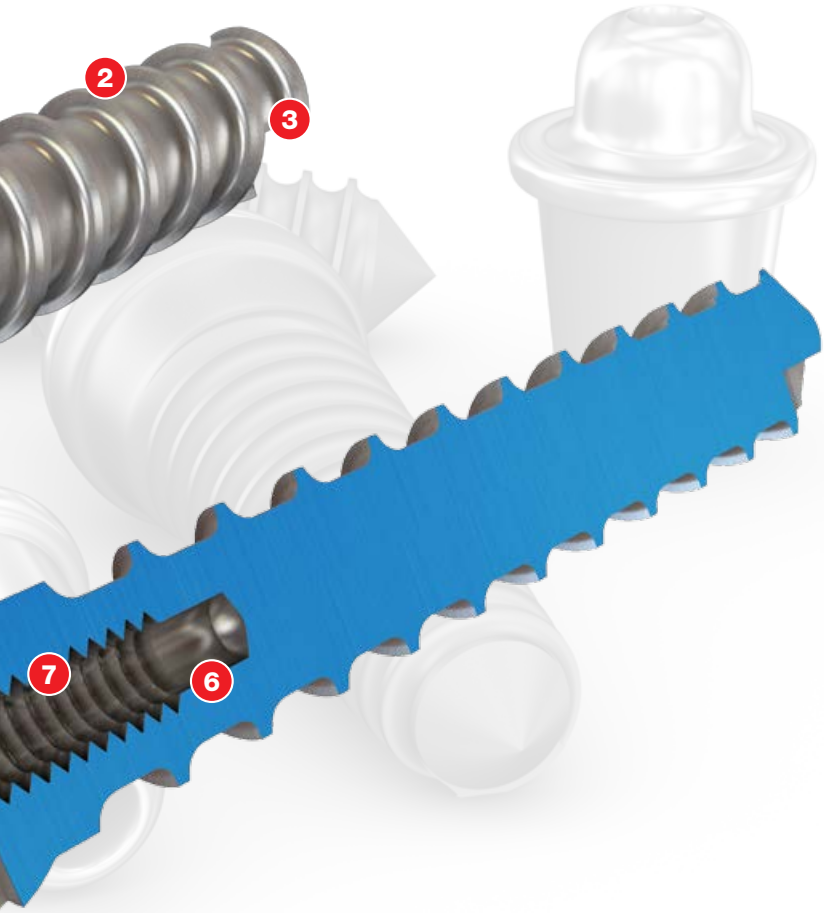
SWISSCUT

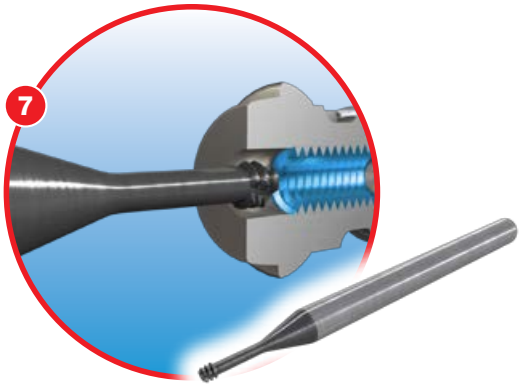
Screw Head Turning



SOLIDDRILL

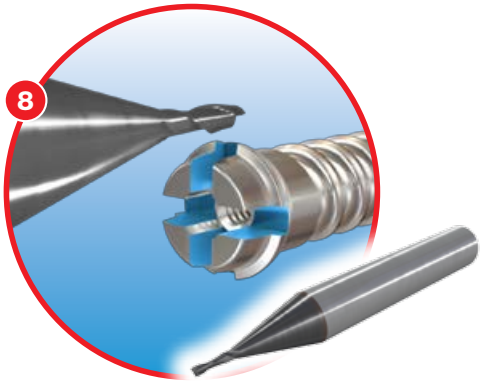
Drilling





SOLIDTHREAD

Thread Milling

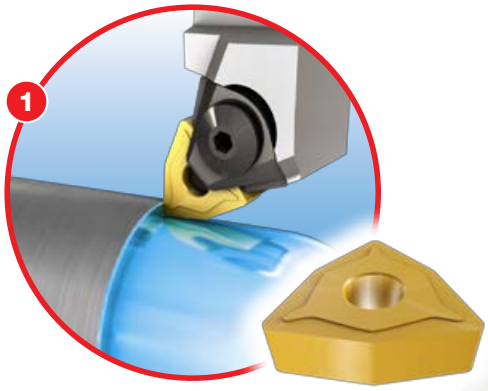


SOLIDMILL
PREMIUM LINE

Key Head Milling

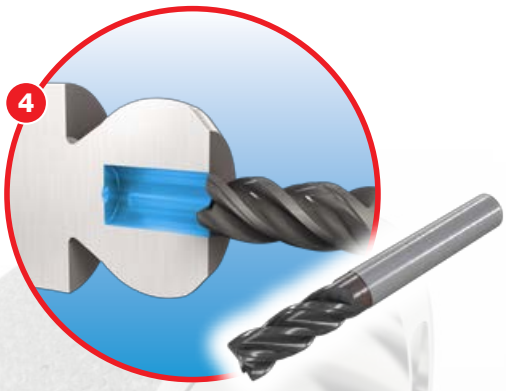
Hip Joint - Head

Attached to the top of the femoral stem, a femoral cap must be machined to size and then polished to reduce the wear of the socket liner, ensuring maximum life of the implant. Often machined from cobalt chrome bar stock, the component



ISOTURN

Rough Turning

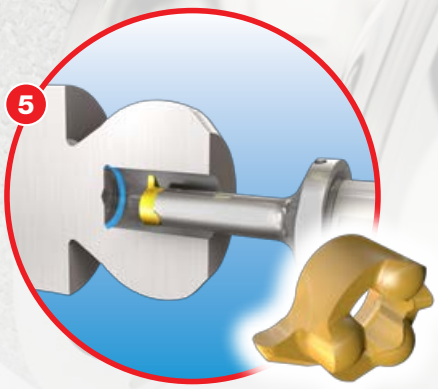


CHATTERFREE
SOLID MILL LINE

Interpolar Inner Diameter
Semi-Finish Milling

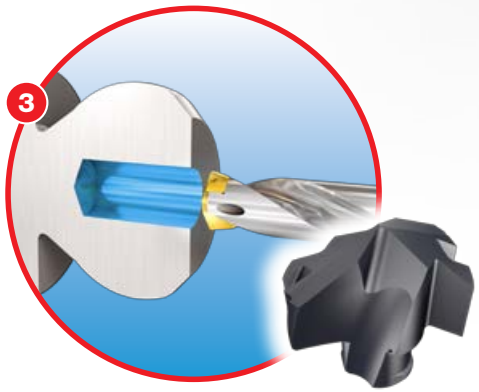
CUTGRIP

Semi-Finish Turning



CHAMGROOVE

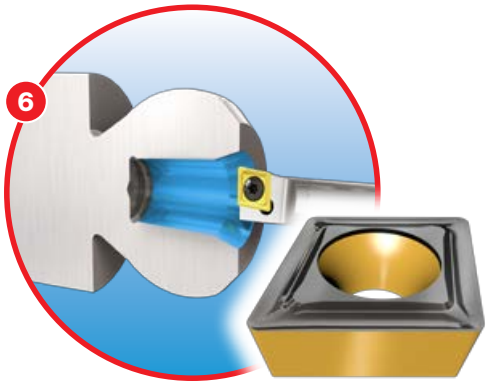
Interpolar Semi-Finish Grooving



SUMOCHAM
CHAMDRILL LINE

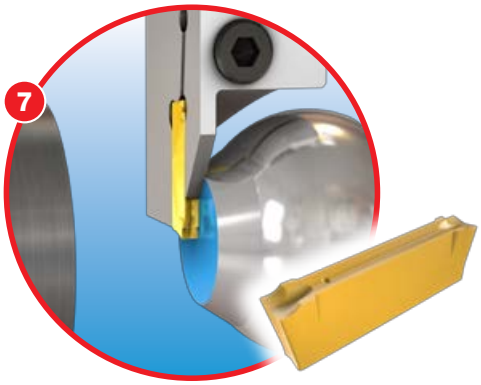
Rough Drilling

demands high tolerances and surface quality. ISCAR offers a wide range of standard and special turning tools and drills to produce hip joint heads on Swiss-Type machines.



ISOTURN

Semi-Finish Internal Turning

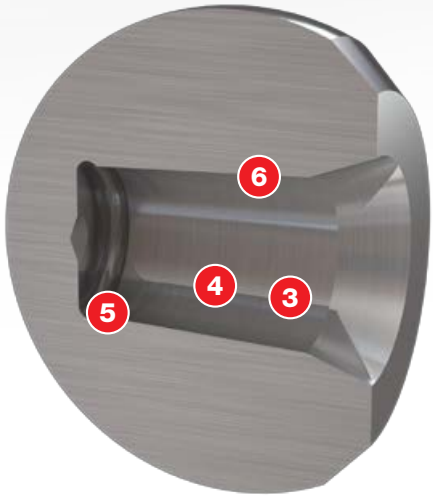


DO-GRIP
500 STRAIGHT LINE

Parting

SWISSTURN

Rough Turning

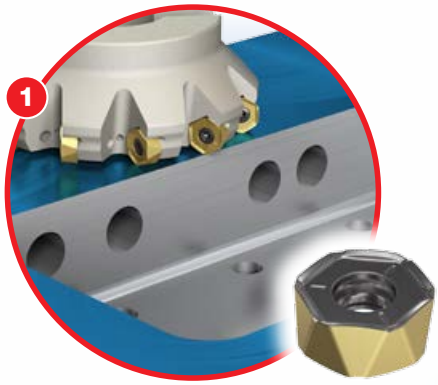


CUTGRIP

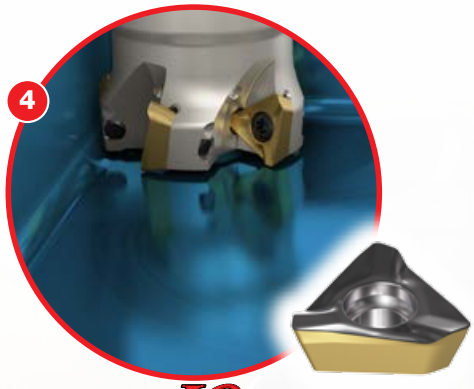
Semi-Finish Turning

Mold Base

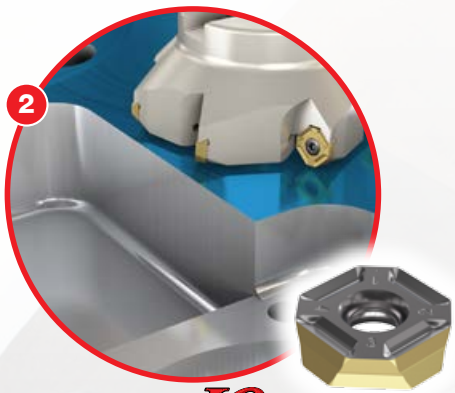
A mold base is the structural steel prismatic part of the mold that holds the cavity and core inserts. ISCAR offers a wide range of standard face mills,



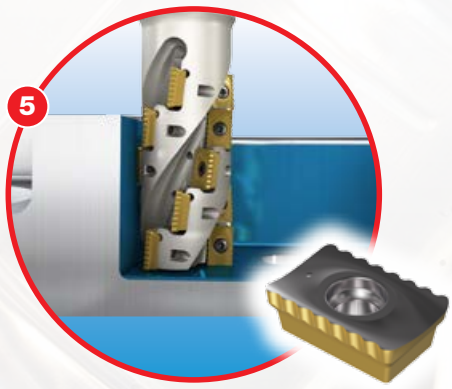
HELIDO
1200 UPFEED LINE
High Feed Face Milling



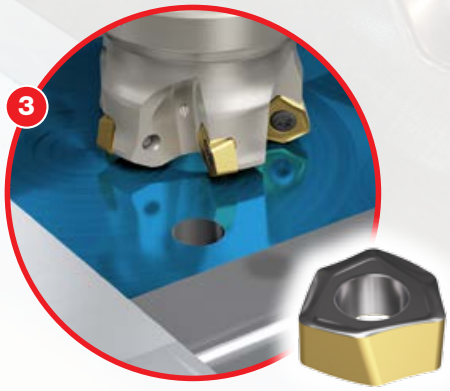
HELIQMILL
390 LINE
Shouldering Corner Radii



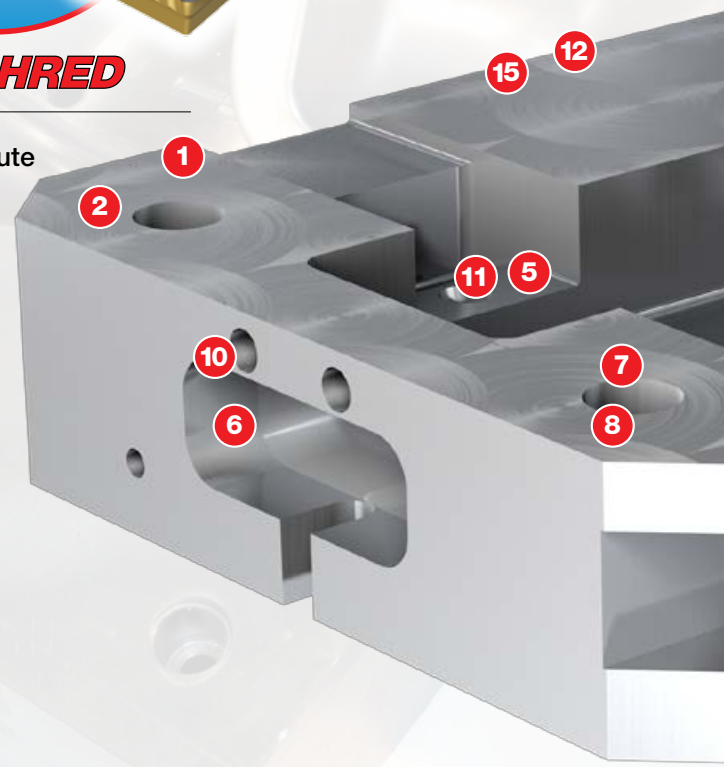
DOVEIQMILL
845 LINE
Face Mill Finishing



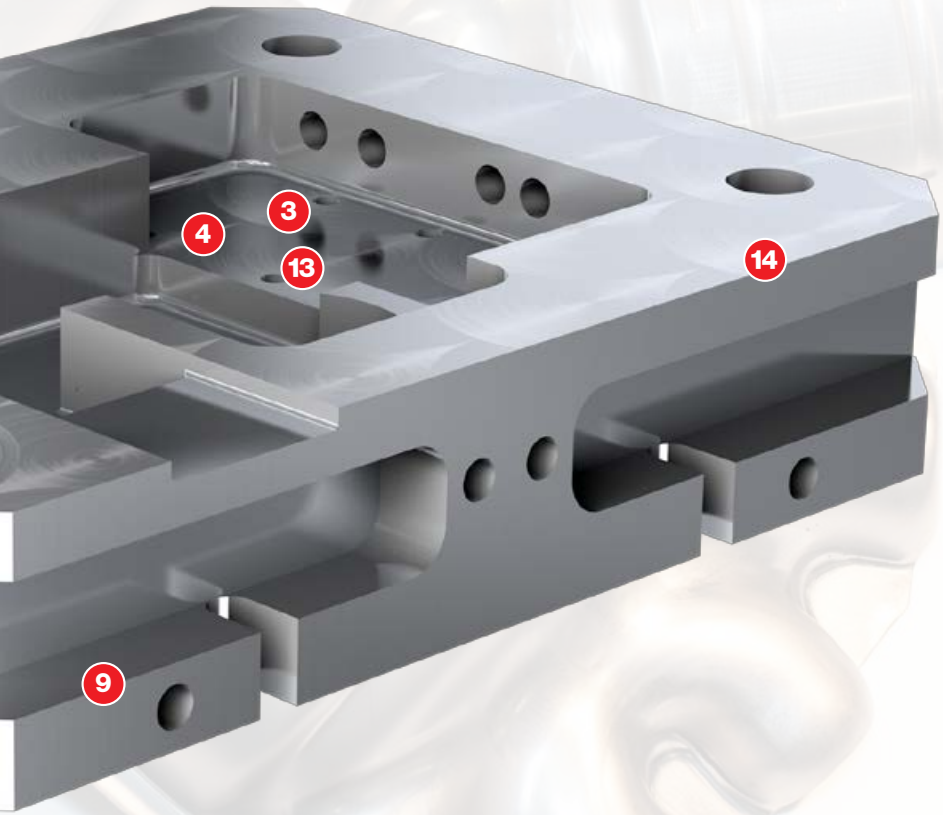
MILLSHRED
P290 LINE
Shouldering
Extended Flute

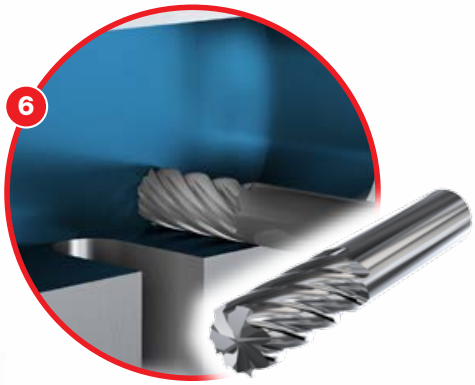


HELIDO
600 UPFEED LINE
Roughing Cavities

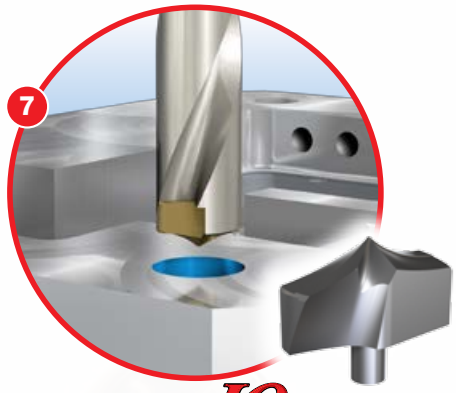


drills, reamers, thread mills and rough and fine boring tools for the production of mold bases.



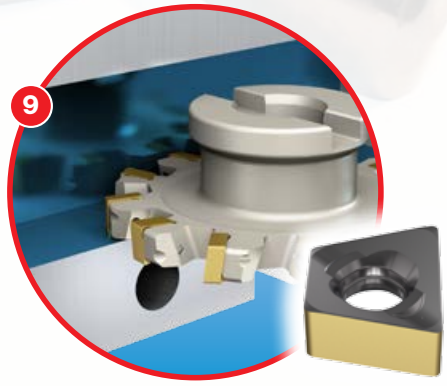


CHATTERFREE
SOLID MILL LINE
Pocket Milling



CHAMIQDRILL
700 LINE
Drilling

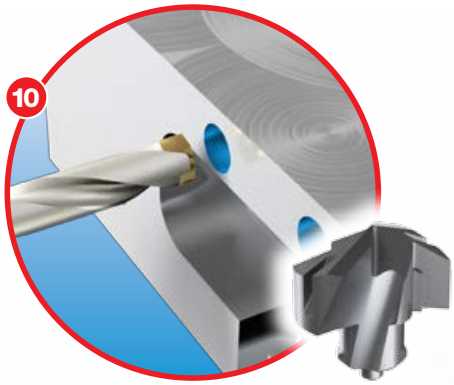
ITSBORE
Boring



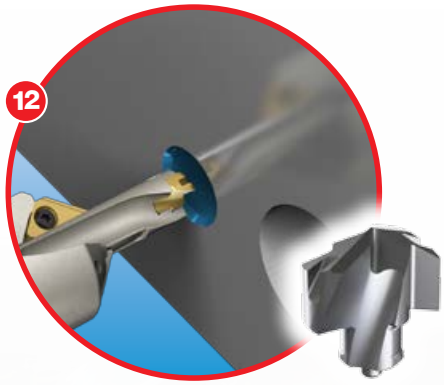
HELISLOT
Side Slotting

Mold Base

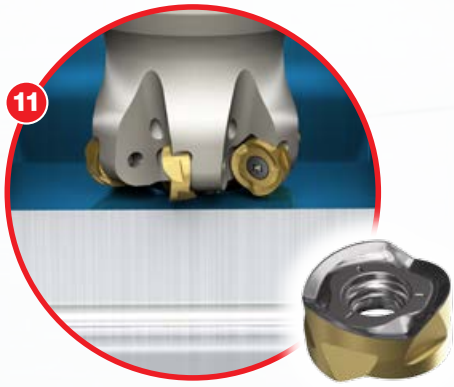
A mold base is the structural steel prismatic part of the mold that holds the cavity and core inserts. ISCAR offers a wide range of standard face mills,



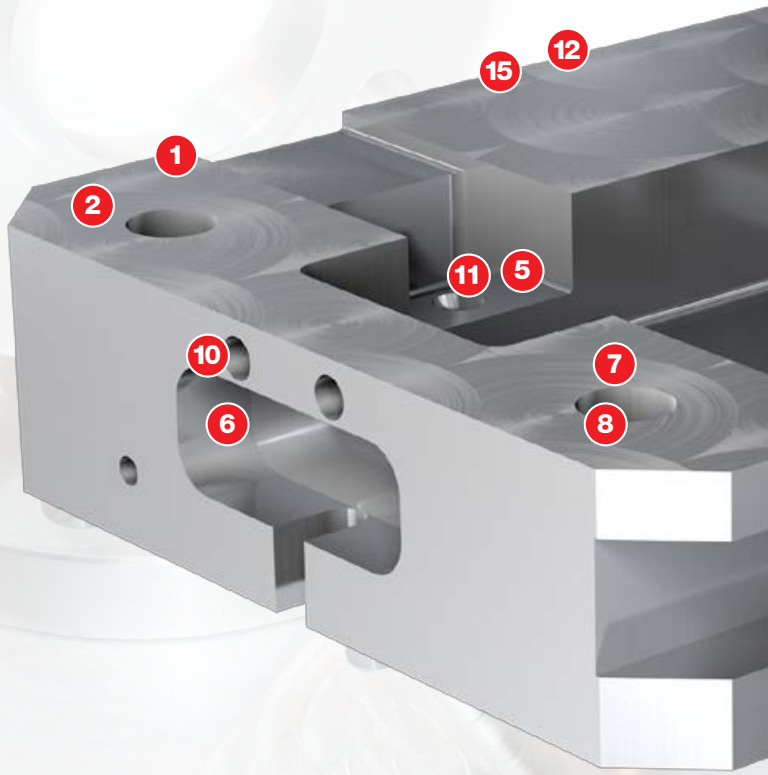
SUMOCHAM
CHAMDRILL LINE
Drilling



SUMO UNI CHAM
Drilling and Chamfering



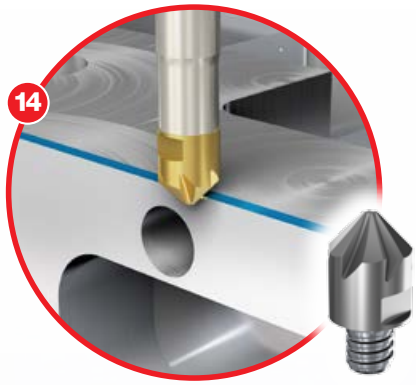
HELIDO
ROUND H606 LINE
Profiling



drills, reamers, thread mills and rough and fine boring tools for the production of mold bases.

BAYOT-REAM

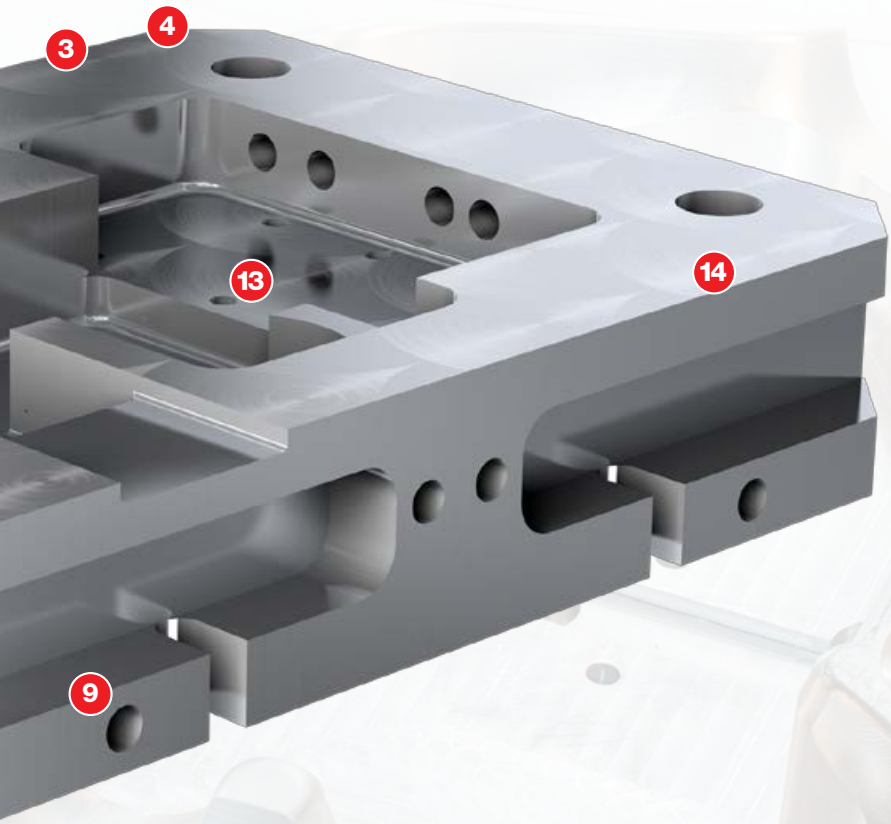
Reaming

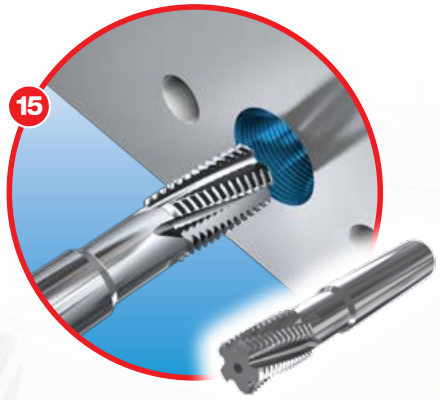


MULTI-MASTER

INDEXABLE SOLID CARBIDE LINE

Chamfer Milling



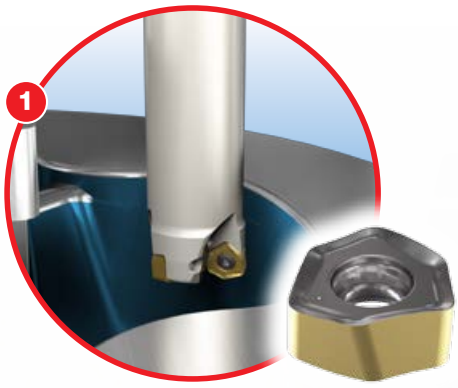


SOLIDTHREAD

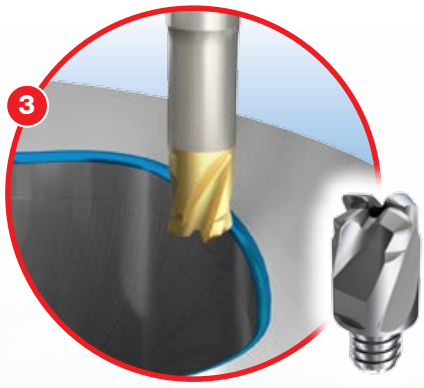
Thread Milling

Extrusion Die

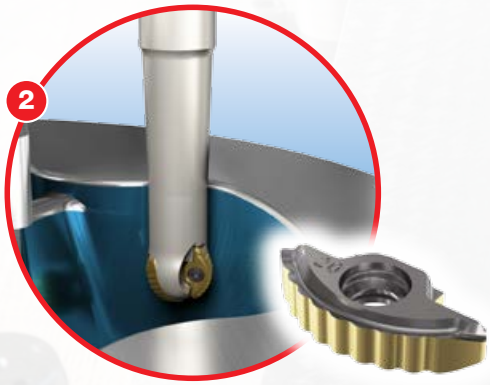
Extrusion is a process used to create objects of a fixed cross-sectional profile. Material is pushed through the die profile of the desired cross-section. Extrusion dies are made of harder tensile materials such as D2 , H13.



HELIDO
600 UPFEED LINE
Rough Milling

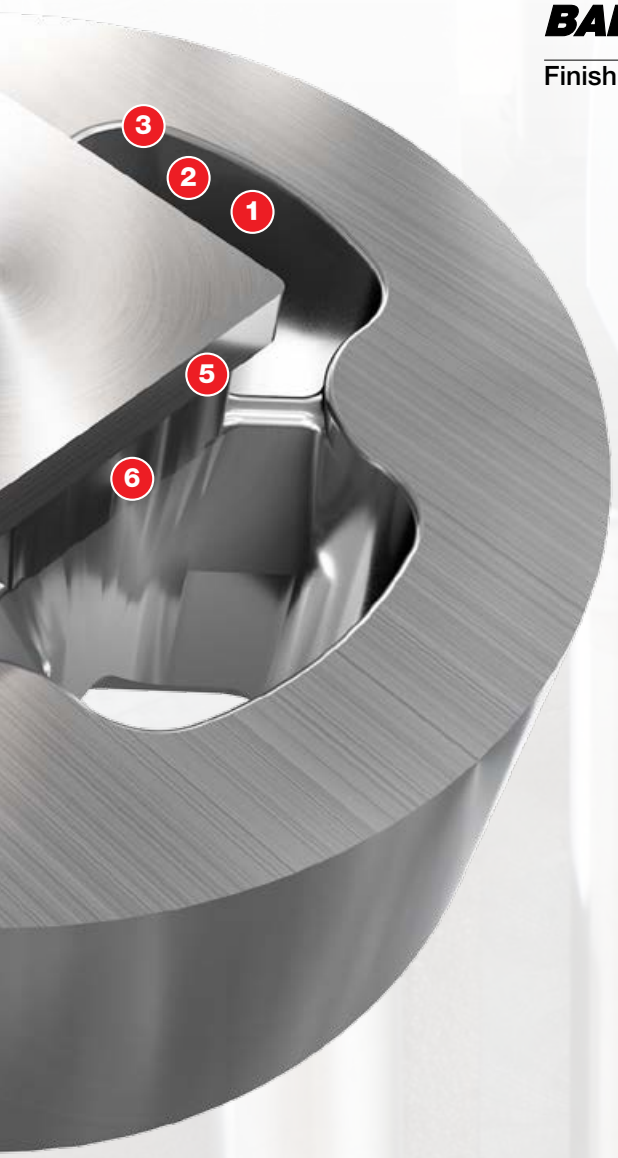


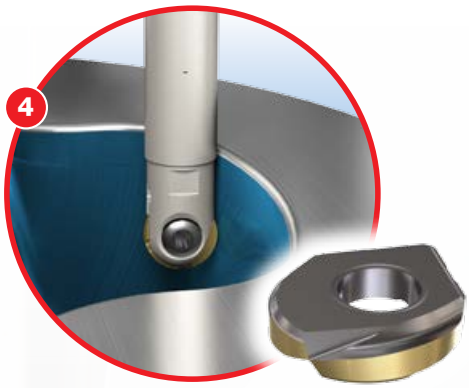
MULTI-MASTER
INDEXABLE SOLID CARBIDE LINE
Semi-Finish 3D Surface
Radius Milling



DROPMILL
3 FLUTE BALL NOSE
Semi-Finish
3D Surface Milling

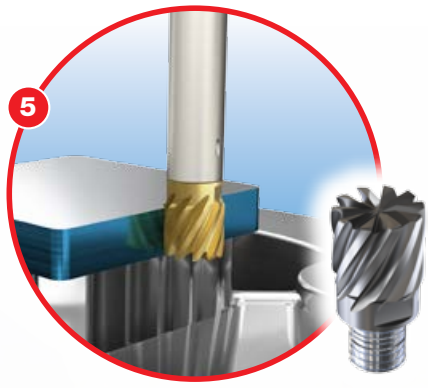
ISCAR offers a wide range of standard face mills, feed mills, ball nose endmills, drills, reamers, thread mills and rough and fine boring tools for the production of extrusion dies.





BALLPLUS

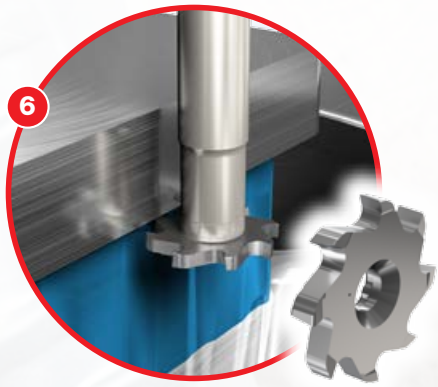
Finish Milling 3D Surfaces



MULTI-MASTER

INDEXABLE SOLID CARBIDE LINE

Shouldering

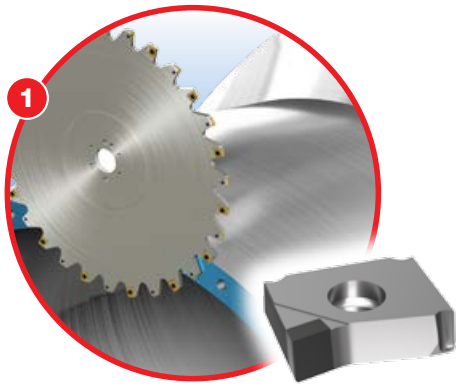


T-SLOT

Side Slotting

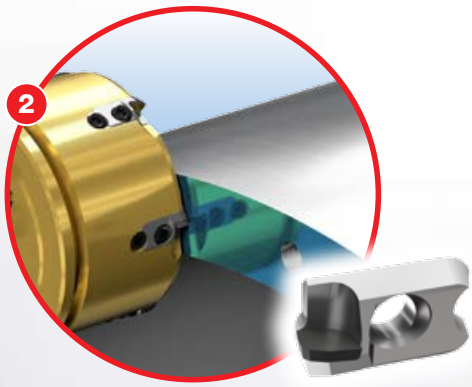
Rotor Blade

Wind power rotor blades are predominantly produced from carbon fiber composite material due to their huge scale size and lightweight design. ISCAR offers a wide range of standard



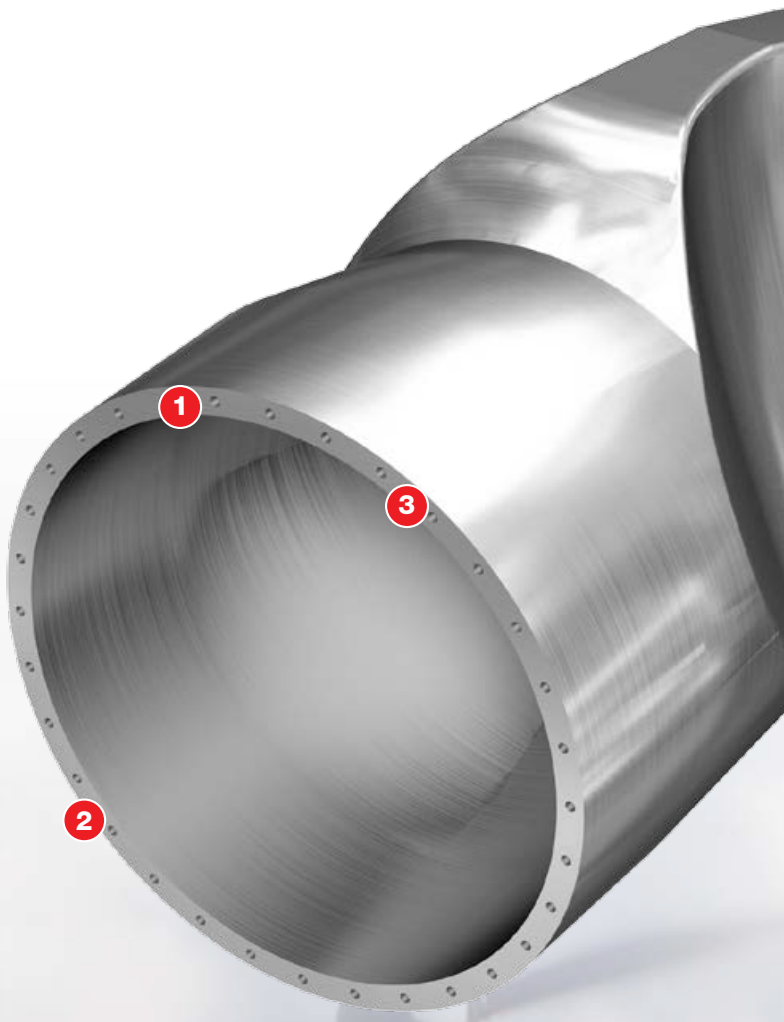
TANGSLOT

Slot Mill Roughing

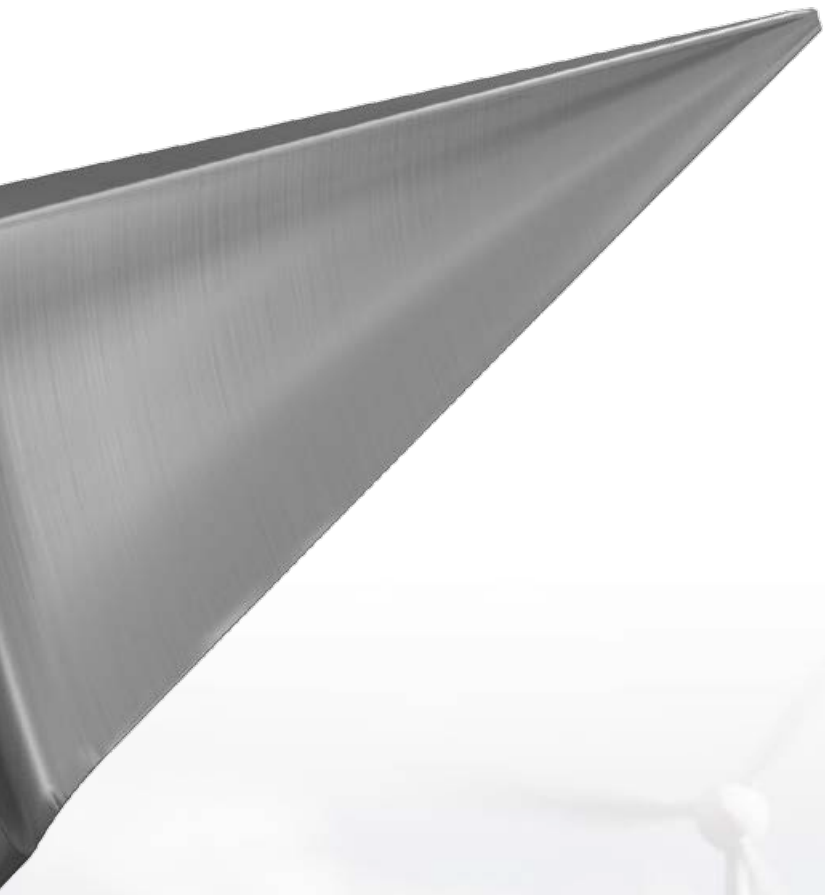


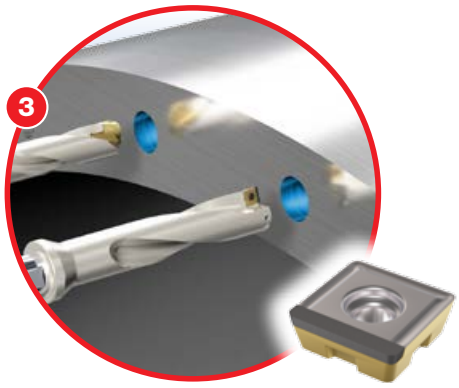
ALUFRAISE

Face Mill Finishing

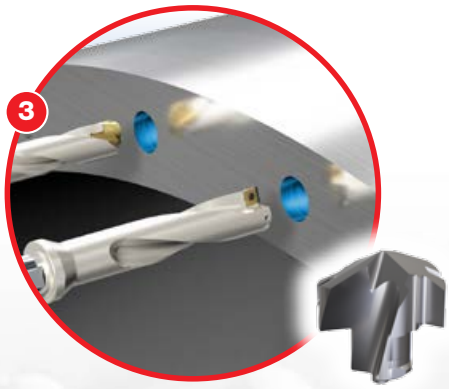


and specially designed mills, drills, reamers and mill thread tooling for the production of wind power rotor blades.





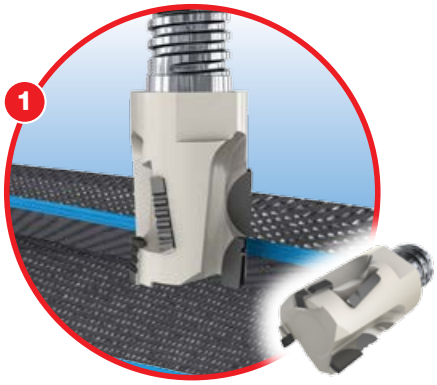
DR-TWIST
INDEXABLE DRILL LINE
Drilling



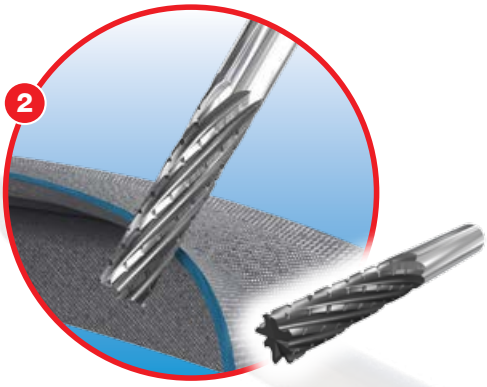
SUMOCHAM
CHAMDRILL LINE
Drilling

Aircraft Fueslage

The fuselage is an aircraft's main body section predominantly produced from carbon fiber composite material for newer, lightweight aircraft

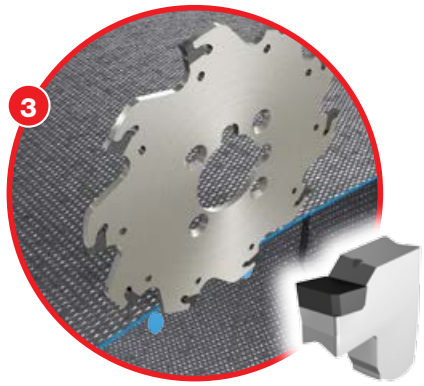


MULTI-MASTER
INDEXABLE SOLID CARBIDE LINE
Shoulder Milling



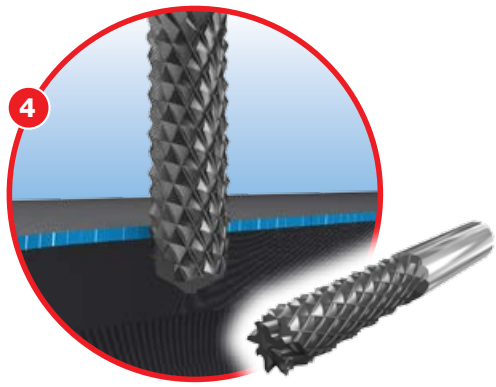
SOLIDMILL
SOLID CARBIDE LINE
Shoulder Milling

frames. ISCAR offers a wide range of standard and specially designed mills, drills and reamer tooling for the production of aircraft fuselage.



TANGSLIT

Mill TGSF Slitting Cutters

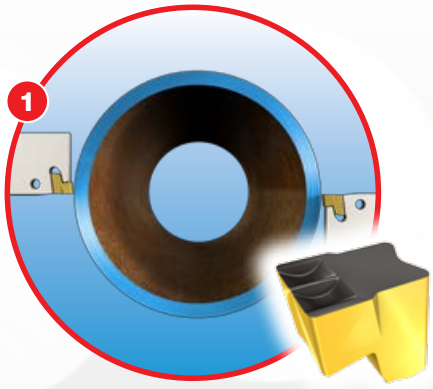


SOLIDMILL
SOLID CARBIDE LINE

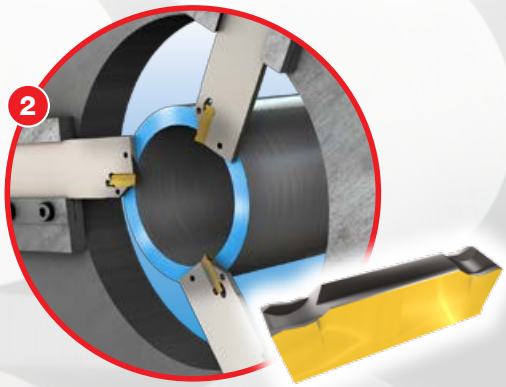
Shoulder Milling

Raw Material Parting

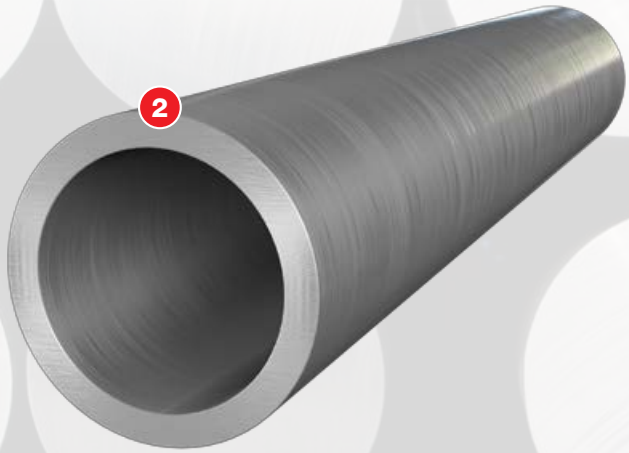
Seamless pipes are traditionally produced from carbon-manganese steels or Mo-containing high strength, stress corrosion cracking material of up to 0.4% Mo. from 60mm up to 400mm diameters.

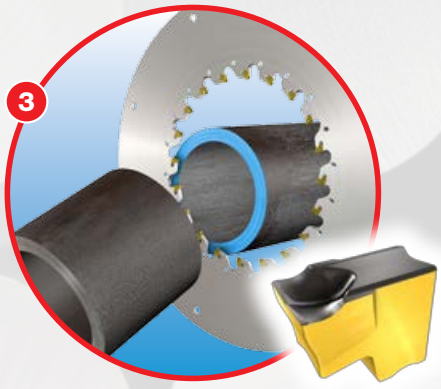


TANG-GRIP
PARTING LINE
Blades Method



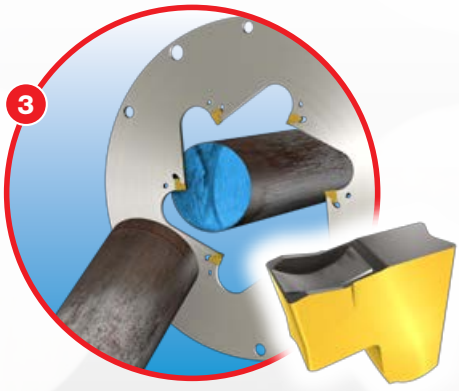
DO-GRIP
TWISTED 2-SIDED
Radial Rotary Method



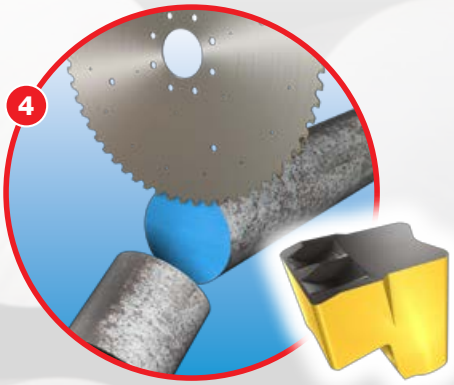


TANG-GRIP
PARTING LINE
Planetary Movement Method

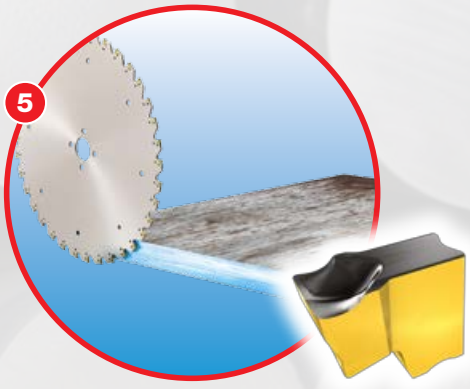
ISCAR offers a wide range of heavy duty economical and productive parting, single and multi-blade sawing solutions.



TANG-GRIP
PARTING LINE
Solid Bar Planetary Movement



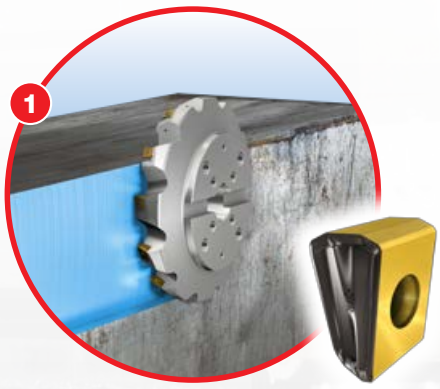
TANG-GRIP
PARTING LINE
Solid Bar



TANG-GRIP
PARTING LINE
Plate Cutting

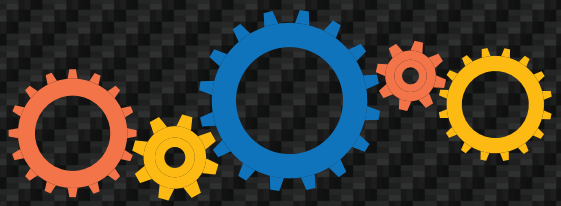
Raw Material Heavy Duty Face Milling

Alloy steel forgings and other types of material billets are made in foundries. ISCAR offers a wide range of heavy duty, economical and productive face milling cutters for rough and semi-finishing operations for pre-sold materials.



HELITANG
T465 LINE
Heavy Duty Face Milling

ISCAR
INDUSTREALIZE
IDEAS BECOME REALITY



ISCAR

INDUSTREALIZE

IDEAS BECOME REALITY

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