



**PRAMET**  
METALLURGY

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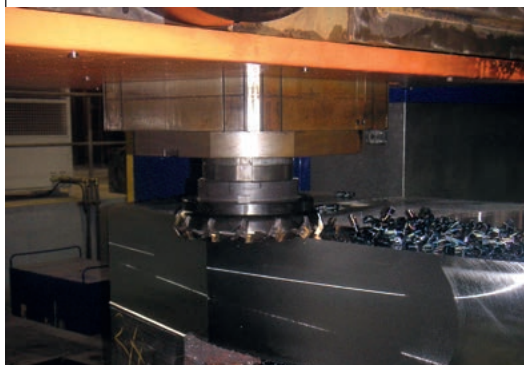
## WE LIKE THE METAL ...

In the Metallurgy segment we focus on removing the first layer of material from large-scale forgings, castings, rolling, welding and oxy-acetylene cut work pieces. These are operations that require high reliability of cutting tools working in very hard conditions. Through long-term cooperation with leading factories in many countries, we have specialized the production of tools for:

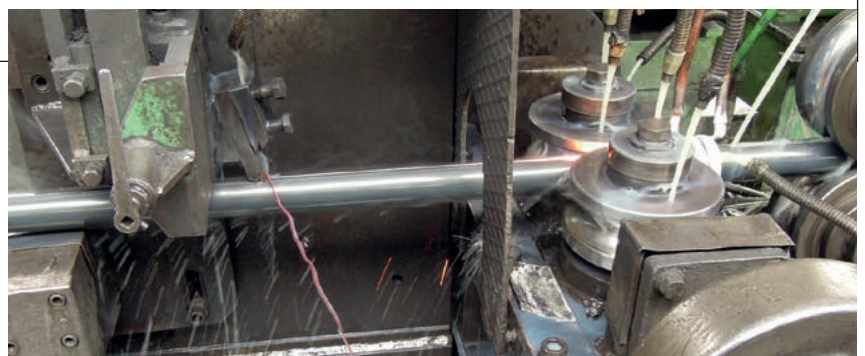
### HEAVY ROUGHING - TURNING



### HEAVY ROUGHING - MILLING



### SCARFING





SPECIAL THREADING OF PIPES



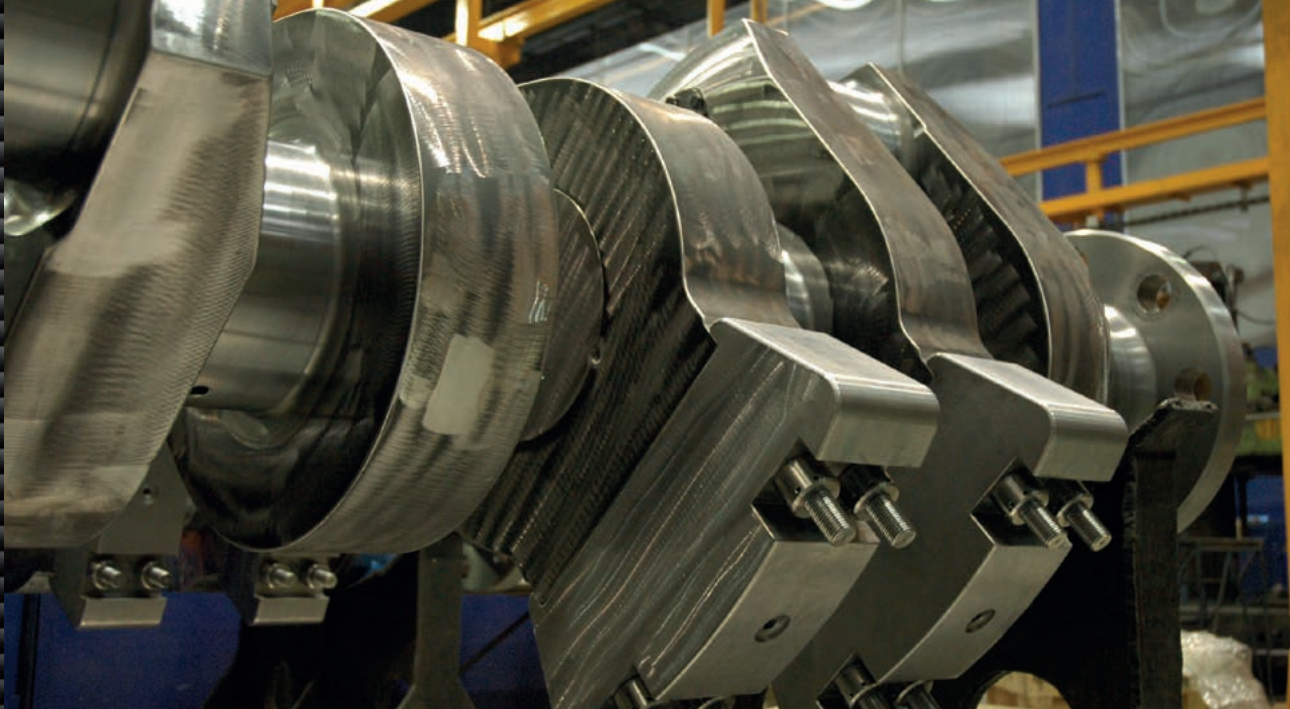
CHAMFERING OF PIPES



BAR PEELING

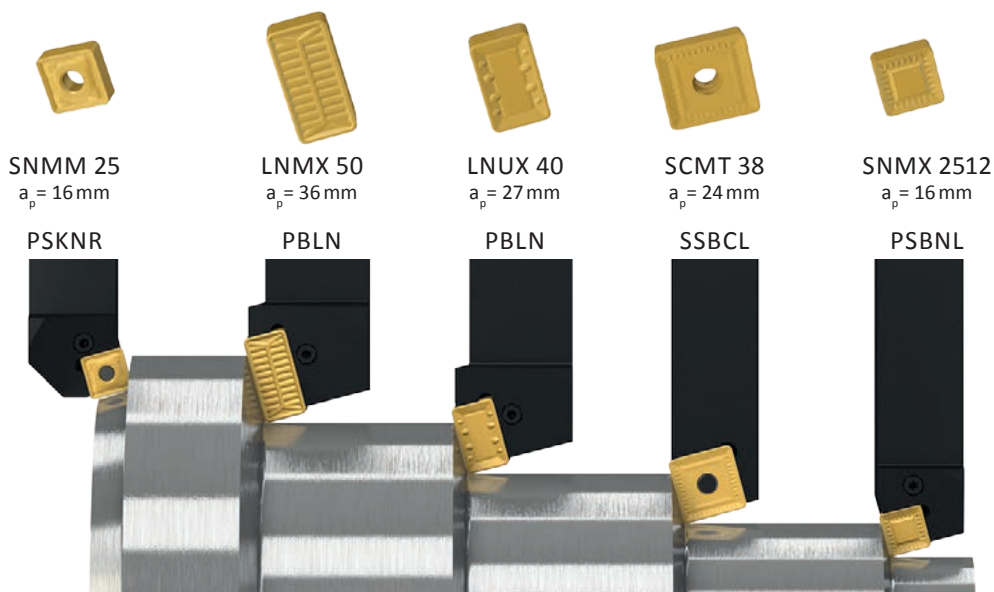




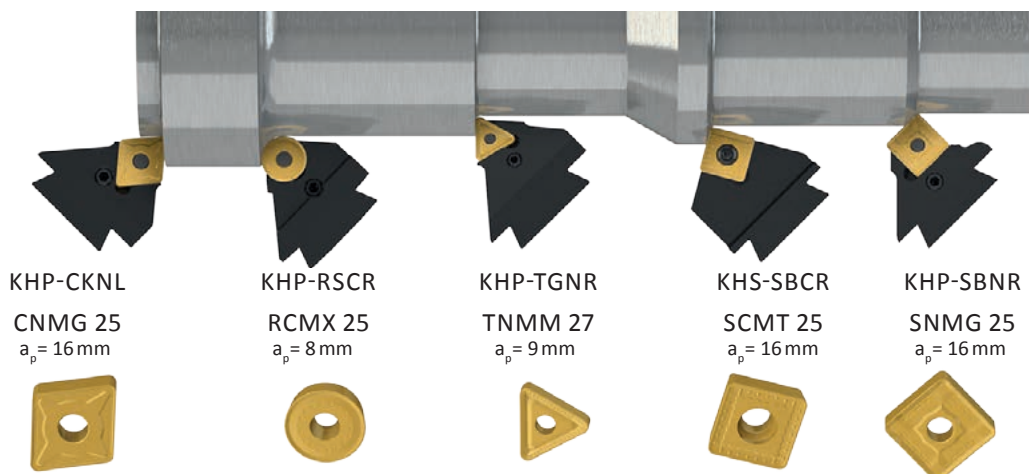


Heavy Turning operations include machining large Shafts with uneven surfaces or skin from forging or casting with a combination of continuous or interrupted cuts. As a possible solution we can offer indexable inserts with cutting edge length 25 – 50 mm and tool holders with various approach angles to cover all common applications, all conditions and power of machines. Depending on demands for productivity and machine rigidity there is a selection of positive or negative inserts, geometry and corresponding cross section of tool holder. Heavy Turning applications can achieve high metal removal rates to a level of 1500 kg/hour. Productive cutting conditions are set-up using new grades - UP!GRADE. For quick tool change we offer the unique cassettes system KH which allows you to replace the head of the tool within 30 seconds.

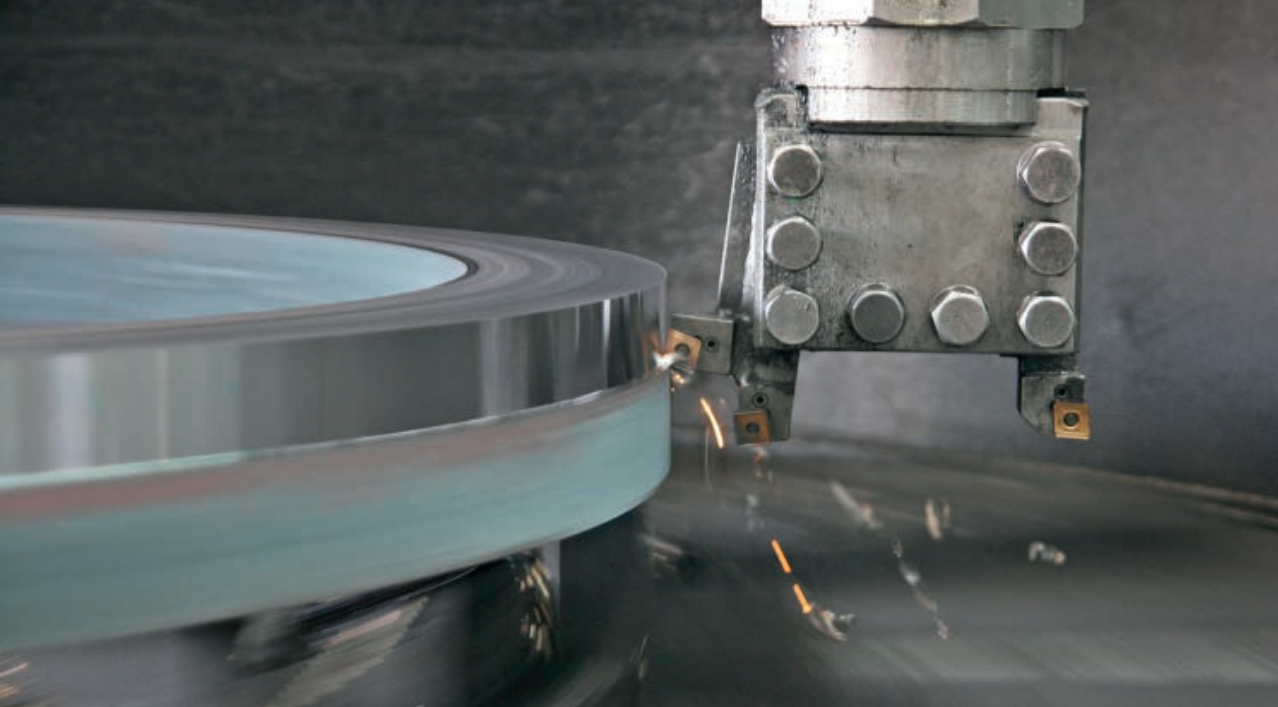
### LET'S CHOOSE THE MOST EFFICIENT TOOLS FOR YOU



### ARE YOU LOOKING FOR QUICK CHANGE?



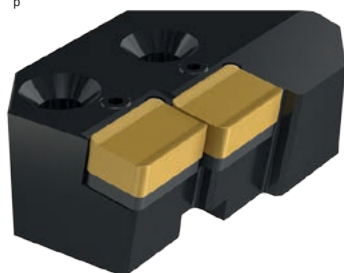




In case of specific needs of various technologies or special machine tools or clamping systems, we can offer a service to develop and manufacture Tailor made tools. We enjoy any challenge to find the solution for non-standard applications.

### DOUBLE DEPTH OF CUT

Inserts: 2x LNUX 40  
 $a_p = 50\text{mm}$



### TRIPLE PRODUCTIVITY

Inserts: 3x LNUX 40,  $a_p = 80\text{mm}$



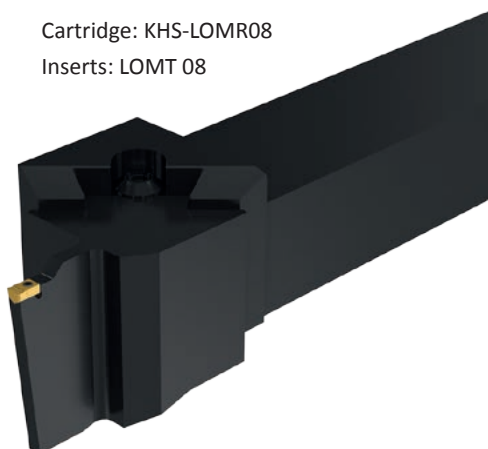
### SMART AND STRONG

Tool holder cross-section  
100x100 with cartridges KH



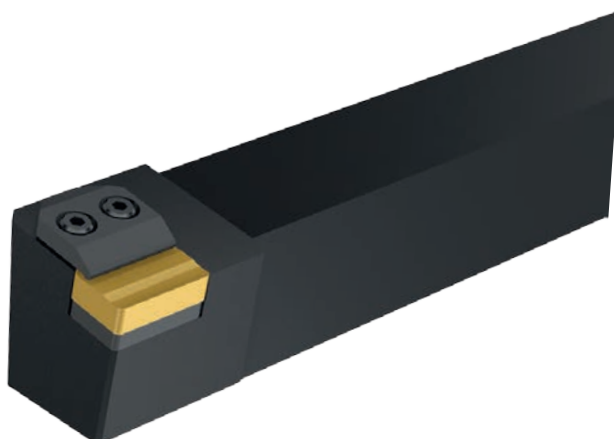
### SMART AND STRONG

Cartridge: KHS-LOMR08  
Inserts: LOMT 08



### HIGH RELIABILITY FOR HARD SHAFTS

Inserts: LNUN 42  
 $a_p = 30\text{mm}$



HEAVY TURNING





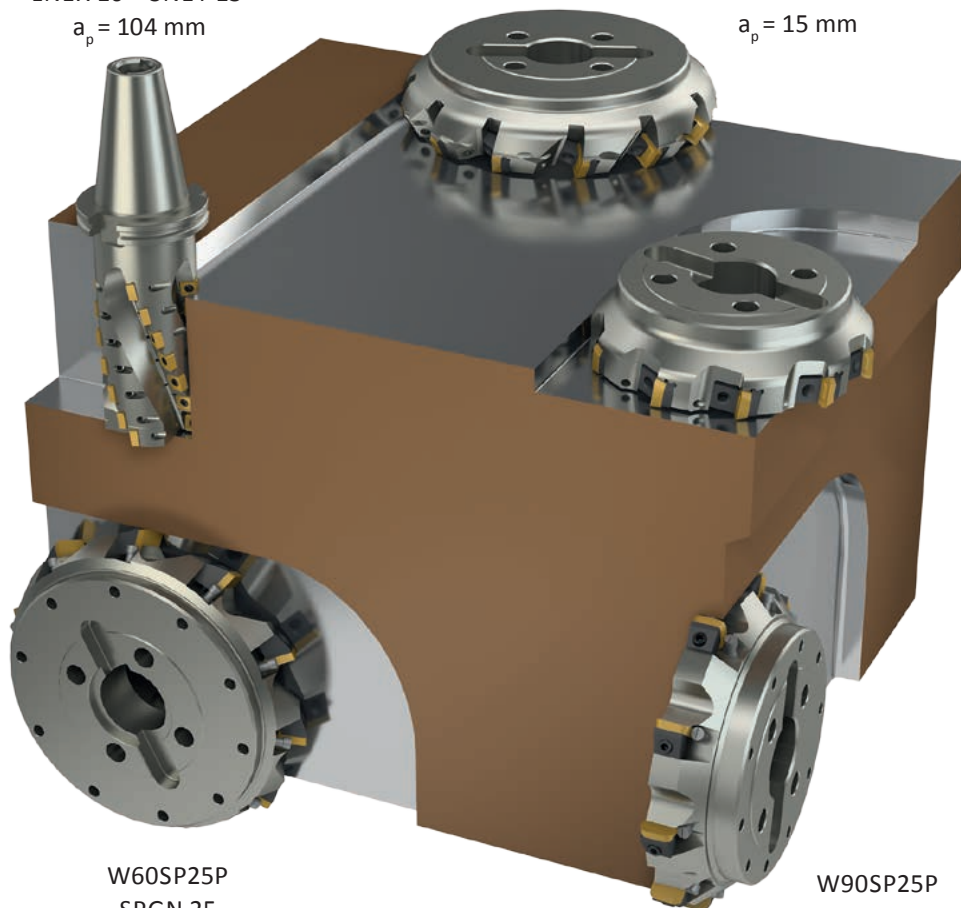
## RELIABLE AND PRODUCTIVE IN EXTREMELY HARD CONDITIONS

Heavy Milling operations often involve machining complicated castings which could be polluted by sand or forgings with hard skins or scale. Our aim is to offer an optimal solution based upon the rigidity of machine, workpiece clamping, machine power and customer requirements.

Depending on the approach angle we can divide the tools into groups: Face milling cutters, Shoulder milling cutters 90°, Helical milling cutters, Chamfer milling cutters and Special milling cutters. The main priorities are high metal removal rate and reliability of cutting edge. Insert reliability is provided by using our new grades - UP!GRADE and high efficiency is achieved by unique Milling cutters developed for Heavy Milling applications.

SLSN  
LNET 16 + SNEX 13  
LNEX 16 + SNET 13  
 $a_p = 104 \text{ mm}$

F6OSB22X  
SBMR 22 + SBKX 22  
 $a_p = 15 \text{ mm}$

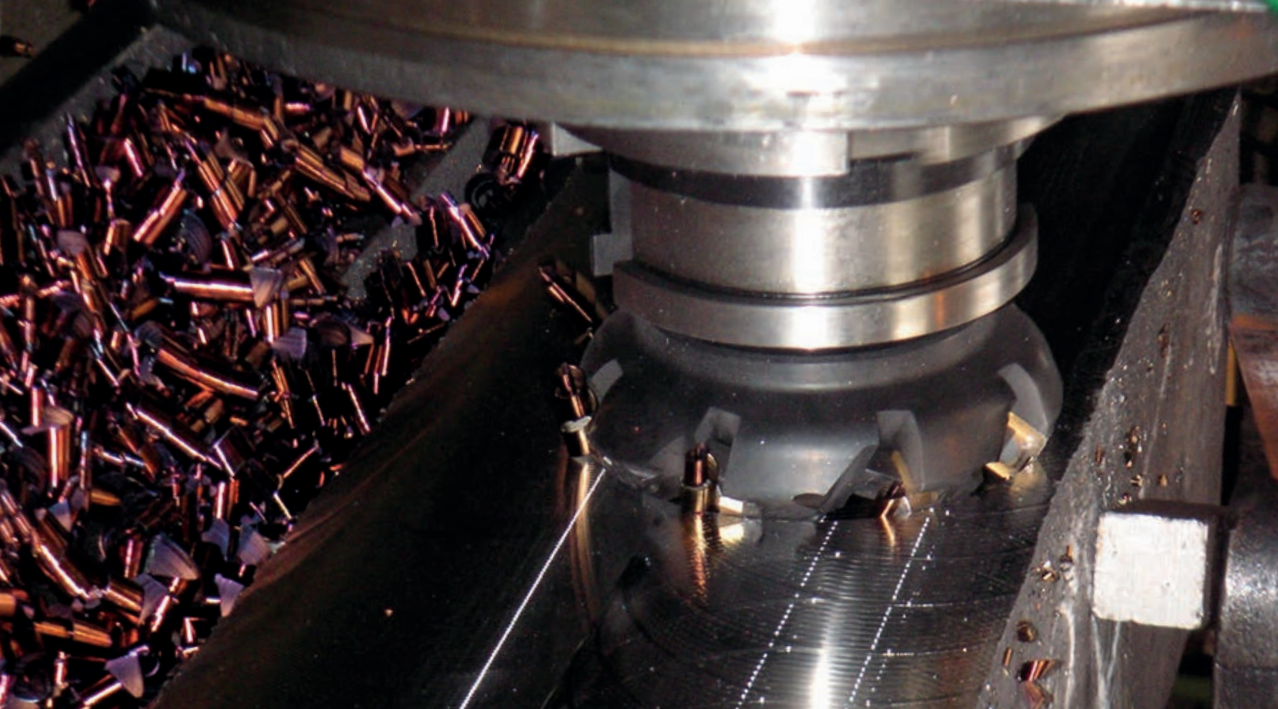


F9OSB22X  
TBMR 27  
 $a_p = 18 \text{ mm}$

W60SP25P  
SPGN 25  
 $a_p = 18 \text{ mm}$

W90SP25P  
SPUN 25  
 $a_p = 22 \text{ mm}$





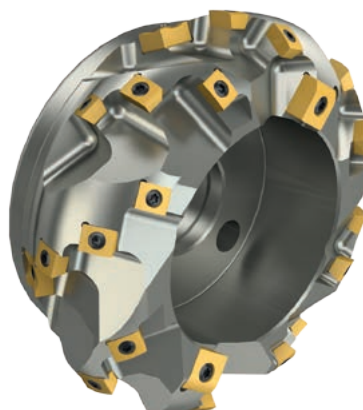
## WE ARE LOOKING FORWARD TO YOUR CHALLENGE

Our experienced designers have developed many special tools for Heavy Roughing operations.

We have provided many successful solutions for T-slot cutters, large diameter Disc milling cutters, Specific shape cutters and special Tangential milling cutters.



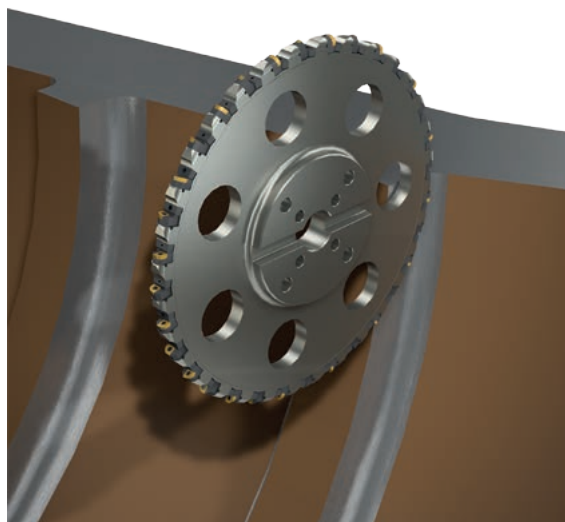
Set of cutters for machining  
a special profile in Hardox 500



Cutter body for radius R36  
Inserts: LPEX 19



Cutter body for T-slot 250x160  
Inserts: LCEX 19, CNM 563;



Cutter body D=560  
Inserts: XNHQ 16; XCEW 14

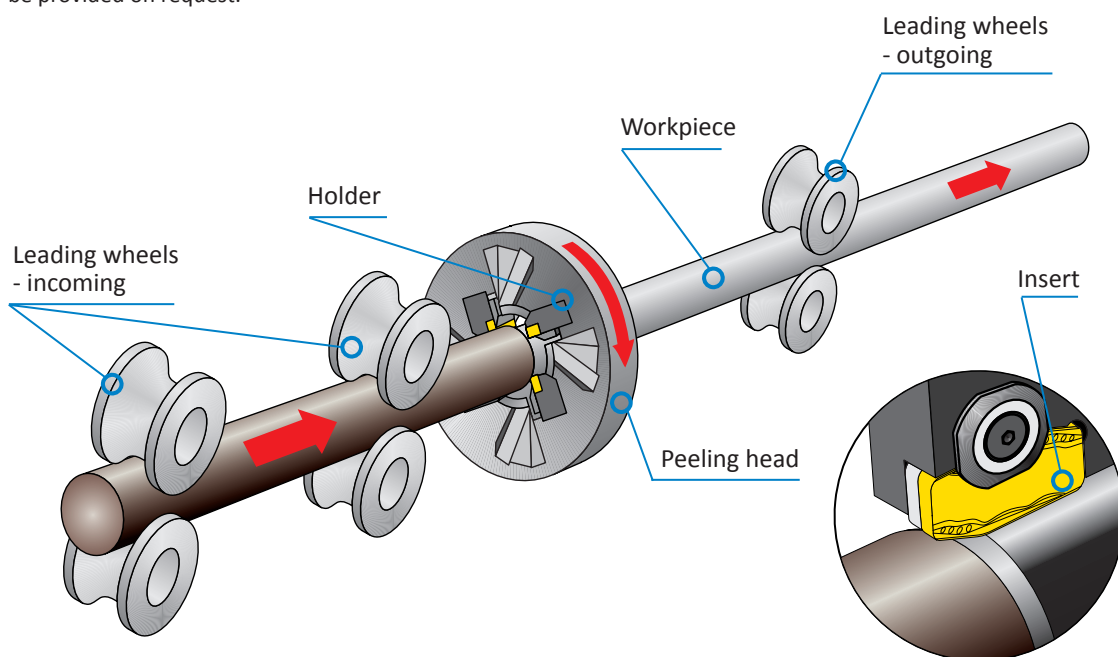
HEAVY MILLING





## PEELING WITH SIGNIFICANT REDUCTION OF VIBRATIONS

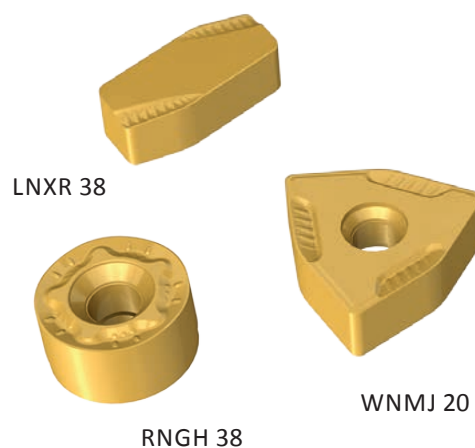
In Bar Peeling applications, the most important criteria are high productivity, dimensional accuracy of machined bars and excellent surface quality. After many years of experiences we offer a wide range of inserts with specific geometries suitable for Steel, Stainless steel as well as Difficult to machine materials. Clamping systems and cassettes can be provided on request.



## STANDARD ASSORTMENT



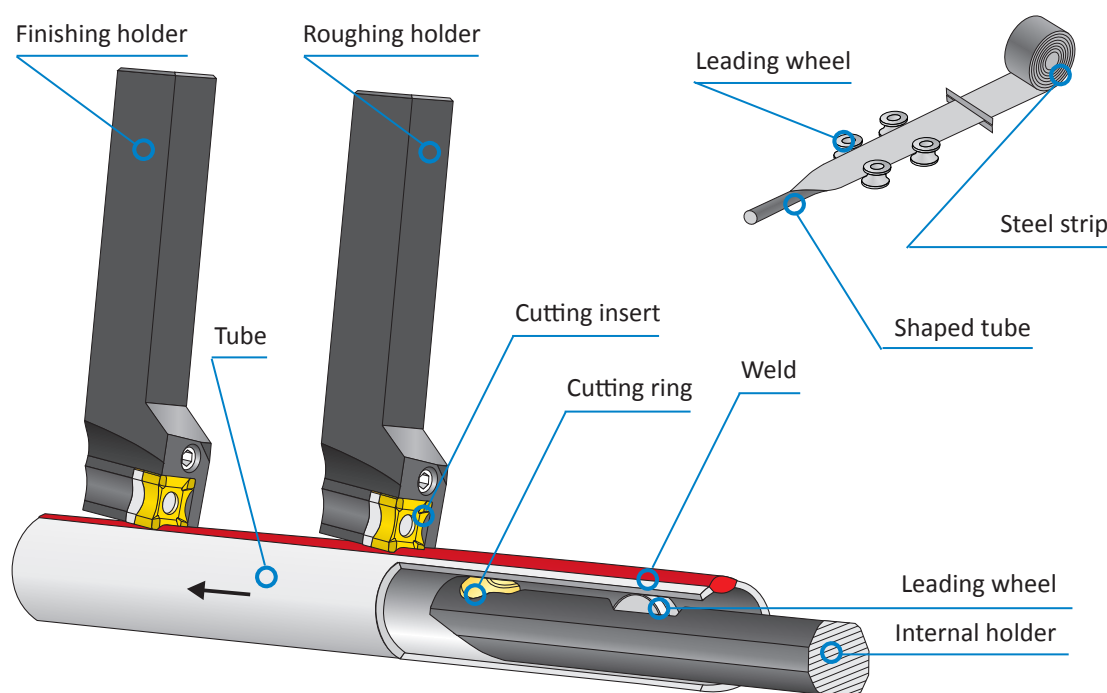
Detailed information about the standard range can be found in the booklet Bar peeling





## WHEN SMOOTH SURFACE IS NEEDED

Cutting the weld deposit is one of last operation during tube production. The main requirement of this application is very good surface quality, high productivity with minimum defects on the weld. We can offer a complete set of tool holders and wide range of indexable inserts for external as well as internal operations. Tools are designed for all common tube diameters.



SNMX 2512



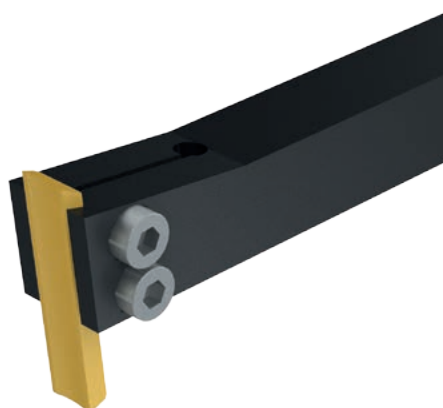
SNMX 15



PSR



SNMX 25



Detailed information about the standard range can be found in the booklet Scarfing

SCARFING

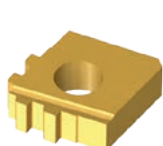




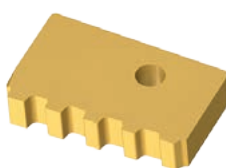
# SPECIAL THREADING

## SPECIAL THREADING TOOLS FOR TUBES INDUSTRY

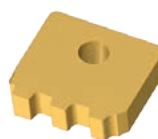
We offer a large line of threading tools for Tube producers. These tools are designed for Standard thread profiles as well as Special profiles. Precise indexable inserts are manufactured using specific technology in order to achieve unique cutting edge quality and profile precision. Our priority is customer satisfaction. Pramet Tools also offer many special tools used for tube pre-threading operations.



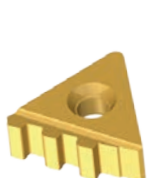
CNGA 19



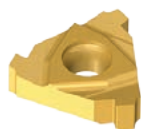
SNGX 25



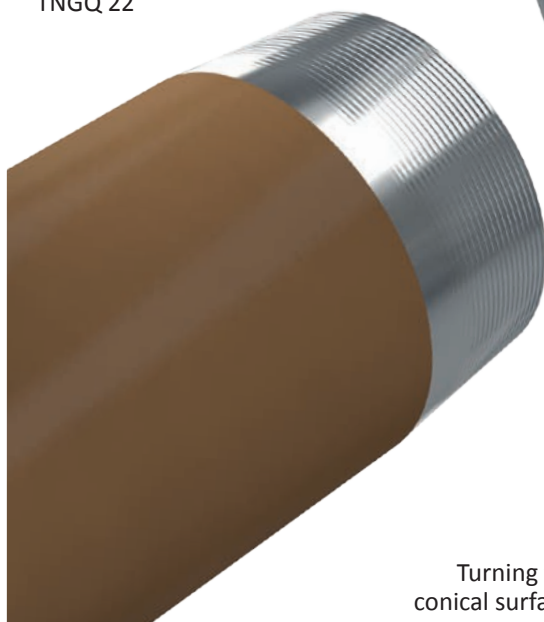
SNGX 15



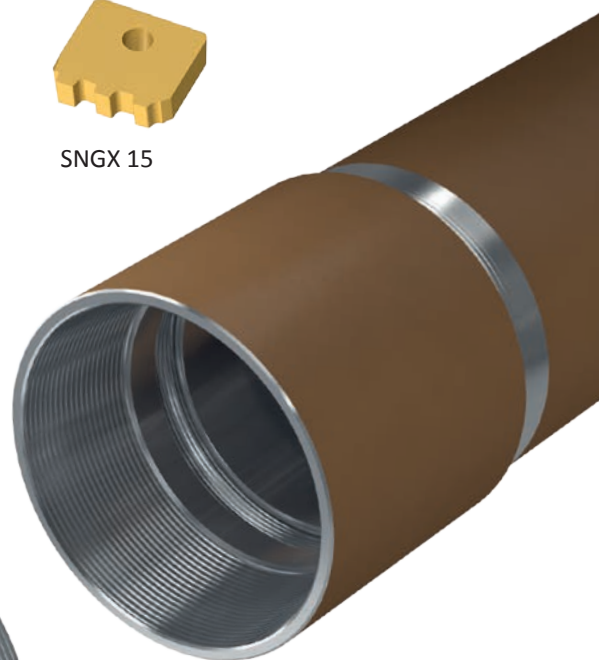
TNGQ 22



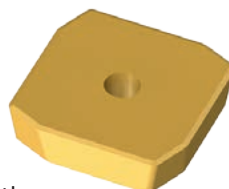
TN 22



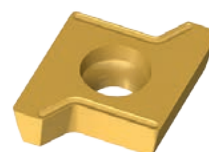
Turning the  
conical surface.



Facing  
and chamfering



SCGW 22

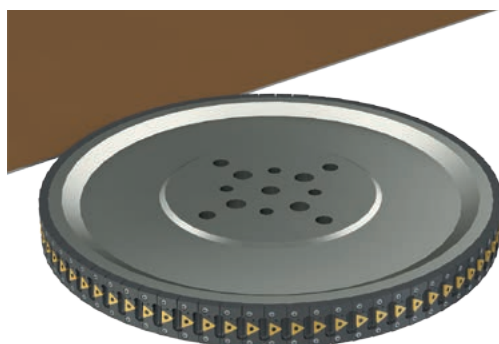


LPMX 25

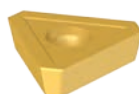


## EDGE PREPARATION FOR SAFETY WELDS

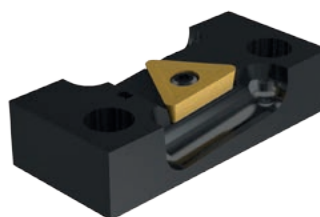
We can meet the requirements for different edge preparation depending on the application of the Tube production – including chamfering of metal sheets before forming of tubes diameters up to 1500 mm or bevelling the face of pipes. We offer solutions for a wide range of chamfer angles and chamfer widths, suitable for various machined materials and types of weld. Our range of chamfering tools are developed by our Custom tools department to fulfil any of your needs.



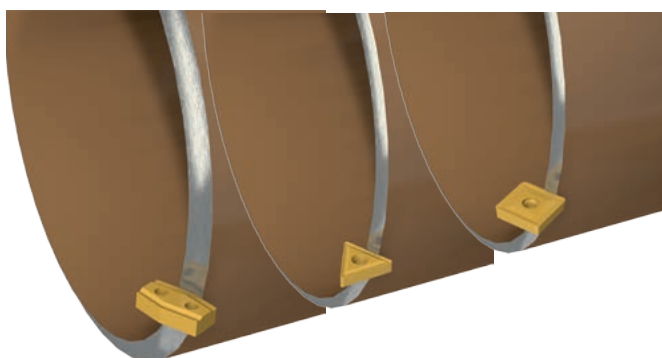
Strip edge preparation



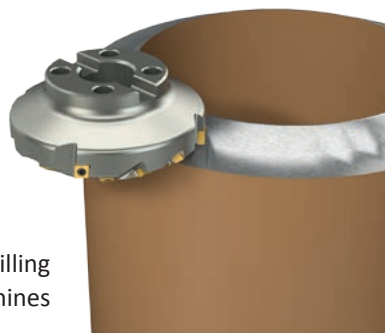
TPEW 33



Bevelling on turning machines



Bevelling on milling machines



CHAMFERING OF TUBE





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