



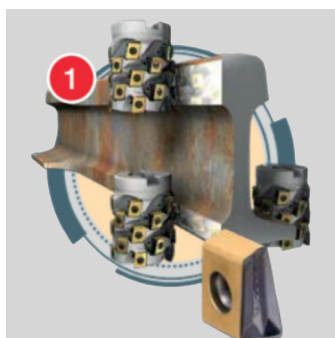
# PRECISION MACHINING FOR RAILWAY INDUSTRY

We are thinking about production differently!

# Shoulder Milling

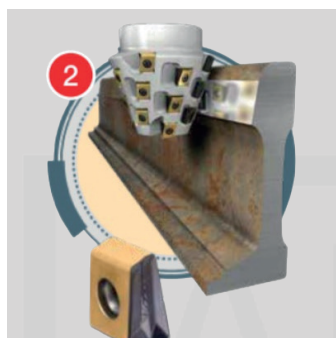
A standard line of cutters with different approach angles ranging from 22° up to 75°.

The connecting link blades are the running rails placed alongside the switch rails when in the closed position. They are designed with different profiles and holes to fit rail configurations. The connection link is usually manufactured from manganese steel and the production operation includes various types of profile milling.



### Shoulder Milling

Special T472 tapered extended flute cutters with rigidly clamped tangential four cutting edged inserts for machining top tapered track profiles, switchers and separators.



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Special T472 tapered extended flute cutters with rigidly clamped tangential four cutting edged inserts for machining top tapered track profiles, switchers and separators. A standard line of cutters with different approach angles ranging from 22° up to 75°.



### Shoulder Milling

Special concave profile extended flute cutters with rigidly clamped tangential inserts for machining top radius profiles, switchers and separators.

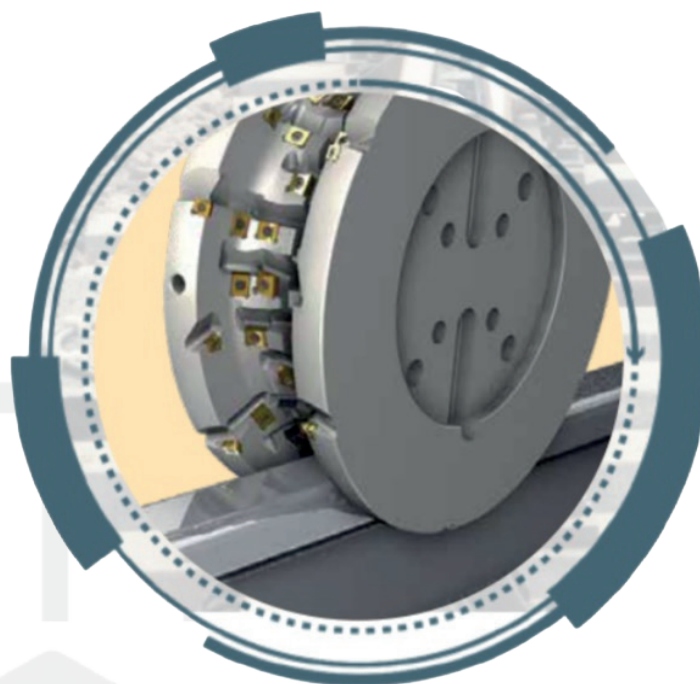


### Shoulder Milling

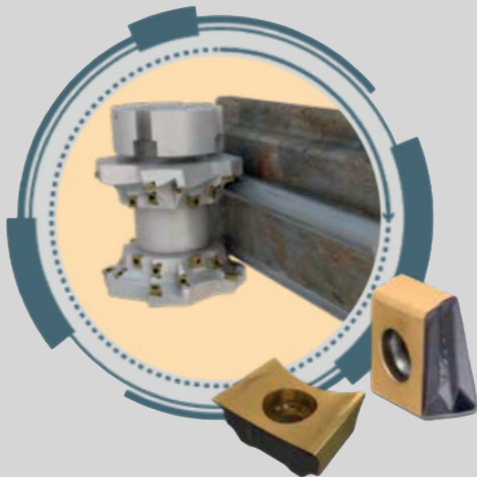
Special concave profile extended flute cutters with rigidly clamped tangential inserts for machining top radius profiles, switchers and separators.



Přemýšlíme o výrobě jinak!

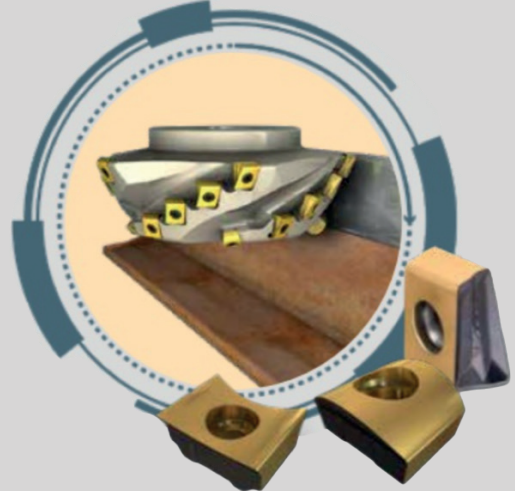


*Přemýšlíme o výrobě jinak!*



### Shoulder Milling

Special concave profile extended flute cutters with tangential inserts for switcher profiling.

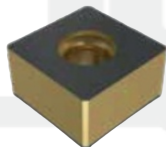


### Tapered Switcher Blade Machining

Special tapered extended flute cutters with helical flutes for high metal chip removal and rigidly clamped tangential inserts for machining top tapered track profiles, switchers and separators.

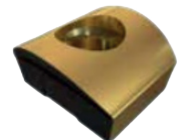
SNHX 1608

\*4R.H. +4L.H. cutting edges.



LNAT 1306...R100

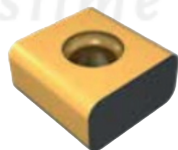
\*2 cutting edges



SNHX 160812

SNHX 160820

\*2R.H.+2L.H. cutting edges.

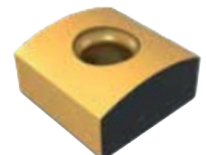


SNHX 1608...R100

SNHX 1608...R140

SNHX 1608...R200

\*2 cutting edges

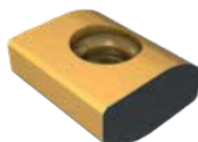


SNHX 1608...R05

SNHX 1608...R07

SNHX 1608...R10

\*2R.H.+2L.H. cutting edges.



Přemýšlíme o výrobě jinak!

Přemýšlíme o výrobě jinak!



Conventional Wheel Lathe



CNN Portal Wheel Lathe



PRWR/L 177-CA-19

PRWR/L 177-CA-1911  
CNMX 191140PRWR/L 175-CA-1911  
CNMX 191140

*Přemýšlíme o výrobě jinak!*



*Přemýšlíme o výrobě jinak!*



**LNMX 191940-F3P**  
For finish operation



**LNMX 191940-WF**  
For semi-finish operation



**LNMX 191940-WM**  
For medium/semi-finishing operation



**LNMX 1919-WKR**  
For roughing operations  
- Unstable conditions

**CNMX 1911-M3P**  
For medium Operations



**LNMX 301940-WM**  
For medium/semi-fining operations



**LNMX 301940-WR**  
For roughing operations



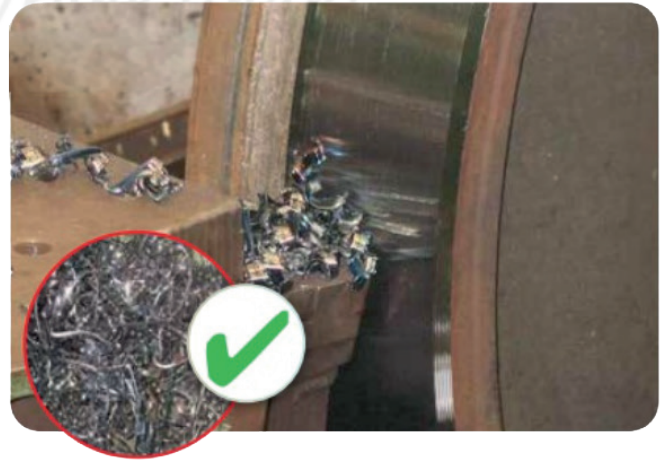
**LNMX 301940-WKR**  
For roughing operations  
- Unstable conditions



### Chip Formation at the Rim Curve



One of the common problems in wheel re-turning is chip formation during the back turning operation at the rim zone.



The WM chipformer (on the 30 mm insert) has been specifically designed to prevent long chip formation during rim turning.

*Přemýšlíme o výrobě jinak!*

**Face Milling**

Range: Ø50 - 315 mm.

Cutter: S0F45 D...-R18

Insert: S845 SNMU 1806ANR-MM

Insert: ONMU 070610-TR-MM

Helido 45° face milling cutters carry square or octagonal double-sided inserts with 8 and 16 cutting edges; recommended for roughing operations at an 8 mm depth of cut up.

**Shoulder Milling**

Range: Ø50 - 160 mm.

Cutter: S890 FSN D...- R13

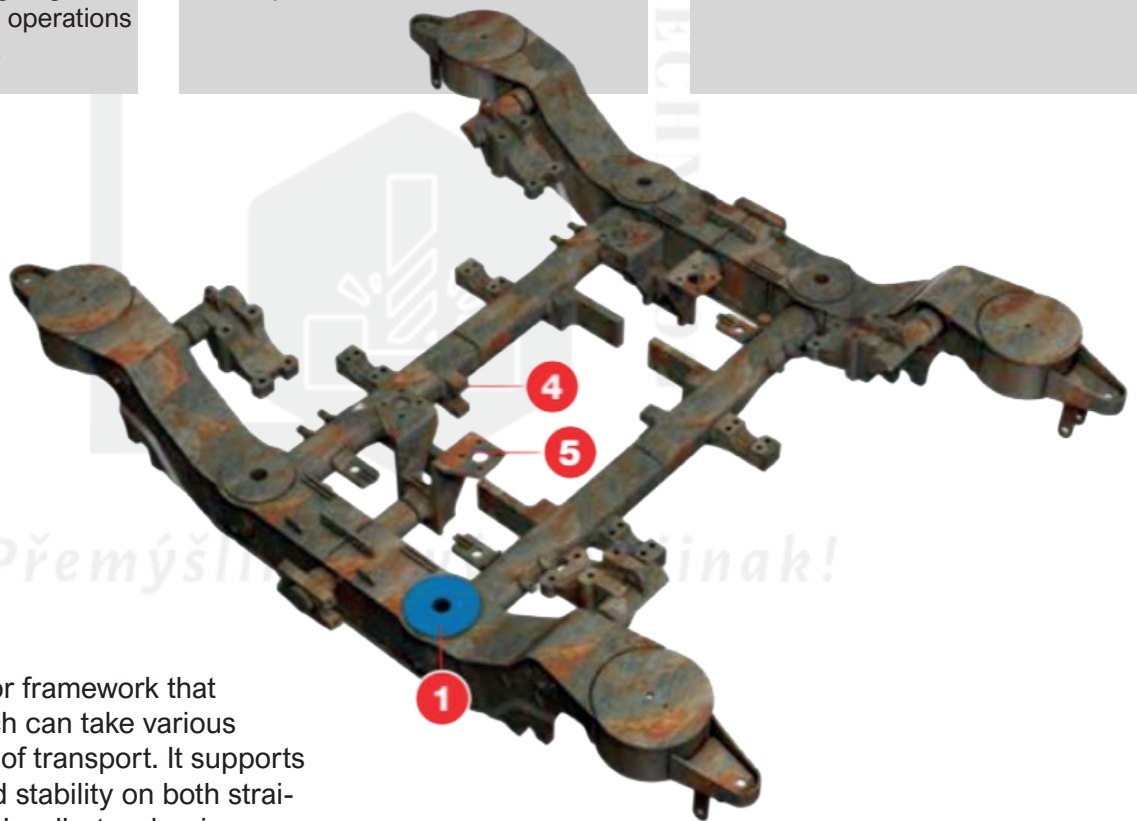
Insert: S890 SNMU 1305 PNTR

Helido S890 face mills with square double-sided inserts; recommended for general milling applications at a 9 mm depth of cut.

**Drilling**

Range: Ø6 - 32.9 mm

The SUMOCHAM drill family is the most productive and profitable solution in the hole making industry.



Side A

The Bogie is a chassis or framework that carries a wheelset, which can take various forms in various modes of transport. It supports the rail vehicle body and stability on both straight and curved tracks. Usually, two bogies are fitted to each carriage, wagon, or locomotive. Some cars are designed for heavy loads and have more axles per bogie. The bogie frames are usually fabricated from carbon steel.

*Přemýšlíme o výrobě jinak!*

**Shoulder Milling**

Range: Ø25 - 250 mm

Cutter: T490 ELN/FLN D...-13

Insert: T490 LNMT 1306 PNTR

The HELITANG T490 Line is recommended for shouldering and slotting operations at a 12 mm depth of cut.

**Drilling**

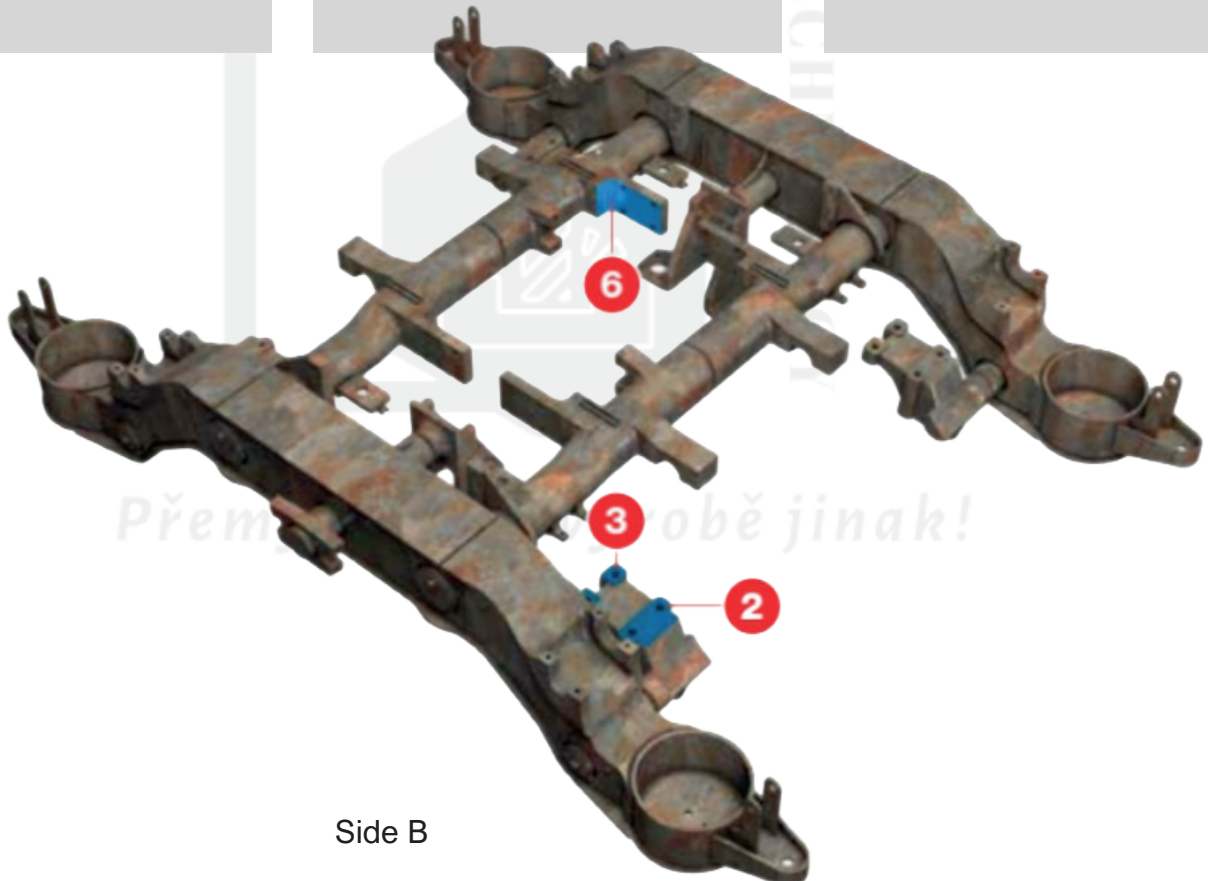
Range: Ø12 - 80 mm

Drills designed with spiral coolant channels and a strong cutter body with excellent resistance to torsion and very efficient chip evacuation.

**Rough Shoulder Milling**

Range: Ø25 - 100 mm

P290 is a family of extended flute cutters carrying inserts with 2 serrated cutting edges for rough and finishing operations and high overhang machining. The HL straight edged inserts are recommended for finishing operations.



Side B

Přemýšlíme o výrobě jinak!