

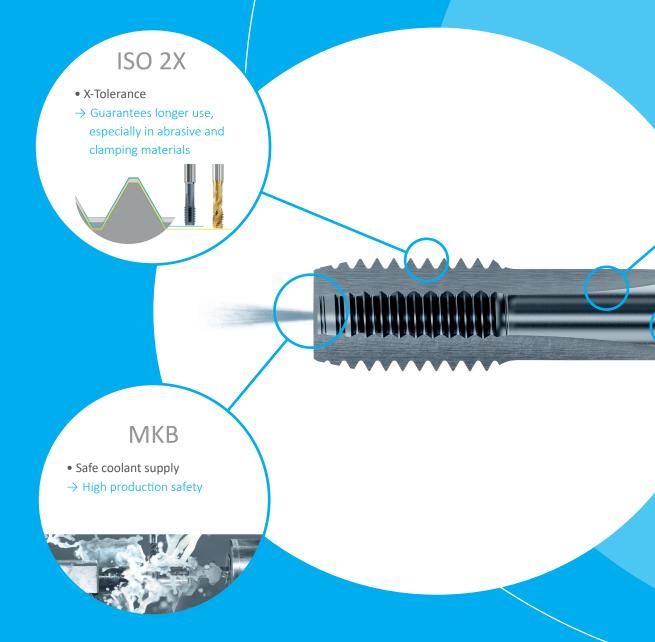


# **NEW PRODUCTS**





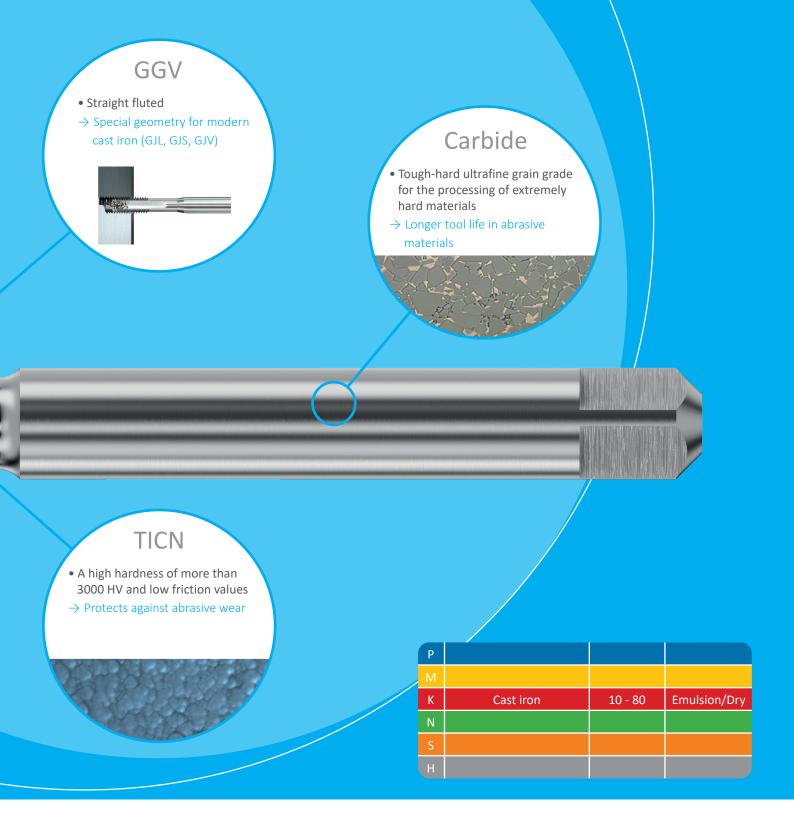
# NORIS TWIN GGV MKB HM TICN



PORTFOLIO INCLUDES COMMON METRIC DIMENSIONS M4 to M16 (ISO2X) M12x1,5 to M20x1,5 (ISO2X)

- Special designed geometry for cast materials
- Reduced chamfer length for short thread run out
- High quality basic material
- With internal coolant supply
- Higher number of flutes





#### **ADVANTAGES**

- High cutting speed
- High production stability
- Increased wear resistance
- Reduced cold welding and friction
- Solid carbide cutting material, more flutes and optimized geometry for more tool life in abrasive cast materials
- Increased tolerance for more tool life in abrasive or clamping workpiece materials
- TICN coating for less wear and longer tool life

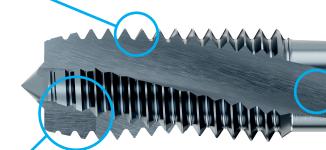
- Long machine run
  - → higher productivity
- Increase production safety
  - → reduce machine down time

# NORIS SL15 TI+ HSSE TICN CS

# ISO 2X

- X-Tolerance
- → Guarantees longer use, especially in abrasive and clamping materials





# FORM C + SPIRAL POINT "S"

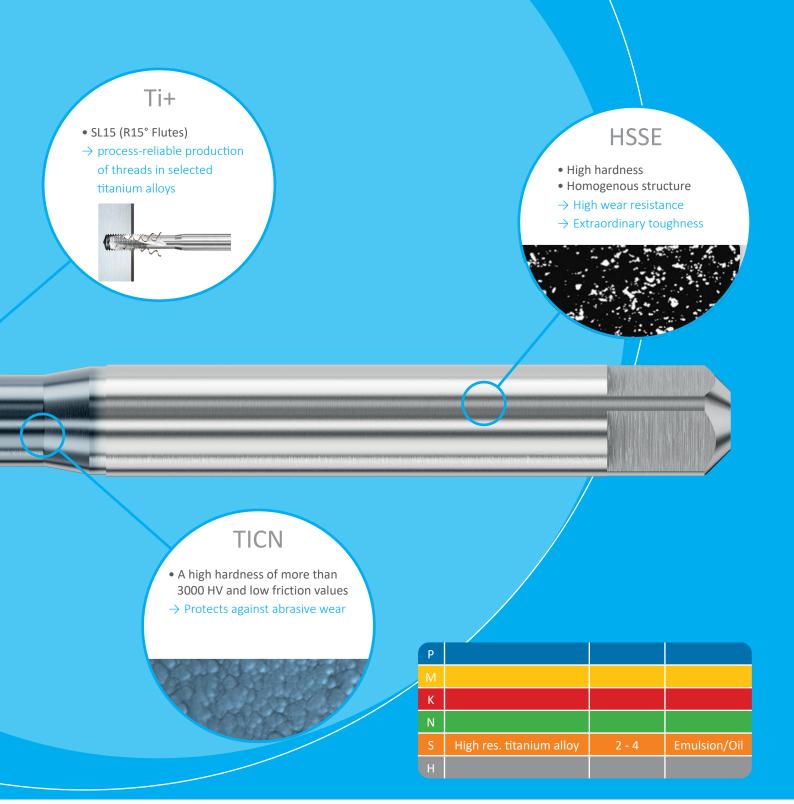
 Helix reduction in the chamfer, caused by the spiral point, ensures short broken chips



PORTFOLIO INCLUDES COMMON METRIC DIMENSIONS M3 to M10 (ISO2X)

- New developed tap geometry Ti+ for processreliable thread production in selected titanium alloys
- Helix reduction in the chamfer, caused by the spiral point, ensures short broken chips
- Stable cutting flutes SL15 (R15° flutes) for 2xD thread depth





### **ADVANTAGES**

- High tool life
- Reduced problems with chips
- High surface quality
- Additional spiral point for tighter rolled and smaller broken chips
- Large clearance angle prevents cold welding
- High process reliability and excellent thread quality

- Less tool costs
  - → less investment
- Long machine run
  - $\rightarrow$  higher productivity
- High surface quality
  - → better image



# NORIS SF R15 UNI MKB 2xD K20

# Chamfer

• flexible over front part





## **MKB**

- Safe coolant supply
- → High production safety



# PORTFOLIO INCLUDES COMMON METRIC DIMENSIONS

M M3 to M16

MF M5x0,5 to M16x1,5

UNC Nr.10 to 3/4 UNF Nr.10 to 3/4 G 1/8 to 1" NPT 1/16 to 2"

- Universal use possible
- Special developed carbide
- Chamfering section over front part
- Special flute design R15° for smooth milling



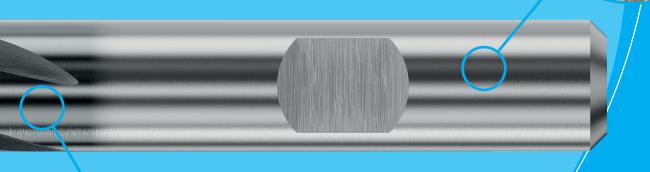
## UNI

- SFR15 (R15° Flutes)
- → In ranges across dimensions, specific pitch



## Carbide

- Tough-hard ultrafine grain grade for the processing of extremely hard materials
- → Longer tool life in abrasive materials



## ACR

- Nanostructured Multilayer coating
- ightarrow High cutting edge stability
- → Thermal shock resistant
- → long lifetime

	Р	Steel <43 HRc	100 - 200	0,04 x P
	М	Stainless steels <33HRc	100 - 200	0,035 x P
	K	Cast iron	100 - 200	0,045 x P
	N	Non ferrous materials	100 - 300	0,06 x P
	S	High res. titanium alloy	40 - 80	0,025 x P
	Н			

#### **ADVANTAGES**

- Right- and left hand threads
- Blind- and through holes
- Best chip evacuation
- Smooth milling thanks to flutes with 15° helix angle
- Diameter-independent chamfering of the core hole with face part possible
- For the specific pitch
- Cross-dimension profile design for more flexibility
- Time savings by reducing the required number of tool variants

- For universal applications
  - → higher flexibility
- High production safety
  - → avoid extra work and extra costs
- Reduce tool stock
  - → less investment

# NORIS NES-Z MKBR + NORIS HM-SP ACR



- Tough-hard ultrafine grain grade for the processing of extremely hard materials
- → Longer tool life in abrasive materials





## UNI

- Universal geometry
- ightarrow In ranges across dimensions pitch rage depending on insert



# PORTFOLIO INCLUDES COMMON METRIC DIMENSIONS

M M12 to M36

MF Depending on gradient range UN Depending on gradient range

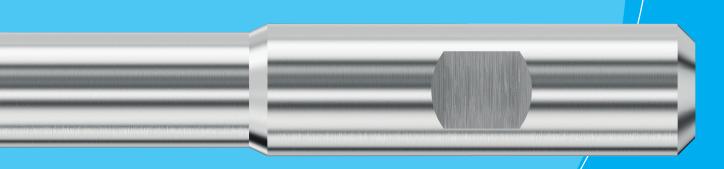
G 1/4 to G 1 1/8

- Exchangeable carbide face instert
- Holder out of tool steel (2xD and 2,5xD)
- Universal geometry



## **ACR**

- Nanostructured Multilayer coating
- → High cutting edge stability
- → Thermal shock resistant
- → long lifetime



# **MKBR**

- Safe coolant supply
- → High production safety



Р	Steel <43 HRc	40 - 250	0,04 x P
М	Stainless steels <33HRc	30 - 120	0,03 x P
K	Cast iron	30 - 120	0,06 x P
N	Non ferrous materials	80 - 250	0,065 x P
S	High res. titanium alloy	30 - 100	0,02 x P
Н	Hardened steels <63HRC	30 - 60	0,02 x P

## **ADVANTAGES**

- Vibration-free
- Thread sizes ≥ M12, MF, UN and G
- One holder fits different inserts (60° and 55°)
- High flexibility
- High production safety
- Easy handling
- Consistently high path feeds reduce cost-intensive machining times
- Highest flexibility and perfect workpiece quality for an economical and reliable thread production

- Reduce stock keeping
  - → less investment
- Avoid work piece damage
  - → higher productivity

# NORIS TOOL-SERVICE



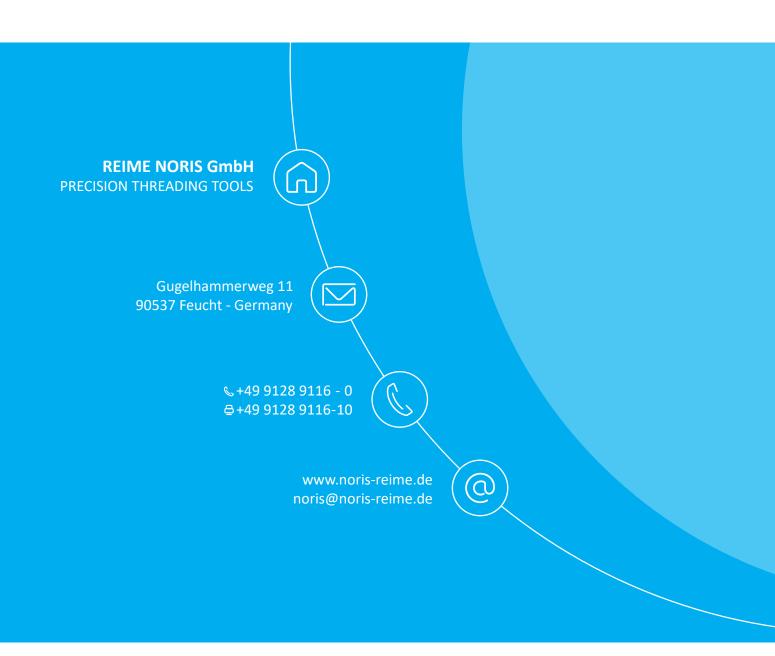
Reduce your tool costs and extend the lifetime of your tools with the NORIS TOOL SERVICE.

Your precision regrinding service for highest quality demands.



- 1 Tool(s) are damaged or worn out
  - 2 Ask for our TOOL SERVICE BOX
    - 3 Fill our TOOL-SERVICE-BOX
    - 4 Send in the TOOL SERVICE BOX
  - 5 The NORIS TOOL SERVICE ensures optimum preparation of your tools including coating.
- 6 We will return the TOOL-SERVICE-BOX to you







**NEW CATALOGUE**THREADING TECHNOLOGY