

NPA

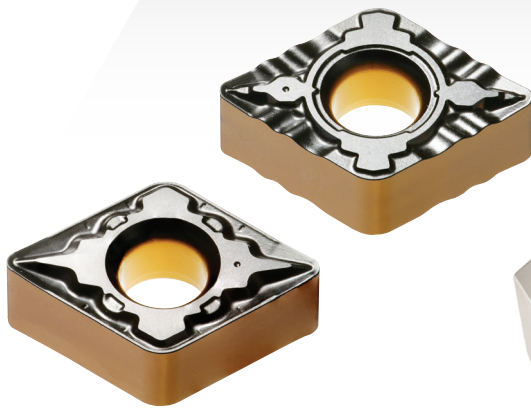
New Product Announcement No. 2019-25



RHINOX TURN

XNMG 70° LINE

70 Degree Corner Angle
XNMG Inserts and Holders



KEY POINT

TaeguTec has launched a new RHINO-X-TURN line, the XNMG 70 degree corner angle insert and holder line.

RHINO-X-TURN's XNMG insert has the advantages of both the CNMG and DNMG inserts, not only does it keep their advantages but the new line overcomes their shortcomings as well. The new **RHINO-X-TURN** line of inserts and holders is a multi-functional line that can be used for internal and external turning, face turning and profile turning. Developed under rigorous testing, the XNMG inserts demonstrate good chip control and stable tool life in a wide range of operations from medium to finish turning, and the line enables good surface finish with less vibration due to low cutting forces. In addition, the insert's thickness increases rigidity and stability with a wide support surface for excellent performance in automotive parts machining. For longitudinal turning, the TXJNR/L holder with a 93° entering angle is mainly used, while the neutral type TXQNR/L holder is particularly used for both longitudinal and face turning.

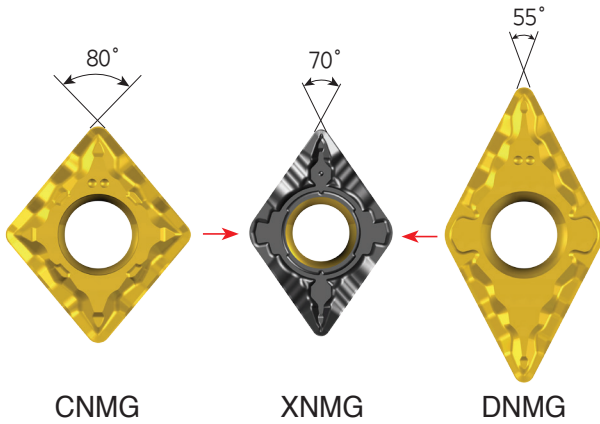
Also in internal turning, this new insert demonstrates good performance with good chip control and low cutting force. A further advantage is its ability to machine complicated shapes like internal chamfers without replacing the holder, which means improved productivity.

Features

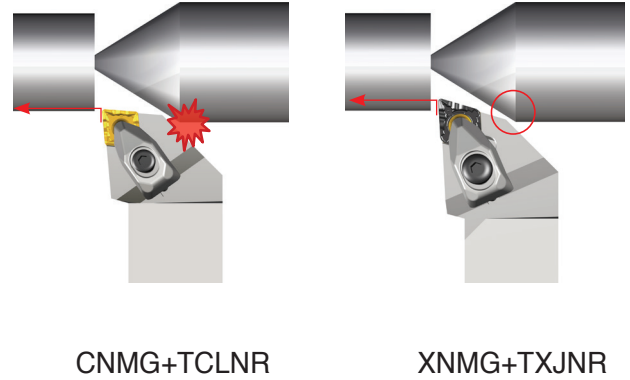
- Multiple applications available for internal turning, longitudinal, face turning and profile turning
- XNMG insert reduces customer inventory with the integrated shape of both the CNMG and DNMG inserts
- Optimally designed for automotive parts such as bearings due to its wide cutting range and good chip control from medium to finishing operations
- When compared to CNMG standard inserts:
 - Smaller corner angle for excellent chip control, good surface finish with low cutting force
 - Profiling capable up to a 15° ramping angle
 - Deeper approach in the live center
- When compared to DNMG standard inserts:
 - Simultaneous longitudinal turning and face turning possible
 - Enhanced insert strength by increased corner angle and stable longer tool life
- TT8105, TT8115, TT8125 are bi-colored CVD grades for improved machining performance



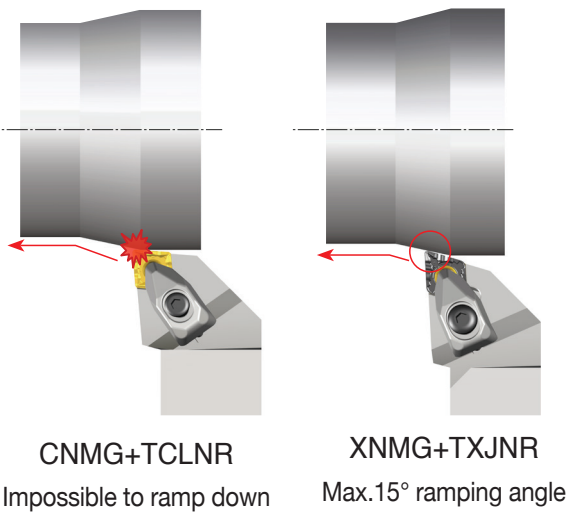
70° corner angle insert



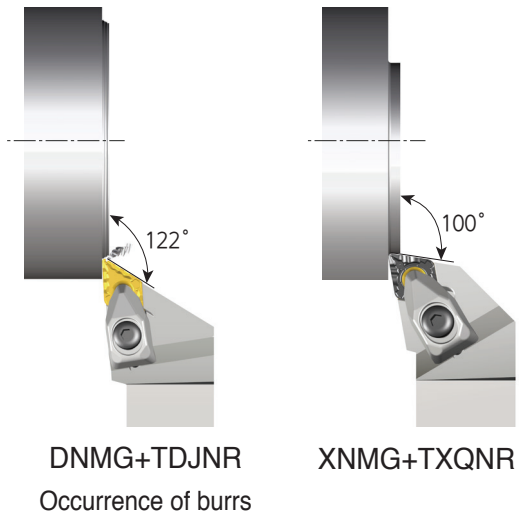
Easy access to the live center



Advantage during profile turning



Advantage during face turning



New chip breaker designation

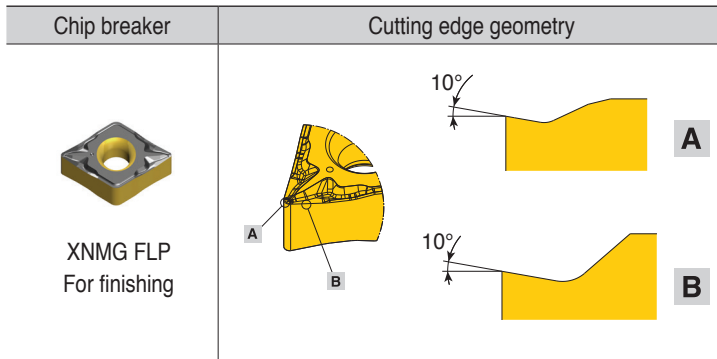
F	G	P
1	2	3

1 Applications	
F	Finishing
M	Medium
R	Roughing

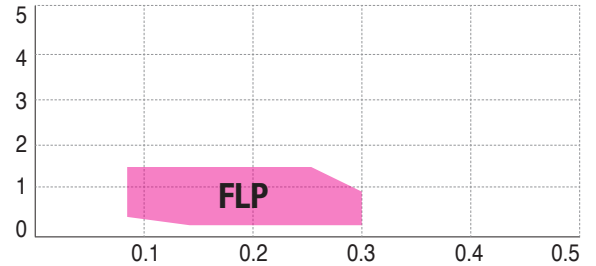
2 Cutting conditions	
L	Light cutting
G	General cutting
T	Tough cutting

3 Workpiece materials	
P	Steel
M	Stainless steel
K	Cast iron
S	High temperature alloys

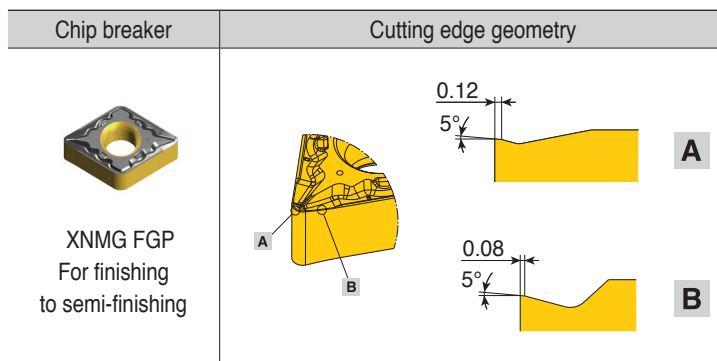
XNMG chip breaker geometries and chip control range



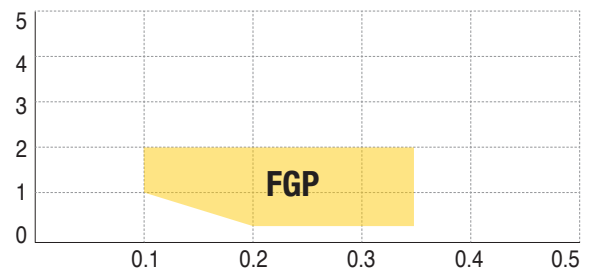
Depth of cut (mm)



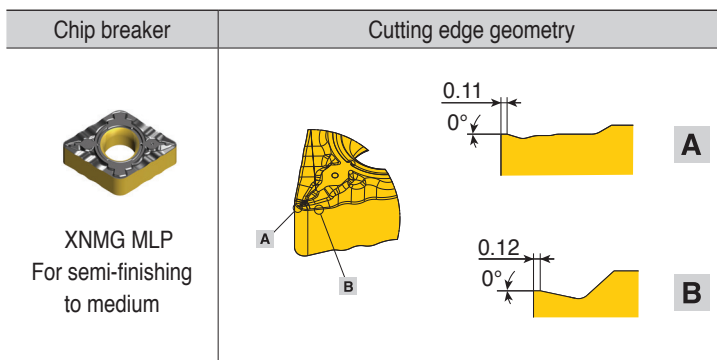
- Insert : XNMG 090404 FLP
- Cutting speed (V) : 200m/min
- Material : AISI 4140 (HB230-260)



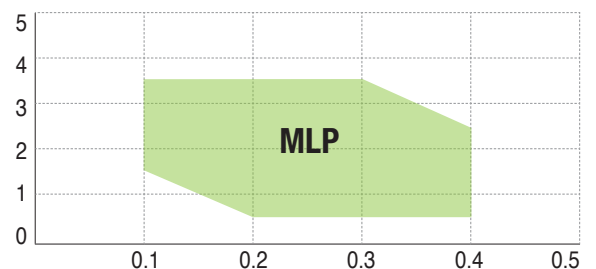
Depth of cut (mm)



- Insert : XNMG 110508 FGP
- Cutting speed (V) : 200m/min
- Material : AISI 4140 (HB230-260)



Depth of cut (mm)



- Insert : XNMG 110508 MLP
- Cutting speed (V) : 200m/min
- Material : AISI 4140 (HB230-260)

Availability

In stock

Price

Available in the GAL system

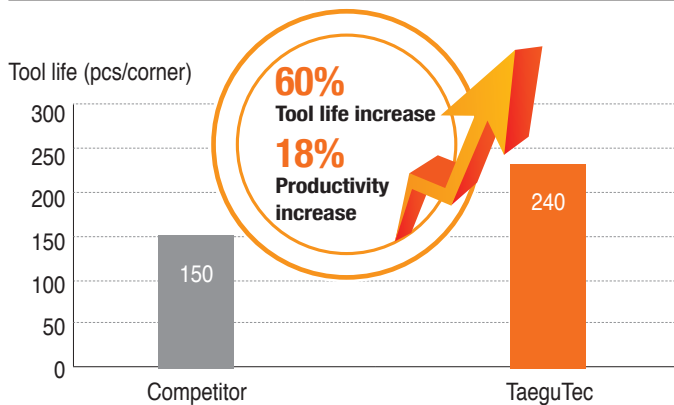
Sincerely,
TaeguTec



Bae Dae-wi
Non-Rotating General PM

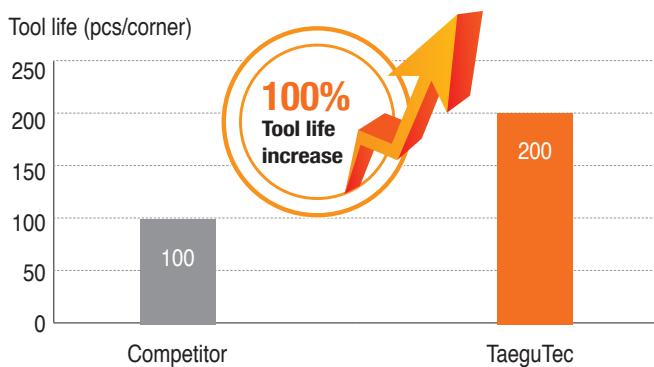
Case study 1 - Compared to CNMG 12 insert

		Competitor	TaeguTec
Part name		Gear	
Material		AISI 5132 / DIN 1.7033 34Cr4	
Operation		External and face turning	
Insert		CNMG 120408 CVD coated	XNMG 110508 MLP TT8115
Cutting speed	V (m/min)	340-375	340-375
Feed rate	f (mm/rev)	0.2-0.25	0.25-0.28
Depth of cut	ap (mm)	0.5-1.0	0.5-1.0
Coolant		Wet	Wet
Tool life (pcs/corner)		150	240



Case study 2 - Compared to DNMG 15 insert

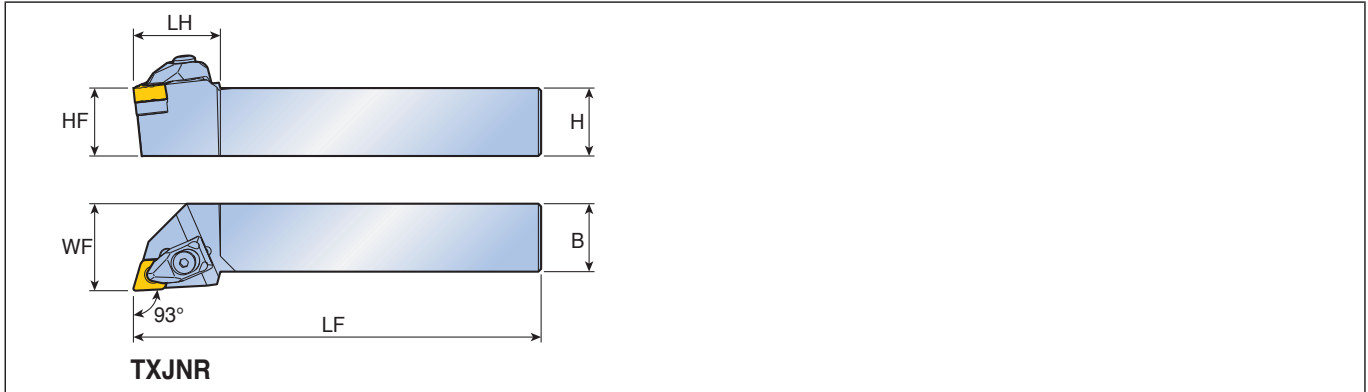
		Competitor	TaeguTec
Part name		Coupling	
Material		AISI 1045	
Operation		External turning	
Insert		DNMG 150608 cermet	XNMG 110508 MLP TT8125
Cutting speed	V (m/min)	300	300
Feed rate	f (mm/rev)	0.25	0.25
Depth of cut	ap (mm)	0.5	0.5
Coolant		Wet	Wet
Tool life (pcs/corner)		100	200



TXJNR/L



T-Holders



Approach angle	Designation	Dimension (mm)						Insert
		H	HF	B	LF	LH	WF	
 93°	TXJNR/L 2020 K0904	20	20	20	125	25	25	XNMG 0904...
	2525 M0904	25	25	25	150	25	32	
	2020 K1105	20	20	20	125	32	25	XNMG 1105...
	2525 M1105	25	25	25	150	32	32	

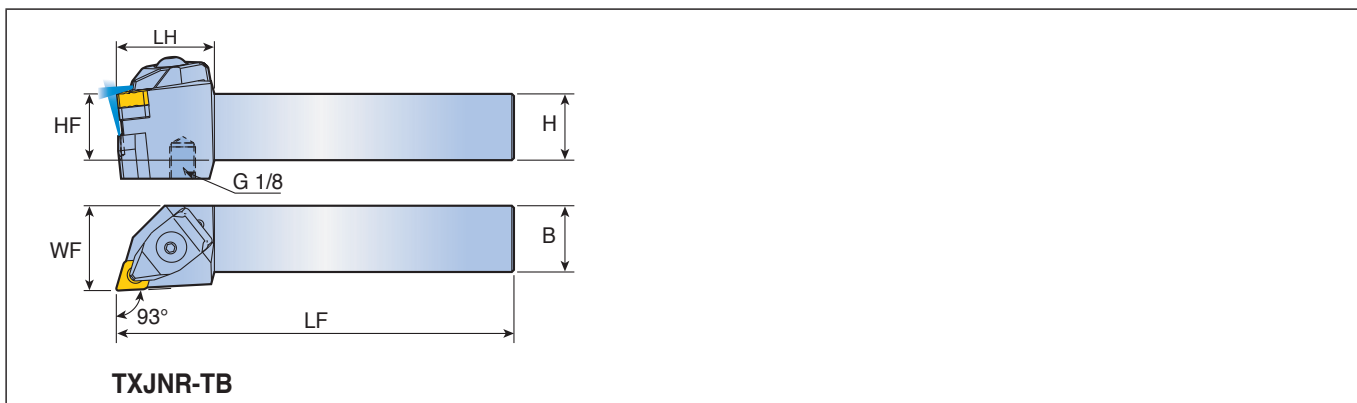
Spare parts

Designation	Clamp	Clamp screw	Spring	Shim	Shim screw	Wrench	
...0904	DLM 2.5-NX	DLS 3	DSP 3	TSX 2.73	SO 40085I	L-W 2.5	T 15
...1105	DLM 3.5-NX	DLS 4	DSP 4	TSX 3.53	SO 50090I	L-W 3	T 20

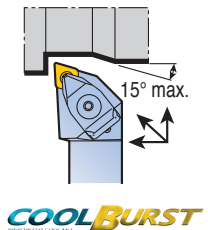
TXJNR/L-TB



T-Holders with high-pressure coolant



Approach angle	Designation	Dimension (mm)						Insert
		H	HF	B	LF	LH	WF	
93°	TXJNR/L 2525 M0904-TB	25	25	25	150	30	32	XNMG 0904...
	2525 M1105-TB	25	25	25	150	37	32	XNMG 1105...



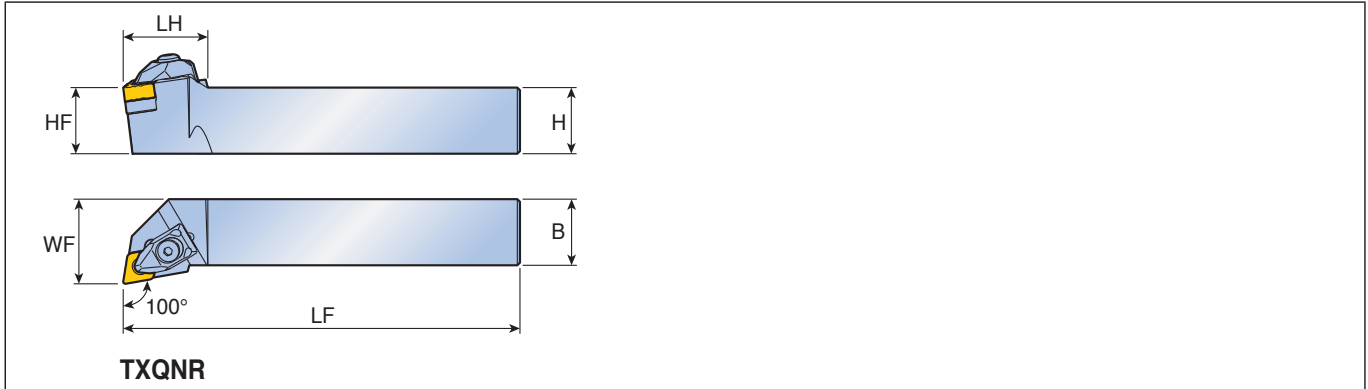
Spare parts

Designation	Clamp	Clamp screw	Spring	Upper O-ring	Lower O-ring	Shim	Shim screw	Wrench	
...0904	DLM 3-NX-TB	BH M4x0.7x 16-TB	DSP 3	O-RING ID4.47x 1.78	O-RING ID6.07x 1.78	TSX 2.73	SO 40085I	L-W 3	T 15
...1105	DLM 3.5-NX-TB	BH M5x0.8x 21-MO-TB	DSP 4	O-RING ID5.28x 1.78	O-RING ID7.59x 2.62	TSX 3.53	SO 50090I	L-W 3	T 20

TXQNR/L



T-Holders



Approach angle	Designation	Dimension (mm)						Insert
		H	HF	B	LF	LH	WF	
 100°	TXQNR/L 2020 K0904	20	20	20	125	25	25	XNMG 0904...
	2525 M0904	25	25	25	150	25	32	
	2020 K1105	20	20	20	125	30	25	XNMG 1105...
	2525 M1105	25	25	25	150	32	32	

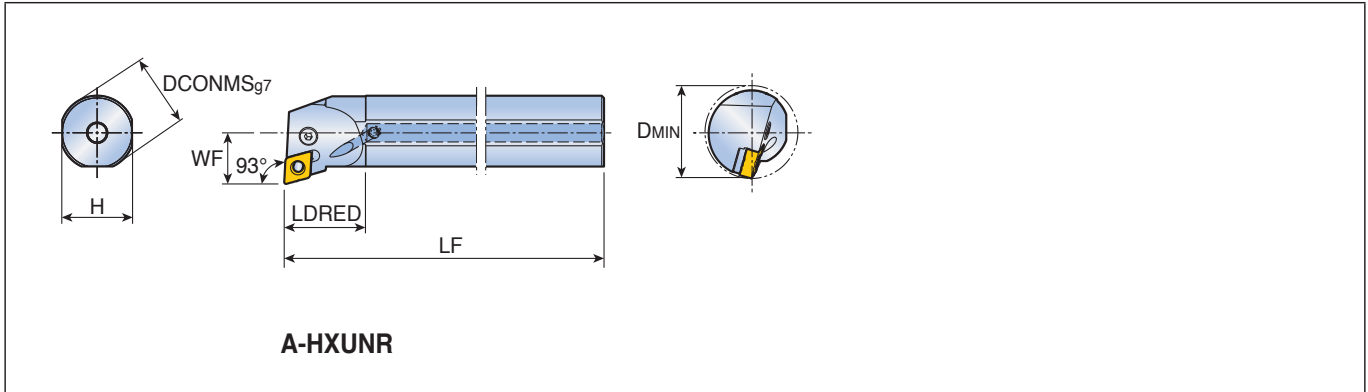
Spare parts

Designation	Clamp	Clamp screw	Spring	Shim	Shim screw	Wrench	
...0904	DLM 2.5-NX	DLS 3	DSP 3	TSX 2.73	SO 40085I	L-W 2.5	T 15
...1105	DLM 3.5-NX	DLS 4	DSP 4	TSX 3.53	SO 50090I	L-W 3	T 20

A-HXUNR/L



Hook lever type boring bars



Approach angle	Designation	Dimension (mm)						Insert
		DCONMS	H	LF	LDRED	WF	DMIN	
93°	A32S HXUNR/L 1105	32	30	250	35	22	40	XNMG 1105...

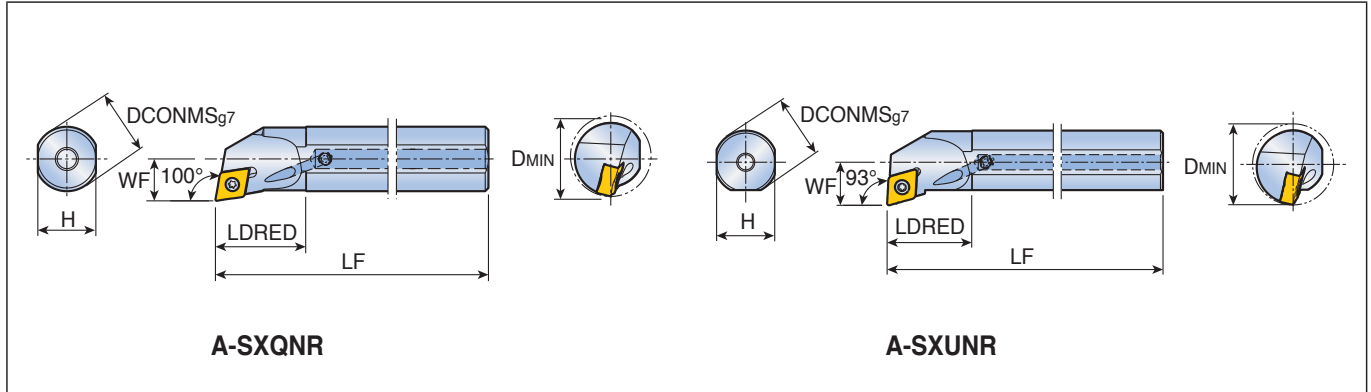
Spare parts

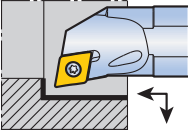
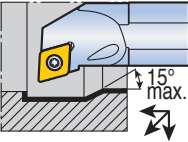
Designation	Lever	Lever screw	Shim	Shim pin	Wrench
...1105	LCL 11-NX	LCS 4S	LSX 3.52B	LSP 4	L-W 3

A-SXQNR/L A-SXUNR/L





Screw type boring bars



Approach angle	Designation	Dimension (mm)						Insert
		DCONMS	H	LF	LDRED	WF	DMIN	
100° 	A16Q SXQNR/L 0904	16	15	180	24.5	11	20	XNMG 0904...
	A20Q SXQNR/L 0904	20	18	180	28	13	25	
	A20Q SXQNR/L 1105	20	18	180	28	13	25	XNMG 1105...
93° 	A25R SXUNR/L 1105	25	23	200	33.4	17	32	

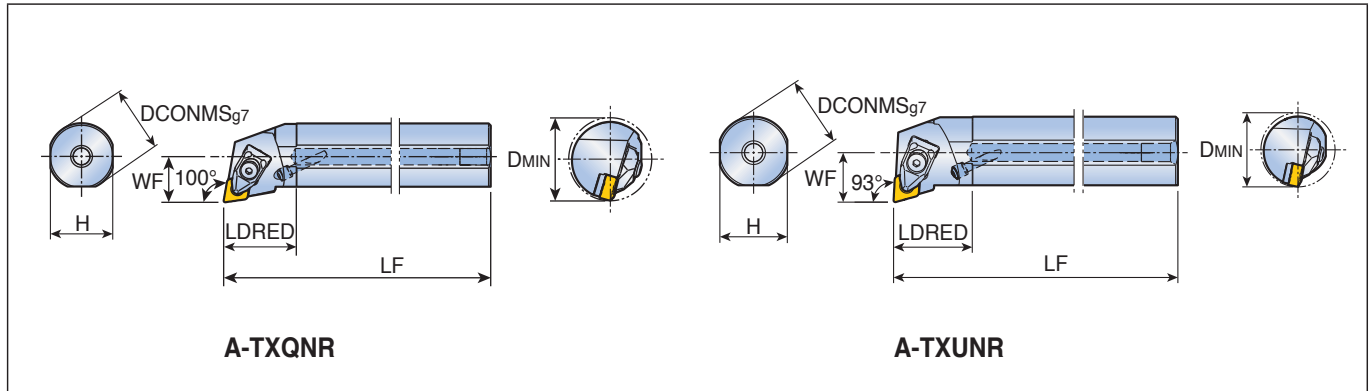
Spare parts

Designation	Screw	Wrench			
					
...0904	TS 30080I/HG	T 9			
...1105	TS 40G110I	T 15			

A-TXQNR/L A-TXUNR/L



T-Holder type boring bars



Approach angle	Designation	Dimension (mm)						Insert
		DCONMS	H	LF	LDRED	WF	DMIN	
100°	A25R TXQNR/L 1105	25	23	200	33.4	17	32	XNMG 1105...
	A32S TXQNR/L 1105	32	30	250	35	22	40	
93°	A32S TXUNR/L 1105	32	30	250	35	22	40	

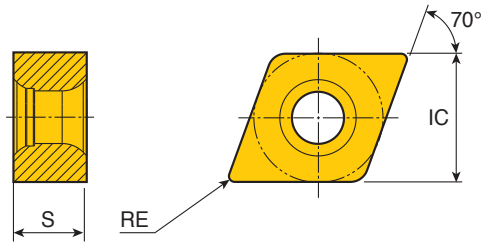
Spare parts

Designation	Clamp	Clamp screw	Spring	Shim	Shim screw	Nozzle	Wrench	
A25R...1105	DLM 3.5-NX	DLS 4	DSP 4	-	-	NZ 62	L-W 3	-
A32S...1105	DLM 3.5-NX	DLS 4	DSP 4	LSX 3.52B	TS 50A105I	NZ 62	L-W 3	T 20

XNMG



Negative 70° rhombic inserts



Size	Dimension (mm)		
	IC	S	RE
09	8.7	4.76	0.4
11	11.11	5.56	0.4-1.2

Insert	Designation	ap (mm)	Feed (mm/rev)	Cermet		CVD coated										PVD coated				
				PV3010	CT3000	TT7005	TT7015	TT8105	TT8115	TT8125	TT8135	TT9215	TT9225	TT9235	TT5100	TT7100	TT5080	TT8020	TT9020	TT9080
	XNMG 090404 FLP	0.20-1.50	0.07-0.30					●	●	●										
	XNMG 110504 FGP	0.25-2.00	0.07-0.30					●	●	●										
	110508 FGP	0.30-2.00	0.10-0.35					●	●	●										
	110512 FGP	0.35-2.00	0.15-0.40					●	●											
	XNMG 110508 MLP	0.50-3.50	0.10-0.40					●	●	●										
	110512 MLP	0.60-3.50	0.15-0.50					●	●	●										

●: Standard items

KIT COLLECTIONS

These kit products are available in the format listed below.



Cat. No	Designation	Bill of materials	Qty.
6334749	KISFT-TXJNR25-XN0904 FLP	TXJNR 2525 M0904	1
		XNMG 090404 FLP TT8115	3
6334750	KISFT-TXJNR25-XN1105 FGP	TXJNR 2525 M1105	1
		XNMG 110504 FGP TT8115	3
		XNMG 110508 FGP TT8125	3
6334751	KISFT-TXJN25-XN1105 MLP	TXJNR 2525 M1105	1
		XNMG 110508 MLP TT8125	3
		XNMG 110512 MLP TT8125	3



Cat. No	Designation	Bill of materials	Qty.
6334762	KISFS-TXJNR25-XN0904 FLP	TXJNR 2525 M0904	1
		XNMG 090404 FLP TT8115	30
6334763	KISFS-TXJNR25-XN1105 FGP	TXJNR 2525 M1105	1
		XNMG 110508 FGP TT8125	30
6334764	KISFS-TXJN25-XN1105 MLP	TXJNR 2525 M1105	1
		XNMG 110508 MLP TT8125	30



Cat. No	Designation	Bill of materials	Qty.
6338390	KISFF-A-X090404FLP TT8115	XNMG 090404 FLP TT8115	100
6338391	KISFF-B-X090404FLP TT8115		300
6338393	KISFF-A-X110504FGP TT8115	XNMG 110504 FGP TT8115	100
6338394	KISFF-B-X110504FGP TT8115		300
6338395	KISFF-A-X110508FGP TT8125	XNMG 110508 FGP TT8125	100
6338396	KISFF-B-X110508FGP TT8125		300
6338398	KISFF-A-X110508MLP TT8125	XNMG 110508 MLP TT8125	100
6338399	KISFF-B-X110508MLP TT8125		300
6338400	KISFF-A-X110512MLP TT8125	XNMG 110512 MLP TT8125	100
6338401	KISFF-B-X110512MLP TT8125		300