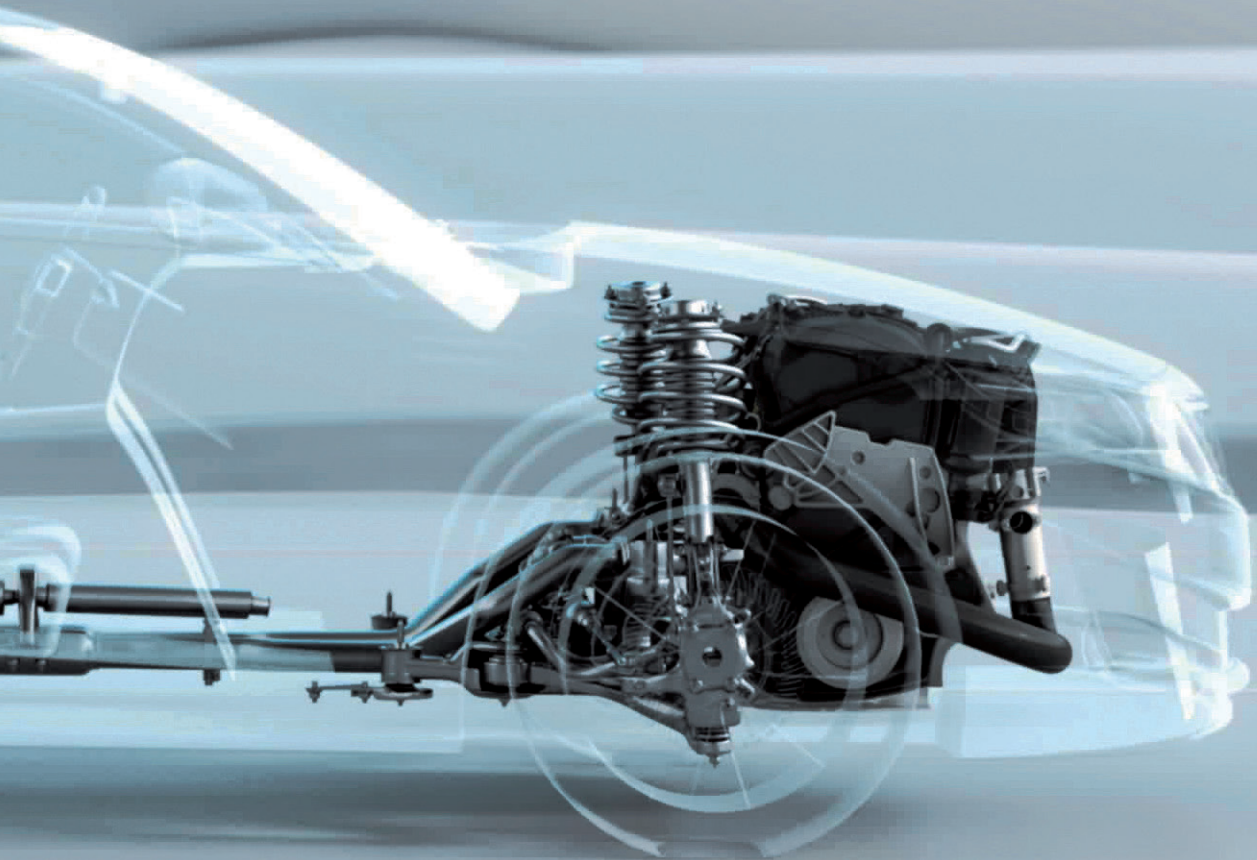


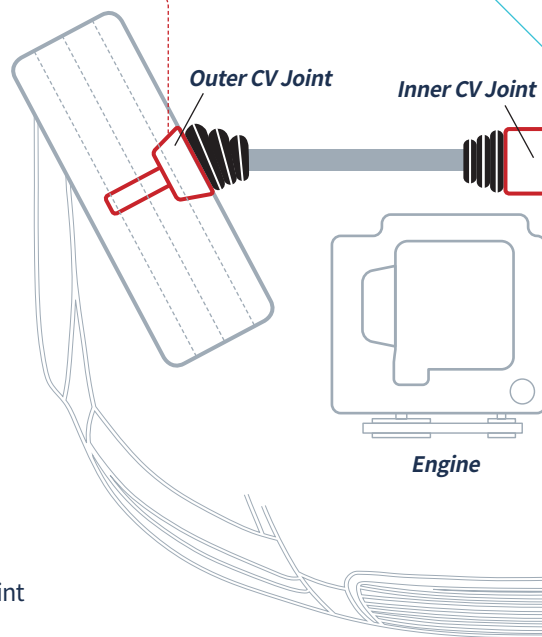
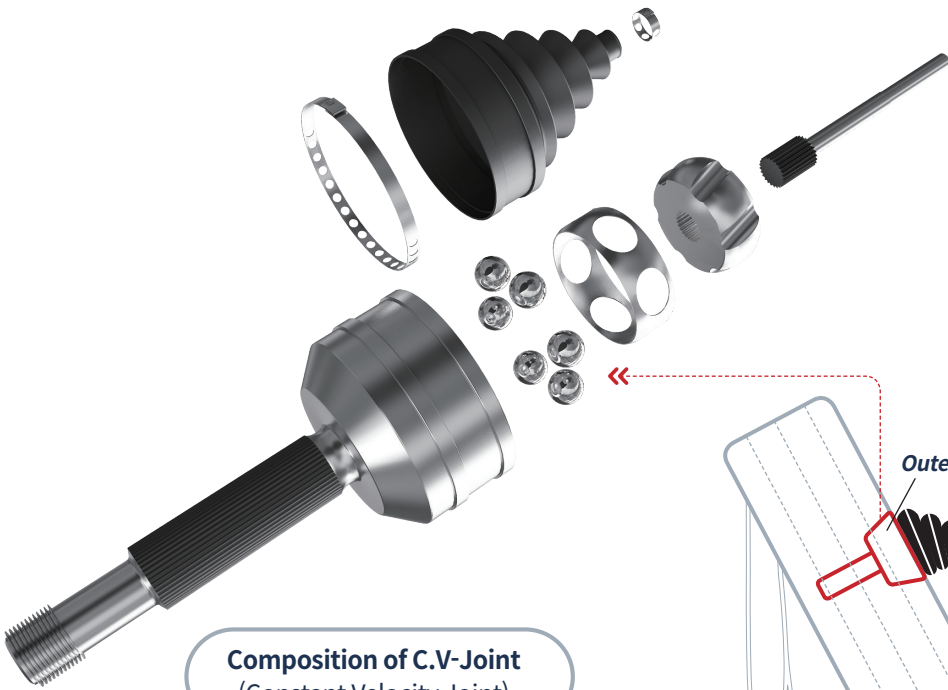
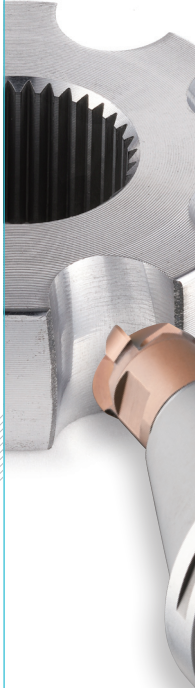
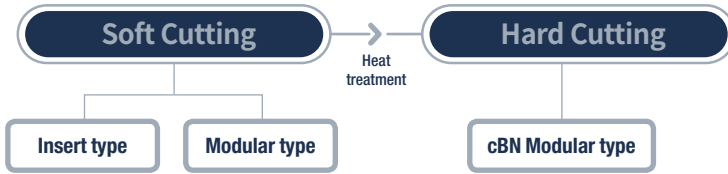
Track Milling Tools

C.V-Joint





Track Milling Tools



Composition of C.V-Joint (Constant Velocity Joint)

- > **Joint on wheel side** (Outer CV Joint)
: Outer Race, Inner Race
- > **Joint on transmission** (Inner CV Joint)
: Tripod Housing
- > **Shaft** (Drive Shaft)
: Axis connecting outer CV Joint and inner CV Joint

TRACK MILLING?

(Ball) Track milling is a type of machining to mill the path where the bearing balls pass through.



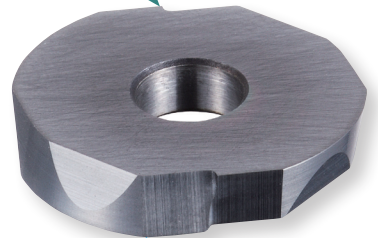
Soft Cutting

Track Milling before Heat Treatment

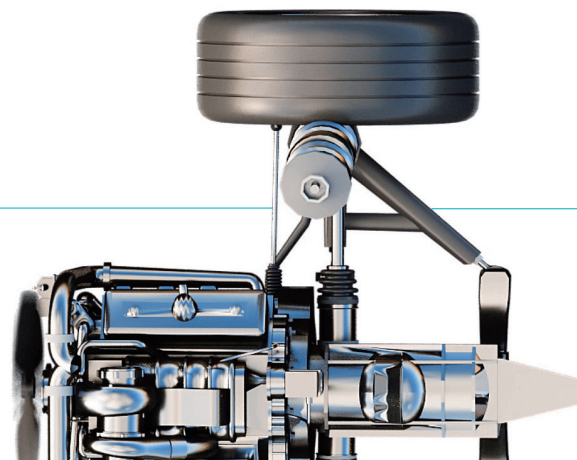
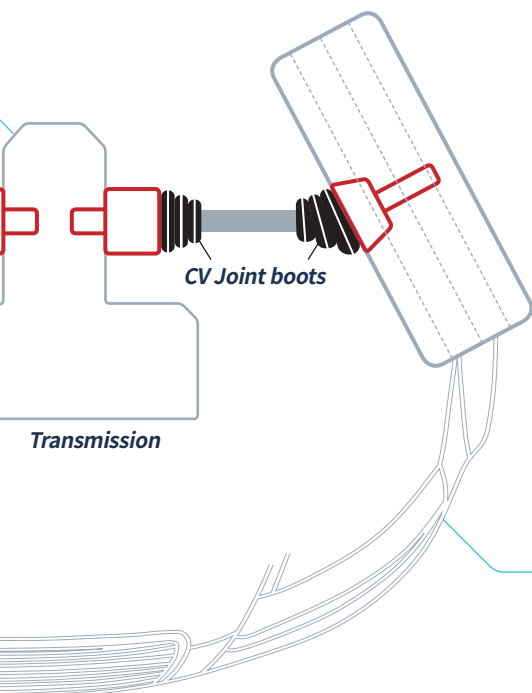
Insert type

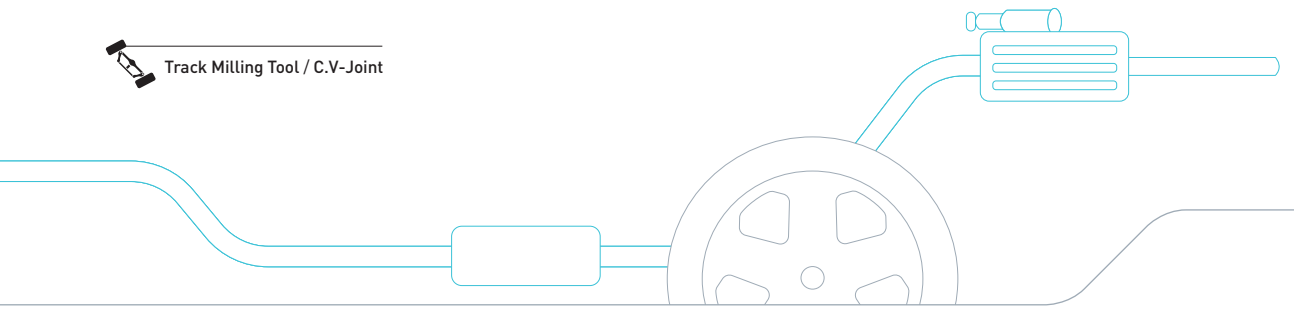
- Economical 2 cornered insert
- More economical than modular type

First corner



Second corner



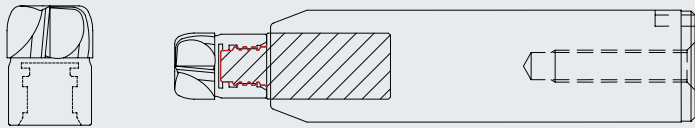


Modular type

- Screw thread clamping system designed for high rigidity and stability with increase in precision machining.
- Helical cutting edge reduces cutting load resulting in longer tool life.
- Cutting edges with 3~ 5 corners increase productivity with high feed.
- Ball or radius shape of cutting edge is applicable according to demands.

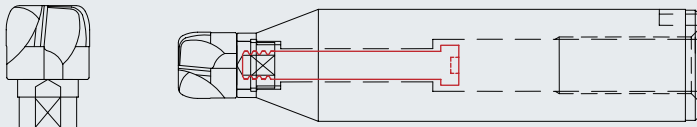
» Thread clamping

- The most stable clamping system in soft cutting.
- Clamping = a modular (a female screw) + a holder (a male screw)



» Pressed clamping

- Modular clamping with a bolt
- Clamping = a modular (a female screw) + a bolt





Hard Cutting

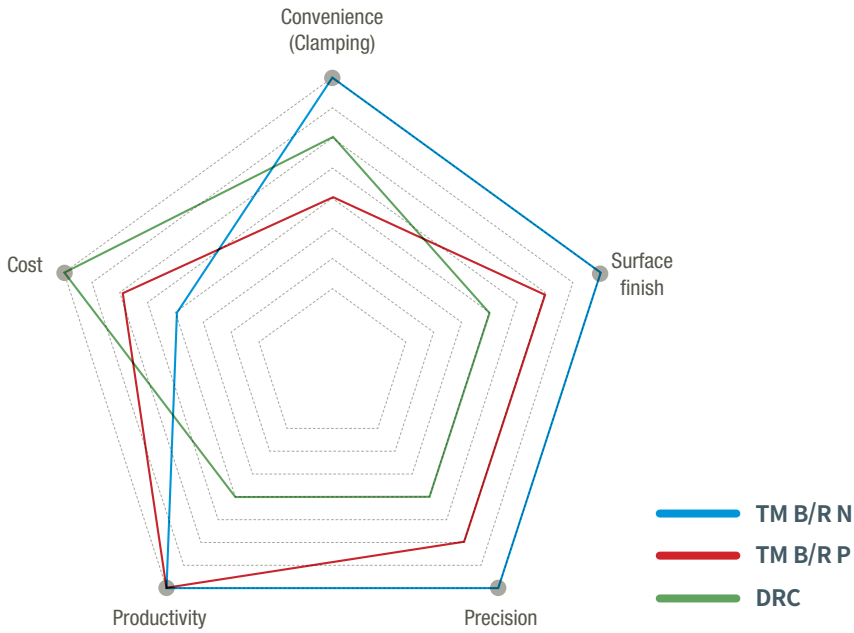
Track Milling after Heat Treatment

cBN modular type

- Carbide body with cBN cutting edge
- High precision in finishing heat-treated parts and high hardness parts



Track Milling Tools Selection Guide



>>

Type	Tools	Convenience (Clamping)	Precision	Surface finish	Productivity	Cost
Modular type	TM B/R N (Threaded)	★★★★★	★★★★★	★★★★★	★★★★★	★★
	TM B/R P (Pressed)	★★	★★★	★★★	★★★★	★★★
Insert type	DRC	★★★	★★	★★	★★	★★★★



Designation

< Modular type >

Head	TM	B	N	16.55	-	4	S
	Item TRACK MILLING	Item B = BALL R = RADIUS	Clamping system N = Threaded P = Pressed	Machining dia. (mm)		No. of flute 4 = 4Pockets 3 = 3Pockets	Sort S = SOFT H = HARD

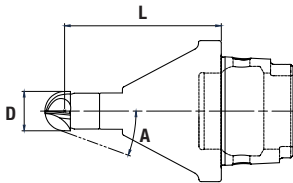
Holder	HSK63	-	TM	N	16.55	-	75.00
	Holder type HSK63C, BT40/50 SS = Shank type		Item TRACK MILLING	Clamping system N = Threaded P = Pressed	Machining dia. (mm)		Center distance

< Insert type >

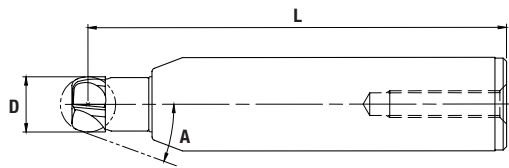
Insert	DRC	16.55
	Item Double Radius Cutter	Machining dia. (mm)

Holder	KBE	16.55	DRC	-	CV
	Item Korloy Ball Endmill	Machining dia. (mm)	Insert		Holder type CV : Shank type HSK63C : Arbor type

Order Form



< Arbor type >



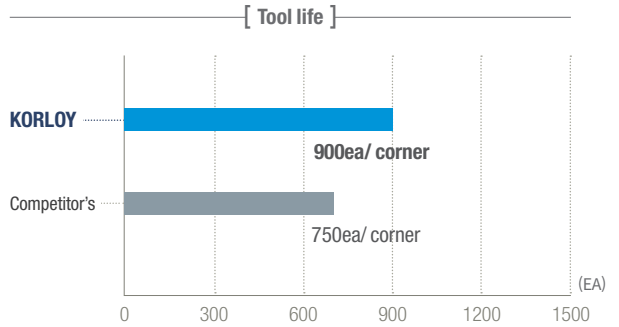
< Shank type >

Data Sheet <Example>

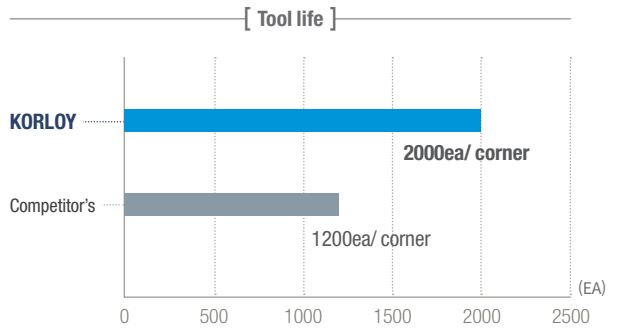
Type	Insert type	Modular type (threaded)	Modular type (pressed)	Modular type cBN
D (Ball diameter)		16.55		
A (Setting angle)		20°		
L (Distance between base level and center of ball)		70		
Holder type		HSK63C		



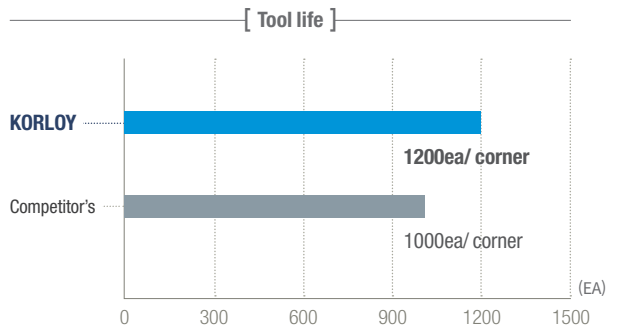
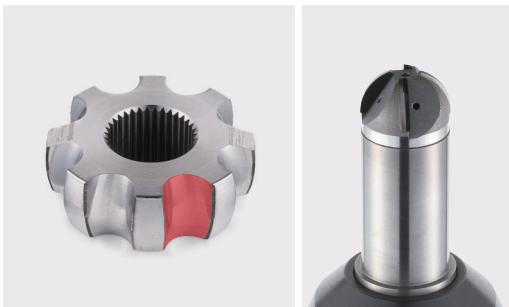
Application Examples



Part	Outer Race	TOOL	Insert - radius type		
Workpiece	S55CKN	Cutting conditions	vc : 163m/min, fz : 0.21mm/t, ap : 1.5mm, D : 14.37mm, dry		
Application	Soft Cutting	Holder	KBE14.37DRC-CV	Head	DRC14.37 CX161D



Part	Outer Race	TOOL	Threaded modular type: ball type		
Workpiece	SM53C	Cutting conditions	vc : 200m/min, fz : 0.2mm/t, ap : 3~4mm, D : 25mm, dry		
Application	Soft Cutting	Holder	BT50-TMN23.0-136	Head	TMBN25.0 - 4S PC30Y

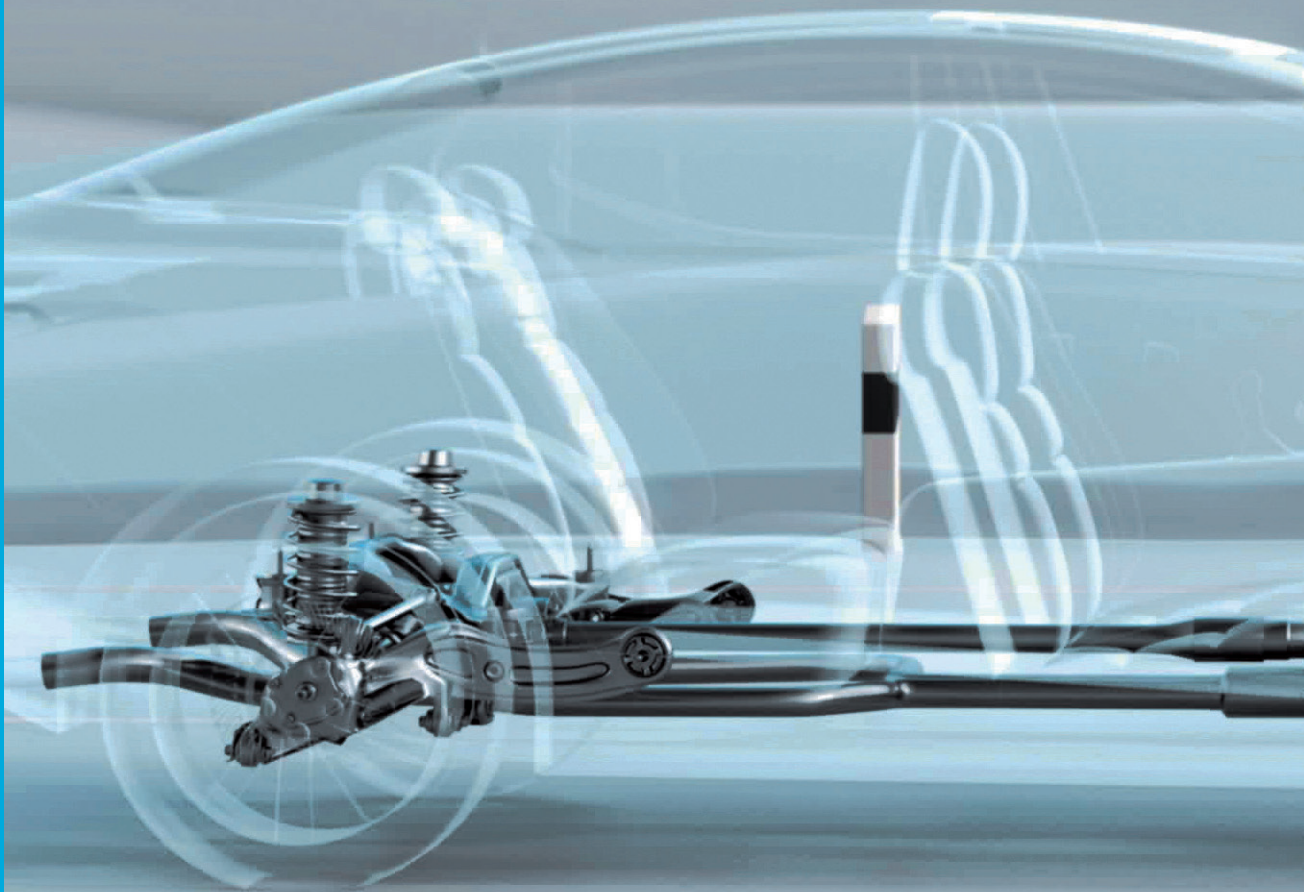
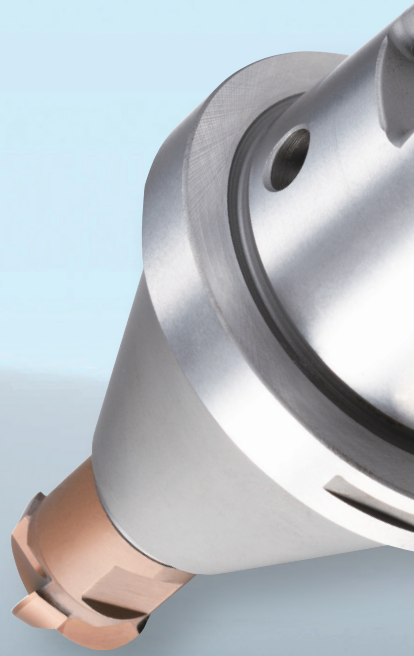


Part	Inner Race	TOOL	CBN modular type		
Workpiece	SCM420H	Cutting conditions	vc : 170m/min, fz : 0.08mm/t, ap : 0.1~0.2mm, D : 17.6mm, dry		
Application	Hard Cutting	Holder	HSK63C-TMP17.6-75	Head	TMBP17.6-4H DBN7500



Track Milling Tool / C.V-Joint

KORLOY Track Milling Tools



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