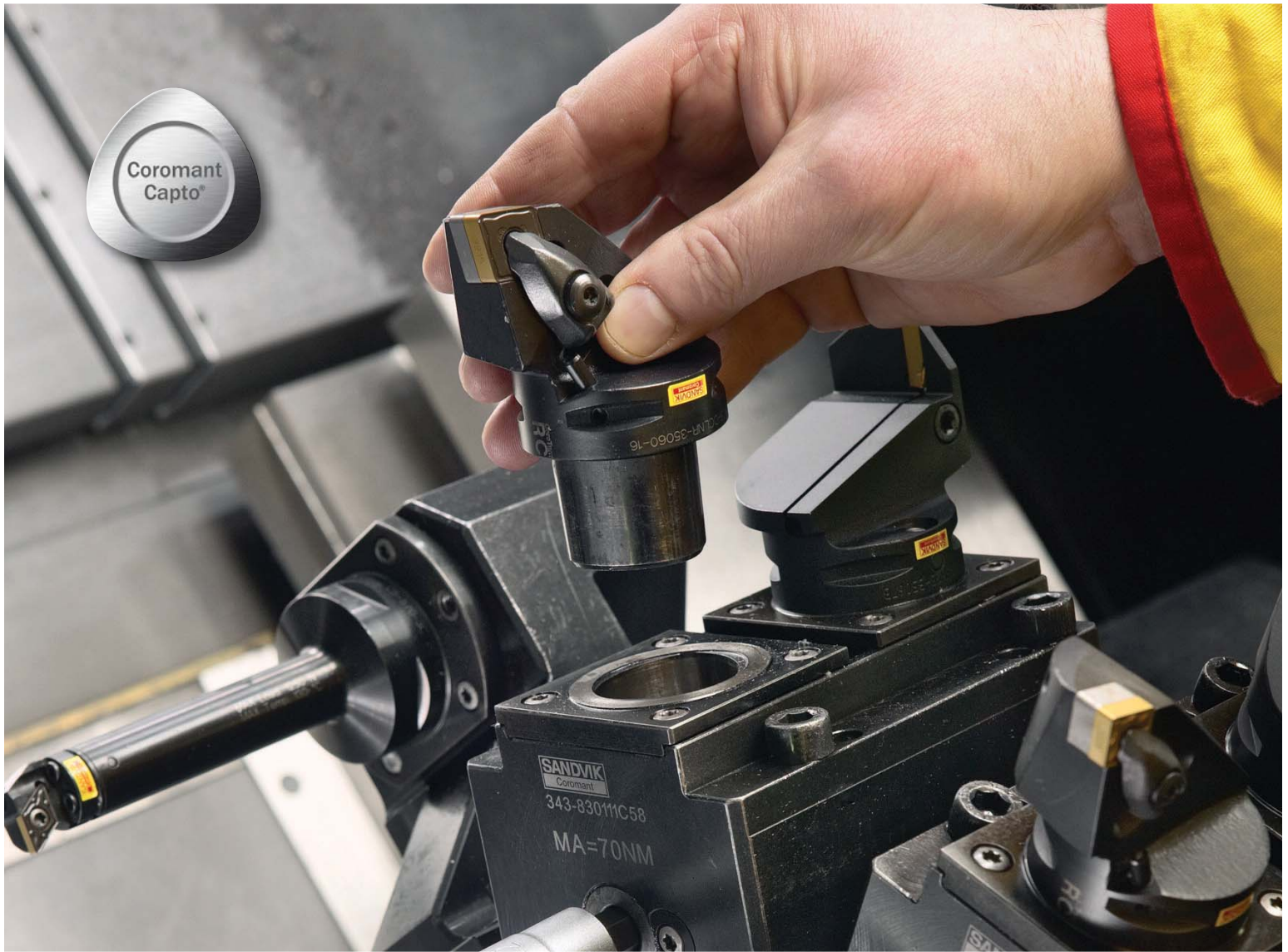


DMG**MORI SEIKI****SANDVIK**
Coromant

Coromant Capto® Machine Adapted Clamping Units

For Mori Seiki CNC lathes


DMG **MORI SEIKI**
QUALIFIED PRODUCTS

Available for the following machines:

NZ 1500, 2000

DuraTurn 2050 MC,
2550 MC

NL 1500-3000 MC,
NLX 2500 MC

NT, NTX 1000, 3100, 3150,
3200

NT 4200, 4250

NT 4300, 5400

NZX 2500, 4000, 6000

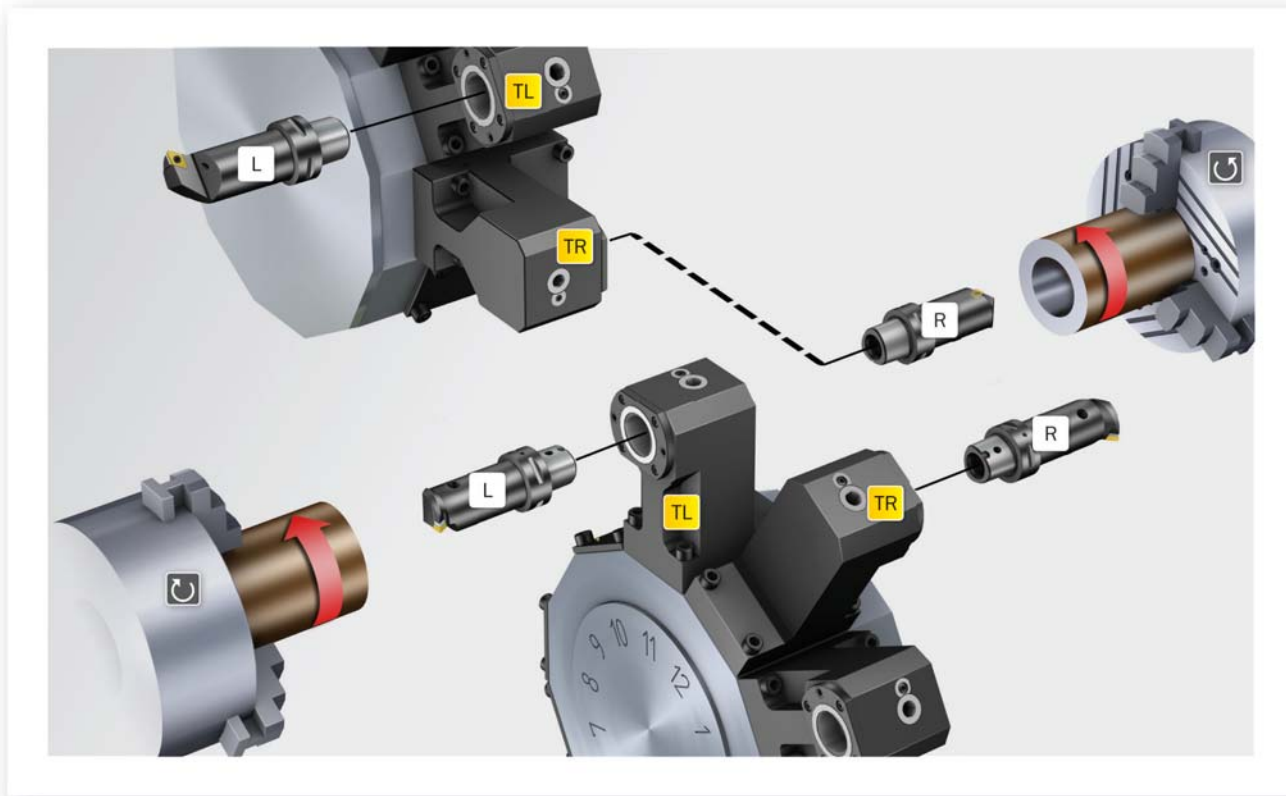
SL 400/403 MC

SL 600/603 MC

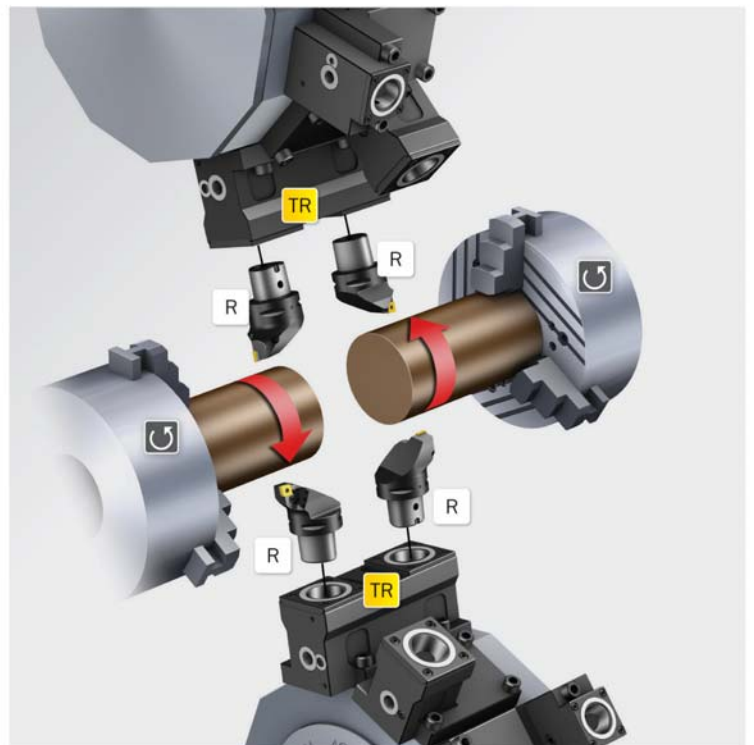
VL 553 MC







Clamping unit configuration

Internal setup



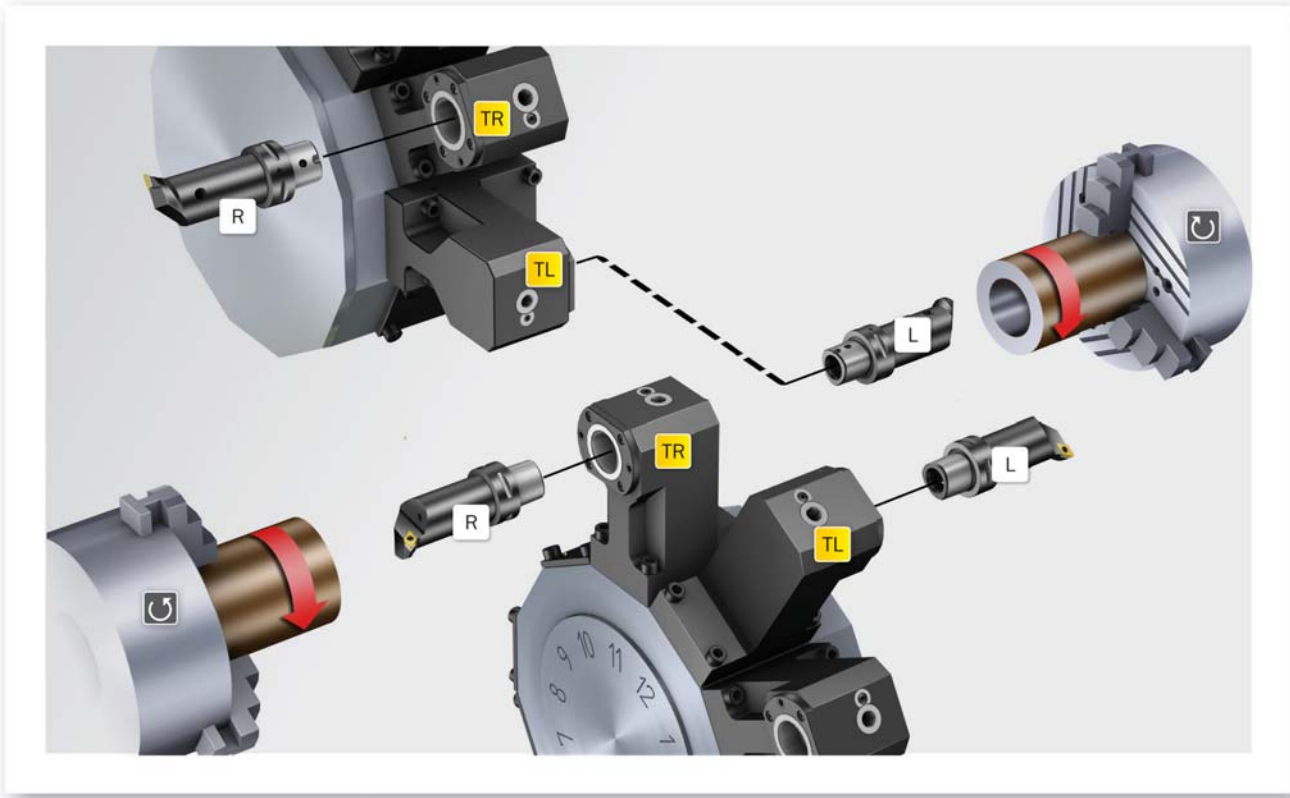
External setup



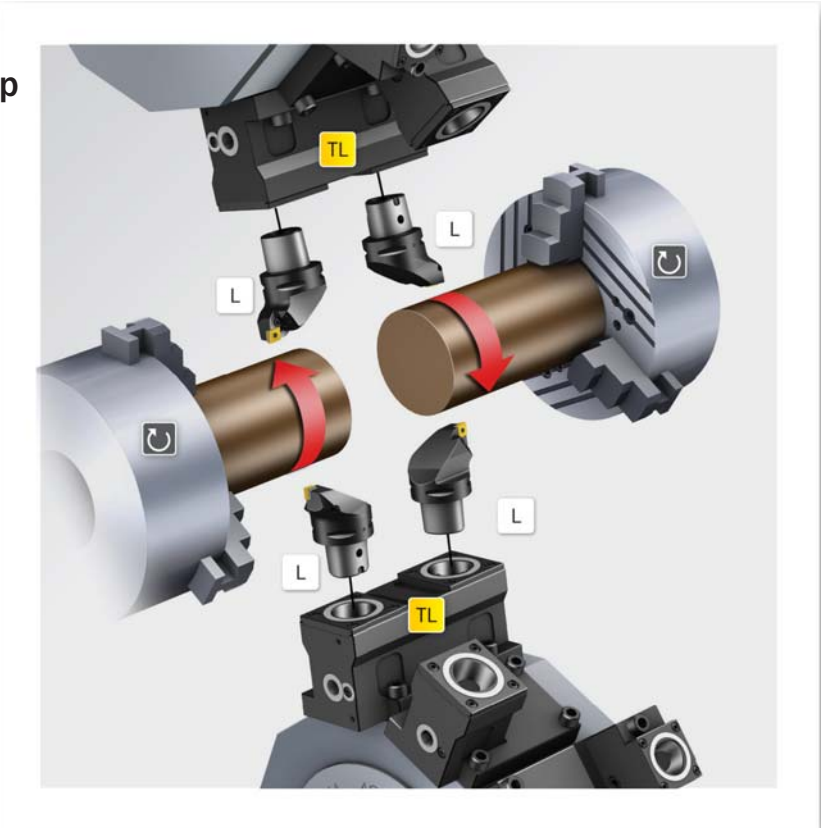
-  Right hand cutting unit
-  Left hand cutting unit
-  Right hand clamping unit
-  Left hand clamping unit
-  Clockwise spindle rotation
-  Counter clockwise spindle rotation

Single clamping unit is also right handed.

Internal setup



External setup



Single clamping unit is also left handed.

Code key for Coromant Capto® machine adapted clamping units



1 Coromant Capto size
C4 – 40 mm C5 – 50 mm

7 Turret interface version
A, B, C

2 Application
T – Turning D – Driven

8 Configuration
Blank – for normal single clamping unit DT – for main spindle and subspindle (two clamping units in one holder) ET – extended DE – extended for main spindle and subspindle (two clamping units in one holder) TT – for machine with half index turret (two clamping units in one holder) YT – for machines with ‘Y’ axis (two clamping units in one holder) DY – for machines with ‘Y’ axis (four clamping units in one holder) SS – for subspindle SP – short projection XT – two clamping units in one holder (change tools with X axis)

3 Hand of clamping units
L – Left R – Right N – Neutral

4 Type of operation
E – External (OD) I – Internal (face/ID)

9 Coolant supply (driven tools only)
I – internal and external (1160 PSI [80 bar]) E – external only

5 Machine
MS – Mori Seiki

6 Turret hole diameter (mm)
40, 60, 65, 68, 80

Code key for Coromant Capto® machine adapted clamping units

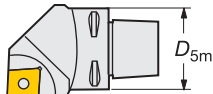
Static holders

C4	-	RC	E	-	NL2000	-	082 080		YT		
1		2	3		4		5	6	7	8	9

Driven tool holders

C4	-	DT	I	-	NL2000	-	090 070		DT		
1		2	3		4		5	6	7	8	9

1 Coupling size



D_{5m} = Coupling size

Size:	inch:	mm:
C3	$D_{5m} = 1.260$	32
C4	$D_{5m} = 1.575$	40
C5	$D_{5m} = 1.969$	50
C6	$D_{5m} = 2.480$	63
C8	$D_{5m} = 3.150$	80

2 Hand of clamping unit/type of unit

RC = Right
 LC = Left
 NC = Neutral
 DT = Driven Tool

3 Type of operation

E = External
 I = Internal

4 Machine model

Example:
 NL2000 = Mori Seiki NL 2000

5 Reference dimension

Gauge line in millimeters from reference point to center line of Coromant Capto coupling

6 Reference dimension

Gauge line in millimeters from reference point to face of Coromant Capto coupling

7 Version

A = New design
 M = Modified from original

8 Coolant

I = Internal coolant (DTH clamping units only)

Note: All static Capto clamping units have internal coolant.

9 Configuration

SS = for subspindle
 DT = for main spindle and subspindle (two clamping units in one holder)

TT = for machine with half index turret (two clamping units in one holder)
 YT = for machines with 'Y' axis (two clamping units in one holder)

XT = two clamping units in one holder (change tools with 'X' axis)

High pressure coolant

High performance. Reduced production time.

By channeling coolant delivery to the cutting edge through the spindle or turret, a high powered coolant jet of 80 bar (1160 PSI) can be positioned precisely at the cutting zone for maximum effect.

CoroTurn® HP high pressure coolant turning heads feature fixed nozzle positions, offering total chip control and preventing cycle interruption.

The production advantages are a higher utilization of the machine and available production time, thereby maximizing the payback on investment. An optimized system with high pressure coolant machining can pay for itself in a few months.

Flood coolant does cool the insert but it does not help with chip control. The coolant is not directed accurately or close enough to the cutting edge, allowing long strands of chips to form.



CoroTurn HP's fixed, pre-directed high precision nozzles create parallel laminar jets of coolant with high velocity, directed at the right place on the insert. The precision and character of these jets makes the difference. No setting with trials is needed; performance and security are built in.

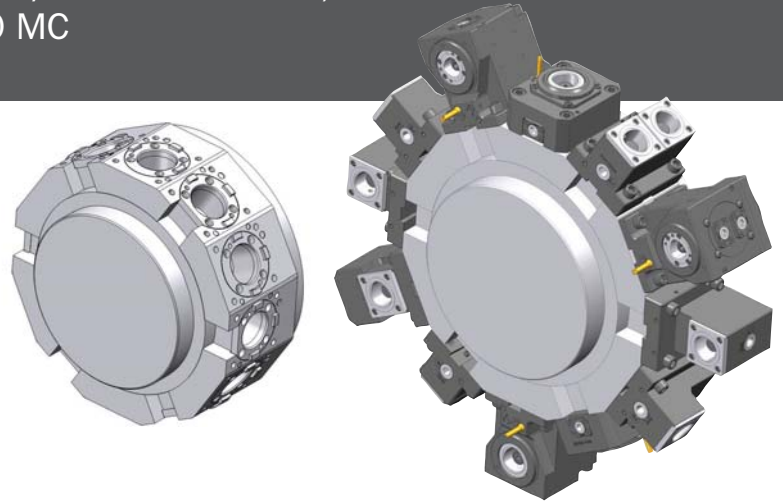


Machines

Mori Seiki NL 1500-3000 MC, SMC, SY, Y (10/12 station turret);
NZX 2500 (10/12 station turret), NLX 2500 MC

Coromant Capto®

Machine adapted clamping units
Standard program



Static toolholders



OD clamping unit
C4-TR/LE-MS60A
C5-TR/LE-MS60A



OD clamping unit, offset, short
C4-R/LCE-NL2000-068040
C5-R/LCE-NL2000-077053



OD clamping unit, 32 mm, "Y" axis
C4-TR/LE-MS60A-YT¹⁾
C5-R/LCE-NL2000-090082YT¹⁾



OD clamping unit, "Y" axis, both sides
C4-R/LCE-NL2000-082080DY



OD clamping unit, both sides
C4-TR/LE-MS60A-DT²⁾
C5-TR/LE-MS60A-DT²⁾



Face and ID clamping unit
C4-TR/LI-MS60A
C5-TR/LI-MS60A



Face and ID clamping unit, back set
C4-TR/LI-MS60A-SS
C5-TR/LI-MS60A-SS



Face and ID clamping unit, double "X" axis
C4-TR/LI-MS60A-XT



Face and ID clamping unit, both sides
C4-R/LCI-NL2000-090073DT²⁾
C5-TR/LI-MS60A-DT²⁾



Face and ID clamping unit, both sides, short
C4-R/LCI-NL2000-122039-DT²⁾
C5-R/LCI-NL2000-122039-DT²⁾



Parting blade holder
APB-TNE-MS60A-25

Driven toolholders



OD drill/milling unit
C4-DNE-MS60A-E
C5-DNE-MS60A-E



Face drill/milling unit, both sides
C4-DTI-NL2000-090070-DT²⁾
C5-DTI-NL2000-090070-DT²⁾



Face drill/milling unit
C4-DNI-MS60A-E C4-DNI-MS60A-I *
C5-DNI-MS60A-E C5-DNI-MS60A-I *

Ordering example:

C4-TRE-MS60A (right hand unit)
C4-TLE-MS60A (left hand unit)

Products beginning with Cx-TR/L and Cx-DN, see code key page 4
Products beginning with Cx-R/LC, see code key page 5

Suggested collet chuck adapter for Coromant Capto to maximize tool projection



Collet chuck adapter, short
C4-391.14-20 035 ER20
C4-391.14-25 038 ER25
C5-391.14-32 045 ER32

Additional short adapters available through Extended Product Offer.

Ratio 1:1

¹⁾ This clamping unit will only fit the NL machine with "Y" axis

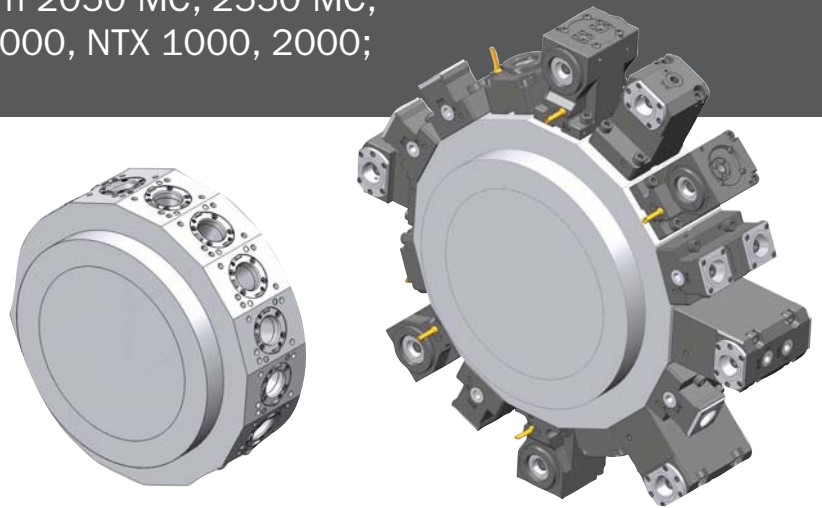
²⁾ Not for NZX2500

* Internal and external coolant supply - Do not run without coolant.
Only use filtered coolant fluid (max. particle size = 100 µm)
Max. coolant pressure = 1160 PSI (80 bar)

Machines

Mori Seiki NZ, NZX 1500, 2000; DuraTurn 2050 MC, 2550 MC;
 NL 1500, 2000 (20 station turret); NT 1000, NTX 1000, 2000;
 NT 3100, 3150, 3200

Coromant Capto® Machine adapted clamping units Standard program



Static toolholders



OD clamping unit
 C4-TR/LE-MS40A



OD clamping unit, both sides
 C4-TR/LE-MS40A-DT²⁾



OD clamping unit, extended
 C4-R/LCE-NZ2000-103075³⁾



OD clamping unit, both sides, extended
 C4-R/LCE-NZ2000-103075DT³⁾



OD clamping unit, "Y" axis
 C4-TR/LE-MS40A-YT⁴⁾



OD clamping unit, "Y" axis, both sides
 C4-R/LCE-NZ2000-070072DY⁴⁾



Face and ID clamping unit
 C4-TR/LI-MS40A



Face and ID clamping unit, both sides
 C4-TR/LI-MS40A-DT⁵⁾



Face and ID clamping unit, back set
 C4-TR/LI-MS40A-SS



Face and ID clamping unit, "Y" axis, both sides
 C4-R/LCI-NZ2000-095068DY⁴⁾



Face and ID clamping unit, "Y" axis
 C4-TR/LI-MS40A-YT⁴⁾



Parting blade holder
 APB-TNE-MS40A-25

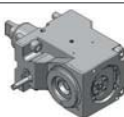
Driven toolholders



OD drill/milling unit
 C3-DNE-MS40A-E C3-DNE-MS40A-I *
 C4-DNE-MS40A-E



OD drill/milling unit (12000 RPM)
 C3-DTES-NZ2000-000056¹⁾



Face drill/milling unit
 C3-DNI-MS40A-E C3-DNI-MS40A-I *
 C4-DNI-MS40A-E C4-DNI-MS40A-I *



Face drill/milling unit (12000 RPM)
 C3-DTIS-NZ2000-085045¹⁾
 C3-DTIS-NZ2000-085045I¹⁾ *



Face drill/milling unit, both sides
 C3-DTI-NZ2000-085050-DT⁵⁾
 C4-DTI-NZ2000-085065-DT⁵⁾

Products beginning with Cx-TR/L and Cx-DN, see code key page 4
 Products beginning with Cx-DT, see code key page 5

Ratio =1:1

¹⁾ Only for 12000 RPM turret option

²⁾ Not for use with DuraTurn

³⁾ This unit for NT3100 type only

⁴⁾ Not for use with DuraTurn and NT/NTX 1000-3200 type machines.

⁵⁾ Not for use with DuraTurn and NT/NTX 1000-2000 machines.

* Internal and external coolant supply - Do not run without coolant.

Only use filtered coolant fluid (max. particle size = 100 µm)

Max. coolant pressure = 1160 PSI (80 bar)

Suggested collet chuck adapter for Coromant Capto to maximize tool projection



Collet chuck adapter, short
 C4-391.14-20 036 ER20

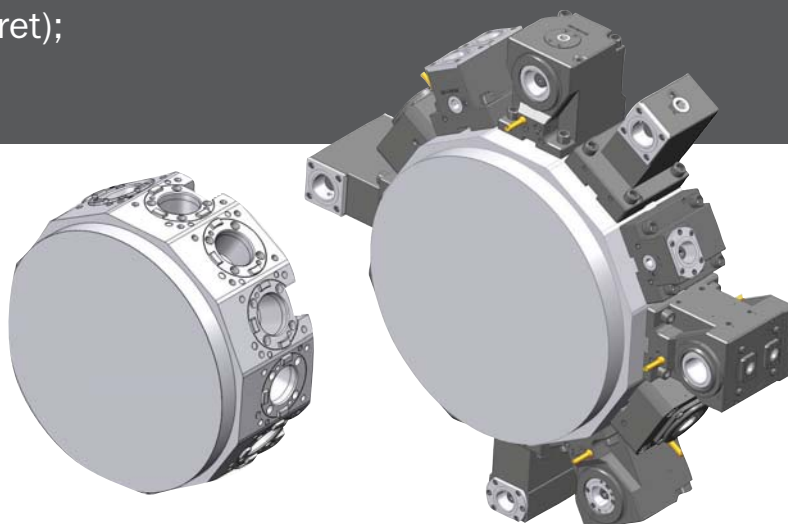
Additional short adapters available through Extended Product Offer.

Machines

Mori Seiki NT 4200, 4250 (12 station turret);
NT 4300, 5400 (10 station turret)

Coromant Capto®

Machine adapted clamping units
Standard program



Static toolholders



OD clamping unit
C4-TR/LE-MS60A
C5-TR/LE-MS60A



OD clamping unit, extended
C4-R/LCE-NT5000-127080¹⁾
C5-R/LCE-NT5000-127080¹⁾



OD clamping unit, both sides
C4-TR/LE-MS60A-DT
C5-TR/LE-MS60A-DT



OD clamping unit, both sides, extended
C4-R/LCE-NT4000-105080DT¹⁾
C5-R/LCE-NT4000-100095DT¹⁾



Face and ID clamping unit
C4-R/LCI-NT4000-120065
C5-R/LCI-NT4000-120041



Face and ID clamping unit, both sides
C4-R/LCI-NT4000-120073DT
C5-R/LCI-NT4000-120093DT



Parting blade holder
APB-TNE-MS60A-25

Driven toolholders



OD drill/milling unit
C4-DNE-MS60A-E
C5-DNE-MS60A-E



Face drill/milling unit, both sides
C4-DTI-NL2000-090070DT
C5-DTI-NL2000-090086DT



Face drill/milling unit
C4-DNI-MS60A-E C4-DNI-MS60A-I *
C5-DNI-MS60A-E C5-DNI-MS60A-I *

Suggested collet chuck adapter for Coromant Capto to maximize tool projection



Collet chuck adapter, short
C4-391.14-20 035 ER20
C4-391.14-25 038 ER25
C5-391.14-32 045 ER32

Additional short adapters available through Extended Product Offer.

Ordering example:

C4-TRE-MS60A (right hand unit)
C4-TLE-MS60A (left hand unit)

Products beginning with Cx-TR/L and Cx-DN, see code key page 4
Products beginning with Cx-R/LC, see code key page 5

Ratio = 1:1

¹⁾ For NT4300 and NT5400 only

* Internal and external coolant supply - Do not run without coolant.
Only use filtered coolant fluid (max. particle size = 100 µm)
Max. coolant pressure = 1160 PSI (80 bar)

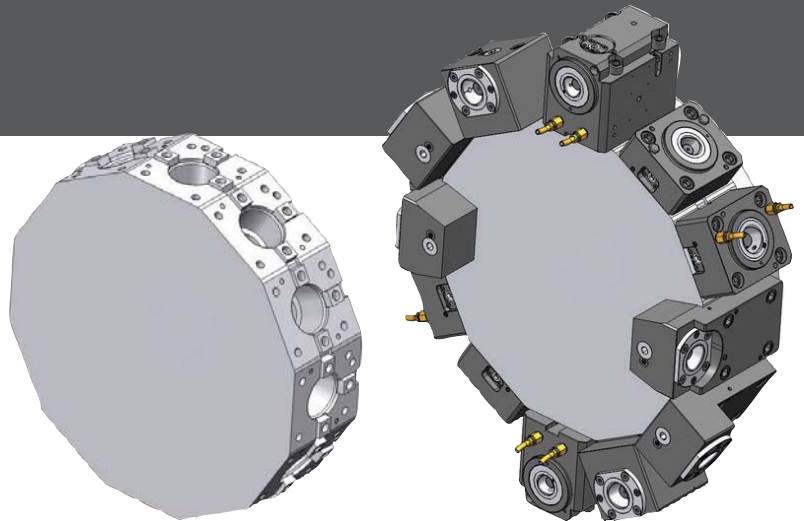
Machines

Mori Seiki NZX 4000

Coromant Capto®

Machine adapted clamping units

Standard program



Static toolholders



OD clamping unit
C6-TR/LE-MS75A



Face and ID clamping unit
C4-TR/LI-MS75A



OD clamping unit, long
C6-R/LCE-MS75-103105

Driven toolholders



OD drill/milling unit
C5-DNE-MS75A-E
C5-DNE-MS75A-I
C6-DTE-MS75-000085



Face drill/milling unit, both sides
C5-DNI-MS75A-E
C6-DTI-MS75-105105
C6-DTI-MS75-105105I *

Suggested collet chuck adapter for Coromant Capto to maximize tool projection



Collet chuck adapter, short
C5-391.14-32 045 ER32

Additional short adapters available through Extended Product Offer.

Ordering example:

C4-TRE-MS75A (right hand unit)

C4-TLE-MS75A (left hand unit)

Products beginning with Cx-TR/L and Cx-DN, see code key page 4

Products beginning with Cx-R/LC, see code key page 5

Ratio =1:1

* Internal and external coolant supply - Do not run without coolant.

Only use filtered coolant fluid (max. particle size = 100 µm)

Max. coolant pressure = 1160 PSI (80 bar)

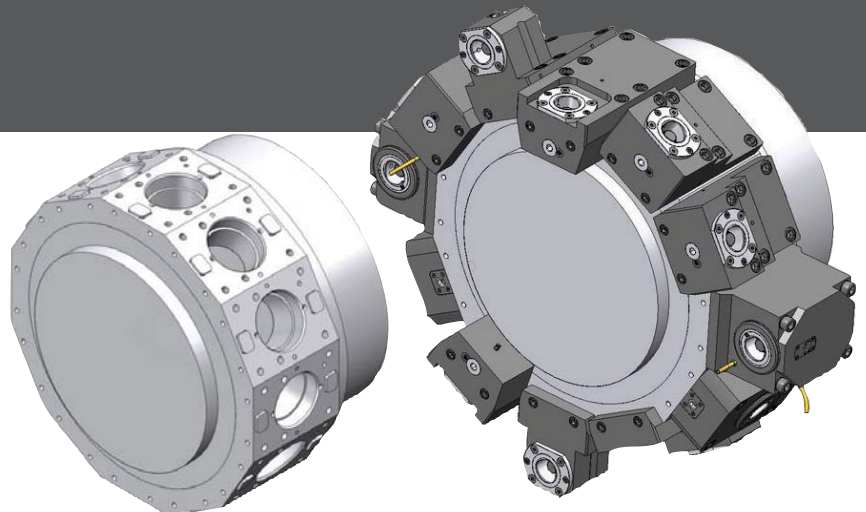
Machines

Mori Seiki NZX 6000

Coromant Capto®

Machine adapted clamping units

Standard program



Static toolholders



OD clamping unit
C6-TR/LE-MS110A



OD clamping unit, sub-spindle
C6-R/LCE-MS110-178105SS



OD clamping unit, long
C6-R/LCE-MS110-003105



Face and ID clamping unit
C6-TR/LI-MS110A

Driven toolholders



OD drill/milling unit
C6-DNE-MS110A-E
C6-DNE-MS110A-I *



Face drill/milling unit
C6-DNI-MS110A-E
C6-DNI-MS110A-I *

Suggested collet chuck adapter for Coromant Capto to maximize tool projection



Collet chuck adapter, short
C6-391.14-32 060 ER32

Additional short adapters available through Extended Product Offer.

Ordering example:

C4-TRE-MS110A (right hand unit)

C4-TLE-MS110A (left hand unit)

Products beginning with Cx-TR/L and Cx-DN, see code key page 4

Products beginning with Cx-R/LC, see code key page 5

Ratio = 1:1

* Internal and external coolant supply - Do not run without coolant.

Only use filtered coolant fluid (max. particle size = 100 µm)

Max. coolant pressure = 1160 PSI (80 bar)

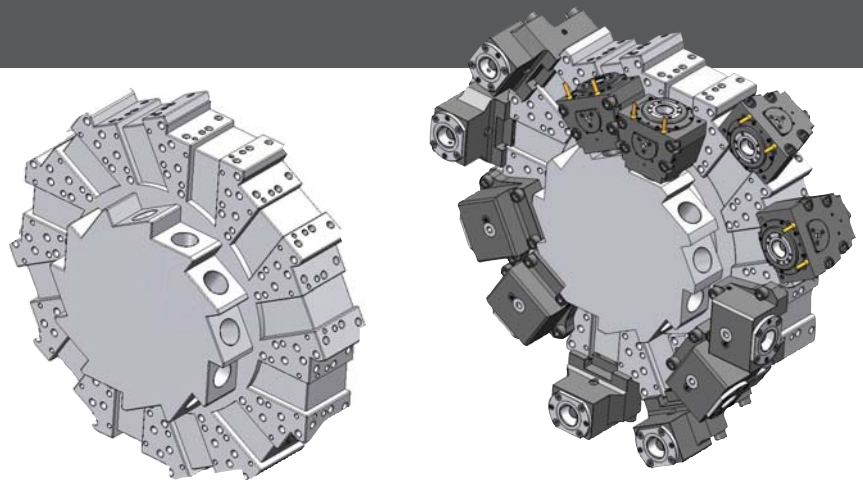
Machines

Mori Seiki SL 400/403 MC, 600/603 MC; VL553MC

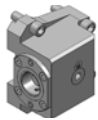
Coromant Capto®

Machine adapted clamping units

Standard program



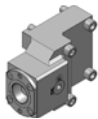
Static toolholders



OD clamping unit
C6-R/LCE-SL603M-058025¹⁾



OD clamping unit
C6-R/LCE-VL55-103035²⁾

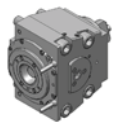


Face and ID clamping unit
C6-R/LCI-SL603M-070100¹⁾

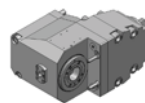


Face and ID clamping unit
C6-R/LCI-VL55-050016²⁾

Driven toolholders



Face and OD drill/milling unit
C5-DTIE-SL603M-043016
C5-DTIE-SL603M-043046I *



Face and OD drill/milling unit
C5-DTE-VL55-097020²⁾
C5-DTE-VL55-097020I²⁾ *

Suggested collet chuck adapter for Coromant Capto to maximize tool projection



Collet chuck adapter, short
C5-391.14-32 045 ER32

Additional short adapters available through Extended Product Offer.

Ordering example:

C6-RCE-SL603M-058025 (right hand unit)

C6-LCE-SL603M-058025 (left hand unit)

Code key, page 5.

¹⁾ Only for SL400, 403, 600, 603 MC

²⁾ Only for VL553 MC

* Internal and external coolant supply - Do not run without coolant.

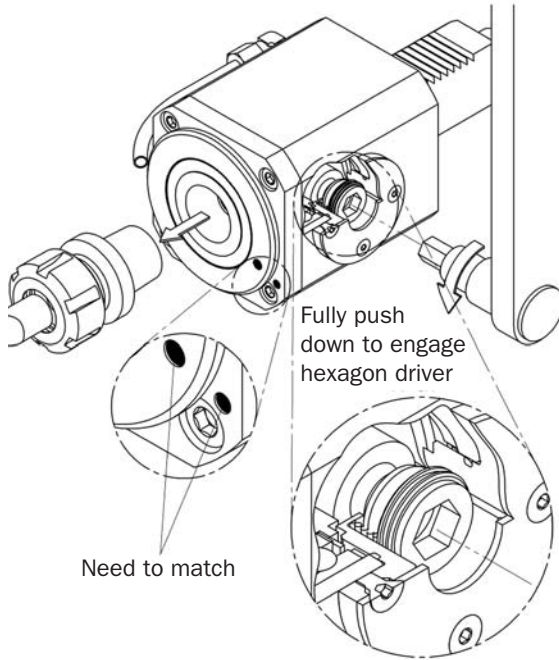
Only use filtered coolant fluid (max. particle size = 100 µm)

Max. coolant pressure = 1160 PSI (80 bar)

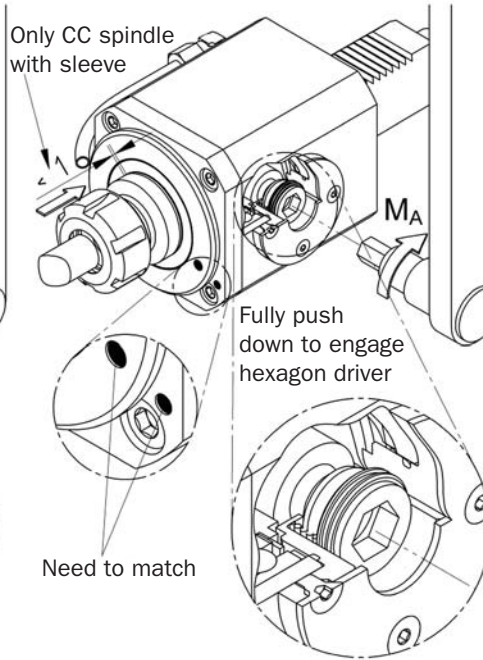
Operating instructions for Coromant Capto driven toolholders

Changing the cutting tool

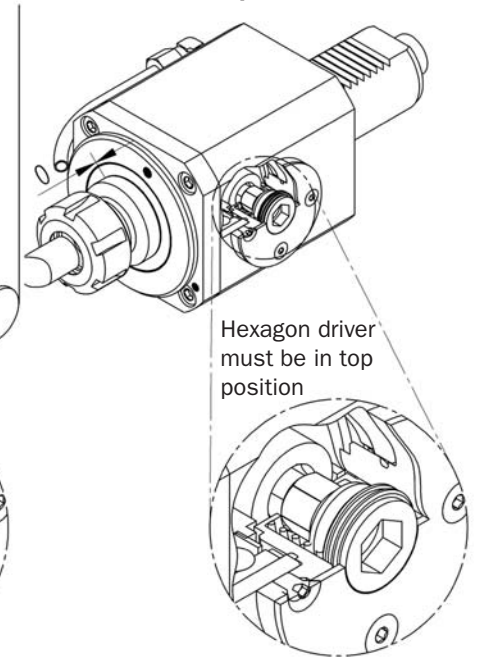
Unlock



Lock



Check before operation



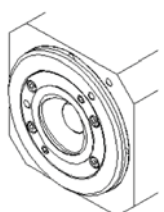
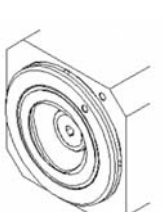
Torque wrench for tool changing

Coupling size			Ordering code Torque wrench	Size mm	Spare parts Key adapter
	ft-lbs	Nm			
C3	16	22	TW-30-01	5	5680 035-08
C3	26	35	BT-TK-02	8	5680 035-05
C4	37	50	C-TK-01	10	5680 035-06
C5	52	70	C-TK-01	12	5680 035-07
C6	66	90	C-TK-01	12	5680 035-07

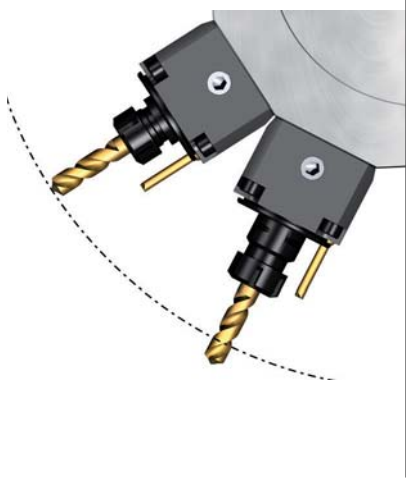
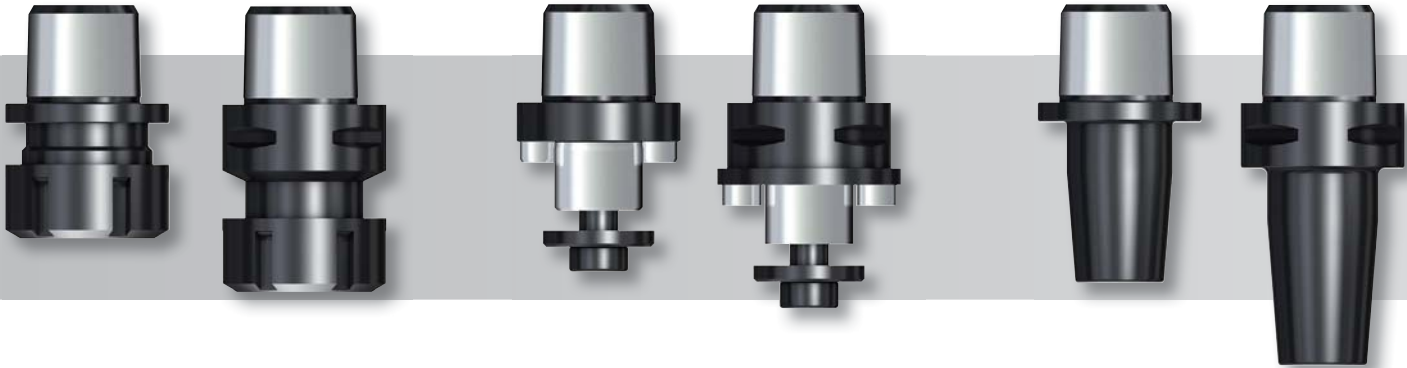
To be calibrated according to ISO 6789, accuracy within 4%

For detailed information, see page G119 in the Sandvik Coromant main catalog.

Torque setting and wrench size

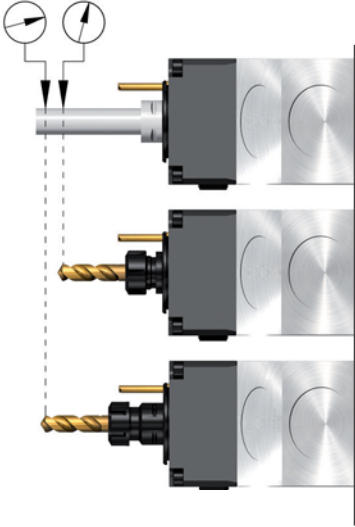
Capto size	Coromant Capto spindle with sleeve				Solid Coromant Capto spindle			
		Wrench size	Torque M_A	Unlock + lock: Turn hexagon driver around approx. 140°		Wrench size	Max Torque M_A	Unlock + lock: Turn hexagon driver around approx. 180°
C3		8 mm	35 Nm				5 mm	
C4		8/10 mm	50 Nm			8 mm	40 Nm	
C5		12 mm	70 Nm			10 mm	60 Nm	
C6		12 mm	90 Nm			12 mm	75 Nm	

Short Adapter



■ More available cutting tool length

Short toolholder projection with no gripper groove



■ Higher accuracy

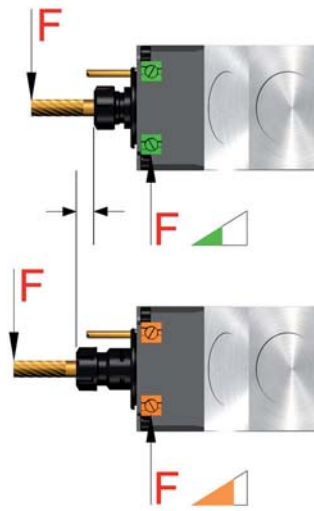
Smaller run-out error through reduced projection length

Interface ISO 26623.

The short Coromant Capto® adapters are designed for driven precision toolholders providing significant advantages.



Short adapter for segment clamping only.
Cannot be used in basic holders, extensions,
or reductions.
Not for automatic tool change (ATC).

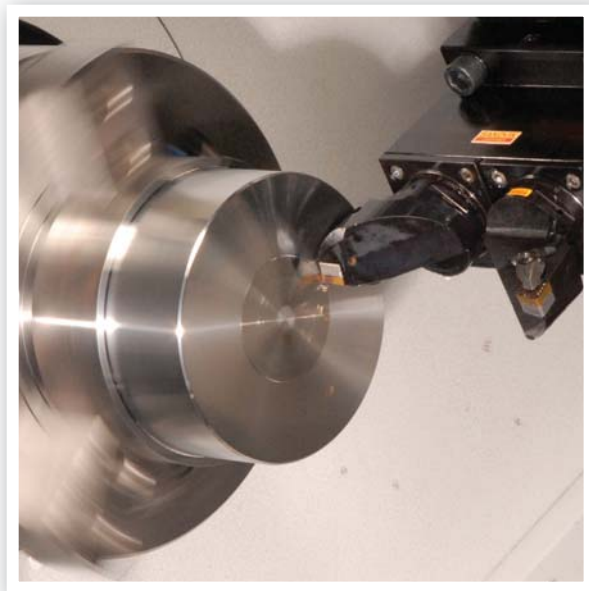
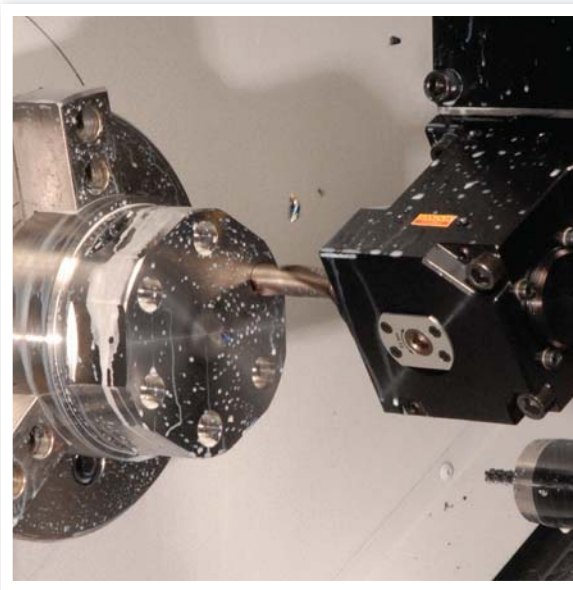


■ Higher stability

Lower vibrations through reduced tool projection length

■ Longer lifetime

Lower load on the bearings through shorter torsion



Why use machine adapted clamping units?

Designed specifically for your machine

Better performance

Faster tool changes

Use Coromant Capto tools for turning, milling and drilling

Ready-equipped to channel high pressure coolant to the latest in CoroTurn HP cutting heads

Tooling packages and certificates

When you pay for a new machine, make sure it pays you back.

By reducing payback time, you reduce the time it takes for your new machine to start making your business more profitable. Sandvik Coromant offers custom tooling packages and Tooling Certificates to unleash the potential of your investment, right from the start.

Talk to your Sandvik Coromant Productivity Engineer or visit www.payback-calculator.com to learn more about paying off your new machines faster.

To order or for more information, contact your Sandvik Coromant sales representative or authorized distributor, or call **1-800-SANDVIK** (1-800-726-3845).

For clamping unit service, call the Coromant Capto Service Center at (704)714-7765.

www.sandvik.coromant.com

E-mail: us.coromant@sandvik.com



Your success in focus