



Sizes (INCH)

- 1.00" ---> 0.75"
- 1.25" ---> 1.00"
- 1.50" ---> 1.25"
- 2.00" ---> 1.50"

Sizes (METRIC)

- 25mm ---> 20mm
- 32mm ---> 25mm
- 40mm ---> 32mm
- 50mm ---> 40mm

Adjustment Capability:

- MILL: +.016" / -.008"
(+ .4mm / -.2mm)
- LATHE: +.008" / -.000"
(+ .2mm / -.000mm)



ECCENTRIC SLEEVES

Ingersoll has changed the design of its Eccentric Sleeves for reducing or enlarging nominal drilling diameters.

The new sleeves can be used on machining centers, lathes and even misaligned turning centers. The eccentric sleeves are available in four inch sizes and four metric sizes.

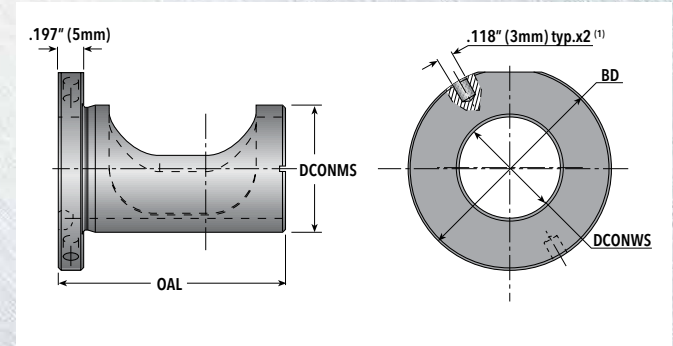
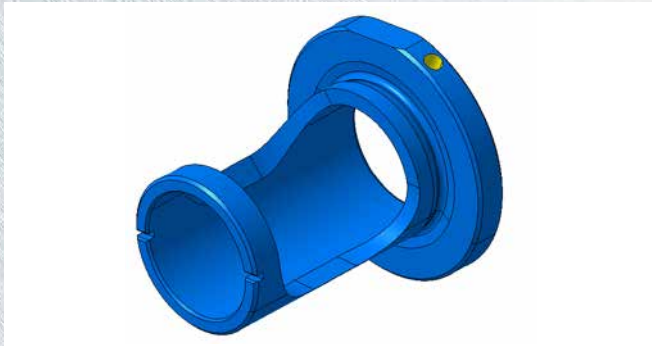
When using on a milling machine, refer to the "MILLING" scale on the frontal flange of the sleeve. When using on a lathe, refer to the "LATHE" scale.

Please read the instructions thoroughly before using.

NEW
PRODUCT ANNOUNCEMENT
2019

DRILL CENTER ADJUSTMENT SLEEVES

ECCENTRIC SLEEVES



Item Number	Description	DCONWS Bore Dia. (ID)	DCONMS Shank Dia. (OD)	BD Body Dia.	OAL Overall Length	Stock
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INCH

4504977	ECCENTERSLEEVE0.75X1.00	0.75	1.00	1.654	2.205	•
4504978	ECCENTERSLEEVE1.00X1.25	1.00	1.25	1.969	2.402	•
4504979	ECCENTERSLEEVE1.25X1.50	1.25	1.50	2.559	2.402	•
4504980	ECCENTERSLEEVE1.50X2.00	1.50	2.00	2.874	2.835	•

METRIC

4504973	ECCENTERSLEEVE20X25	20	25	40	44	2 WEEKS
4605064	ECCENTERSLEEVE25X32	25	32	50	46	2 WEEKS
4605065	ECCENTERSLEEVE32X40	32	40	65	55	2 WEEKS
4605066	ECCENTERSLEEVE40X50	40	50	75	77	2 WEEKS

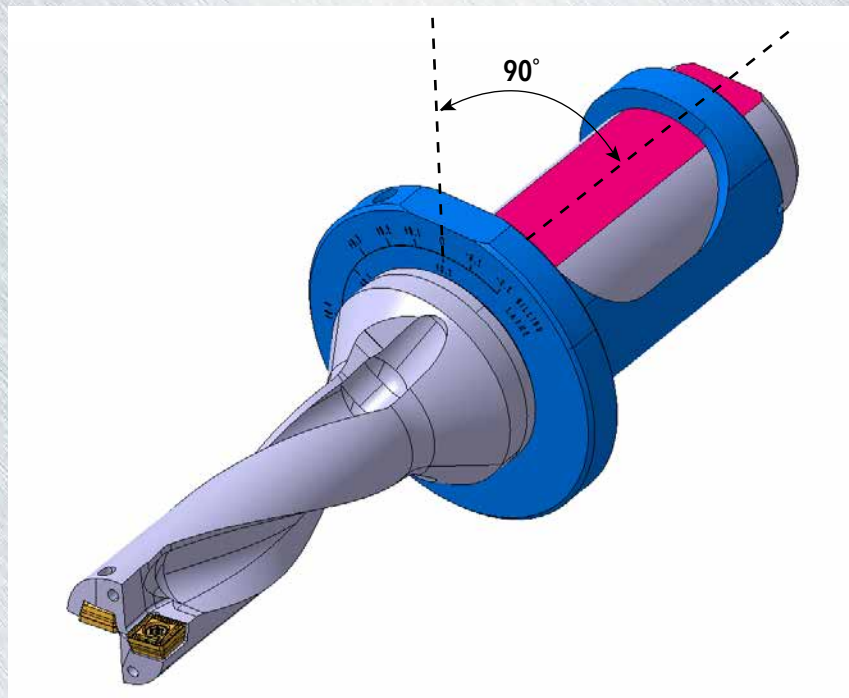
⁽¹⁾Holes for inserting a pin are used to facilitate radial adjustment of the sleeve (pin not supplied).

BU TO ECCENTER CROSSOVER

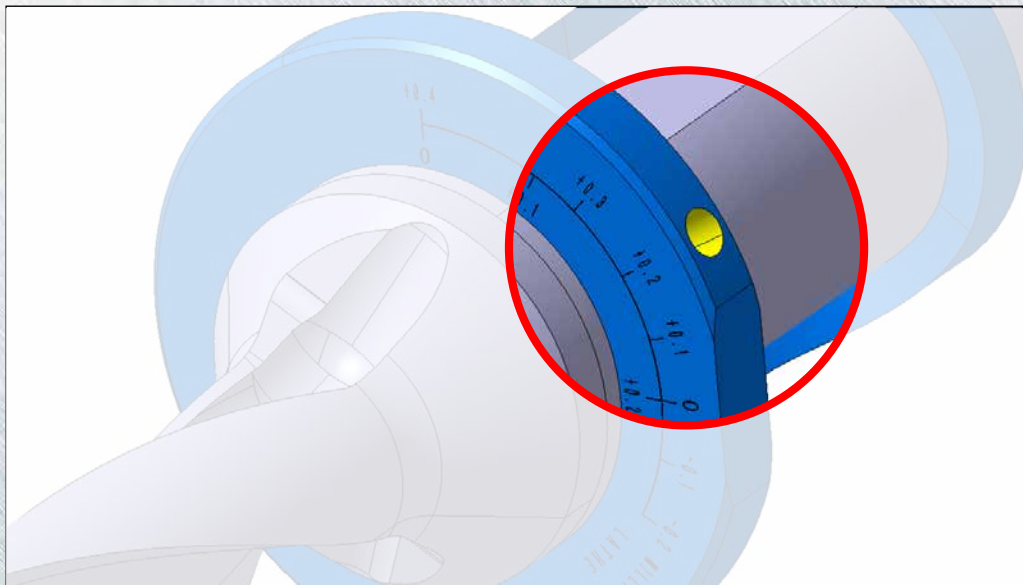
OLD ITEM#	OLD DESCRIPTION	NEW ITEM#	NEW DESCRIPTION
7031186	BU16-16	4504978	ECCENTERSLEEVE1.00X1.25
7031185	BU24-44	4504979	ECCENTERSLEEVE1.25X1.50
7031184	BU32-02	4504980	ECCENTERSLEEVE1.50X2.00
7031725	BU032-10	4605064	ECCENTERSLEEVE25X32

ADJUSTMENT

During initial setting ensure the flat on the eccentric sleeve coincides with the flat on the drill shank. (Both planes must be in parallel condition to each other)

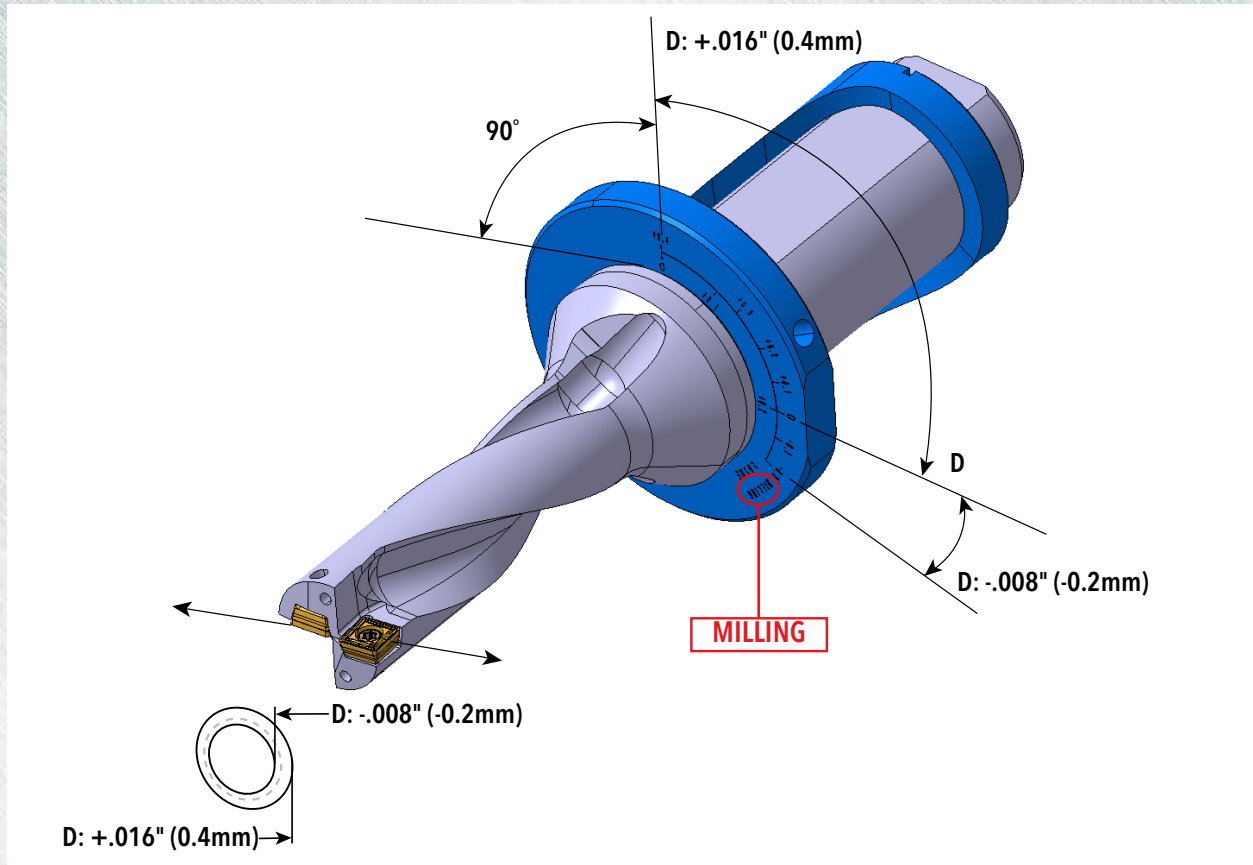


To facilitate the rotation of the sleeve, a metal rod or a screw key may be inserted into the hole on the eccentric sleeve flange. Unlock adapter screw before adjusting sleeve.

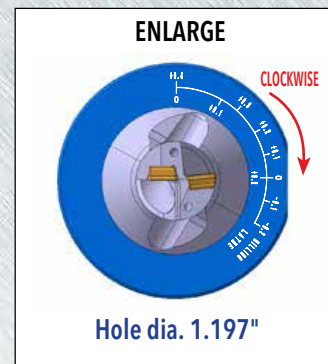
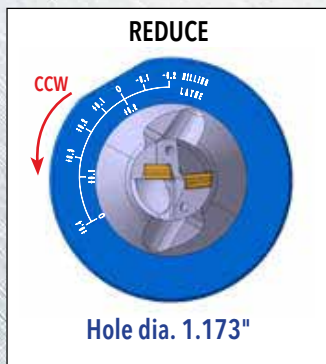


MILLING APPLICATION

On a milling machine the sleeve can change the drill's nominal diameter by shifting the drill's axis out of the tool spindle.

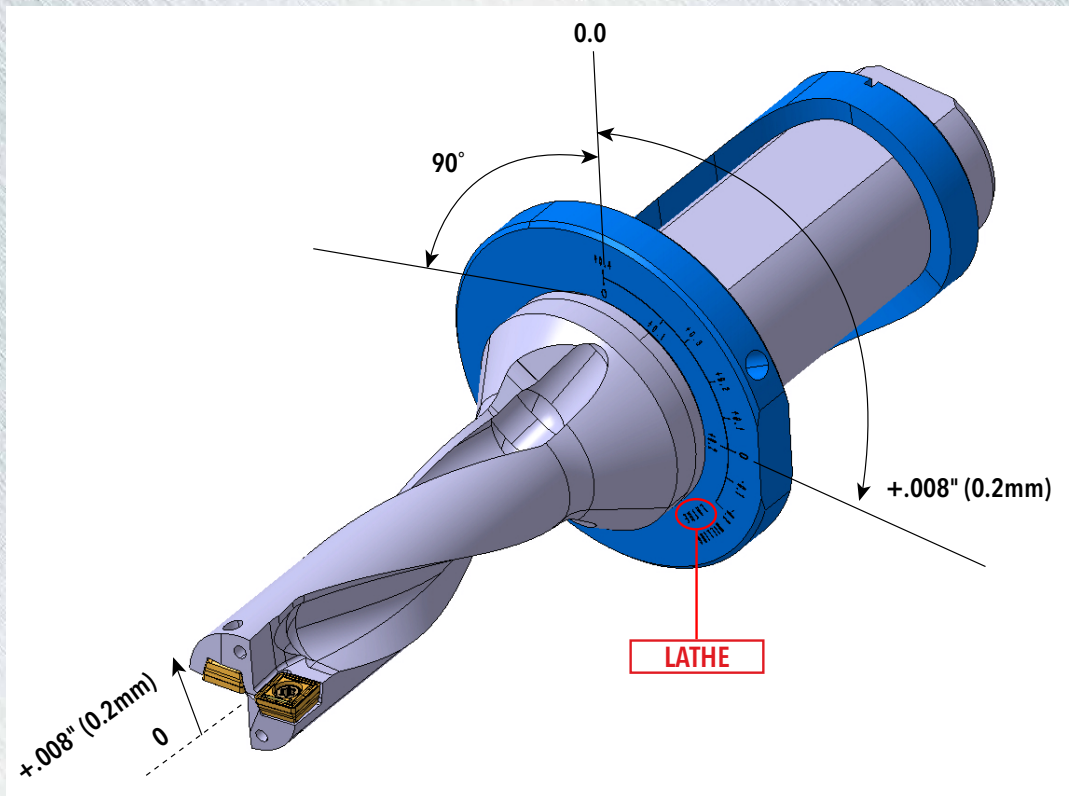


To enlarge the diameter, turn the sleeve clockwise.
To reduce the diameter, turn the sleeve counterclockwise.
Drill diameter: 1.181"

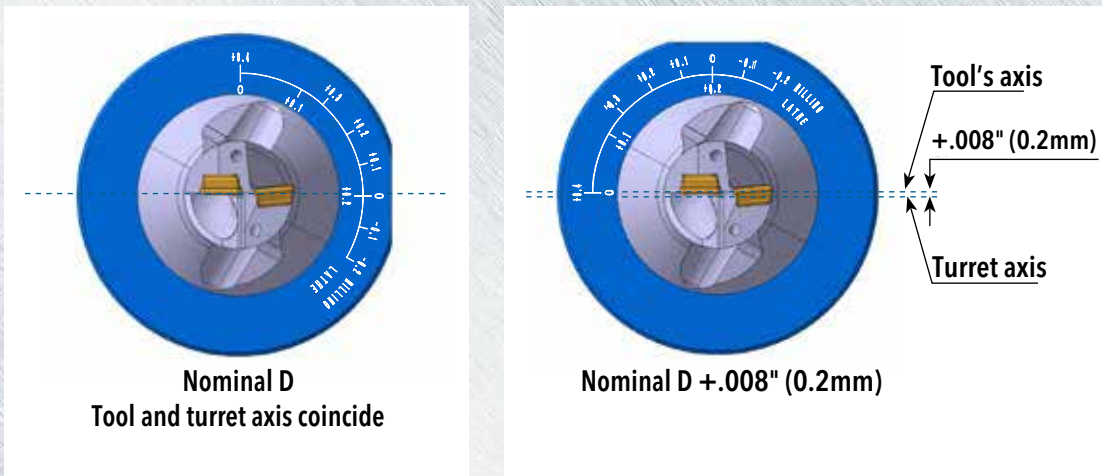


LATHE APPLICATION

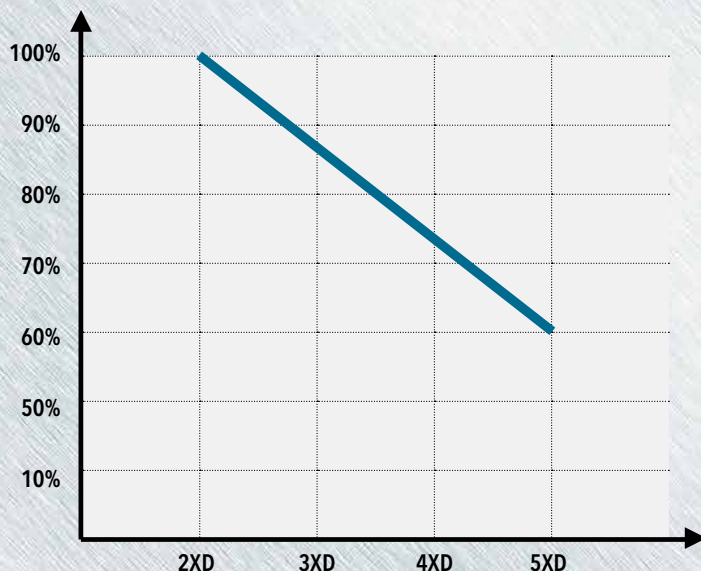
On a lathe, the eccentric sleeve can shift the drill's axis to coincide with the spindle axis.



The eccentric sleeve enables the user to align the drill's axis with the spindle axis to within .008" range (turn the sleeve counterclockwise to raise it).



RECOMMENDED FEED WHEN USING ECCENTRIC SLEEVE



TEST

ECCENTER SLEEVE 1.00x1.25

Tool: QR0254076N6R01 (1.00" Dia. QuadTwist Drill)

Insert: SOMT08T306SK IN1030

Material: Alloy steel (AISI: 4140)

Coolant: Internal

Drilling depth: 2.36" on Milling Machine

Cutting condition: V=525 SFM

f =.004 IPR

Drill diameter : 1.000" (3XD)

Eccentric Sleeve (in)	Hole size (in)
0	1.000
+.002	1.002
+.008	1.008
+.012	1.012
+.016	1.016
-.004	.996
-.008	.992

Note: The result can be changed by machining condition.