

CoroBore® 825

Fine boring tools with Silent Tools™ technology

CoroBore® 825 is a flexible and reliable tool for fine boring, offering stable performance with reduced vibration.

Thanks to the new-generation Silent Tools™ adapters, higher performance and increased productivity can be achieved.

Features and benefits

- Silent Tools™ dampers dimensioned for every adapter, for maximum performance
- Short fine boring head in aluminum to reduce weight and distance between damper and cutting edge
- Internal coolant through the tool to cutting edge
- Stable boring process providing excellent surface finish, process security and high penetration rates
- Option to use the new assortment of cartridges for back boring applications

Application

- For fine boring applications, diameters 19–167 mm (0.748–6.575 inch)
- For higher performance and increased productivity where vibration issues are frequently encountered, especially when machining with long overhangs
- Cutting data can be increased substantially thanks to reduced vibration



ISO application areas

Performance – Fine boring with C5-R825C-FAE-277 (825D-70TC11-C5M)

Machine:	MORI SEIKI NT4200 DCG
	Spindle interface: Coromant Capto® C6
Tool assembly:	825D-70TC11-C5M, diameter range 55–70 mm (2.165–2.756 inch)
Basic holder:	C6-391.02-50 080
LF/LU:	380 mm (14.96 inch)/350 mm (13.78 inch)
Cartridge:	R825C-AF23STUC1103A, KAPR 92°
Insert:	TCGX 110304L-WK 1515
Workpiece material:	EN 34CrNiMo6 (AISI 4340); MC: P2.1.Z.AN, HB: 290

Excellent
surface finish



Insert:	TCGX 110304L-WK 1515					
Boring tool preset diameter, Dc mm (inch)	64.4 (2.535)					
Measured bore diameter, Dc mm (inch)	64.3 (2.531)					
Predrilled bore diameter, Dp mm (inch)	63.6 (2.504)					
Chip thickness, h_{ex} mm (inch)	0.15 (0.006)					
Cutting speed, v_c m/min (ft/min)	100 (328)	200 (656)	300 (984)	400 (1,312)	500 (1,640)	600 (1,968)
Feed per rev, f_r mm (inch)	0.15 (0.006)					
Spindle speed, n rpm	494	989	1,483	1,977	2,471	2,966
Penetration rate, v_f mm/min (in/min)	74 (2.913)	148 (5.827)	223 (8.780)	297 (11.693)	371 (14.606)	445 (17.520)
Intended radial depth of cut, a_p mm (inch)	0.400 (0.016)					
Actual radial depth of cut, a_p mm (inch)	0.350 (0.014)					
Surface roughness, R_z μm (μin)	4.43 (174)	4.75 (187)	4.55 (179)	4.41 (174)	4.44 (175)	3.99 (157)
Surface roughness, R_q μm (μin)	1.01 (40)	1.11 (44)	1.12 (44)	1.02 (40)	0.97 (38)	1.01 (40)
Surface roughness, R_a μm (μin)	0.85 (33)	0.94 (37)	0.94 (37)	0.86 (34)	0.80 (32)	0.89 (35)

For more information, contact your local Sandvik Coromant representative or visit www.sandvik.coromant.com/corobore825

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