

90° SHOULDER Mill Portfolio Facts



	VSM11	VSM17	M680-16	VHSC-16	VSM490-10	VSM490-15	M690-12	M690-15	VSM890-12
EFFECTIVE CUTTING EDGES	2	2	2	2	4	4	4	4	8
INSERT STYLE	Single Sided	Single Sided	Single Sided	Single Sided	Double Sided	Double Sided	Single Sided	Single Sided	Double Sided
MAX. AXIAL DEPTH OF CUT (in mm)	11.5	16.4	14	16	10	15	10	12	9.8
TRUE 90° WALL	✓	✓	✓	✓	✓✓	✓✓	✓	✓	✓✓
WALL SURFACE FINISH	✓	✓	✓	✓	✓✓	✓✓	✓	✓	✓✓
RAMPING CAPABILITY	⊙	⊙	○	⊙	○	○	○	○	○
VICTORY GRADE	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙
DIAMETER RANGE (in mm)	12-125	25-160	25-160	25-80	16-125	25-160	50-160	50-125	32-250
SCREW-ON END MILLS	⊙	⊙	⊙	○	⊙	⊙	○	○	○
WELDON END MILLS	⊙	⊙	⊙	○	⊙	⊙	○	○	⊙
CYLINDRICAL END MILLS	⊙	⊙	○	⊙	⊙	⊙	○	○	○
CYL. END MILLS LONG	⊙	⊙	○	○	⊙	⊙	○	○	○
SHELL MILLS	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙
MONOBLOCK HSK63A	○	○	○	⊙	○	○	○	○	○
HELICAL CUTTERS AVAILABLE	⊙	⊙	⊙	○	○	○	⊙	○	○
WORKPIECE MATERIALS	P M K N S	P M K N S	P M K N S	N	P M K N S H	P M K N S	P M K N S	P M K S	P M K N S
INSERT NOSE RADII (R in mm)	0.2/0.4/0.8/1.2/ 1.6/2.0/2.4/ 3.2	0.4/0.8/1.2/1.6/ 2.0/2.4/3.2/ 4.0/6.0	0.4/0.8/1.2/1.6/ 2.0/2.5/3.2/ 4.0	0.4/0.8/1.2/1.6/ 2.0/3.0/4.0/ 5.0	0.4/0.8/1.2/1.6	0.4/0.8/1.2/ 1.6/2.0	0.8/1.2/1.6/ 2.4/3.2	1.2/1.6	0.8/1.6
WORKPIECE FLOOR FINISH	✓	✓	✓	✓	✓	✓	✓	✓	✓