





List 78PXSH: PXSH Exchangeable Heads

Side Milling (L/D≤4)

Hardness		Up to 45 HRC		45-55 HRC		55-62 HRC		62-66 HRC		66-70 HRC	
Work Material		Hardened Steels Prehardened Steels		Hardened Steel		Hardened Steel		Hardened Steel		Hardened Steel	
Depth of Cut 		Aa=1.0D Ar=0.05D (1mm max)		Aa=1.0D Ar=0.03D (1mm max)		Aa=1.0D Ar=0.02D (0.5mm max)					
Mill Dia.		Speed (RPM)	Feed (in/min)	Speed (RPM)	Feed (in/min)	Speed (RPM)	Feed (in/min)	Speed (RPM)	Feed (in/min)	Speed (RPM)	Feed (in/min)
(in)	(mm)										
-	12	3180	90.2	2390	67.7	1860	37.0	1590	27.2	1330	20.1
1/2	-	3010	85.4	2260	64.0	1760	35.0	1500	26.7	1260	19.0
5/8	-	2410	90.9	1800	68.1	1400	36.9	1200	27.4	1010	20.3
-	16	2390	90.2	1790	67.7	1390	36.6	1190	27.2	1000	20.1
3/4	-	2000	94.4	1500	71.0	1170	38.6	1010	28.6	840	21.1
-	20	1910	90.2	1430	67.7	1110	36.6	960	27.2	800	20.1
-	25	1530	96.5	1150	72.4	890	39.4	760	28.7	640	20.1
1	-	1510	95.2	1130	71.1	880	38.9	750	28.3	630	19.8

1. Use a rigid and precise machine and holder.
2. When chattering occurs, reduce the speed and feed simultaneously.
3. Please adjust the cutting condition when the overhang length is longer.
4. Please consider the overhang length as the total length of replaceable head and overhang length of shank holder.
5. Use an air blow or a suitable cutting fluid with high smoke retardant properties.

Side Milling (4<L/D≤5)

Hardness		Up to 45 HRC		45-55 HRC		55-62 HRC		62-66 HRC		66-70 HRC	
Work Material		Hardened Steels Prehardened Steels		Hardened Steel		Hardened Steel		Hardened Steel		Hardened Steel	
Depth of Cut 		Aa=1.0D Ar=0.03D (1mm max)		Aa=1.0D Ar=0.02D (1mm max)		Aa=0.7D Ar=0.02D (0.5mm max)					
Mill Dia.		Speed (RPM)	Feed (in/min)	Speed (RPM)	Feed (in/min)	Speed (RPM)	Feed (in/min)	Speed (RPM)	Feed (in/min)	Speed (RPM)	Feed (in/min)
(in)	(mm)										
-	12	2260	64.2	1730	49.2	1330	18.9	1190	13.4	930	7.9
1/2	-	2140	60.8	1640	46.6	1260	17.9	1130	12.7	880	7.5
5/8	-	1700	64.2	1300	49.2	1010	19.1	910	13.9	710	8.0
-	16	1690	63.8	1290	48.8	1000	18.9	900	13.8	700	7.9
3/4	-	1420	67.1	1090	51.6	840	19.5	760	14.6	590	8.3
-	20	1350	63.8	1040	49.2	800	18.9	720	13.8	560	7.9
-	25	1080	68.1	830	52.4	640	28.3	570	21.6	450	14.2
1	-	1060	66.8	820	51.8	630	23.4	560	21.2	440	13.9


1. Use a rigid and precise machine and holder.
2. When chattering occurs, reduce the speed and feed simultaneously.
3. Please adjust the cutting condition when the overhang length is longer.
4. Please consider the overhang length as the total length of replaceable head and overhang length of shank holder.
5. Use an air blow or a suitable cutting fluid with high smoke retardant properties.





List 78PXSH: PXSH Exchangeable Heads

High Speed Side Milling (L/D≤4)

Hardness	Up to 45 HRC		45-55 HRC		55-62 HRC		62-66 HRC		66-70 HRC		
Work Material	Hardened Steels Prehardened Steels		Hardened Steel		Hardened Steel		Hardened Steel		Hardened Steel		
Depth of Cut 	Aa=1.0D Ar=0.05D (1mm max)		Aa=1.0D Ar=0.03D (1mm max)		Aa=0.7D Ar=0.015D (0.5mm max)		Aa=0.7D Ar=0.01D (0.5mm max)				
Mill Dia.		Speed (RPM)	Feed (in/min)	Speed (RPM)	Feed (in/min)	Speed (RPM)	Feed (in/min)	Speed (RPM)	Feed (in/min)	Speed (RPM)	Feed (in/min)
(in)	(mm)										
-	12	4510	102.4	3980	90.1	2790	44.5	2390	33.8	1860	23.6
1/2	-	4260	96.7	3760	85.1	2640	42.1	2260	31.9	1760	22.3
5/8	-	3410	103.3	3020	91	2110	44.9	1800	33.9	1400	23.8
-	16	3380	102.4	2990	90.1	2090	44.5	1790	33.8	1390	23.6
3/4	-	2850	107.7	2510	94.6	1750	46.6	1500	35.4	1170	24.9
-	20	2710	102.4	2390	90.1	1670	44.5	1430	33.8	1110	23.6
-	25	2170	109.4	1910	96.1	1340	47.6	1150	36.2	890	25.2
1	-	2140	107.9	1880	94.6	1320	46.9	1130	35.6	880	24.9

1. Use a rigid and precise machine and holder.
2. When chattering occurs, reduce the speed and feed simultaneously.
3. Please adjust the cutting condition when the overhang length is longer.
4. Please consider the overhang length as the total length of replaceable head and overhang length of shank holder.
5. Use an air blow or a suitable cutting fluid with high smoke retardant properties.

