

# Open Hole P28 Honing Stones

In some cases, stones other than the RECOMMENDED STONES may hone faster or last longer. For long or repetitive production runs, it may be economical to choose a stone slightly harder or softer, coarser or finer. As a general rule, hard materials require soft stones; soft materials require hard stones; rough holes require hard stones.

Additional diamond or Borazon/CBN stones are available to hone difficult materials that cannot be honed with conventional superabrasive stones. Contact Customer Service Dept. for recommendations. Stone orders involving large quantities or unusual requirements available 2 - 4 weeks after receipt of order.

## All Available Stones

		Grit Size											
		70	80	100	150	220	280	320	400	500	600	900	1200
Hard-----Soft	<b>Aluminum Oxide Stones (A) - 12 per box</b>												
		P28-A23			P28-A43	P28-A53	P28-A61						
		P28-A25			P28-A45	P28-A55	P28-A63						
		P28-A27			P28-A46	P28-A56	P28-A65	P28-A73					
		P28-A29			P28-A47	P28-A57	P28-A66	P28-A75					
					P28-A48	P28-A58	P28-A67	P28-A77					
					P28-A49	P28-A59	P28-A68	(P28-A78)					
					P28-A411	(P28-A510)	P28-A69	P28-A79					
					P28-A413	(P28-A513)	(P28-A611)						
	Hard-----Soft	<b>Silicon Carbide Stones (J,C) - 12 per box</b>											
(P28-J15)		(P28-J21)			(P28-J43)	(P28-J53)	(P28-J61)						
		P28-J23			P28-J45	P28-J55	P28-J63			P28-J83	P28-J93		
(P28-J17)		P28-J25				P28-J56	P28-J65			P28-J85	P28-J95	P28-C05*	
		P28-J27			P28-J47	P28-J57	P28-J66			P28-J87	P28-J97		
					P28-J48	P28-J58	P28-J67						
		P28-J29			P28-J49	P28-J59	P28-J68						
		(P28-J211)				(P28-J511)	P28-J69			P28-J89	P28-J99		
							P28-J611			(P28-J811)	P28-J911		
<b>Diamond (D) &amp; Borazon/CBN Stones (N) — Metal (M), Resin (R), Vitrified (V) Bond - 1 per box</b>													
(P28-DMB15)		(P28-DMB35)	HP28-DM45	P28-DMB45	(P28-DMB55)	(P28-DMB65)			(P28-DMB85)	(P28-DMB95)	(P28-DMB05)	(P28-DMB905)	(P28-DMB005)
(P28-DM15)		P28-DM35	P28-DM45	P28-DM55		(P28-DM65)			P28-DM85	HP28-DM95	P28-DM05	(P28-DM905)	(P28-DM005)
(P28-DM17)		(P28-DM37)	(P28-DM47)			(P28-DM67)			P28-DM87	(P28-DM95)	(P28-DM07)	(P28-DM907)	(P28-DM007)
(P28-DM19)		P28-DM39	P28-DM49	P28-DM59		(P28-DM69)			P28-DM89	(P28-DM97)	P28-DM09	(P28-DM909)	(P28-DM009)
			P28-DV47	P28-DV57					P28-DV87	(P28-DM99)	P28-DV07		
				P28-DV59					(P28-DV89)		P28-DV09		
				P28-NR51							P28-NR09		
HP28-NM15		HP28-NM35	HP28-NM45	HP28-NM55					HP28-NM85		HP28-NM05		P28-NR007
(P28-NMB15)		(P28-NMB35)	(P28-NMB45)	(P28-NMB55)		(P28-NMB65)			(P28-NMB85)	(P28-NMB95)	(P28-NMB05)	(P28-NMB905)	(P28-NMB005)
P28-NM15		P28-NM35	P28-NM45	P28-NM55		(P28-NM65)			P28-NM85	(P28-NM95)	P28-NM05	(P28-NM905)	(P28-NM005)
P28-NM17		P28-NM37®	P28-NM47	P28-NM57		(P28-NM67)			P28-NM87	(P28-NM97)	(P28-NM07)	(P28-NM907)	(P28-NM007)
P28-NM19		P28-NM39	P28-NM49	P28-NM59		(P28-NM69)			P28-NM89	(P28-NM99)	(P28-NM09)	(P28-NM909)	(P28-NM009)
				P28-NV59					P28-NV89				

\*For best results, use with bronze mandrel.

Most stones in parentheses available 2 weeks after receipt of order.

## Recommended Stones for Open Hole P28 Honing Units

Material	Low-Volume			High-Volume		
	Stone to use	Approx. Ra Surface Finish $\mu\text{m}$ $\mu\text{in}$		Stone to use	Approx. Ra Surface Finish $\mu\text{m}$ $\mu\text{in}$	
<b>Deburring: rough holes, all materials</b>						
	P28-A413	—	—	P28-A413	—	—
<b>Fast removal: deburred, bored, ground, reamed holes</b>						
Aluminum	P28-J57	1,38	55	P28-DM85	1,25	50
Brass, Soft	P28-J63	0,83	33	P28-J63	0,83	33
Bronze	P28-J57	1,38	55	P28-J57	1,38	55
Carbide	P28-DM55	0,50	20	P28-DM55	0,50	20
Cast Iron	P28-J57	0,50	20	P28-DM55	2,00	80
Ceramic	P28-DM55	1,00	40	P28-DM55	1,00	40
Glass	P28-DM55	1,75	70	P28-DM55	1,75	70
Steel, Soft	P28-A57	0,75	30	P28-NM55	1,25	50
Steel, Hardened*	P28-A55	0,30	12	P28-NM55	1,00	40
Steel, Hardened**	P28-A63	0,30	12	—	—	—
Steel, Very Hard***	P28-NM55	1,00	40	—	—	—
<b>Fine finishing: previously honed holes</b>						
Aluminum	P28-J95	0,30	12	P28-DM05	0,83	33
Brass, Soft	P28-J83	0,40	16	P28-J83	0,40	16
Bronze	P28-J95	0,30	12	P28-J95	0,30	12
Carbide	P28-DM05	0,08	3	P28-DM05	0,08	3
Cast Iron	P28-J95	0,13	5	P28-DM05	0,50	20
Ceramic	P28-DM05	0,38	15	P28-DM05	0,38	15
Glass	P28-DM05	0,38	15	P28-DM05	0,38	15
Steel, Soft	P28-J85	0,10	4	P28-NM05	0,40	16
Steel, Hardened	P28-J93	0,13	5	P28-NM05	0,18	7

\*1st choice  
 \*\*2nd choice. Use if A55 does not cut.  
 \*\*\*3rd choice. Use if A63 does not cut.

## Replacement Parts for P28 Honing Units (Both Open and Blind Hole)

Mandrel Range*	Wedge* Open Hole	Wedge* Blind Hole	Retainer Block	Tension Block	Guide Shoe Shims (set of 4)
G-P28-1000VA — G-P28-1187VB	_G-P28	_G-R28	LN_1329A	LN_1336A	LN_1144
G-P28-1250WB — G-P28-1750WE	_G-P28	_G-R28	LN_1329A	LN_1336A	LN_1156
H-P28-1875WE — H-P28-2500WG	_H-P28	_H-R28	LN_1330A	LN_1337A	LN_1156
J-P28-2625SD — J-P28-3750SD	_J-P28	_J-R28	LN_1329A	LN_1336A	LN_1156
K-P28-2625SC — K-P28-3750SD	_K-P28-1	_K-R28-1	LN_1329A	LN_1336A	LN_1156
K-P28-3875SD — K-P28-5000SD	_K-P28-2	_K-R28-2	LN_1329A	LN_1336A	LN_1156
K-P28-5125SD — K-P28-5875SD	_K-P28-3	_K-R28-3	LN_1329A	LN_1336A	LN_1156

\*Insert 2,3,4 or 5 depending on stone number. Ex. 4G-P28 Wedge for 4-Stone Mandrel

## Automatic Size Control Probes

### 26mm - 51mm (1"-2")

Setting Fixture required for centering and setting Sensing Units. Order ASC-50 Setting Fixture. (For metric version, specify ASC-50M.)

Sensing Tip Part No.	Diameter Range	
	mm	in
ASC-51	26-32	1 - 1 1/4
ASC-52	32-38	1 1/4 - 1 1/2
ASC-53	38-45	1 1/2 - 1 3/4
ASC-54	45-51	1 3/4 - 2

For use on machines with Automatic Size Control units. Select the appropriate size control probe based on workpiece finish diameter. See page 98 for complete list of A.S.C. probes.