

mollart-cox
Group

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Engineering Limited

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Products Limited

BORE SIZING MACHINES & CONSUMABLE TOOLING

PRICE LIST 2010

MOLLART COX PRODUCTS LIMITED

UNIT 1

BROOMBANK ROAD

CHESTERFIELD TRADING ESTATE

SHEEPBRIDGE

CHESTERFIELD

DERBYSHIRE

S41 9QJ

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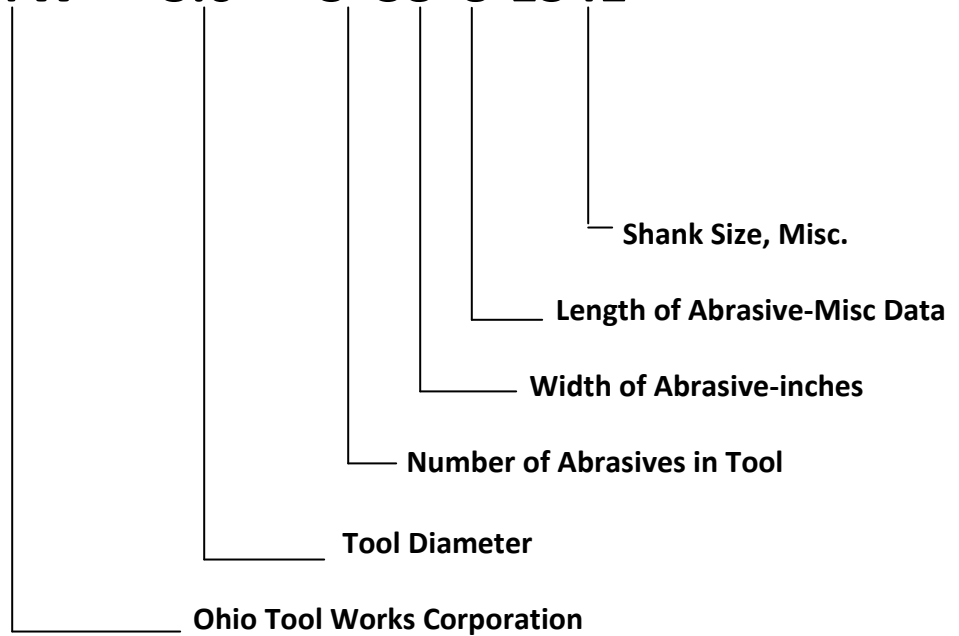
FAX: +44 (0) 1246 458091

www.mollartcoxproducts.co.uk



Ohio Tool Works Tool Assembly Description

OTW - 3.0 - 5 38 8-1341



Slotted Tool Bodies



Model Number	Shank Size	Range	Assembly Price	Body Only Price	Body Type	Abrasive Size
OTW-.750-3184-0000 Integral Driveshaft	N/A	.72-1.12	£1,077.48	£819.26 OTW	Slotted	1/8x1/8x4 SA
OTW-.750-3184-0000 Integral Driveshaft	N/A	.72-1.12	£1,077.48	£819.26 OTW	No Spring Slots	1/8x1/8x4 SA
OTW-1.0-3184-0000 Integral Driveshaft	N/A	.92-1.25	£1,667.55	£834.82 OTW	Slotted	1/8x1/8x4 SA
OTW-1.0-3184-0000 Integral Driveshaft	N/A	.92-1.25	£1,107.55	£834.82 OTW	No Spring Slots	1/8x1/8x4 SA
OTW-1.25-3146-1992	¾"	1.19-1.50	£1,262.52	£835.86 OTW1570	Slotted	1/4x7/32x6
OTW-1.25-3146-1993	¾"	1.19-1.50	£1,162.52	£835.86 OTW1860	No Spring Slots	1/4x7/32x6
OTW-1.5-35166-1301	¾"	1.43-1.81	£1,244.44	£865.93 OTW1571	Slotted	5/16x5/16x6
OTW-1.5-35166-1302	7/8"	1.43-1.81	£1,244.44	£865.93 OTW1571	Slotted	5/16x5/16x6
OTW-1.5-35166-1303	¾"	1.43-1.81	£1,244.44	£865.93 OTW1861	No Spring Slots	5/16x5/16x6
OTW-1.5-35166-1304	7/8"	1.43-1.81	£1,244.44	£865.93 OTW1861	No Spring Slots	5/16x5/16x6
OTW-1.75-45166-1311	7/8"	1.65-2.01	£1,503.70	£1,003.85 OTW1572	Slotted	5/16x5/16x6
OTW-1.75-45166-1312	1 1/8"	1.65-2.01	£1,503.70	£1,003.85 OTW1572	Slotted	5/16x5/16x6
OTW-1.75-45166-1313	7/8"	1.65-2.01	£1,503.70	£1,003.85 OTW1862	No Spring Slots	5/16x5/16x6
OTW-1.75-45166-1314	1 1/8"	1.65-2.01	£1,503.70	£1,003.85 OTW1862	No Spring Slots	5/16x5/16x6
OTW-2.0-4388-1321	7/8"	1.93-2.50	£1,663.40	£1,034.96 OTW1573	Slotted	3/8x3/8x8
OTW-2.0-4388-1322	1 1/8"	1.93-2.50	£1,663.40	£1,034.96 OTW1573	Slotted	3/8x3/8x8

Slotted Tool Bodies



Model Number	Shank Size	Range	Assembly Price	Body Only Price	Body Type	Abrasive Size
OTW-2.0-4388-1323	7/8"	1.93-2.50	£1,663.40	£1,034.96 OTW1863	No Spring Slots	3/8x3/8x8
OTW-2.0-4388-1324	1 1/8"	1.93-2.50	£1,663.40	£1,034.96 OTW1863	No Spring Slots	3/8x3/8x8
OTW-2.5-4388-1331	1 1/8"	2.41-3.18	£1,724.59	£1,050.51 OTW1574	Slotted	3/8x3/8x8
OTW-2.5-4388-1332	1 1/2"	2.41-3.18	£1,724.59	£1,050.51 OTW1574	Slotted	3/8x3/8x8
OTW-2.5-4388-1333	1 1/8"	2.41-3.18	£1,724.59	£1,050.51 OTW1864	No Spring Slots	3/8x3/8x8
OTW-2.5-4388-1334	1 1/2"	2.41-3.18	£1,724.59	£1,050.51 OTW1864	No Spring Slots	3/8x3/8x8
OTW-3.0-5388-1341	1 1/8"	2.91-3.93	£1,882.22	£1,218.52 OTW1575	Slotted	3/8x3/8x8
OTW-3.0-5388-1342	1 1/2"	2.91-3.93	£1,882.22	£1,218.52 OTW1575	Slotted	3/8x3/8x8
OTW-3.0-5388-1343	1 3/4"	2.91-3.93	£1,882.22	£1,218.52 OTW1575	Slotted	3/8x3/8x8
OTW-3.0-5388-1344	1 1/8"	2.91-3.93	£1,882.22	£1,218.52 OTW1865	No Spring Slots	3/8x3/8x8
OTW-3.0-5388-1345	1 1/2"	2.91-3.93	£1,882.22	£1,218.52 OTW1865	No Spring Slots	3/8x3/8x8
OTW-3.0-5388-1346	1 3/4"	2.91-3.93	£1,882.22	£1,218.52 OTW1865	No Spring Slots	3/8x3/8x8

Flanged Tool Bodies



Model Number	Shank Size	Range	Assembly Price	Body Only Price	Body Type	Abrasive Size
OTW-3.5-5388-1351	1 ½"	3.41-4.00	£1,963.11	£1,240.29 OTW2273	Flange	3/8x3/8x8
OTW-3.5-5388-1352	1 ¾"	3.41-4.00	£1,963.11	£1,240.29 OTW2273	Flange	3/8x3/8x8
OTW-4.0-5128-1361	1 ½"	3.88-5.00	£2,139.40	£1,289.03 OTW2274	Flange	1/2x1/2x8
OTW-4.0-5128-1362	1 ¾"	3.88-5.00	£2,139.40	£1,289.03 OTW2274	Flange	1/2x1/2x8
OTW-4.0-5128-1363	2 ¼"	3.88-5.00	£2,139.40	£1,289.03 OTW2274	Flange	1/2x1/2x8
OTW-5.0-5128-1381	1 ½"	4.88-6.13	£2,334.37	£1,406.22 OTW2275	Flange	1/2x1/2x8
OTW-5.0-5128-1382	1 ¾"	4.88-6.13	£2,334.37	£1,406.22 OTW2275	Flange	1/2x1/2x8
OTW-5.0-5128-1383	2 ¼"	4.88-6.13	£2,334.37	£1,406.22 OTW2275	Flange	1/2x1/2x8
OTW-6.0-6128-1391	1 ¾"	5.76-7.06	£2,707.70	£1,664.44 OTW2276	Flange	1/2x1/2x8
OTW-6.0-6128-1392	2 ¼"	5.76-7.06	£2,707.70	£1,664.44 OTW2276	Flange	1/2x1/2x8
OTW-6.0-6128-1393	3"	5.76-7.06	£2,707.70	£1,664.44 OTW2276	Flange	1/2x1/2x8
*OTW-6.0-8128-0000S	2 ¼"	5.76-7.06	£3,102.81	£1,909.18 OTW	Flange	1/2x1/2x8
OTW-7.0-6128-1401	1 ¾"	6.76-8.06	£3,088.29	£1,855.26 OTW1514	Flange	1/2x1/2x8
OTW-7.0-6128-1402	2 ¼"	6.76-8.06	£3,088.29	£1,855.26 OTW1514	Flange	1/2x1/2x8
OTW-7.0-6128-1403	3"	6.76-8.06	£3,088.29	£1,855.26 OTW1514	Flange	1/2x1/2x8

Flanged Tool Bodies



Model Number	Shank Size	Range	Assembly Price	Body Only Price	Body Type	Abrasive Size
*OTW-7.0-8128-1411S	1 ¾"	6.76-8.06	£3,484.44	£2,089.63 OTW1515	Flange	1/2x1/2x8
*OTW-7.0-8128-1412S	2 ¼"	6.76-8.06	£3,484.44	£2,089.63 OTW1515	Flange	1/2x1/2x8
*OTW-7.0-8128-1413S	3"	6.76-8.06	£3,484.44	£2,089.63 OTW1515	Flange	1/2x1/2x8
OTW-8.0-8128-1421	1 ¾"	7.76-9.06	£3,520.74	£2,189.18 OTW1516	Flange	1/2x1/2x8
OTW-8.0-8128-1422	2 ¼"	7.76-9.06	£3,484.44	£2,189.18 OTW1516	Flange	1/2x1/2x8
OTW-8.0-8128-1423	3"	7.76-9.06	£3,484.44	£2,189.18 OTW1516	Flange	1/2x1/2x8
OTW-9.0-8128-1431	1 ¾"	8.76-10.06	£3,793.48	£2,310.52 OTW1517	Flange	1/2x1/2x8
OTW-9.0-8128-1432	2 ¼"	8.76-10.06	£3,793.48	£2,310.52 OTW1517	Flange	1/2x1/2x8
OTW-9.0-8128-1433	3"	8.76-10.06	£3,793.48	£2,310.52 OTW1517	Flange	1/2x1/2x8
OTW-10/11-8128-1442	2 ¼"	9.63-12.25	£5,017.18	£3,210.66 OTW2001	Flange	1/2x1/2x8
OTW-10/11-8128-1443	3"	9.63-12.25	£5,017.18	£3,210.66 OTW2001	Flange	1/2x1/2x8
OTW-12/13-8128-1452	2 ¼"	11.63-14.25	£6,867.26	£4,188.59 OTW2002	Flange	1/2x1/2x8
OTW-12/13-8128-1453	3"	11.63-14.25	£6,867.26	£4,188.59 OTW2002	Flange	1/2x1/2x8
OTW-14/15-8128-1462	2 ¼"	13.63-16.25	£9,404.88	£6,113.33 OTW2003	Flange	1/2x1/2x8
OTW-14/15-8128-1463	3"	13.63-16.25	£9,404.88	£6,113.33 OTW2003	Flange	1/2x1/2x8
OTW-16/17-8128-1472	2 ¼"	15.63-18-25	£11,391.85	£7,403.40 OTW2004	Flange	1/2x1/2x8

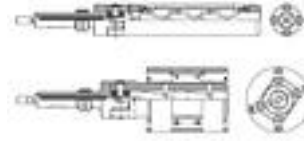
Flanged Tool Bodies



Model Number	Shank Size	Range	Assembly Price	Body Only Price	Body Type	Abrasive Size
OTW-16/17-8128-1473	3"	15.63-18.25	£11,391.85	£7,403.40 OTW2004	Flange	1/2x1/2x8
*OTW-18/19-8128-1482	2 ¼"	17.63-20.25	£14,715.55	£9,565.63 OTW	Flange	1/2x1/2x8
*OTW-18/19-8128-1483	3"	17.63-20.25	£14,715.55	£9,565.63 OTW	Flange	1/2x1/2x8
*OTW-20/21-8128-1492	2 ¼"	19.63-22.25	£17,705.33	£12,229.77 OTW	Flange	1/2x1/2x8
*OTW-20/21-8128-1493	3"	19.63-22.25	£17,705.33	£12,229.77 OTW	Flange	1/2x1/2x8
*OTW-22/23-8128-1502	2 ¼"	21.63-24.25	£18,814.96	£12,229.77 OTW	Flange	1/2x1/2x8
*OTW-22/23-8128-1503	3"	21.63-24.25	£18,814.96	£12,229.77 OTW	Flange	1/2x1/2x8
*OTW-24/25-8128-	3"	24.63-26.25	£21,905.33	£14,238.51 OTW	Flange	1/2x1/2x8
*OTW-24/25-8128-	3"	24.63-26.25	£21,905.33	£14,238.51 OTW	Flange	1/2x1/2x8

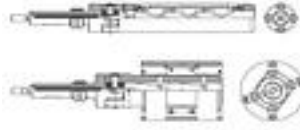
* Non-Standard Special Order Tools

Medium Duty Tool Bodies



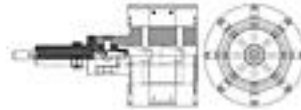
Model Number	Shank Size	Range	Assembly Price	Body Only Price	Body Type	Abrasive Size
OTW-1.5-35166-1301	¾"	1.43-1.81	£1,244.44	£865.93 OTW1571	Slotted	5/16x5/16x6
OTW-1.5-35166-1302	7/8"	1.43-1.81	£1,244.44	£865.93 OTW1571	Slotted	5/16x5/16x6
OTW-1.5-35166-1303	¾"	1.43-1.81	£1,244.44	£865.93 OTW1861	No Spring Slots	5/16x5/16x6
OTW-1.5-35166-1304	7/8"	1.43-1.81	£1,244.44	£865.93 OTW1861	No Spring Slots	5/16x5/16x6
OTW-1.75-45166-1311	7/8"	1.65-2.02	£1,503.70	£1,002.81 OTW1572	Slotted	5/16x5/16x6
OTW-1.75-45166-1312	1 1/8"	1.65-2.02	£1,503.70	£1,002.81 OTW1572	Slotted	5/16x5/16x6
OTW-1.75-45166-1313	7/8"	1.65-2.02	£1,503.70	£1,002.81 OTW1862	No Spring Slots	5/16x5/16x6
OTW-1.75-45166-1314	1 1/8"	1.65-2.02	£1,503.70	£1,002.81 OTW1862	No Spring Slots	5/16x5/16x6
OTW-2.0-4386-xxxx	7/8"	1.94-2.50	£1,612.60	£1,031.85 OTWxxxx	Slotted	3/8x3/8x6
OTW-2.0-4386-7277	1 1/8"	1.94-2.50	£1,612.60	£1,031.85 OTWxxxx	Slotted	3/8x3/8x6
OTW-2.0-4386-xxxx	7/8"	1.94-2.50	£1,612.60	£1,031.85 OTWxxxx	No Spring Slots	3/8x3/8x6
OTW-2.0-4386-xxxx	1 1/8"	1.94-2.50	£1,612.60	£1,031.85 OTWxxxx	No Spring Slots	3/8x3/8x6
OTW-2.5-4386-7278	1 1/8"	2.38-3.12	£1,693.48	£1,050.51 OTWxxxx	Slotted	3/8x3/8x6
OTW-2.5-4386-xxxx	1 ½"	2.38-3.12	£1,693.48	£1,050.51 OTWxxxx	Slotted	3/8x3/8x6
OTW-2.5-4386-xxxx	1 1/8"	2.38-3.12	£1,693.48	£1,050.51 OTWxxxx	No Spring Slots	3/8x3/8x6
OTW-2.5-4386-xxxx	1 ½"	2.38-3.12	£1,693.48	£1,050.51 OTWxxxx	No Spring Slots	3/8x3/8x6

Medium Duty Tool Bodies



Model Number	Shank Size	Range	Assembly Price	Body Only Price	Body Type	Abrasive Size
OTW-3.0-4386-1347	1 1/8"	2.94-3.50	£1,881.18	£1,216.44 OTWxxxx	Flange	3/8x3/8x6
OTW-3.0-4386-xxxx	1 1/2"	2.94-3.50	£1,881.18	£1,216.44 OTWxxxx	Flange	3/8x3/8x6
OTW-3.0-4386-3813	1 3/4"	2.94-3.50	£1,881.18	£1,216.44 OTWxxxx	Flange	3/8x3/8x6
OTW-3.5-4386- 3576	1 1/8"	3.43-4.30	£1,963.11	£1,240.30 OTWxxxx	Flange	3/8x3/8x6
OTW-3.5-4386- xxxx	1 3/4"	3.43-4.30	£1,963.11	£1,240.30 OTWxxxx	Flange	3/8x3/8x6
OTW-4.0-4386- 6741	1 1/8"	3.88-5.18	£2,140.44	£1,348.15 OTWxxxx	Flange	3/8x3/8x6
OTW-4.0-4386- 5126	1 3/4"	3.88-5.18	£2,140.44	£1,348.15 OTWxxxx	Flange	3/8x3/8x6
OTW-4.0-4386- xxxx	2 1/4"	3.88-5.18	£2,140.44	£1,348.15 OTWxxxx	Flange	3/8x3/8x6
OTW-5.0-4386- xxxx	1 1/8"	4.83-6.00	£2,334.37	£1,406.22 OTWxxxx	Flange	3/8x3/8x6
OTW-5.0-4386- 7262	1 3/4"	4.83-6.00	£2,334.37	£1,406.22 OTWxxxx	Flange	3/8x3/8x6
OTW-5.0-4386- xxxx	2 1/4"	4.83-6.00	£2,334.37	£1,406.22 OTWxxxx	Flange	3/8x3/8x6
OTW-6.0-4386- xxxx	1 1/8"	5.76-7.00	£2,707.70	£1,664.44 OTWxxxx	Flange	3/8x3/8x6
OTW-6.0-4386- 7263	1 3/4"	5.76-7.00	£2,707.70	£1,664.44 OTWxxxx	Flange	3/8x3/8x6
OTW-6.0-4386- xxxx	2 1/4"	5.76-7.00	£2,707.70	£1,664.44 OTWxxxx	Flange	3/8x3/8x6
OTW-7.0-4386- xxxx	1 1/8"	6.76-8.00	£3,088.30	£1,855.26 OTWxxxx	Flange	3/8x3/8x6
OTW-7.0-4386- 7264	1 3/4"	6.76-8.00	£3,088.30	£1,855.26 OTWxxxx	Flange	3/8x3/8x6
OTW-7.0-4386- xxxx	2 1/4"	6.76-8.00	£3,088.30	£1,855.26 OTWxxxx	Flange	3/8x3/8x6

MD Modular Tooling



- **7265 Hub Assembly 8"/14" (1.75" Shank) Price: £2,884.00**

<u>Part #</u>	<u>Description</u>	<u>Price</u>
7266	Ring Kit 8"/9"	£1,922.66
7267	Ring Kit 10"/11"	£1,980.74
7268	Ring Kit 12"/13"	£2,046.07

HD Modular Tooling

- **5677 Hub Assembly 14/25" (2 1/4" Shank) Price £5,527.41**
- **5676 Hub Assembly 14/25" (3" Shank) Price £5,527.41**

<u>Part #</u>	<u>Description</u>	<u>Price</u>
5684	Ring Kit 14/15"	Price £4,385.63
5685	Ring Kit 16/17"	Price £4,870.96
5686	Ring Kit 18/19"	Price £5,355.26
5687	Ring Kit 20/21"	Price £5,840.60
5688	Ring Kit 22/23"	Price £6,324.88
5689	Ring Kit 24/25"	Price £6,809.18

Stone holders: See price book (10" thru 25")

- **6239 Hub Assembly 26/35" (3" Shank) Price £17,546.66**

<u>Part #</u>	<u>Description</u>	<u>Price</u>
6240	Ring Kit 26/27"	Price £8,883.26
6241	Ring Kit 28/29"	Price \$8,876.00
6242	Ring Kit 30/31"	Price £9,526.22
6243	Ring Kit 32/33"	Price £9,846.66
6244	Ring Kit 34/35"	Price £10,167.11

Stone Holders: 1/2" x 1/2" x 6" (2)

Price: £313.18 ea. £2,505.48/set



Drive Shanks

Tool Size	Shank 1	Shank 2	Shank 3
.750"	N/A		
1.00"	N/A		
1.25"	.750" - OTW1588		
1.50"	.875" - OTW1591	.750" - OTW1590	
1.75"	.875" - OTW1592	1.125" - OTW1593	
2.00"	1.125" - OTW1595	.875" - OTW1594	
2.50"	1.125" - OTW1596	1.50" - OTW1597	
3.00"	1.75" - OTW1600	1.125" - OTW1598	1.50" - OTW1599
3.50"	1.75" - OTW1600	1.50" - OTW1599	
4.00"	1.75" - OTW1530	2.25" - OTW1532	1.50" - OTW1528
5.00"	1.75" - OTW1531	2.25" - OTW1214	1.50" - OTW1529
6.00" to 9.00"	2.25" - OTW1535	3.0" - OTW1536	1.75" - OTW 1534
10.00" to 22.00"	3.00" - OTW1996	2.25" - OTW1995	

Standard Angle Back Stone Holders



Tool Size	OTW Part #	SPC/GHC Part #	Height	Range	Abrasive Size	Price
.500"	OTW1232	G14A105	.120"	.48-.50	.12x.07x.2.5" Super abrasive only	£126.52 ea.
	OTW1233	G14A105-1	.151"	.54-.56		£379.55 @
	OTW1234	G14A105-2	.182"	.60-.62		Set (3)
	OTW1235	G14A105-3	.213"	.66-.69		
.750"	Vit S.A. 5949 4607	G14B195	.187"	.724-.873		£126.52 ea.
	5950 4608	G14B195-1	.218"	.786-.937		£379.55 @
	5951 4609	G14B195-2	.250"	.850-.999		Set (3)
	5952 4610	G14B195-3	.281"	.912-1.061		
		G14B195-4	.312"	Not Recom.		
1.0"	2938 2380	G14B186-1	.218"	.92-1.00	.12x.12x4" Super abrasive only	£126.52 ea.
	2939 2381	G14B186-2	.250"	.98-1.06		£379.55 @
	2940 2382	G14B186-3	.281"	1.04-1.12		Set (3)
	2941 2383	G14B186-4	.312"	1.00-1.18		
	2942 2384	G14B186-5	.343"	1.17-1.25		
	2943 2385	G14B186-6	.375"	Not Recom.		
1.25"	OTW1284	G14B187	.312"	1.19-1.25	1/4x7/32x6 (.25x.218x 6)	£126.52 ea.
	OTW1285	G14B187-1	.343"	1.25-1.31		£379.55 @
	OTW1286	G14B187-2	.375"	1.31-1.37		Set (3)
	OTW1287	G14B187-3	.406"	1.37-1.43		
	OTW1288	G14B187-4	.437"	1.43-1.50		
1.50"	OTW1270	G14B125	.312"	1.43-1.53	5/16x5/16x6	£126.52 ea.
	OTW1271	G14B139	.357"	1.53-1.62		£379.55 @
	OTW1272	G14B140	.402"	1.62-1.71		Set (3)
	OTW1273	G14B182	.447"	1.71-1.81		
1.75"	OTW1270	G14B125	.312"	1.65-1.74	5/16x5/16x6	£126.52 ea.
	OTW1271	G14B139	.357"	1.74-1.83		£506.08 @
	OTW1272	G14B140	.402"	1.83-1.92		Set (4)
	OTW1273	G14B182	.447"	1.92-2.01		

Standard Angle Back Stone Holders



1.75" SPC/GHC only	OTW1297	G14B139-1	.325"	1.65-1.74	5/16x5/16x6	£126.52 ea.	
	OTW1298	G14B140-1	.370"	1.74-1.83			
	OTW1299	G14B182-1	.415"	1.83-1.92			£506.07 @
	OTW1300	G14B182-2	.460"	1.92-2.01			Set (4)
2.0"	OTW1274	G14B168-1	.412"	1.93-2.00	3/8x3/8x8	£117.18 ea.	
	OTW1275	G14B171-1	.484"	2.06-2.12			
	OTW1276	G14B172-1	.546"	2.19-2.25			£468.74 @
	OTW1277	G14B173-1	.609"	2.31-2.37			Set (4)
	OTW1278	G14B174-1	.671"	2.44-2.50			
2.5"	OTW1279	G14B130	.625"	2.41-2.68	3/8x3/8x8	£117.18 ea.	
	OTW1280	G14B131	.750"	2.66-2.93			£468.74 @
	OTW1281	G14B132	.875"	2.91-3.18			Set (4)
3.0"	OTW1280	G14B131	.750"	2.91-3.18	3/8x3/8x8	£117.18 ea.	
	OTW1281	G14B132	.875"	3.16-3.47			
	OTW1282	G14B133	1.00"	3.41-3.68			£585.92 @
	OTW1283	G14B178	1.125"	3.66-3.93			Set (5)

Standard Flat Back Stone Holders



Tool Size	OTW Part #	SPC/GHC Part #	Height	Range	Abrasive Size	Price
3.50"	OTW1198	G14C150	.406"	3.41-3.50	3/8x 3/8 x8	£103.70 ea. £518.52 @ Set (5)
	OTW1201	G14C115	.475"	3.54-3.63		
	OTW1204	G14C162	.531"	3.66-3.75		
	OTW1207	G14C116	.600"	3.79-3.88		
	OTW1210	G14C168	.656"	3.91-4.00		
4.0"	OTW1250	G14C108	.375"	3.88-400	1/2x1/2x8	£103.70 ea. £518.52 @ Set (5)
	OTW1251	G14C109	.500"	4.13-4.25		
	OTW1252	G14C110	.625"	4.37-4.50		
	OTW1253	G14C111	.750"	4.63-4.75		
	OTW1254	G14C114	.875"	4.88-5.00		
5.0"	OTW1252	G14C110	.625"	4.88-5.13	1/2x1/2x8	£103.70 ea. £518.52 @ Set (5)
	OTW1253	G14C111	.750"	5.13-5.38		
	OTW1254	G14C114	.875"	5.38-5.63		
	OTW1255	G14C112	1.00"	5.63-5.88		
	OTW1256	G14C113	1.125"	5.88-6.13		
6.0" thru 9.0"	OTW1254	G14C114	.875"	5.76-6.06	1/2x1/2x8	£103.70 ea. £622.22 @ Set (6) £829.63 @ Set (8)
	OTW1255	G14C112	1.00"	6.01-6.31		
	OTW1256	G14C113	1.125"	6.26-6.56		
	OTW1257		1.250"	6.51-6.81		
	OTW1258		1.375"	6.76-7.06		
10.0" thru 24.0"	OTW1260		2.00"	9.63-10.25	1/2x1/2x8	£126.52 ea. £1,012.15 @ Set (8)
	OTW1261		2.25"	10.13-10.75		
	OTW1262		2.50"	10.63-11.25		
	OTW1263		2.75"	11.13-11.75		
	OTW1264		3.00"	11.63-12.25		

Clamp Plates

3 ½" thru 5" tools

6" thru 9" tools

10" and up tools

Price: £25.66 each

Price: £27.27 each

Price: £36.30 each

Clamp Plate Screws

£0.83 each

£0.93 each

£1.04 each

Medium Duty Stone Holders



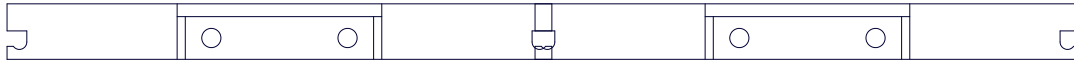
Tool Size	OTW Part #	SPC Part #	Height	Range	Abrasive Size	Price
1 ½"	1270	G14B125	.312	1.437-1.531	5/16x5/16x6 Mtd.	£126.52 ea. £379.55 @ Set(3)
	1271	G14B139	.357	1.531-1.625		
	1272	G14B140	.402	1.625-1.718		
	1273	G14B182	.447	1.718-1.812		
1 ¾"	1297	G14B139-1	.325	1.650-1.750	5/16x5/16x6 Mtd.	£126.52 ea. £506.07 @ Set(4)
	1298	G14B140-1	.370	1.740-1.840		
	1299	G14B182-1	.415	1.830-1.930		
	1300	G14B182-2	.460	1.920-2.020		
2"	2200	G14B152	.421	1.940-2.000	3/8x3/8x6 Mtd.	£117.18 ea. £468.74 @ Set(4)
	2201	G14B153	.484	2.070-2.120		
	2202	G14B154	.546	2.190-2.250		
	2203	G14B146	.609	2.320-2.370		
	2204	G14B155	.671	2.440-2.500		
2 ½"	6378	G14B146	.625	2.375-2.625	3/8x3/8x6 Mtd.	£117.18 ea. £468.74 @ Set(4)
	6379	G14B148	.750	2.625-2.875		
	6380	G14B149	.875	2.875-3.125		
3"	1236	G14C178-1	.312	2.937-3.000	3/8x3/8x6 Mtd.	£117.85 ea. £468.74 @ Set(4)
	1237	G14C178-2	.374	3.062-3.125		
	1238	G14C178-3	.437	3.187-3.250		
	1239	G14C178-4	.500	3.312-3.375		
	1240	G14C178-5	.562	3.437-3.500		
3 ½"	1238	G14C178-3	.437	3.430-3.550	3/8x3/8x6 Mtd.	£117.18 ea. £468.74 @ Set(4)
	1239	G14C178-4	.500	3.550-3.680		
	1240	G14C178-5	.562	3.680-3.800		
	1241	G14C178-6	.625	3.800-3.930		
	1242	G14C178-7	.687	3.930-4.050		
	1243	G14C178-8	.750	4.050-4.180		
1244	G14C178-9	.812	4.180-4.300			

Medium Duty Stone Holders



Tool Size	OTW Part#	SPC Part #	Height	Range	Abrasive Size	Price
4"	1239	G14C178-4	.500	3.880-4.180	3/8x3/8x6 Mtd.	£117.18 ea. £468.74 @ Set (4)
	1241	G14C178-6	.625	4.130-4.430		
	1243	G14C178-8	.750	4.380-4.680		
	1245	G14C178-10	.875	4.680-4.930		
	1247	G14C178-12	1.000	4.880-5.180		
5"	5644	G14C129	.725	4.825-5.250	3/8x3/8x6 Mtd.	£117.18 ea. £468.74 @ Set (4)
	5645	G14C130	.850	5.075-5.500		
	5646	G14C131	.975	5.325-5.750		
	5647	G14C132	1.100	5.575-6.000		
6"	5646	G14C131	.975	5.760-6.250	3/8x3/8x6 Mtd.	£117.18 ea. £468.74 @ Set(4)
	5647	G14C132	1.100	6.010-6.500		
	7269	G14C133	1.225	6.250-6.750		
	7270	G14C134	1.350	6.510-7.000		
7"	5646	G14C131	.975	6.760-7.250	3/8x3/8x6 Mtd.	\$113.00 ea. \$452.00@ Set(4)
	5647	G14C132	1.100	7.010-7.500		
	7269	G14C133	1.225	7.250-7.750		
	7270	G14C134	1.350	7.510-8.000		
8"/9"	7271		1.473	7.77-8.32	3/8x3/8x6 Mtd.	£117.18 ea. £493.63 @ Set (4)
10"/11"	7272		1.661	8.13-8.70		
12"/13"	7273		1.911	8.63-9.19		
Modular	7274		2.161	9.13-9.70		
	7275		2.406	9.62-10.19		

Tandem Stone Holders



Tool Size	OTW Part #	SPC Part #	Height	Range	Abrasive Size	Price
2 ½"	3365	G14B165	.625	2.375-2.625	3/8x3/8x6	£240.60 ea.
	1266	G14B166	.750	2.625-2.875	(2)	£962.37 @
	2568	G14B167	.875	2.875-3.125	Angleback	Set (4)
3"	1266	G14B166	.750	2.875-3.000	3/8x3/8x6	£240.60 ea.
	2567	G14B163	.812	3.000-3.250	(2)	£1,202.96 @
	2569	G14B164	.937	3.250-3.500	Angle back	Set (5)
	1268	G14B169	1.062	3.500-3.750		
3 ½"	2249	G14C184-1	.406	3.375-3.500	3/8x3/8x6 (2)	£193.93 ea.
	2250	G14C184-2	.531	3.625-3.750		£969.63 @
	6575	G14C184-3	.593	3.750-3.875		Set (5)
	6576	G14C184-4	.656	3.875-4.000		
	6577	G14C184-5	.781	4.125-4.250		
4"	1292	G14C174-4	.375	3.875-4.000	1/2x1/2x8 (2)	£246.81 ea.
	1291	G14C174-3	.500	4.125-4.250		£1,234.07 @
	1293	G14C174-2	.625	4.375-4.500		Set(5)
	2964	G14C174-1	.750	4.625-4.750		£1,480.88 @
	1294	G14C173-7	.850	4.825-5.000		Set(6)
5"	1293	G14C174-2	.625	4.875-5.125	1/2x1/2x8 (2)	£246.81 ea.
	2964	G14C174-1	.750	5.125-5.375		£1,234.07 @
	1294	G14C173-7	.850	5.375-5.575		Set(5)
	4469	G14C173-8	.975	5.575-5.825		£1,480.88 @
	4470	G14C173-9	1.100	5.825-6.075		Set(6)
*6"	1294	G14C173-7	.850	5.760-6.062	1/2x1/2x8 (2)	£246.81 ea.
4469	G14C173-8	.975	6.010-6.312	£1,480.88/Set(6)		
Thru	4470	G14C173-9	1.100	6.260-6.562		£1,974.52/Set(8)
4471	G14C173-10	1.225	6.510-6.812			
*9"	4472	G14C173-11	1.350	6.760-7.062		

*Tandem Stone Holders 6.00" thru 9.00" have the same range with 1.00" larger increments.

Tooling Components

Expander Pins



Tool Size	Part #	Price
3.5"	OTW-1621	£21.77
4.0"	OTW-1522	£23.85
5.0"	OTW-1523	£23.85
6.0"	OTW-1524	£24.88
7.0"	OTW-1525	£24.88
8.0"	OTW-1526	£24.88
9.0"	OTW-1527	£24.88
10"/11"	OTW-1997	£31.11
12"/13"	OTW-1998	£37.33
14"/15"	OTW-1999	£45.63
16"/17"	OTW-2000	£45.63

Pin Pricing is for standard tooling only
For Special Pins multiply by x 1.2

Add a £280.00 Set-up fee to the price of
Expander Plates

Expander Plates



Abrasive Length	Angles	Price
2" and below	1	£58.07
2" thru 4"	2	£70.52
4"	2	£73.63
5"	2	£81.93
6"	2	£85.04
6"	3	£94.37
8"	2	£105.77
8"	3	£123.40

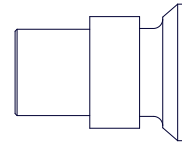
Tooling Components

Universal Blocks



Tool Size	OTW Part Number	SPC #	Price
1 ¼"	OTW-1562	G15A120	£118.22
1 ½"	OTW-1562	G15A120	£118.22
1 ¾"	OTW-1563	G15A121	£118.22
2"	OTW-1564	G15A104	£118.22
2 ½"	OTW-1565	G15A110	£118.22
3"	OTW-1566	G15A111	£124.44
3 ½"	OTW-1566	G15A111	£124.44
4"	OTW-1221	G15A101	£137.93
5"	OTW-1221	G15A101	£137.93
6"	OTW-1539	G15A112	£137.93
7"	OTW-1539	G15A112	£137.93
8"	OTW-1539	G15A112	£137.93
9"	OTW-1539	G15A112	£137.93
10"	OTW-1110		£207.41
12"	OTW-1110		£207.41
14"	OTW-1110		£207.41
16"	OTW-1110		£207.41

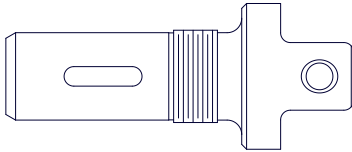
Drive Screws and Pins



Tool Size	OTW Part Number	SPC #	Price
1 ¼"	OTW-1585 Pin	G16A139	£12.44
1 ½"	OTW-1605 Pin	G16A122	£12.44
1 ¾"	OTW-1606 Pin	G16A138	£12.44
2"	OTW-1219 Screw	G16A102	£14.52
2 ½"	OTW-1218 Screw	G16A109	£14.52
3"-3 ½"	OTW-1217 Screw	G16A116	£14.52
4"	OTW-1216 Screw	G16A112	£14.52
5"	OTW-1213 Screw	G16A101	£15.55
6"-16"	OTW-1540 Screw	G16A105	£19.70

Tooling Components

Drive Shanks



Tool Size	OTW Part Number	Price
1 ¼"	OTW-1588 (.75")	£298.66
1 ½"	OTW-1590 (.75")	£304.88
	OTW-1591 (.87")	£304.88
1 ¾"	OTW-1592 (.87")	£311.11
	OTW-1593 (1.12")	£311.11
2"	OTW-1594 (.87")	£314.22
	OTW-1595 (1.12")	£314.22
2 ½"	OTW-1596 (1.12")	£323.55
	OTW-1597 (1.50")	£323.55
3"	OTW-1598 (1.12")	£341.18
	OTW-1599 (1.50")	£341.18
	OTW-1600 (1.75")	£341.18
3 ½"	OTW-1599 (1.50")	£341.18
	OTW-1600 (1.75")	£368.14
4"	OTW-1528 (1.50")	£341.18
	OTW-1530 (1.75")	£368.14
	OTW-1532 (2.25")	£414.81
5"	OTW-1529 (1.50")	£368.14
	OTW-1531 (1.75")	£368.14
	OTW-1214 (2.25")	£414.81
6"-9"	OTW-1534 (1.75")	£414.81
	OTW-1535 (2.25")	£414.81
	OTW-1536 (3.00")	£518.52
10"-22"	OTW-1995 (2.25")	£518.52
	OTW-1996 (3.00")	£518.52

Ring Nuts

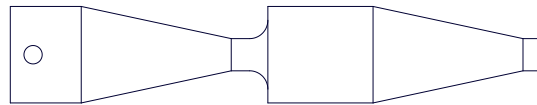


Tool Size	OTW Part Number	SPC Part #	Price
1 ¼"	OTW-1547 (.75")	G19A144	£28.00
1 ½"	OTW-1547 (.75")	G19A144	£28.00
	OTW-1548 (.87")	G19A118	£29.04
1 ¾"-2"	OTW-1548 (.87")	G19A118	£29.04
	OTW-1549 (1.12")	G19A111	£32.15
2 ½"	OTW-1549 (1.12")	G19A111	£32.15
	OTW-1550 (1.50")	G19A109	£35.26
3"	OTW-1549 (1.12")	G19A111	£32.15
	OTW-1550 (1.50")	G19A109	£35.26
	OTW-1551 (1.75")	G19A139	£35.26
3 ½"	OTW-1550 (1.50")	G19A109	£35.26
	OTW-1551 (1.75")	G19A139	£35.26
4"-5"	OTW-1550 (1.50")	G19A109	£35.26
	OTW-1551 (1.75")	G19A139	£35.26
	OTW-1215 (2.25")	G19A101	£40.44
6"-9"	OTW-1551 (1.75")	G19A139	£35.26
	OTW-1215 (2.25")	G19A101	£40.44
	OTW-1553 (3.00")	G19A107	£40.44
10"-22"	OTW-1215 (2.25")	G19A101	£40.44
	OTW-1553 (3.00")	G19A107	£40.44
Driveshaft's			
2" Shank	OTW-1883	G19A102	£40.44
2 ½" Shank	OTW-1884	G19A103	£46.66
3" Shank	OTW-1885	G19A108	£59.11

For Spline shanks add £570.37 to the shank price above, and add the split collar, and nut price (Refer to page 27 for Split Collar and Nut pricing)

Tooling Components

Cones



Tool Size	Angles	Part Number	Price
1"	3	OTW-2072	£135.85
1 ¼"	3	OTW-2132	£165.93
1 ½"	3	OTW-1580	£186.66
1 ¾"	3	OTW-1581	£191.85
2"	3	OTW-1582	£199.11
2 ½"	3	OTW-1583	£205.33
3"	3	OTW-1584	£208.44
3 ½"	2	OTW-2277	£180.44
4"	2	OTW-2278	£185.63
5"	2	OTW-2279	£185.63
6"	2	OTW-2280	£185.63
7"-9"	2	OTW-1521	£185.63
10"-16"	2	OTW-1109	£207.41

Cones for Tandem Tools

12" Long Holders..... Multiply x 1.5
 16" Long Holders..... Multiply x 1.8
 24" Long Holders..... Multiply x 2.3

Special Cones: Book + £218.81



Tooling Components

Cone Rod Components

Consult Factory

1" thru 1 ¾" utilize a one piece cone rod with no link

Utilization

Tool Size	Cone Rod And Link	Feed Rod	Feed Rod Cap	Spring
1 ¼"	N/A	1610 (.75)	1607	1940
1 ½"	N/A	1610 (.75)	1607	1940
		1611 (.87)	1608	1941
1 ¾"	N/A	1612 (.87)	1608	1941
		1612 (1.12)	1609	1941
2"	1616	1613 (.87)	1608	1941
		1613 (1.12)	1609	1941
2 ½"	1617	1614 (1.12)	1608	1941
		1615 (1.50)	1609	1942
3"	1617	1614 (1.12)	1609	1941
		1615 (1.50)	1545	1942
		1615 (1.75)	1545	1942

Tooling Components

Cone Rod Components

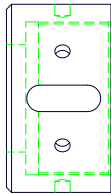
Consult Factory

Utilization

Tool Size	Cone Rod And Link	Feed Rod	Feed Rod Cap	Spring
3 ½"	1617	1615 (1.50)	1545	1942
		1615 (1.75)	1545	1942
4"	1544	1541 (1.50)	1545	1942
		1541 (1.75)	1545	1942
		1541 (2.25)	1546	1943
5"	1544	1541 (1.50)	1545	1941
		1541 (1.75)	1545	1942
		1541 (2.25)	1546	1943
6"-9"	1544	1542 (1.75)	1543	1942
		1542(2.25)	1113	1943
		1542 (3.00)	1113	1943
10"-16"	1120	1112 (2.25)	1113	1943
		1112 (3.00)	1113	1943

Tooling Components

Spindle Nuts



Shank Size	OTW Part #	SPC Part #	Price
#4 MT			£369.18
#5 MT			£388.88
#6 MT	1946	G20B103	£410.66
#7 MT			£477.03
1.25" Spline			£388.88
1.75" Spline			£404.44
2.25" Spline			£410.66

Spindle Drive Keys

Shank Size	OTW Part #	SPC Part #	Price
#4 MT		G22A121	£73.63
#5 MT		G22A120	£80.88
#6 MT	1844	G22A128	£84.00

Utilization

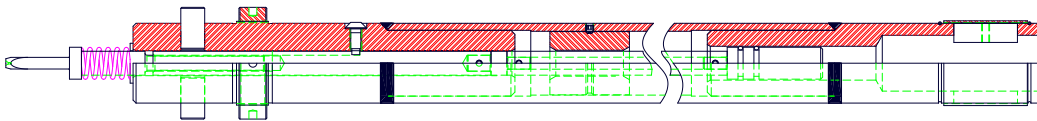
Utilization	Shank Size	OTW Part #	SPC Part #
GH210	#6 MT	1946	G20B103
GH310	#6 MT	1946	G20B103
4014 Barnes	#5 MT		G20B102
	#6 MT		G19B112
307 Barnes	#4 MT		G20B101
	#5 MT		G19B108
10H300 Micro	#6 MT		G200D343-1

Split Collars

Shank Size	OTW Part #	Price
1.25" Spline		£213.26
1.75" Spline		£259.26
2.25" Spline		£281.04

Tooling Components

Driveshaft Assemblies



Driveshaft Diameter	Base Price	Price Per Ft.
Up to 1"	£1,317.04	£51.85
1" to 2"	£1,389.63	£58.08
2" to 3"	£1,420.74	£77.77
3" to 4"	£1,555.55	£93.33
4" to 6"	£1,970.37	£114.07

Diameter To Hone	Recommendation
1 ¼"	OTW-2.5P-1.12-.75
1 ½"	OTW-2.5P-1.25-.87
1 ¾"	OTW-2.5P-1.25-.87
2"	OTW-2.5P-1.56-1.12
2 ½"	OTW-2.5P-1.56-1.12
3"	OTW-2.5P-2.5-1.75
4"	OTW-2.5P-3.0-2.25
5"	OTW-2.5P-3.0-2.25
6"-12"	OTW-2.5P-3.0-2.25
14"-24"	OTW-2.5P-4.0-3.0

Notes:

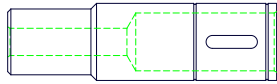
- Use 4 foot as the minimum driveshaft length.
- Add £415.85 to all shafts ten feet and longer for straightening.
- Add £394.07 for split section driveshafts.
- Add £394.07 for shafts with spline shanks.
- Add £394.07 for shafts with spline sockets.
- Add £17.63 per foot for shafts with plastic covers.
- MPS Connection consult factory
- Add £404.44 for #50mm taper connections.
- Add £311.11 for a crate of driveshaft's over 12' long

P-For Driveshafts using an Adjusting Head

PH-For Driveshafts using a Drive Adapter

Tooling Components

Driveshaft Socket



Socket I.D.	OD	OTW Number	SPC Part #	Price
¾"		OTW2915	G43B118	£349.48
7/8"			G43B125	£378.52
1 1/8"	1 9/16"	OTW1888	G43B104	£396.15
1 ¾"	2 ½"	OTW1828	G43B101	£422.07
2 ¼"	3"	OTW1889	G43B103	£445.93
2 ¼"	3 ¼"	OTW1842		£445.93
3"	4"	OTW3289		£570.37

Drive Keys



Socket I.D.	OTW Number	SPC Part #	Price
¾"	OTW1847	G22A108	£32.14
7/8"	OTW1848	G22A114	£34.22
1 1/8"	OTW1849	G22A105	£34.22
1 ½"	OTW1850	G22A102	£39.41
1 ¾"	OTW1851	G22A106	£39.41
2 ¼" (3" OD)	OTW1851	G22A106	£39.41
2 ¼" (3 ¼" OD)	OTW1853		£39.41
3"	OTW1852	G22A104	£40.44
3" OTW	OTW3295		£41.48

Tooling Components

Key Sleeve

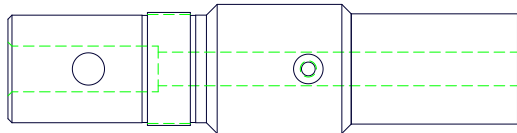
Socket I.D.	OTW Number	SPC Part #	Price
¾"	OTW1876	G35A136	£33.18
7/8"	OTW1877	G35A155	£34.22
1 1/8"	OTW1878	G35A103	£36.30
1 ½"	OTW1879	G35A102	£39.41
1 ¾"	OTW1845	G35A101	£42.52
2 ¼" (3" O/D)	OTW1880	G35A104	£42.52
2 ¼" (3 ¼" O/D)	OTW1846		£42.52
3"	OTW3291		£65.33

Drive Key Dimensions (W x H x L)

OTW1847	.249" x .281" x .748"
OTW1848	.249" x .300" x 1.248
OTW1849	.249" x .328" x 1.248"
OTW1850	.375" x .560" x 1.998"
OTW1851	.498" x .600" x 1.998"
OTW1853	.498" x .720" x 1.998"
OTW1852	.623" x .913" x 2.498"

Tooling Components

Driveshaft Shanks



Shank Size	OTW Part #	SPC Part #	Price
2"	2.0P/R	#4 GHB	£431.41
2 ½"	2.5P/R	#4C & #5GHB	£454.22
3"	3P/R	#6GHB	£481.18

***Specify Adjusting Head or Push Feed**

Utilization

Driveshaft	OTW Shank Part #	SPC Part #	Driveshaft	OTW Shank Part #	SPC Part #
2.0P-1.12-.75			2.5P-2.50-1.75	1899	G42B101
2.0P-1.25-.87			2.5P-3.0-2.25	1894	G42B105
2.0P-1.56-1.12	1905		3.0P-2.5-1.75	1826	
2.0P-2.50-1.75			3.0P-3.0-2.25		
2.0P-3.0-2.25			3.0P-3.25-2.25	1840	
2.5P-1.12-.75					
2.5P-1.25-.87					
2.5P-1.56-1.12	1922	G42B106			

Tooling Components

Feed Rod Cap

Socket Size	OTW Part #	Price
¾"	2916	£51.85
7/8"	2916	£51.85
1 1/8"	1911	£53.93
1 ½"	1907	£58.07
1 ¾"	1907	£58.07
2 ¼"	1907	£58.07
3"	1833	£67.41
4"	1833	£67.41

Driveshaft Shank Drive Pin Pricing

2", 2 ½", 3"

Price: £13.48 ea.

Tooling Components

Feed Screw Assembly



Driveshank Size	OTW Part #	SPC PART #	Price
2"	1855	G17C111	£226.07
2 ½"	1855	G17C111	£226.07
2" & 2 ½"	1856	Socket	£126.52
2" & 2 ½"	1857	Screw	£136.88
2 ½" left	3821		£226.07
3"	1829/ 1830		£226.07

Assembly price is less spring and washer
These are priced £20.74 ea.

Collars are priced £20.74 ea.

Rotary Feed Screw

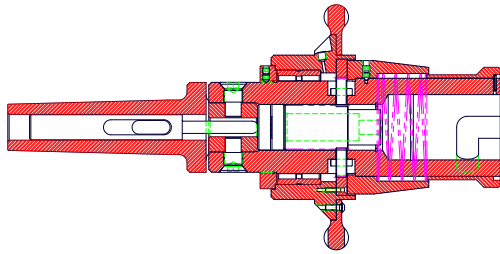


Standard Feed Screws

Feed Screw	£136.88
Square Extension	£37.33
Feed Nut	£65.33
Snap Ring	£3.11
Roll Pins	£3.11

Tooling Components

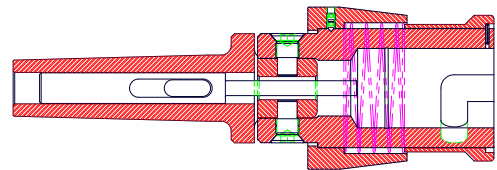
Adjusting Heads



OTW Model #	Socket Size	Price
OTW-3-H-4	2"	£4,795.26
2171	2 ½"	£5,214.22
OTW-3-H-6	3"	£5,350.07
OTW-3-H-7	4"	£8,972.44

Specify Hand wheel or Palm wheel (Included)
Specify universal block or rigid
Specify Morse Taper (Included)

Drive Adapters



OTW Model #	Socket Size	Price
OTW-4	2"	£2,517.93
2620	2 ½"	£2,727.40
OTW-6	3"	£3,826.66
OTW-7	4"	£3,971.85

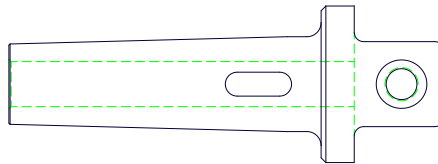
Specify Morse Taper (Included)

Rotary Feed Drive Adapter: Add £622.22
Body only 50% of assembly

Reversing Keys

A/H D/A	OTW Part #	Price
H-4	2501	£163.85 ea.
H-5	2302	£172.14 ea.
H-6		£176.30 ea.
H-7		£233.33 ea.

Tooling Components



Morse Taper Shanks

Utilization	Morse Taper	OTW Part #	SPC Part #	Price
OTW-4	#4		G18B109	£466.66
	#5		G18B107	£492.60
	#6		G18B109	£502.96
OTW-5	#5		G18C113	£534.07
	#6	2108	G18C112	£549.63
OTW-6	#5		G18C118	£560.00
	#6		G18C117	£575.55
OTW-7	#6		G18C125	£596.30
Feed Rod		2109		£222.96

Tooling Components

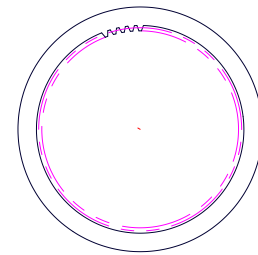
Adjusting Head Gears

Idler



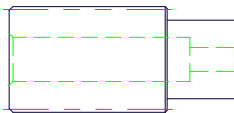
Utilization	OTW Part #	SPC Part #	Price
OTW-4/6M	1917	G32A112	£46.66
OTW-5	1618	G32A109	£53.92
OTW-6		G32A117	£65.33
OTW-7	1693	G32A105	£74.66

Ring



Utilization	OTW Part #	SPC Part #	Price
OTW-4/6M		G32A115	£209.48
OTW-5	2143	G32A110	£225.03
OTW-6		G32A118	£311.11
OTW-7	1695	G32B101	£342.22

Pinion



Utilization	OTW Part #	SPC Part #	Price
OTW-4/6M			£209.48
OTW-5	1619	G32A107	£209.48
OTW-6	1619	G32A107	£311.11
OTW-7	1694	G32B102	£322.52

Adjusting Head Feed Rods

Utilization	Morse Taper	OTW Part #	SPC Part #	Price
OTW-4B 4C 4M 5 5M	#4		G17B109	£191.85
OTW-4C 4M 5 5M	#5 #6	2109	G17B107 G17B108	£207.41 £217.77
OTW-6	#5 #6		G17B107 G17B108	£207.41 £217.77
OTW-7	#6		G17B119	£238.51

Tooling Components

Retaining Springs

Spring Dimensions	OTW Part #	Tooling Used	Price
1/16" x 6"	100165	1.5" Double Bank	£2.50
3/32" x 12"	100105	Driveshafts	£2.17
1/8" x 12"	100106	Tooling	£2.23
5/32" x 12"	100107	Tooling	£2.46
3/16" x 12"	100108	3 1/2"-5" Tools	£2.75
1/4" x 12"	100109	6"-20" Tooling	£3.28

Spanner/Wrenches

OTW Part #	Type	Price
	3/16" Pin (3/4"-2")	£66.37
100448	1/4" Pin (1 1/4"-3")	£76.74
100603	1/4" Pin (2"-4 3/4")	£104.74
	Hook (2"-4 3/4")	£95.41

Pigtail Springs

OTW Part #	SPC Part #	Tooling Used	Price
1586	G21A104	1 1/4" Tools	£3.11
1220	G21A134	1 1/2" + Tools	£3.11

Minimum order on springs is 12 off.

OTW LD Tooling

Tool Assemblies



OTW Part #	Range	Abrasive Size	Stoneholders Per Set	Price
OTW-.50-41162	.48"-.63"	.06x.06-2"	4	£572.44
OTW-.63-41162	.60-.95	.06x.06-2"	4	£580.74
OTW-.75-41162	.72-1.07	.06x.06-2"	4	£591.11
OTW-.88-41162	.85-1.19	.06x.06-2"	4	£601.48
OTW-1.0-4183	.93-1.25	.12x.12x3"	4	£765.33
OTW-1.25-4183	1.18-1.50	.12x.12x3"	4	£784.00
OTW-1.50-4183	1.43-1.75	.12x.12x3"	4	£805.77
OTW-1.75-4183	1.68-2.00	.12x.12x3"	4	£829.63

0.50"-.88" Tools utilizes an integral Driveshaft.

1.0"-1.75" Tools utilizes a 7/8" OD Driveshaft.

See Driveshaft pricing on Page 42.

Body only price: 70% of assembly price

Cone only prices: 30% of assembly price

OTW LD Stoneholders

Stone Holders for 0.50"-.88" Tools

Tool Size	Range	OTW Part #	SPC Part #	Price
.50"	.48-.53	1048	S-1	£62.22
	.53-.58	1049	S-2	£62.22
	.58-.63	1050	S-3	£62.22
.625"	.60-.71	1051	T-1	£62.22
	.72-.83	1052	T-2	£62.22
	.84-.95	1053	T-3	£62.22
.75	.72-.83	1052	T-2	£62.22
	.84-.95	1053	T-3	£62.22
	.96-1.07	1054	T-4	£62.22
.875	.84-.95	1052	T-2	£62.22
	.96-1.07	1053	T-3	£62.22
	1.08-1.19	1054	T-4	£62.22

Four (4) Stone Holders per set
.062" x .062" x 2" Super Abrasive

Stone Holders for 1.0"-1.75" Tools

Tool Size	Range	OTW Part #	SPC Part #	Price
1.0"	.93-1.00	1044	A-1	£69.48
	1.06-1.13	1045	A-2	£69.48
	1.18-1.25	1046	A-3	£69.48
1.25"	1.18-1.25	1044	A-1	£69.48
	1.30-1.38	1045	A-2	£69.48
	1.43-1.50	1046	A-3	£69.48
1.5"	1.43-1.50	1044	A-1	£69.48
	1.56-1.63	1045	A-2	£69.48
	1.69-1.75	1046	A-3	£69.48
1.75"	1.69-1.75	1044	A-1	£69.48
	1.80-1.88	1045	A-2	£69.48
	1.93-2.00	1046	A-3	£69.48

Four (4) Stone Holders per set
.125" x .125" x 3" Super Abrasive



OTW LD Driveshafts

Tool Size	Model #	Shaft OD	OTW Part #	Pricing
.50"	OTW/LD-7/16 x _____	7/16"		£1,037.03 + £3.63 @inch
.625"	OTW/LD-1/2 x _____	1/2"		£1,037.03 + £3.63 @inch
.75"	OTW/LD-5/8 x _____	5/8"		£1,037.03 + £3.63 @inch
.875"	OTW/LD-3/4 x _____	3/4"		£1,037.03 + £3.63 @inch
1.0"-1.75"	OTW/LD-7/8 x _____	7/8"		£1,037.03 + £7.26 @inch

When quoting drive shafts, LD Tool pricing must be included from previous page.
Total length is measured from the end of the tool nose to the face of the drive shank, in inches.
MPS threaded Adapter add £492.60

Universal Joint

Model OTW/LD Universal-7/8 (used with 7/8" Shaft)

Price: £596.30 ea.



OTW LD Adjusting Head

4583 LDA Adjusting Head Price: £2,048.15

Adders for connection consult OTW

OTW-5000 Machine

Model #	Description	Comments	List Price
OTW-5000-30-14	14' Stroke Horizontal Honing Machine	30 HP Spindle 460 V; 1 Traveling Support	
OTW-5000-30-22	22' Stroke Horizontal Honing Machine	30 HP Spindle 460 V; 1 Traveling Support	
OTW-5000-30-26	25' Stroke Horizontal Honing Machine	30 HP Spindle 460 V; 1 Traveling Support	
OTW-5000-30-32	32' Stroke Horizontal Honing Machine	30 HP Spindle 460 V; 2 Traveling Support	
OTW-5000-30-42	42' Stroke Horizontal Honing Machine	30 HP Spindle 460 V; 3 Traveling Support	
	OTW-5000 (Options)		
	Rotary Feed System		
	High Speed Spindle (500 RPM)		
	Traveling Driveshaft Support Assembly		
	Dual Feed Pressure		
	Transformer (460-230 Voltage)		
	Spindle Load Meter		
	Wiper Assembly	Specify Diameter	
	D/S Support Bushing	Specify Diameter	
	CE Mark	Consult Factory	
	International Set-up & Training	Consult Factory	
	OTW Coolant System (Options)		
	Magnetic Separator FDMP-400		
	Deep Bed Paper filter DTE 250		
	Magnetic over Paper filter DCO 250		
	OTW Fixturing Options		
	60-3 Cotter Chain	Priced per foot	
	60-6 Cotter Fixture Chain	Priced per foot	
	OTW Drive Adapter	Includes Reversing Keys and Drive Key	



OTW-1000 Machine

Model #	Description	Comments	List Price
OTW-1000-5-2 M	2 M Stroke Horizontal Honing Machine	5 HP Spindle 4.7 HP Recip. 460 V; 0 Traveling Support	
OTW-1000-5-4 M	4 M Stroke Horizontal Honing Machine	5 HP Spindle 4.7 HP Recip. 460 V; 1 Traveling Support	
OTW-1000-5-6 M	6 M Stroke Horizontal Honing Machine	5 HP Spindle 4.7 HP Recip. 460 V; 2 Traveling Supports	
	OTW-1000 (Options)		
	10 HP Spindle Drive w/6.7 HP Reciprocation		
	Traveling Driveshaft Support Assembly		
	Median Size Control System		
	Driveshaft Support Bushings		
	Driveshaft Wiper Assembly		
	Tool Support Cradle w/Lift		
	OTW 6365 Transformer (460-230 Voltage)		
	CE Mark	Consult Factory	
	International Set-up & Training	Consult Factory	
	OTW Coolant System (Options)		
	Magnetic Separator		
	DTE 150 Deep Bed Paper filter	Standard paper bed filter	
	DTE 100 Deep Bed Paper filter	Optional for small diameters	
	Magnetic over Paper Filter		
	OTW Drive Adapter Options		
	OTW Drive Adapter Rotary-Push	Includes reversing keys	
	OTW6848 LD Drive Adapter		

OTW-9000 Machine

Model #	Description	Comments	List Price
OTW-9000-5-48	48" Stroke Vertical Honing Machine	5 HP Spindle Drive; Standard Feed; 460V	
OTW-9000-5-60	60" Stroke Vertical Honing Machine	5 HP Spindle Drive; Standard Feed; 460V	
OTW-9000-5-72	72" Stroke Vertical Honing Machine	5 HP Spindle Drive; Standard Feed; 460V	
	OTW-9000 (Options)		
	10 HP Spindle Drive		
	15 HP Spindle Drive		
	Median Size Control System	Standard Feature	
	CE Mark	Consult Factory	
	International Set-up & Training	Consult Factory	
	Fixturing		
	Hydraulic End Clamping Fixture w Chuck		
	OTW 6365 Transformer (460-230 Voltage)		
	OTW Coolant System (Options)		
	DMD 050 Magnetic Separator		
	DTE 150 Deep Bed Paper filter	Standard paper bed filter	
	DTE 100 Deep Bed Paper filter	Optional for small diameters	
	DCO 150 Magnetic over Paper Filter		
	OTW Drive Adapter Options		
	OTW Drive Adapter Rotary-Push	Includes reversing keys	
	OTW6848 LD Drive Adapter		



OTW Honing Coolants

OTW-8915-55	55 gal. Pre-Mixed Honing Oil	£596.30/drum
OTW-8915-275	275 gal. Tote Pre-Mixed Honing Oil	£2,903.70/tote
OTW-ASF-5	5 gal. Coolant additive	£ 165.93/pail

***Subject to monthly changes**
***FOB Cleveland (add £207.41 for shipment to Ashland for consolidation)**

Conventional Abrasive Adhesive

OTW-1-55 Flake Shellac

<u>1-10 lbs.</u>	<u>11-25 lbs.</u>	<u>26-54 lbs.</u>	<u>55+ lbs.</u>
£14.00/lb.	£12.03/lb.	£9.85/lb.	£7.26/lb.

Ordering Information: OTW-1-55-weight (Sample OTW-1-55-5) is 5 lbs.

Super Abrasive Epoxy

OTW-7012	2 oz. Bottle	Price: £57.04 ea.
OTW-7014	4 oz. Bottle	Price: £67.41 ea.

Provided with assembly, and disassembly instructions.

Instructions for the use of OTW-7 Series Epoxy

- Always store OTW-7 series epoxy in a refrigerator to assure maximum shelf life, which is estimated to be approximately one (1) year.
- Remove from refrigerator one hour before each use and allow epoxy to warm to room temperature for ease of dispensing.
- Trim plastic dispensing cap to the desired opening size and angle.
- If epoxy does not flow smoothly and easily, place dispenser in warm water for approximately 20 minutes.
- Both parts must be clean, free of old epoxy, dry and straight before proceeding.
- We recommend a light grit blast and cleaning of both surfaces to assure the best results.
- Before applying epoxy, be sure the superabrasive slides freely in the stoneholder slot.
- Apply a medium sized bead of epoxy into the stoneholder slot, stopping 1/8 inch from each end.
- Place the superabrasive segment in the stoneholder slot and slide it slightly from end to end, while pressing down firmly to assure proper seating in the slot.
- Be sure a small fillet of epoxy is visible along each side of the abrasive. This will add to the strength of the assembly.
- Place assembly in a small curing oven, similar to a “toaster oven”. Heat cure @ 400 degrees F. for 90 minutes.
- Assemblies will be ready for immediate use when cool enough to handle.
- 6 inch and longer assemblies, mounted in aluminum holders may require minor straightening using a small arbor press to assure maximum flatness.
- Contact Mollart Cox Products on +44 (0) 1246 458090 you have any technical questions related to the assembly of metal bond products.

OTW Fixtures

OTW-2508 Heavy Duty Chain Type Fixtures

- Includes OTW-1664 60-3 chain clamps
- Includes 11' OTW-100048 60-3 cottered chain

Price: £17,240.73/set

OTW-2509 Heavy Duty Chain Type Fixtures

- Includes OTW-1667 60-6 chain clamps
- Includes 11' OTW-100049 60-6 cottered chain

Price: £17,940.73/set

Fixture Components

Chain Clamps:

- OTW-1664 60-3 Chain Clamps Price: £408.60 ea.
- OTW-1667 60-6 Chain Clamps Price: £570.37 ea.

Cottered Chain:

- OTW-100048 60-3 Cottered Chain Price: £74.66/ft.
- OTW-100049 60-6 Cottered Chain Price: £186.66/ft.

Replacement Fingers:

- OTW-1666 60-3 Price: £96.44 ea.
- OTW-1669 60-6 Price: £117.18 ea.

Conventional Abrasive Pricing

<u>Stone Size</u>	<u>Price Each £</u>
5/8 x 5/8 x 8	£1.61
Resin	£4.04
5/8 x 5/8 x 6	£1.61
Resin	£3.84
1/2 x 1/2 x 8	£1.21
Resin	£3.28
1/2 x 1/2 x 6	£1.21
Resin	£3.08
1/2 x 1/2 x 4	£0.95
Resin	£3.08
1/2 x 3/8 x 8	Consult Factory
Resin	
1/2 x 3/8 x 6	Consult Factory
Resin	
3/8 x 3/8 x 8	£1.07
Resin	£3.04
3/8 x 3/8 x 6	£1.07
Resin	
3/8 x 3/8 x 4	£0.85
Resin	
5/16 x 5/16 x 6	£0.83
Resin	£2.63
5/16 x 5/16 x 4	£0.83
Resin	
1/4 x 1/4 x 6	Consult Factory
Resin	
1/4 x 1/4 x 4	Consult Factory
Resin	

Notes:

For un mounted abrasives, subtract
 £0.15
 For bevel one-end add £0.10
 For S/C prices, multiply 1.5 x A/O
 price.
 For 400-500 grit, multiply x 2.5
 For 600 grit multiply x 3.0
 Sizes not listed are priced as the next
 larger cross section, in that length.
 For larger sizes, please contact OTW



OTW OH500/OH700 Conventional & Super Abrasive Pricing

Conventional Abrasives: 11% more usable abrasive, and all abrasives sulfur filled

Grades available (A23, A25, A27, A43, A45, A47, A67, J85 and J87), for other grades, please contact OTW for P & D.

Pricing Schedule:

Standard A/O Stones, and J Stones
£18.50 each

Part Numbering:

OTW: OH700-A450 Sunnen: H70-A45
OTW: OH500-A450 Sunnen: H50-A45

Metal Bond Abrasives 50% more usable abrasive
All grits and hardness available in Diamond or CBN (No Specials)

Pricing Schedule:

Standard CBN, and Diamond Stones
£349.48 each

Part Numbering:

Diamond: D CBN: B

OTW Grit Size & Hardness:

SH703-B-151-M (CBN 100/120 grit 50 con)
SH503-B-151-H (CBN 100/120 grit 75 con)
SH703-B-76-S (CBN 200/230 grit 35 con)
SH703-B-76-M (CBN 200/230 grit 50 con)
SH503-B-76-H (CBN 200/230 grit 75 con)
SH703-B-46-S (CBN325/400 grit 35 con)

Sunnen Grit Size & Hardness:

H70-NM35 (CBN 100/120 grit 50 con)
H50-NM37 (CBN 100/120 grit 75 con)
H70-NM53 (CBN 200/230 grit 35 con)
H70-NM55 (CBN 200/230 grit 50 con)
H50-NM57 (CBN 200/230 grit 75 con)
H70-NM83 (CBN 325/400 grit 35 con)

All others consult OTW for price, and delivery.

OTW/MOLLART COX PRODUCTS LIMITED SUPER ABRASIVE CODING

Sunnen H70 Sets to OH700 Sets

NM/DM-Sunnen/B-OTW = CBN (CUBIC BORON NITRIDE)/D = DIAMOND

Size Range	Sunnen Stone Coding	OTW/MCPL Stone Coding
3.00" Upwards	H70 – NM15	SH703-B-252-M
3.00" Upwards	H70 – NM17	SH703-B-252-H
3.00" Upwards	H70 – NM35	SH703-B-151-M
3.00" Upwards	H70 – NM37	SH703-B-151-H
3.00" Upwards	H70 – NM45	SH703-B-107-M
3.00" Upwards	H70 – NM47	SH703-B-107-H
3.00" Upwards	H70 – NM55	SH703-B-76-M
3.00" Upwards	H70 – NM57	SH703-B-76-H
3.00" Upwards	H70 – NM85	SH703-B-46-M
3.00" Upwards	H70 – NM87	SH703-B-46-H
3.00" Upwards	H70 – NM05	SH703-B-29-M
3.00" Upwards	H70 – NM07	SH703-B-29-H
3.00" Upwards	H70 – NM005	SH703-B-9-M
3.00" Upwards	H70 – NM007	SH703-B-9-H



OTW/MOLLART COX PRODUCTS LIMITED SUPER ABRASIVE CODING

Sunnen H50 Sets to OH500 Sets

NM/DM- Sunnen/B- OTW = CBN (CUBIC BORON NITRIDE)/D = DIAMOND

Size Range	Sunnen Stone Coding	OTW/MCPL Stone Coding
2.00" – 3.00"	H50 – NM15	SH503-B-252-M
2.00" – 3.00"	H50 – NM17	SH503-B-252-H
2.00" – 3.00"	H50 – NM35	SH503-B-151-M
2.00" – 3.00"	H50 – NM37	SH503-B-151-H
2.00" – 3.00"	H50 – NM45	SH503-B-107-M
2.00" – 3.00"	H50 – NM47	SH503-B-107-H
2.00" – 3.00"	H50 – NM55	SH503-B-76-M
2.00" – 3.00"	H50 – NM57	SH503-B-76-H
2.00" – 3.00"	H50 – NM85	SH503-B-46-M
2.00" – 3.00"	H50 – NM87	SH503-B-46-H
2.00" – 3.00"	H50 – NM05	SH503-B-29-M
2.00" – 3.00"	H50 – NM07	SH503-B-29-H
2.00" – 3.00"	H50 – NM005	SH503-B-9-M
2.00" – 3.00"	H50 – NM007	SH503-B-9-H

OTW/Sunnen style K, L, P20 and P28 Metal Bond Abrasive Pricing

(All grits and hardness, no specials)

SK3	£26.60 each	SL3	£46.40 each
SK4	£26.60 each	SL4	£46.40 each
SK5	£28.00 each	SL5	£48.33 each
SK6	£30.80 each	SL6	£48.33 each
SK8	£32.20 each	SL8	£52.52 each
SK10	£36.86 each	SL10	£60.46 each
SK12	£43.86 each	SL12	£71.66 each
SK16	£58.59 each	SL16	£105.00 each
SK20	£74.20 each	SL20	£135.33 each
SP20	£74.66 each		
SP28 or SR28	£112.51 each		

Discount schedule:

The following discounts are accumulative

12 > 10%

Part number system:

Diamond: D CBN: B

OTW Grit Size & Hardness:

151-S (100/120 grit 35 con)
 151-M (100/120 grit 50 con)
 151-H (100/120 grit 75 con)
 76-S (200/230 grit 35 con)
 76-M (200/230 grit 50 con)
 76-H (200/230 grit 75 con)
 46-S (325/400 grit 35 con)
 46-M (325/400 grit 50 con)

Sunnen Grit Size & Hardness:

33 (100/120 grit 35 con)
 35 (100/120 grit 50 con)
 35 (100/120 grit 75 con)
 53 (200/230 grit 35 con)
 55 (200/230 grit 50 con)
 57 (200/230 grit 75 con)
 83 (325/400 grit 35 con)
 85 (325/400 grit 50 con)

OTW: SP28B-76-M (CBN 200/230 50% con) Sunnen: P28-NM55

OTW: SP28D-76-M (Diamond 200/230 50% con) Sunnen: P28-DM55

All others consult OTW



Speed Conversion Chart

SFM to RPM

Spindle Speed-RPM	Surface Speed in FPM																		
	70	75	80	85	90	95	100	110	120	130	140	150	160	170	180	190	200	250	
Bore Dia.																			
1.000	267	286	305	325	344	363	382	420	458	497	535	573	612	649	687	726	764	955	
1.125	238	255	272	289	306	323	340	374	408	442	476	510	544	578	612	646	680	850	
1.250	214	230	249	260	275	291	306	337	367	398	428	459	490	520	551	581	612	765	
1.375	195	209	222	236	250	264	278	306	334	361	389	417	445	473	500	528	556	695	
1.500	178	191	204	217	230	242	255	281	306	332	358	383	408	435	460	486	512	640	
1.625	165	176	188	200	212	223	235	259	282	306	329	353	376	400	423	447	470	587	
1.750	153	164	174	185	196	207	218	240	262	283	305	327	349	371	392	414	436	545	
1.875	143	153	163	173	184	194	204	224	245	265	287	306	326	347	367	388	408	510	
2.000	133	143	153	162	172	182	191	210	229	248	268	287	306	325	344	363	382	477	
2.250	119	128	136	145	153	162	170	187	204	221	238	255	272	289	306	323	340	425	
2.500	107	115	122	130	138	145	153	168	183	199	214	230	245	260	275	290	306	382	
2.750	97	104	111	118	125	132	139	153	167	181	195	209	222	236	250	264	278	347	
3.000	89	96	102	108	115	121	128	140	153	166	179	192	204	217	230	243	255	319	
3.250	82	88	94	100	106	112	118	129	141	152	165	176	188	200	212	223	235	292	
3.500	77	82	88	93	99	104	110	120	131	142	153	164	175	186	197	208	219	274	
3.750	71	77	82	88	92	97	102	112	122	133	143	153	163	173	184	194	204	255	
4.000	67	72	77	81	86	91	96	105	115	125	134	144	153	163	173	182	191	239	
4.250	63	68	72	77	81	86	90	99	108	117	126	135	144	153	162	171	180	225	
4.500	60	64	68	72	77	81	85	94	102	111	119	128	136	145	153	162	170	213	
4.750	56	60	64	68	72	76	81	89	97	105	113	121	129	137	145	153	161	201	
5.000	54	57	61	65	69	73	76	84	92	99	107	117	122	130	137	145	152	190	
5.500	49	52	56	59	63	66	70	76	83	90	97	104	111	118	125	132	139	174	
6.000	45	48	51	54	57	61	64	70	76	83	89	96	102	108	115	121	127	159	
6.500	41	43	47	50	53	56	59	64	70	76	82	87	94	100	106	111	117	147	
7.000	38	41	44	46	49	52	55	60	65	71	76	82	87	93	98	103	109	136	
7.500	36	38	41	43	46	48	51	56	61	66	71	77	82	87	92	97	102	128	
8.000	33	36	38	41	43	45	48	53	57	62	67	72	76	81	86	91	96	120	
8.500	32	34	36	38	41	43	45	50	54	59	63	68	72	77	81	86	90	113	
9.000	30	32	34	36	38	40	43	47	51	55	60	64	68	72	77	81	85	107	
9.500	28	30	32	34	36	38	40	44	48	52	56	60	64	69	73	77	81	102	
10.00	27	29	31	32	34	36	38	42	46	50	53	57	61	65	69	73	76	95	
11.00	24	26	28	29	31	33	35	38	42	45	49	52	56	59	62	66	69	87	
12.00	22	24	26	27	29	30	32	35	38	41	45	48	51	54	57	61	64	80	
13.00	21	22	24	25	26	28	29	32	35	38	41	44	47	50	53	56	59	74	
14.00	19	20	22	23	25	26	27	30	33	35	38	41	44	46	49	52	55	69	
15.00	18	19	20	22	23	24	26	28	31	33	36	38	41	43	46	48	51	64	
16.00	17	18	19	20	22	23	24	26	29	31	33	36	38	41	43	45	48	60	
17.00	16	17	18	19	20	21	23	25	27	29	32	34	36	38	41	43	45	57	
18.00	15	16	17	18	19	20	21	23	25	28	30	32	34	36	38	40	42	53	
19.00	14	15	16	17	18	19	20	22	24	26	28	30	32	34	36	38	40	50	
20.00	13	15	15	16	17	18	19	21	23	25	27	29	31	32	34	36	38	48	

Honing Reactions

RPM-Reciprocation-Feed Pressure

Increase RPM

1. Makes abrasives act harder
2. Will obtain finer finish
3. Abrasive will stop cutting if increase too much

Increase Reciprocation

1. Makes abrasives act softer
2. Will obtain courser finish
3. Will decrease abrasive life

Increase Feed Pressure

1. Makes abrasives act softer
2. Will increase abrasives aggressiveness and not glaze
3. Will remove stock quicker
4. Will increase torque
5. Will generate more heat
6. Will give courser finish

Decrease RPM

1. Makes abrasives act softer
2. Will obtain courser finish
3. Will increase abrasives aggressiveness and not glaze
4. Will increase torque

Decrease Reciprocation

1. Abrasive will act harder
2. Will give finer surface finish
3. Will decrease a abrasive's ability to stay sharp and not glaze
4. Will remove stock slower if too slow

Decrease Feed Pressure

1. Will cause abrasives to act harder
2. Will decrease a abrasives ability to stay sharp and not glaze
3. Will remove stock more slowly
4. Will decrease torque
5. Will contribute to better geometry
6. Will decrease wear on machine
7. Will generate less heat
8. Will generate less noise
9. Will give finer surface finish
10. Will increase cycle time

Honing Spindle Speed

Spindle speeds are decided by the following factors:

1. Material Specifications
2. Bore Diameter
3. Abrasive Size
4. Surface Finish

Guidelines

Material	Hardness	Surface Feet per Minute
Steel	Mild	120-150
Steel	Hardened	80-100
Cast Iron	Mild	160-180
Cast Iron	Hardened	90-110

Surface Feet Conversion: See Chart

Increase RPM = Abrasive act Harder, finish is finer

Decrease RPM = Abrasives act Softer, finish is courser

Reciprocation: 60-90 Feet per minute

Increase Reciprocation = Abrasives act Softer, finish is rougher

Decrease Reciprocation = Abrasives act Harder, finish is finer

Honing Trouble Shooting

Condition	Correction in order of Importance
Abrasive glazing.....	2-3-5-15-13-18-11
Abrasive loading.....	2-3-15-7-17-19-11
Abrasive galling.....	2-3-7-15-9-17-19-24-11
Finish too rough.....	1-4-6-17-16-7-12
Finish too smooth.....	2-3-5-18-15-8-13
Excessive abrasive usage.....	1-4-6-16-7
Tapered stone wear.....	14-22-21-16
Slow stock removal.....	5-3-2-8-11-15-18
Excessive part heat.....	10-6-8-11-24-15-20
Part out of roundness.....	6-2-3-12-14-15-25
Part bell mouth/taper.....	26-12-14-25
Part not axially straight.....	32-14-25-33
Part being honed eccentric to OD.....	14-29-30
Bore not square to face.....	29-14-33
Washout around keyways, ports.....	6-17-28

Corrections

- | | |
|---|---|
| 1. Increase spindle RPM | 18. Use Courser grit abrasives |
| 2. Decrease spindle RPM | 19. Use less porous abrasives |
| 3. Increase reciprocation | 20. Use more porous abrasives |
| 4. Decrease reciprocation | 21. Check abrasive grade |
| 5. Increase feed rate | 22. Check tool for wear |
| 6. Decrease feed rate | 23. Trial other abrasives |
| 7. Increase coolant's base content | 24. Use more coolant |
| 8. Decrease coolant's base content | 25. Check fixture is not distorting part |
| 9. Check filtration of coolant | 26. Adjust over-run of stroke |
| 10. Check refrigeration of coolant | 27. Use guides |
| 11. Check coolant for hydraulic oil contamination | 28. Use fiber clad abrasives |
| 12. Increase run-out time spindle | 29. Tram part face to check square to |
| 13. Decrease run-out time | 30. Rotate part occasionally while honing |
| 14. Check spindle to part alignment cycle | 31. Use light feed pressure at start of |
| 15. Use softer abrasives | 32. Use longer abrasives |
| 16. Use harder abrasives | 33. Check part accuracy prior to honing |
| 17. Use finer grit abrasives | |