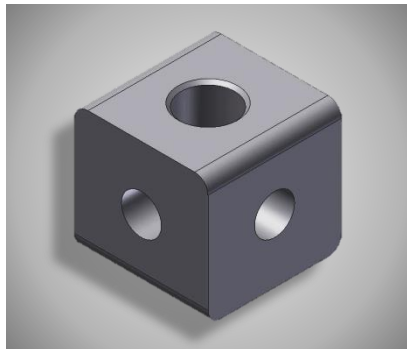
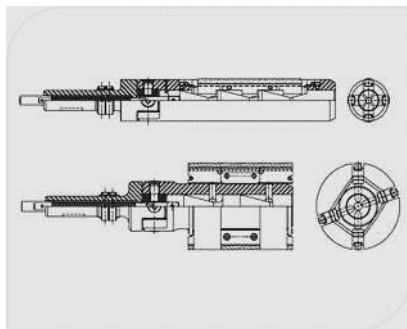




STANDARD TUBE HONING PRODUCTS CATALOG



Honing Tools and Accessories for All Major Brands of Honing Equipment

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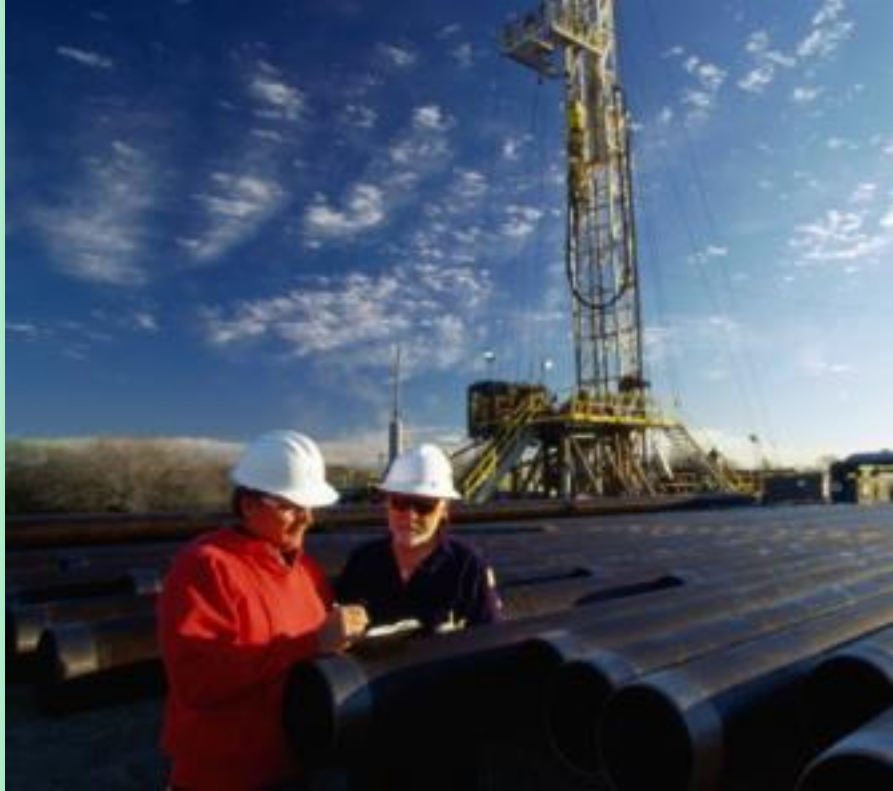
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To Our Valued Customers

Welcome and thank you for taking a moment to review the Ohio Tool Works Tooling Catalog. We hope you'll find this Catalog to be a useful and efficient way to explore OTW's complete line up of medium and heavy duty honing tools – unmatched for their design, quality, and precision.

As you'll see, OTW's honing tools span the full range of applications, diameters, lengths, configurations, and abrasives types and can be supplied in a variety of packages to meet your specific needs, including:

Standard & Custom OTW Tooling Assemblies

Standard & Custom OTW Tooling Components

Replacement Tooling for All Major Honing Brands

No matter what brand of honing machine you currently use, Ohio Tool Works has a tooling solution for you. With more than 100 years of in house honing expertise and a dedicated staff of customer-facing engineers,



we are proud to provide our customers with superior tooling solutions – whether fixtured to Ohio Tool Works equipment or any other major brand including Sunnen, Barnes, General Hone, and more. All of OTW's honing tools are designed and manufactured – with uncompromising care – at our 80,000 sq. ft. plant in Ashland, Ohio. The result is clear: Ohio Tool Works honing tools consistently outperform our competitors in terms of precision and tool life.

As you explore OTW's *Tooling Catalog*, please do not hesitate to give us a call if you have any questions. We look forward to providing you the right tooling for your specific honing needs.

Sincerely,

John Hovsepian
Partner

Ohio Tool Works
Ashland, Ohio, USA

No matter what brand of honing machine you currently use – or how challenging your application appears –

Ohio Tool Works has the precise tooling solution for you

Please call us to discuss your specific tooling needs

419.281.3700



Standard Tool Assemblies (MD/HD)

Model Number	Shank Size	Range	Body Type	Abrasive Size
OTW-.750-3184-0000 Integral Driveshaft	N/A	.72-1.12	Slotted	1/8x1/8x4 Super Abrasives
OTW-.750-3184-0000 Integral Driveshaft	N/A	.72-1.12	No Spring Slots	1/8x1/8x4 Super Abrasives
OTW-1.0-3184-0000 Integral Driveshaft	N/A	.92-1.25	Slotted	1/8x1/8x4 Super Abrasives
OTW-1.0-3184-0000 Integral Driveshaft	N/A	.92-1.25	No Spring Slots	1/8x1/8x4 Super Abrasives
OTW-1.25-3146-1992	3/4"	1.19-1.50	Slotted	1/4x7/32x6
OTW-1.25-3146-1993	3/4"	1.19-1.50	No Spring Slots	1/4x7/32x6
OTW-1.5-35166-1301	3/4"	1.43-1.81	Slotted	5/16x5/16x6
OTW-1.5-35166-1302	7/8"	1.43-1.81	Slotted	5/16x5/16x6
OTW-1.5-35166-1303	3/4"	1.43-1.81	No Spring Slots	5/16x5/16x6
OTW-1.5-35166-1304	7/8"	1.43-1.81	No Spring Slots	5/16x5/16x6
OTW-1.75-45166-1311	7/8"	1.65-2.01	Slotted	5/16x5/16x6
OTW-1.75-45166-1312	1 1/8"	1.65-2.01	Slotted	5/16x5/16x6
OTW-1.75-45166-1313	7/8"	1.65-2.01	No Spring Slots	5/16x5/16x6
OTW-1.75-45166-1314	1 1/8"	1.65-2.01	No Spring Slots	5/16x5/16x6
OTW-2.0-4386-9877	1 1/8"	1.94-2.50	Slotted	3/8x3/8x6

Medium Duty Tools

Available as Assembly & Bodies

Model Number	Shank Size	Range	Body Type	Abrasive Size
OTW-3.0-4386-xxxx	1 ½"	2.94-3.50	Flange	3/8x3/8x6
OTW-3.0-4386-3813	1 ¾"	2.94-3.50	Flange	3/8x3/8x6
OTW-3.5-4386- 6832	1 1/8"	3.43-4.30	Flange	3/8x3/8x6
OTW-3.5-4386- xxxx	1 ¾"	3.43-4.30	Flange	3/8x3/8x6
OTW-4.0-4386- 6741	1 1/8"	3.88-5.18	Flange	3/8x3/8x6
OTW-4.0-4386- 5126	1 ¾"	3.88-5.18	Flange	3/8x3/8x6
OTW-4.0-4386- xxxx	2 ¼"	3.88-5.18	Flange	3/8x3/8x6
OTW-5.0-4386- xxxx	1 1/8"	4.83-6.00	Flange	3/8x3/8x6
OTW-5.0-4386- 7262	1 ¾"	4.83-6.00	Flange	3/8x3/8x6
OTW-5.0-4386- xxxx	2 ¼"	4.83-6.00	Flange	3/8x3/8x6
OTW-6.0-4386- xxxx	1 1/8"	5.76-7.00	Flange	3/8x3/8x6
OTW-6.0-4386- 7263	1 ¾"	5.76-7.00	Flange	3/8x3/8x6
OTW-6.0-4386- xxxx	2 ¼"	5.76-7.00	Flange	3/8x3/8x6
OTW-7.0-4386- xxxx	1 1/8"	6.76-8.00	Flange	3/8x3/8x6
OTW-7.0-4386- 7264	1 ¾"	6.76-8.00	Flange	3/8x3/8x6



Slotted-Body Tools

Available as Assembly & Bodies

Model Number	Shank Size	Range	Body Type	Abrasive Size
OTW-2.0-4388-1321	7/8"	1.93-2.50	Slotted	3/8x3/8x8
OTW-2.0-4388-1322	1 1/8"	1.93-2.50	Slotted	3/8x3/8x8
OTW-2.0-4388-1323	7/8"	1.93-2.50	No Spring Slots	3/8x3/8x8
OTW-2.0-4388-1324	1 1/8"	1.93-2.50	No Spring Slots	3/8x3/8x8
OTW-2.5-4388-1331	1 1/8"	2.41-3.18	Slotted	3/8x3/8x8
OTW-2.5-4388-1332	1 1/2"	2.41-3.18	Slotted	3/8x3/8x8
OTW-2.5-4388-1333	1 1/8"	2.41-3.18	No Spring Slots	3/8x3/8x8
OTW-2.5-4388-1334	1 1/2"	2.41-3.18	No Spring Slots	3/8x3/8x8
OTW-3.0-5388-1341	1 1/8"	2.91-3.93	Slotted	3/8x3/8x8
OTW-3.0-5388-1342	1 1/2"	2.91-3.93	Slotted	3/8x3/8x8
OTW-3.0-5388-1343	1 3/4"	2.91-3.93	Slotted	3/8x3/8x8
OTW-3.0-5388-1344	1 1/8"	2.91-3.93	No Spring Slots	3/8x3/8x8
OTW-3.0-5388-1345	1 1/2"	2.91-3.93	No Spring Slots	3/8x3/8x8
OTW-3.0-5388-1346	1 3/4"	2.91-3.93	No Spring Slots	3/8x3/8x8

Flanged-Body Tools

Available as Assembly & Bodies

Model Number	Shank Size	Range	Body Type	Abrasive Size
OTW-3.5-5388-1351	1 ½"	3.41-4.00	Flange	3/8x3/8x8
OTW-3.5-5388-1352	1 ¾"	3.41-4.00	Flange	3/8x3/8x8
OTW-4.0-5128-1361	1 ½"	3.88-5.00	Flange	1/2x1/2x8
OTW-4.0-5128-1362	1 ¾"	3.88-5.00	Flange	1/2x1/2x8
OTW-4.0-5128-1363	2 ¼"	3.88-5.00	Flange	1/2x1/2x8
OTW-5.0-5128-1381	1 ½"	4.88-6.13	Flange	1/2x1/2x8
OTW-5.0-5128-1382	1 ¾"	4.88-6.13	Flange	1/2x1/2x8
OTW-5.0-5128-1383	2 ¼"	4.88-6.13	Flange	1/2x1/2x8
OTW-6.0-6128-1391	1 ¾"	5.76-7.06	Flange	1/2x1/2x8
OTW-6.0-6128-1392	2 ¼"	5.76-7.06	Flange	1/2x1/2x8
OTW-6.0-6128-1393	3"	5.76-7.06	Flange	1/2x1/2x8
*OTW-6.0-8128-0000S	2 ¼"	5.76-7.06	Flange	1/2x1/2x8
OTW-7.0-6128-1401	1 ¾"	6.76-8.06	Flange	1/2x1/2x8
OTW-7.0-6128-1402	2 ¼"	6.76-8.06	Flange	1/2x1/2x8
OTW-7.0-6128-1403	3"	6.76-8.06	Flange	1/2x1/2x8



Model Number	Shank Size	Range	Body Type	Abrasive Size
OTW-8.0-8128-1421	1 ¾"	7.76-9.06	Flange	1/2x1/2x8
OTW-8.0-8128-1422	2 ¼"	7.76-9.06	Flange	1/2x1/2x8
OTW-8.0-8128-1423	3"	7.76-9.06	Flange	1/2x1/2x8
OTW-9.0-8128-1431	1 ¾"	8.76-10.06	Flange	1/2x1/2x8
OTW-9.0-8128-1432	2 ¼"	8.76-10.06	Flange	1/2x1/2x8
OTW-9.0-8128-1433	3"	8.76-10.06	Flange	1/2x1/2x8
OTW-10/11-8128-1442	2 ¼"	9.63-12.25	Flange	1/2x1/2x8
OTW-10/11-8128-1443	3"	9.63-12.25	Flange	1/2x1/2x8
OTW-12/13-8128-1452	2 ¼"	11.63-14.25	Flange	1/2x1/2x8
OTW-12/13-8128-1453	3"	11.63-14.25	Flange	1/2x1/2x8
OTW-14/15-8128-1462	2 ¼"	13.63-16.25	Flange	1/2x1/2x8
OTW-14/15-8128-1463	3"	13.63-16.25	Flange	1/2x1/2x8
OTW-16/17-8128-1472	2 ¼"	15.63-18-25	Flange	1/2x1/2x8
OTW-16/17-8128-1473	3"	15.63-18-25	Flange	1/2x1/2x8

Model Number	Shank Size	Range	Body Type	Abrasive Size
*OTW-18/19-8128-1482	2 ¼"	17.63-20.25	Flange	1/2x1/2x8
*OTW-18/19-8128-1483	3"	17.63-20.25	Flange	1/2x1/2x8
*OTW-20/21-8128-1492	2 ¼"	19.63-22.25	Flange	1/2x1/2x8
*OTW-20/21-8128-1493	3"	19.63-22.25	Flange	1/2x1/2x8
*OTW-22/23-8128-1502	2 ¼"	21.63-24.25	Flange	1/2x1/2x8
*OTW-22/23-8128-1503	3"	21.63-24.25	Flange	1/2x1/2x8
*OTW-24/25-8128-	3"	24.63-26.25	Flange	1/2x1/2x8
*OTW-24/25-8128-	3"	24.63-26.25	Flange	1/2x1/2x8

* Non-Standard Special Order Tools



MD Modular Tooling

Expandable Hone Tooling

7265 Hub Assembly

Range: 8"/16" (1 3/4" Shank)

<u>Part #</u>	<u>Description</u>	<u>Range</u>
7266	Ring Kit 8"/9"	7.75" – 10.19"
7267	Ring Kit 10"/11"	9.75" – 12.19"
7268	Ring Kit 12"/13"	11.75" – 14.19"
7687	Ring Kit 14"/15"	13.77" – 16.19"

Stone holders: See [page 17](#) (8" thru 16") 3/8" x 3/8" x 6"
(4/set)

8913 Hub Assembly

Range: 14"/22" (1 3/4" Shank)

<u>Part #</u>	<u>Description</u>	<u>Range</u>
8914	Ring Kit 14"/15"	13.75" – 16.19"
8915	Ring Kit 16"/17"	15.75" – 18.19"
8919	Ring Kit 18"/19"	17.75" – 20.19"
8920	Ring Kit 20"/21"	19.75" – 22.19"

Stone holders: See [page 17](#) (14" thru 22") 3/8" x 3/8" x 6"
(6/set)

HD Modular Tooling

Expandable Hone Tooling

Select Shank Size:

5677 Hub Assembly	14/26" (2 1/4" Shank)
5676 Hub Assembly	14/26" (3" Shank)

Select Diameter Range:

<u>Part #</u>	<u>Description</u>	<u>Range</u>
5684	Ring Kit 14/15"	13.63" – 16.25"
5685	Ring Kit 16/17"	15.63" – 18.25"
5686	Ring Kit 18/19"	17.63" – 20.25"
5687	Ring Kit 20/21"	19.63" – 22.25"
5688	Ring Kit 22/23"	21.63" – 24.25"
5689	Ring Kit 24/25"	23.63" – 26.25"

Stone holders: See [page 17](#) (13" thru 26") 1/2" x 1/2" x 8" (8/set)

6239 Hub Assembly 26/41" (3" Shank)

6240	Ring Kit 26–28"	25.62" – 29.12"
6241	Ring Kit 29-31"	28.62" – 32.12"
6242	Ring Kit 32-34"	31.62" – 35.12"
6243	Ring Kit 35-37"	34.62" – 38.12"
6244	Ring Kit 38-40"	37.62" – 41.12"

Stone holders: 1/2" x 1/2" x 6" (2) See [page 19](#) (10/set)



Tool Size	OTW Part #	SPC/GHC Part #	Height	Range	Abrasive Size
1 ½"	1270	G14B125	.312	1.43-1.53	5/16x5/16x6 Mtd.
	1271	G14B139	.357	1.53-1.63	
	1272	G14B140	.402	1.63-1.72	
	1273	G14B182	.447	1.72-1.81	
1 ¾"	1297	G14B139-1	.325	1.65-1.75	5/16x5/16x6 Mtd.
	1298	G14B140-1	.370	1.74-1.84	
	1299	G14B182-1	.415	1.83-1.93	
	1300	G14B182-2	.460	1.92-2.02	
2"	2200	G14B152	.421	1.94-2.00	3/8x3/8x6 Mtd.
	2201	G14B153	.484	2.07-2.12	
	2202	G14B154	.546	2.19-2.25	
	2203	G14B146	.609	2.32-2.37	
	2204	G14B155	.671	2.44-2.50	
2 ½"	6378	G14B146	.625	2.38-2.63	3/8x3/8x6 Mtd.
	6379	G14B148	.750	2.63-2.88	
	6380	G14B149	.875	2.88-3.13	
3"	1236	G14C178-1	.312	2.94-3.00	3/8x3/8x6 Mtd.
	1237	G14C178-2	.374	3.06-3.13	
	1238	G14C178-3	.437	3.19-3.25	
	1239	G14C178-4	.500	3.31-3.38	
	1240	G14C178-5	.562	3.44-3.50	
3 ½"	1236	G14C178-1	.312	3.43-3.55	3/8x3/8x6 Mtd.
	1237	G14C178-2	.374	3.55-3.68	
	1238	G14C178-3	.437	3.68-3.80	
	1239	G14C178-4	.500	3.80-3.93	
	1240	G14C178-5	.562	3.93-4.05	

Standard MD Stone holders

Tool Size	OTW Part #	SPC/GHC Part #	Height	Range	Abrasive Size
4"	1239	G14C178-4	.500	3.88-4.18	3/8x3/8x6 Mtd.
	1241	G14C178-6	.625	4.13-4.43	
	1243	G14C178-8	.750	4.38-4.68	
	1245	G14C178-10	.875	4.68-4.93	
5"	5644	G14C129	.725	4.83-5.25	3/8x3/8x6 Mtd.
	5645	G14C130	.850	5.08-5.50	
	5646	G14C131	.975	5.33-5.75	
	5647	G14C132	1.100	5.58-6.00	
6"	5646	G14C131	.975	5.76-6.25	3/8x3/8x6 Mtd.
	5647	G14C132	1.100	6.01-6.50	
	7269	G14C133	1.225	6.25-6.75	
	7270	G14C134	1.350	6.51-7.00	
7"	5646	G14C131	.975	6.76-7.25	3/8x3/8x6 Mtd.
	5647	G14C132	1.100	7.01-7.50	
	7269	G14C133	1.225	7.25-7.75	
	7270	G14C134	1.350	7.51-8.00	
8" thru 22" Modular	7271		1.473	7.75-8.32	3/8x3/8x6 Mtd.
	7272		1.661	8.13-8.70	
	7273		1.911	8.63-9.19	
	7274		2.161	9.13-9.70	
	7275		2.406	9.62-10.19	



Tool Size	OTW Part #	SPC/GHC Part #	Height	Range	Abrasive Size
.500"	OTW1232	G14A105	.120	.48-.50	.12x.07x.25" Super abrasive only
	OTW1233	G14A105-1	.151	.54-.56	
	OTW1234	G14A105-2	.182	.60-.62	
	OTW1235	G14A105-3	.213	.66-.69	
.750"	OTW4607	G14B195	.187	.724-.873	.12x.12x4" Super abrasive only
	OTW4608	G14B195-1	.218	.786-.937	
	OTW4609	G14B195-2	.250	.850-.999	
	OTW4610	G14B195-3	.281	.912-1.061	
1.0"	OTW2938	G14B186-1	.218	.92-1.00	.209x.154x4" Super abrasive only
	OTW2939	G14B186-2	.250	.98-1.06	
	OTW2940	G14B186-3	.281	1.04-1.12	
	OTW2941	G14B186-4	.312	1.11-1.18	
	OTW2942	G14B186-5	.343	1.17-1.25	
1.25"	OTW1284	G14B187	.312"	1.19-1.25	(.25x.218x 6) Super abrasive only
	OTW1285	G14B187-1	.343"	1.25-1.31	
	OTW1286	G14B187-2	.375"	1.31-1.37	
	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
	OTW1271	G14B139	.357"	1.53-1.62	
	OTW1272	G14B140	.402"	1.62-1.71	
	OTW1273	G14B182	.447"	1.71-1.81	
1.75"	OTW1270	G14B125	.312"	1.65-1.74	5/16x5/16x6
	OTW1271	G14B139	.357"	1.74-1.83	
	OTW1272	G14B140	.402"	1.83-1.92	
	OTW1273	G14B182	.447"	1.92-2.01	
1.75" SPC/GHC only	OTW1297	G14B139-1	.325"	1.65-1.74	5/16x5/16x6
	OTW1298	G14B140-1	.370"	1.74-1.83	
	OTW1299	G14B182-1	.415"	1.83-1.92	
	OTW1300	G14B182-2	.460"	1.92-2.01	
2.0"	OTW1274	G14B168-1	.412"	1.93-2.00	3/8x3/8x8
	OTW1275	G14B171-1	.484"	2.06-2.12	
	OTW1276	G14B172-1	.546"	2.19-2.25	
	OTW1277	G14B173-1	.609"	2.31-2.37	
	OTW1278	G14B174-1	.671"	2.44-2.50	

Standard HD Stone holders

Tool Size	OTW Part #	SPC/GHC Part #	Height	Range	Abrasive Size
2.5"	OTW1279	G14B130	.625"	2.41-2.68	3/8x3/8x8
	OTW1280	G14B131	.750"	2.66-2.93	
	OTW1281	G14B132	.875"	2.91-3.18	
3.0"	OTW1280	G14B131	.750"	2.91-3.18	3/8x3/8x8
	OTW1281	G14B132	.875"	3.16-3.47	
	OTW1282	G14B133	1.00"	3.41-3.68	
	OTW1283	G14B178	1.125"	3.66-3.93	
3.50"	OTW1198	G14C150	.406"	3.41-3.50	3/8x 3/8 x8
	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"	3.88-4.00	1/2x1/2x8
	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
	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
	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
	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	



Tandem Stone holders

Tool Size	OTW Part #	SPC/GHC Part #	Height	Range	Abrasive Size
2 ½"	3365	G14B165	.625	2.38-2.63	3/8x3/8x6 (2) Angleback
	1266	G14B166	.750	2.63-2.88	
	2568	G14B167	.875	2.88-3.13	
3"	1266	G14B166	.750	2.83-3.00	3/8x3/8x6 (2) Angleback
	2567	G14B163	.812	3.00-3.25	
	2569	G14B164	.937	3.25-3.50	
	1268	G14B169	1.062	3.50-3.75	
3 ½"	2249	G14C184-1	.406	3.38-3.50	3/8x3/8x6 (2)
	2250	G14C184-2	.531	3.63-3.75	
	6575	G14C184-3	.593	3.75-3.88	
	6576	G14C184-4	.656	3.88-4.00	
	6577	G14C184-5	.781	4.13-4.25	
4"	1292	G14C174-4	.375	3.88-4.00	1/2x1/2x8 (2)
	1291	G14C174-3	.500	4.13-4.25	
	1293	G14C174-2	.625	4.38-4.50	
	2964	G14C174-1	.750	4.63-4.75	
	1294	G14C173-7	.850	4.83-5.00	
5"	1293	G14C174-2	.625	4.83-5.13	1/2x1/2x8 (2)
	2964	G14C174-1	.750	5.13-5.38	
	1294	G14C173-7	.850	5.38-5.58	
	4469	G14C173-8	.975	5.58-5.83	
	4470	G14C173-9	1.100	5.83-6.08	
*6" Thru *9"	1294	G14C173-7	.850	5.76-6.06	1/2x1/2x8 (2)
	4469	G14C173-8	.975	6.01-6.31	
	4470	G14C173-9	1.100	6.26-6.56	
	4471	G14C173-10	1.225	6.51-6.81	
	4472	G14C173-11	1.350	6.76-7.06	

*Tandem Stone holders 6" thru 9" have the same range with 1" larger increments.

Large Modular Tool

Tandem Stone holders

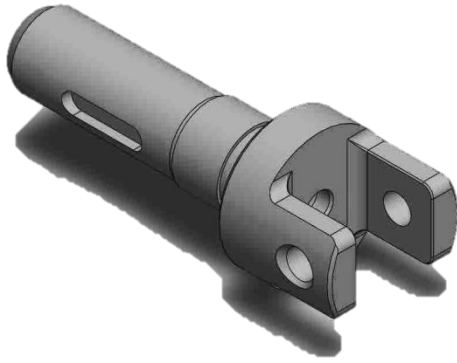
Tool Sizes	OTW Part #	Range	Height
26" – 28"	9835	25.62" – 26.50"	3.000"
29" – 31"	9836	26.50" – 27.37"	3.440"
32" – 34"	9837	27.37" – 28.25"	3.875"
35" – 37"	9838	28.25" – 29.12"	4.312"

Abrasives: Two (2) ½" x ½" x 6" tandem in line
 Note: Each tool add 3.0" for the next tools range

Flange Kit Numbers for Extra-Large Tool Kits using Hub 6239

OTW Part #	6240 26/28"	6241 29/31"	6242 32/34"	6243 35/37"	6244 38/40"
OTW-9835	25.62-26.50	28.62-29.50	31.62-32.50	34.62-35.50	37.62-38.50
OTW-9836	26.50-27.37	29.50-30.37	32.50-33.37	35.50-36.37	38.50-39.37
OTW-9837	27.37-28.25	30.37-31.25	33.37-34.25	36.37-37.25	39.37-40.25
OTW-9838	28.25-29.12	31.25-32.12	34.25-35.12	37.25-38.12	40.25-41.12





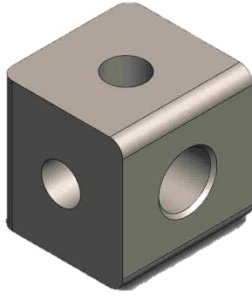
Drive Shanks



Ring Nuts

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

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



Universal Blocks

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



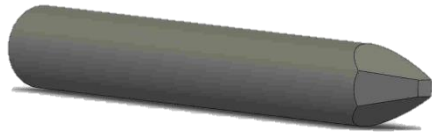
Drive Screws/Pins

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

Drive Screw - Pilot Dimensions

1585	.250" x .41" long
1605	.250" x .53" long
1606	.312" x .62" long
1219	.371" x .26" long
1218	.433" x .39" long
1217	.433" x .45" long
1216	.620" x .54" long
1213	.620" x .57" long
1540	.748" x .68" long

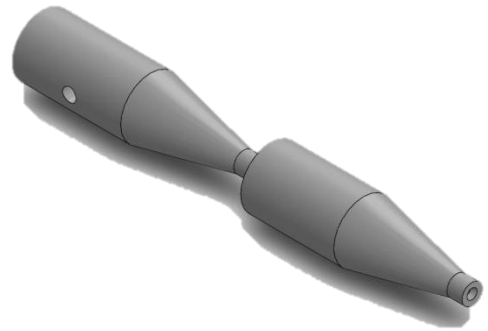




Expander Pins

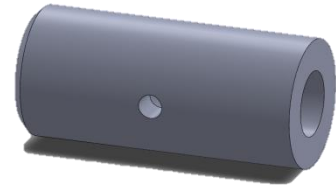
Tool Size	OTW Part Number	Pin Size
3.5"	OTW-1621	.373 X .740 LG
4.0"	OTW-1522	.498 X .847 LG
5.0"	OTW-1523	.498 X 1.066 LG
6.0"	OTW-1524	.622 X 1.196 LG
7.0"	OTW-1525	.622 X 1.508 LG
8.0"	OTW-1526	.622 X 2.003 LG
9.0"	OTW-1527	.622 X 2.503 LG
10"/11"	OTW-1997	.622 X 1.786 LG
12"/13"	OTW-1998	.622 X 2.786 LG
14"/15"	OTW-1999	.622 X 3.786 LG
16"/17"	OTW-2000	.622 X 4.786 LG

*Expander Plates also available upon request



Cones

Tool Size	Part Number	Angles
1.0"	OTW-2072	3
1.25"	OTW-2132	3
1.5"	OTW-1580	3
1.75"	OTW-1581	3
2.0"	OTW-1582	3
2.5"	OTW-1583	3
3.0"	OTW-1584	3
3.5"	OTW-2277	2
4.0"	OTW-2278	2
5.0"	OTW-2279	2
6.0"	OTW-2280	2
7"-9"	OTW-1521	2
10"-16"	OTW-1109	2



Cone Rod Link

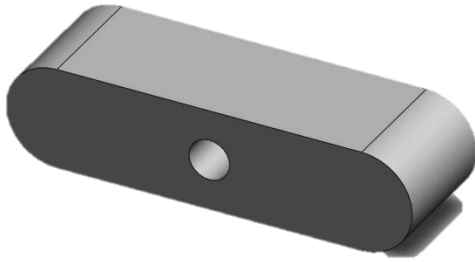
Cone Rod

Cone Rod Cap

Tool Size	Cone Rod Link	Cone Rod	Cone Rod Cap	Spring
1 ¼"	N/A	4390 (.75)	1607	1940
1 ½"	N/A	1610 (.75) 1611 (.87)	1607 1608	1940 1941
1 ¾"	N/A	1612 (.87) 1612 (1.12)	1608 1609	1941 1941
2"	1616	1613 (.87) 1613 (1.12)	1609 1545	1941 1941
2 ½"	1617	1614 (1.12) 1615 (1.50)	1608 1609	1941 1942
3"	1617	1614 (1.12) 1615 (1.50) 1615 (1.75)	1609 1545 1545	1941 1942 1942
3 ½"	2272	1615 (1.50) 1615 (1.75)	1545 1545	1942 1942
4"	2271	1541 (1.50) 1541 (1.75) 1541 (2.25)	1545 1545 1546	1942 1942 1943
5"	2271	1541 (1.50) 1541 (1.75) 1541 (2.25)	1545 1545 1546	1941 1942 1943
6"	2271	1542 (1.75) 1542(2.25) 1542 (3.00)	1543 1113 1113	1942 1943 1943
7" – 9"	1544	1542 (1.75) 1542(2.25) 1542 (3.00)	1543 1113 1113	1943 1943 1943
10" – 16"	1120	1112 (2.25) 1112 (3.00)	1113 1113	1943 1943

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



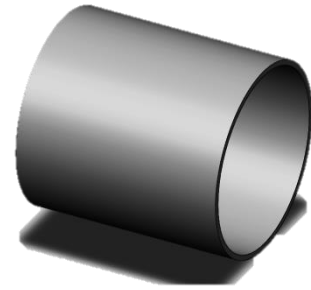


Drive Keys

Socket I.D.	OTW Part #	SPC Part #
3/4"	1847	G22A108
7/8"	1848	G22A114
1 1/8"	1849	G22A105
1 1/2"	1850	G22A102
1 3/4"	1851	G22A106
2 1/4" (3" OD)	1851	G22A106
2 1/4" (3 1/4" OD)	1853	
3"	1852	G22A104
3" OTW	3295	

Drive Key Dimensions (W x H x L)

OTW1847	.249" x .281" x 0.748"
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"



Key Sleeves

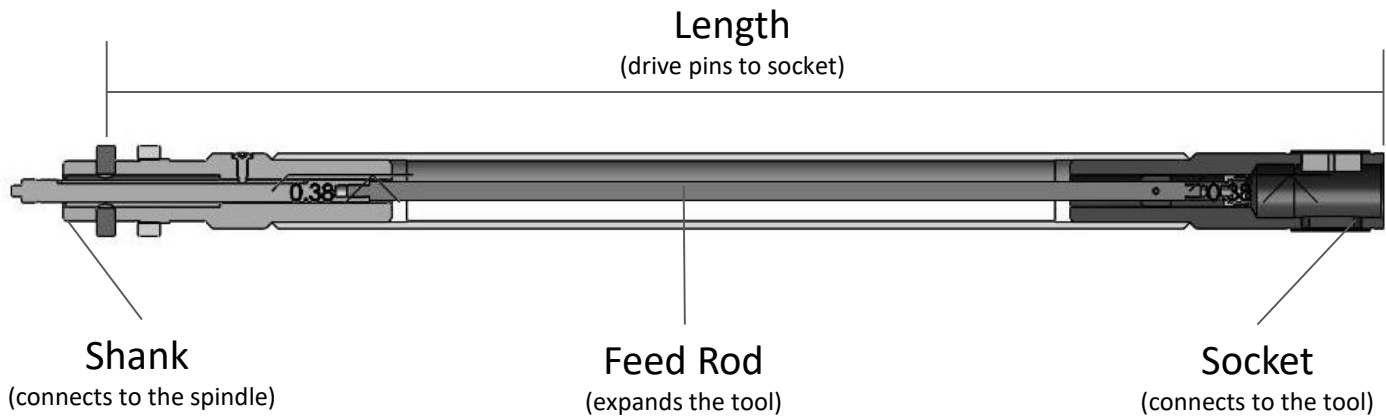
Socket I.D.	OTW Part #	SPC Part #
3/4"	1876	G35A136
7/8"	1877	G35A155
1 1/8"	1878	G35A103
1 1/2"	1879	G35A102
1 3/4"	1845	G35A101
2 1/4" (3" OD)	1880	G35A104
2 1/4" (3 1/4" OD)	1846	
3"	3291	

Retaining Springs

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

* 12 ea. Minimum order on springs

Drive Shafts



Diameter To Hone	Recommendation	OTW Shank Part #	SPC Shank Part #	OTW Socket Part #	SPC Socket Part #
1 ¼"	OTW-2.5P-1.12-.75	2934		OTW2915	G43B118
1 ½"-2"	OTW-2.5P-1.25-.87	4493		OTW4490	G43B125
2"-3"	OTW-2.5P-1.56-1.12	1922	G42B106	OTW1888	G43B104
3"-4"	OTW-2.5P-2.5-1.75	1899	G42B101	OTW1828	G43B101
4"-9"	OTW-2.5P-3.0-2.25	1894	G42B105	OTW1889	G43B103
10"-24"	OTW-2.5P-4.0-3.0	3287		OTW1842	

*To order, please contact your OTW representative



Honing Machines

Industry-leading Value and Capability

Standard Machine Overview

	Horizontal			
	VersaHone Horizontal Flexible Duty <i>“Highly Versatile”</i>	PowerHone Horizontal Production Duty <i>“Simple and Precise”</i>	UltraHone Horizontal Standard UltraHone-XL <i>“Maximum Productivity”</i>	
Spindle Power (Max)	3,7 kW (5.0 HP)	20,0 kW (26.8 HP)	30,0 kW (40.2 HP)	37,3 kW (50.0 HP)
Drive Type	VFD Gearmotor	Servo	Servo	Hydraulic
Stroke Power	2.0 HP (1.5kW)	11,0 kW	11,0 kW	25.0 HP (18,6 kW)
Drive Type	Servo	Servo	Servo	Hydraulic
Feed System	Rotary, Servo	Linear, Servo	Linear, Servo	Push, Hydraulic Linear, Servo
ID Capacity Min. (Rec.)*	2.0” (50mm)	0.5” (12mm)	1.5” (38mm)	1.5” (38mm)
ID Capacity Max (Rec.)*	22.0” (559mm)	22.0” (559mm)	24.0” (610mm)	24.0” (610mm)
OD Capacity*	24.0” (610mm)	23.0” (584mm)	26.0” (660mm)	26.0” (660mm)
Optional Stroke Capacity	Up to 14.5 (4.5M)	Up to 26' (8M)	Up to 45' (14M)	Up to 56' (17M)
Reciprocation Rate (Infinitely Variable)	1-90 FPM	1 -100 FPM	1 -100 FPM	
Tooling Type (ref. OTW Tooling Catalog)	VHT/MPS	MD/MD Modular	HD/HD Modular	
Max Stock Removal**	0.16 in ³ /min (2,6 cm ³ /min)	1.00 in ³ /min (16,4 cm ³ /min)	1.75 in ³ /min (28,7 cm ³ /min)	2.5 in ³ /min (40,9 cm ³ /min)
Replaces Model	N/A	OTW-1000	OTW-3000	OTW-5000
Typical Application By Industry	Hydraulic repair/ remanufacture	Aerospace Defense Plastics Hydraulics	Raw Materials Defense Plastics Hydraulics Energy	

**Based on recommended tooling using conventional abrasives in mild steel

Vertical				
VersaHone Vertical Flexible Duty "Highly Versatile"	PowerHone Vertical Production Duty "Simple and Precise"	UltraHone Vertical Standard UltraHone-XL "Maximum Productivity"		
10,0 kW (13.4 HP) Servo	20,0 kW (26.8 HP) Servo	30,0 kW (40.2 HP) Servo	37,3 kW (50.0 HP) Hydraulic	Spindle Power (Max) Drive Type
5,0 kW Servo	11,0 kW Servo	11,0 kW Servo	25.0 HP (18,6 kW) Hydraulic	Stroke Power Drive Type
Linear, Servo	Linear, Servo Rotary, Servo	Linear, Servo	Push, Hydraulic Linear, Servo	Feed System
.05" (12mm)	1.5" (38mm)	1.5" (38mm)	1.5" (38mm)	ID Capacity Min. (Rec.)*
6.0" (152mm)	16.0" (406mm)	22.0" (559mm)	24.0" (610mm)	ID Capacity Max (Rec.)*
8.0" (200mm)	24.0" (610mm)	24.0" (610mm)	26.0" (660mm)	OD Capacity*
Up to 36" (915mm)	Up to 96" (2438 mm)	Up to 72" (1829mm)	Up to 72" (1829mm)	Optional Stroke Capacity
1 -100 FPM	1 -100 FPM	10-100 FPM		Reciprocation Rate (Infinitely Variable)
LD/Custom	MD Modular/Custom	HD/HD Modular		Tooling Type (ref. OTW Tooling Catalog)
0.80 in ³ /min (13,1 cm ³ /min)	1.00 in ³ /min (16,4 cm ³ /min)	1.75 in ³ /min (28,7 cm ³ /min)	2.5 in ³ /min (40,9 cm ³ /min)	Max Stock Removal**
N/A	OTW-9000	OTW-V10		Replaces Model
Aerospace Automotive Defense Hydraulics	Aerospace Automotive Defense Hydraulics Energy	Aerospace Automotive Defense Hydraulics Energy		Typical Application By Industry

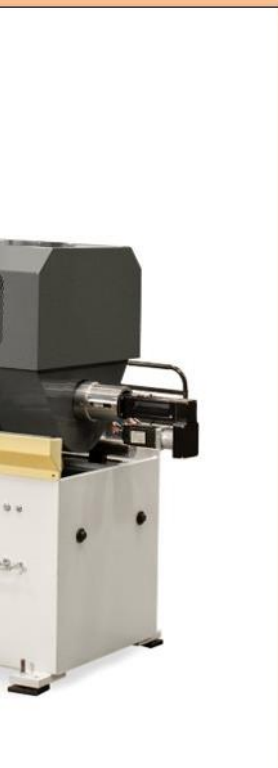


VersaHone

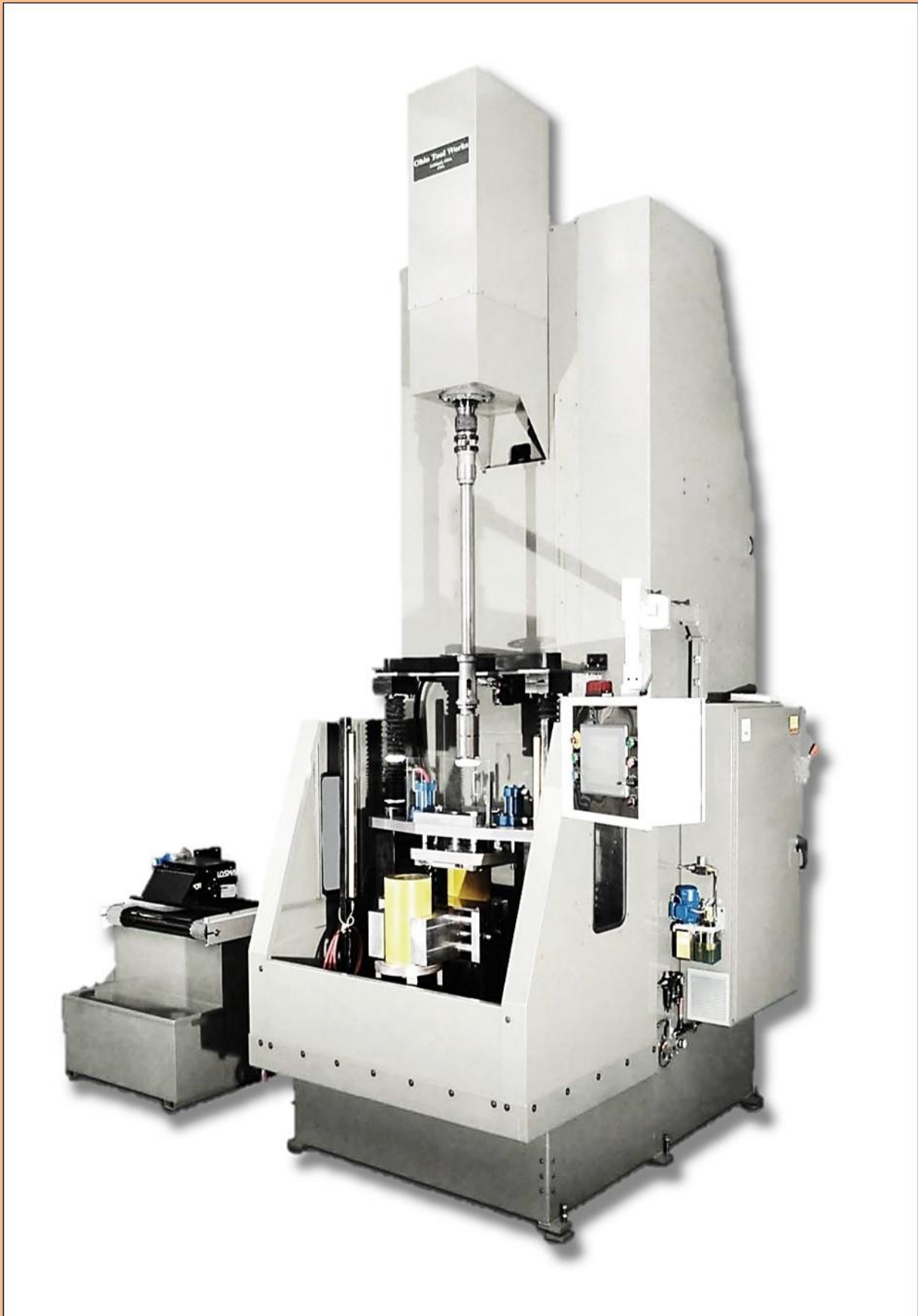
PowerHone



Hone



UltraHone



Honing Fluids



Using the right honing oil is an essential part of bore sizing precision, finish and efficiency. OTW makes it easy with our specialty honing lubricants, which are specifically formulated and tested to cool, flush, and optimize your honing operation.

OTW's proprietary cutting fluids help customers optimize their material removal rates, extend their abrasive and tooling life, and obtain superior bore finishes.

OTW-8915 HONING OIL:

OTW-8915 Honing Fluid is a pre-mixed honing oil and is an excellent choice for most honing applications. Available in 5-gallon pails, 55-gallon drums and 275 gallon totes.

OTW-AF-5 HONING FLUID ADDITIVE:

OTW-AF-5 Honing Fluid is a base oil for use with most conventional honing coolants. Available in 5 gallon & 55 gallon drums.

OTW-8920 HONING OIL:

OTW-8920 Honing Fluid is a premium pre-mixed honing oil and is an ideal choice for applications where tight tolerances and fine surface finishes are critical.

OTW-8920 is a direct replacement for customers who currently use Sunnen #MB-30.

Available in 5-gallon pails, 55-gallon drums and 275 gallon totes.

OTW-PROCUT 78-275 DRILLING OIL:

Available in 55 gallon drums and 275 gallon totes.

Honing Abrasives

Conventional Vitrified

Grain Type	Grit Sizes	Stone Hardness	Stone Sizes	Stone Lengths
Aluminum Oxide	80	H (ultra soft)	1/4" x 1/4"	2" 3" 4" 6" 8"
White Aluminum Oxide	120	I (soft)	5/16" x 5/16"	
Black Silicone Carbide	150	IP (induced porosity)	3/8" x 3/8"	
Green Silicon Carbide	180	J (medium soft)	1/2" x 1/2"	
Ceramic Oxide Resin	240	K (medium)	5/8" x 5/8"	
	320	L (medium hard)	3/4" x 3/4"	
	400	M (hard)	1" x 1"	
	500			

Metal bond Super abrasives

Grain Type	Grit Sizes	Bonds	Configurations	Stone Sizes (H&W)
Diamond Cubic Boron Nitride (CBN/Borazon)	Mesh 30-400	Premium Bonds	Standard Modified Hard-Tip Slotted Radius	.039" thru .750"
	Micron 500-800	Concentration 25-150		Stone Lengths Up to 12"



Honing Consumables

Whether provided as part of a complete honing solution, a just-in-time consumables supply program or on an individual basis, OTW's complete line of top-quality honing accessories are designed to keep your honing equipment running as cleanly, efficiently and accurately as possible.



ABRASIVE CLOTH:

50 Yard Rolls

Grit Sizes:

- 80, 100, 120, 150, 220, 240, 280, 320, 400 and 600

Widths:

- 3, 6, 8, 9, 11, 12, 16, 18 and 20 inches

FILTER MEDIA ROLLS:

Widths:

15 to 55 inches

Lengths:

100 or 250 yards

Micron Rating:

10, 20, 50, 80 or 100

SILENCERS AND GUIDES:

Wood Block Silencers

- Use in place of stones to reduce noise during honing. Available in most standard mountings

Honing Guides

- For use with specialty tools to protect the finished bore during the honing process. Standard and custom sizes available.

FILTER BAGS/CARTRIDGES:

Available from 20-100 micron rating in most industry-standard sizes.

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Sunnen / GHC Reference Numbers (“SPC”) Listed Throughout



Honing Tools

With more than 100 years of honing industry experience, Ohio Tool Works' dedicated staff of customer-facing engineers are fluent with all major honing abrasive manufacturers and systems. As result, we are proud to provide our customers both standard and custom replacement abrasives for tooling of other manufacturers.

MANUFACTURERS:

- Sunnen Products Company
- General Hone
- Barnes
- Micromatic
- Century
- Nagel
- Delapena
- Gehring
- Superior
- Toyo
- Others



To discuss how the **OTW's Quality and Expertise** can meet your honing needs, please contact :

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