SUNNEN®

ABOVE AND BEYOND **HONING**

X-GH-2900I

GH® Honing Tools

Tooling & Abrasive Selection Guide

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SUNNEN® . . .

THE FOREMOST AUTHORITY ON TUBE HONES WITH MORE THAN 400 DELIVERED AROUND THE WORLD

HTA - Valued priced

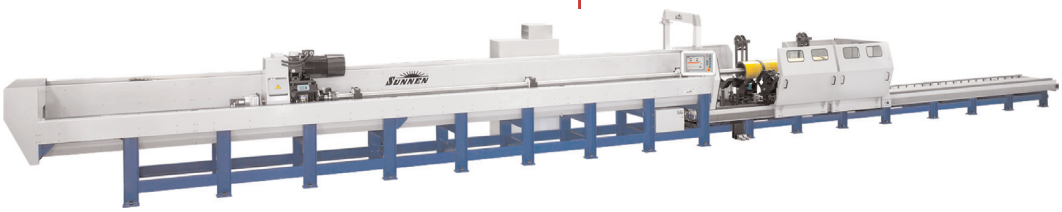
HTB - Perfect for job shops

HTH - High production and flexibility

HTC - High volume production

GH-210 - Heavy-duty power

HTD - For large demanding applications



A Message to Our Customers

In 1924 my grandfather, Joseph Sunnen, founded Sunnen Products Company with little more than an innovative idea and a lot of hard work. His guiding vision was to provide superior products at a fair price, and to put his customers and employees first. He used that formula over the years to grow Sunnen® from a one-man shop into a global company with facilities and distributors in more than 50 countries.

But with all the changes that have taken place since 1924, some things at Sunnen remain the same. Sunnen Products Company is still owned by the Sunnen family and I am honored to be at the helm in our eighth decade of service. But just as important is our commitment to our friends and customers who depend on us for heavy-duty honing tooling and abrasives. General Hone® machines and tools are an important part of Sunnen.

At Sunnen, we have delivered more than 400 tube hones around the world, making Sunnen the foremost authority in heavy-duty honing. Sunnen is committed to being ready with the latest honing technology when you need it.

When you buy your Sunnen system, you get more than the latest honing technology . . . you get:

• Sunnen's nationwide team of factory-trained representatives with solutions to your equipment needs;
• Personal customer service for fast, easy ordering and;
• Technical advice and field service that is second to none.

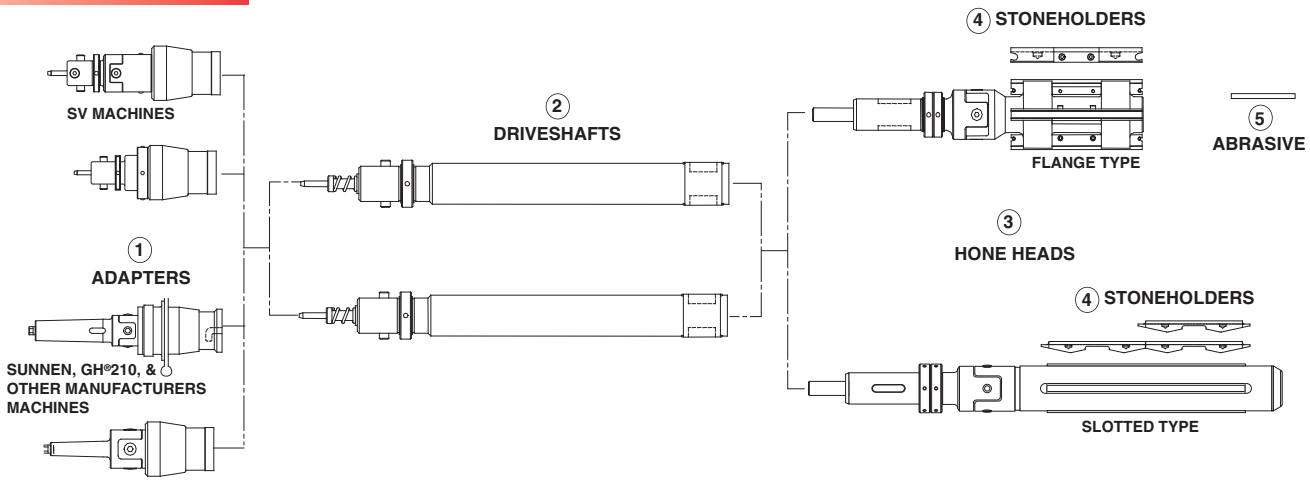
On behalf of all Sunnen employees, I wish you good luck and much business success in the future.

Matthew Sunnen Kreider

Matthew Sunnen Kreider
President,
Sunnen Products Company

Sunnen GH® Honing Tool System

How To Use This Guide



Complete GH® Honing Tool consist of items #: 1, 2, 3, 4, and 5:

NOTE: *Use Order Form on Page 51 of this Catalog to ensure all information is supplied.*

HOW TO USE THIS GUIDE

Step 1. - Select Tooling by Machine Type and Diameter Range. (Consult your local authorized Sunnen Distributor or your local Sunnen Field Service Engineer for help in selecting the proper tooling for your application.)

Step 2. - Turn to Page indicated.

Step 3. - Order by Part Number and Description.

Sunnen GH® Honing Tool System

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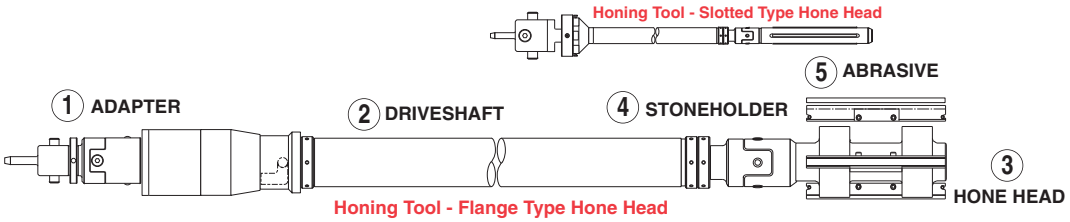
Sunnen GH® Honing Tool System

Sunnen SV-Series Vertical Honing Machines

Diameter Range:
0.50 - 8.00 in.
(12,7 - 203,2 mm)



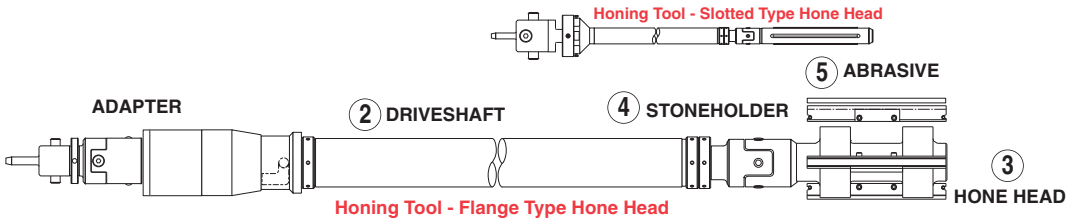
Feed Type - Push (G1)

Tool Size O.D.[1] in. (mm)	Range in. (mm)	1 Adapter Socket Size *(See Pg. 10-11)*	2 Driveshaft[2] *(See Pg. 12)*	3 Hone Head Part No. *(See Pg. 14)*	4 Stoneholder[3] Part No. *(See Pg. 24)*	5 Abrasive Part No. *(See Pg. 24)*
0.50 (12,7)	0.47-0.68in. (11,9-17,3mm)	1.75in. (44,5mm)	GMPXA1P___ GMH1A1P___ (INTEGRATED- PG. 13)	G1P5322P5S RECOMMENDED (INTEGRATED- PG. 13)	G14A105__ *(See Pg. 24)*	*(See Pg. 24)*
0.75 (19,1)	0.72-1.12in. (18,3-28,4mm)	1.75in. (44,5mm)	GMPXC3P___ GMH1C3P___ (INTEGRATED- PG. 13)	G1P75324S RECOMMENDED (INTEGRATED- PG. 13)	G14B195A__ *(See Pg. 24)*	*(See Pg. 24)*
1.00 (25,4)	0.93-1.29in. (23,6-32,8mm)	1.75in. (44,5mm)	GMPXD5P___ GMH1D5P___ (INTEGRATED- PG. 13)	G11334S RECOMMENDED (INTEGRATED- PG. 13)	G14B186A__ *(See Pg. 24)*	*(See Pg. 24)*
1.25 (31,8)	1.22-1. 61in. (31,0-40,9mm)	1.75in. (44,5mm)	P1F4P___ R1F4P___ (See Pg. 12)	G11P2537326S1 RECOMMENDED (See Pg. 15)	G14B187A__ *(See Pg. 24)*	*(See Pg. 24)*
1.50 (50,8)	1.43-1.81 (36,3-46,0)	1.75in. (44,5mm)	P1G5P___ R1G5P___ (See Pg. 12)	G11P5356S1 RECOMMENDED (See Pg. 15)	G14B_____ *(See Pg. 24)*	*(See Pg. 24)*
			P1J6P___ R1J6P___ (See Pg. 12)	G11P5356S2 (See Pg. 15)		
1.75 (44,5)	1.60-2.02 (40,6-51,3)	1.75in. (44,5mm)	P1G5P___ R1G5P___ (See Pg. 12)	G11P75456S1 RECOMMENDED (See Pg. 15)	G14B_____ *(See Pg. 24)*	*(See Pg. 24)*
			P1J6P___ R1J6P___ (See Pg. 12)	G11P75456S3 (See Pg. 15)		
2.00 (50,8)	1.94-2.50 (49,3-63,5)	1.75in. (44,5mm)	P1G5P___ R1G5P___ (See Pg. 12)	G12466S1 (See Pg. 15)	G14B_____ *(See Pg. 24)*	*(See Pg. 24)*
			P1J6P___ R1J6P___ (See Pg. 12)	G12466S2 RECOMMENDED (See Pg. 15)		
2.50 (63,5)	2.37-3.12 (60,2-79,2)	1.75in. (44,5mm)	P1J6P___ R1J6P___ (See Pg. 12)	G12P5466S1 RECOMMENDED (See Pg. 15)	G14B_____ *(See Pg. 24)*	*(See Pg. 24)*
			P1K7P___ R1K7P___ (See Pg. 12)	G12P5466S2 (See Pg. 15)		
3.00 (76,2)	2.93-3.50in. (74,4-88,9mm)	1.75in. (44,5mm)	P1J6P___ R1J6P___ (See Pg. 12)	G13466S1 (See Pg. 16)	G14C178__ *(See Pg. 24)*	*(See Pg. 24)*
			P1K7P___ R1K7P___ (See Pg. 12)	G13466S2 (See Pg. 16)		
			P1K8P___ R1K8P___ (See Pg. 12)	G13466S2 RECOMMENDED (See Pg. 16)		

NOTE:
[1] Tool Size OD - For Tools Sizes under 1.29in. (32,8mm) refer to Integrated Tools on Page 13 or Hone Heads on Page 14.
[2] Driveshaft - Refer to Driveshaft Chart on Page 12. Specify Driveshaft/Stroke Length and Diameter.
[3] Stoneholder - Refer to Stoneholder Chart on Page 24. Specify Bore Length and Diameter.

Sunnen GH® Honing Tool System

Sunnen SV-Series Vertical Honing Machines



Diameter Range: 0.50 - 8.00 in. (12,7 - 203,2 mm)

Feed Type - Push (G1)

Tool Size O.D.[1] in. (mm)	Range in. (mm)	1 Adapter Socket Size *(See Pg. 10-11)*	2 Driveshaft[2] *(See Pg. 12)*	3 Hone Head Part No. *(See Pg. 14)*	4 Stoneholder[3] Part No. *(See Pg. 24)*	5 Abrasive Part No. *(See Pg. 24)*
3.50 (88,9)	3.43-4.05in. (87,1-102,9mm)	1.75in. (44,5mm)	P1J6P___ R1J6P___ (See Pg. 12)	G13P5466F1 (See Pg. 17)	G14C178__ *(See Pg. 24)*	*(See Pg. 24)*
			P1K7P___ R1K7P___ (See Pg. 12)	G13P5466F2 (See Pg. 17)		
			P1K8P___ R1K8P___ (See Pg. 12)	G13P5466F3 RECOMMENDED (See Pg. 17)		
4.00 (101,6)	3.88-5.18in. (98,6-131,6mm)	1.75in. (44,5mm)	P1K7P___ R1K7P___ (See Pg. 12)	G14466F1 (See Pg. 17)	G14C178__ *(See Pg. 24)*	*(See Pg. 24)*
			P1K8P___ R1K8P___ (See Pg. 12)	G14466F2 RECOMMENDED (See Pg. 17)		
			P1M9P___ R1M9P___ (See Pg. 12)	G14466F3 (See Pg. 17)		
5.00 (127,0)	4.82-6.00in. (122,4-152,4mm)	1.75in. (44,5mm)	P1K7P___ R1K7P___ (See Pg. 12)	G15466F1 (See Pg. 17)	G14C____ *(See Pg. 24)*	*(See Pg. 24)*
			P1K8P___ R1K8P___ (See Pg. 12)	G15466F2 RECOMMENDED (See Pg. 17)		
			P1M9P___ R1M9P___ (See Pg. 12)	G15466F3 (See Pg. 17)		
6.00 (152,4)	5.76-7.00in. (146,3-177,8mm)	1.75in. (44,5mm)	P1K7P___ R1K7P___ (See Pg. 12)	G16466F1 (See Pg. 17)	G14C____ *(See Pg. 24)*	*(See Pg. 24)*
			P1K8P___ R1K8P___ (See Pg. 12)	G16466F2 (See Pg. 17)		
			P1M9P___ R1M9P___ (See Pg. 12)	G16466F3 RECOMMENDED (See Pg. 17)		
7.00 (177,8)	6.76-8.00in. (171,7-203,2mm)	1.75in. (44,5mm)	P1K7P___ R1K7P___ (See Pg. 12)	G17466F1 (See Pg. 17)	G14C____ *(See Pg. 24)*	*(See Pg. 24)*
			P1K8P___ R1K8P___ (See Pg. 12)	G17466F2 (See Pg. 17)		
			P1M9P___ R1M9P___ (See Pg. 12)	G17466F3 RECOMMENDED (See Pg. 17)		

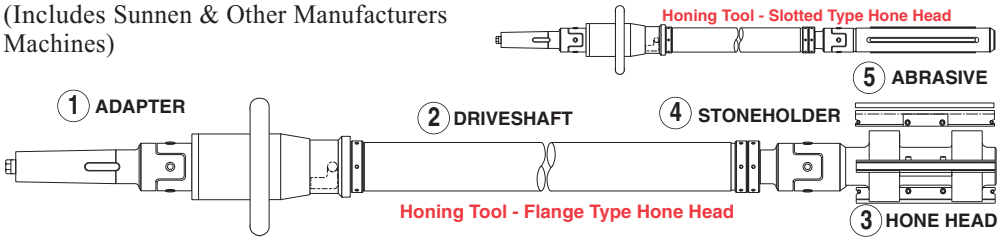
NOTE:
[1] Tool Size OD - For Tools Sizes under 1.37in. (34,8mm) refer to Integrated Tools on Page 13 or Hone Heads on Page 14.
[2] Driveshaft - Refer to Driveshaft Chart on Page 12. Specify Driveshaft/Stroke Length and Diameter.
[3] Stoneholder - Refer to Stoneholder Chart on Page 24. Specify Bore Length and Diameter.

Sunnen GH® Honing Tool System

GH®-210 Horizontal Honing Machines

(Includes Sunnen & Other Manufacturers Machines)

Diameter Range:
0.50 - 16.00 in.
(12,7 - 406,4 mm)



Feed Type - Push (G1)

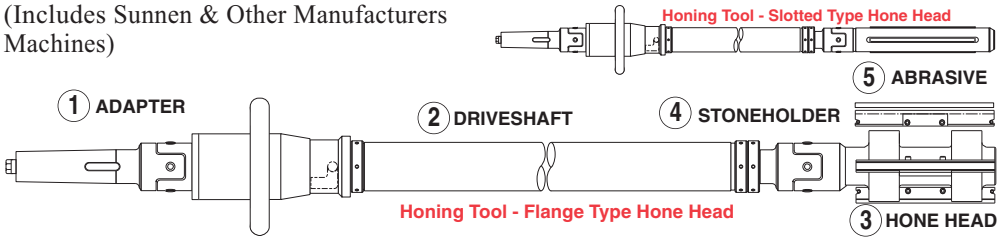
Tool Size O.D.[1] in. (mm)	Range in. (mm)	1 Adapter Socket Size *(See Pg. 10-11)*	2 Driveshaft[2] *(See Pg. 12)*	3 Hone Head Part No. *(See Pg. 14)*	4 Stoneholder[3] Part No. *(See Pg. 25)*	5 Abrasive Part No. *(See Pg. 25)*
0.50 (12,7)	0.50-0.70in. (12,7-17,8mm)	2.50in. (63,5mm)	GPH3A1P___ (INTEGRATED- PG. 13)	G1P5322P5S RECOMMENDED (INTEGRATED- PG. 13)	G14A105__ *(See Pg. 25)*	*(See Pg. 25)*
0.75 (19,1)	0.74-1.11in. (18,8-28,2mm)	2.50in. (63,5mm)	GPH3C3P___ (INTEGRATED- PG. 13)	G1P75324S RECOMMENDED (INTEGRATED- PG. 13)	G14B195A__ *(See Pg. 25)*	*(See Pg. 25)*
1.00 (25,4)	0.93-1.37in. (23,6-34,8mm)	2.50in. (63,5mm)	GPH3D5P___ (INTEGRATED- PG. 13)	G11334S RECOMMENDED (INTEGRATED- PG. 13)	G14B186A__ *(See Pg. 25)*	*(See Pg. 25)*
1.25 (31,8)	1.22-1.61in. (31,0-40,9mm)	2.50in. (63,5mm)	P3F4P___ (See Pg. 12)	G11P2537326S1 RECOMMENDED (See Pg. 18)	G14B187A__ *(See Pg. 25)*	*(See Pg. 25)*
1.50 (50,8)	1.43-1.81 (36,3-46,0)	2.50in. (63,5mm)	P3F4P___ (See Pg. 12)	G11P5356S1 RECOMMENDED (See Pg. 18)	G14B_____ *(See Pg. 25)*	*(See Pg. 25)*
			P3G5P___ (See Pg. 12)	G11P5356S2 (See Pg. 18)		
1.75 (44,5)	1.60-2.02 (40,6-51,3)	2.50in. (63,5mm)	P3G5P___ (See Pg. 12)	G11P75456S1 RECOMMENDED (See Pg. 18)	G14B_____ *(See Pg. 25)*	*(See Pg. 25)*
			P3J6P___ (See Pg. 12)	G11P75456S3 (See Pg. 18)		
2.00 (50,8)	1.94-2.50 (49,3-63,5)	2.50in. (63,5mm)	P3G5P___ (See Pg. 12)	G12468S1 (See Pg. 18)	G14B_____ *(See Pg. 25)*	*(See Pg. 25)*
			P3J6P___ (See Pg. 12)	G12468S2 RECOMMENDED (See Pg. 18)		
2.50 (63,5)	2.41-3.18 (60,2-80,8)	2.50in. (63,5mm)	P3J6P___ (See Pg. 12)	G12P5468S1 RECOMMENDED (See Pg. 18)	G14B_____ *(See Pg. 25)*	*(See Pg. 25)*
			P3K7P___ (See Pg. 12)	G12P5468S2 (See Pg. 18)		
			P3K8P___ (See Pg. 12)	G12P5468S3 (See Pg. 189)		

NOTE:
[1] Tool Size OD - For Tools Sizes under 1.37in. (34,8mm) refer to Integrated Tools on Page 13 or Hone Heads on Page 14.
[2] Driveshaft - Refer to Driveshaft Chart on Page 12. Specify Driveshaft/Stroke Length and Diameter.
[3] Stoneholder - Refer to Stoneholder Chart on Page 25. Specify Bore Length and Diameter.

Sunnen GH® Honing Tool System

GH®-210 Horizontal Honing Machines

(Includes Sunnen & Other Manufacturers Machines)



Diameter Range: 0.50 - 16.00 in. (12,7 - 406,4 mm)

Feed Type - Push (G1)

Tool Size O.D.[1] in. (mm)	Range in. (mm)	1 Adapter Socket Size *(See Pg. 10-11)*	2 Driveshaft[2] *(See Pg. 12)*	3 Hone Head Part No. *(See Pg. 14)*	4 Stoneholder[3] Part No. *(See Pg. 25)*	5 Abrasive Part No. *(See Pg. 25)*
3.00 (76,2)	2.91-3.93in. (73,9-99,8mm)	2.50in. (63,5mm)	P3J6P___ (See Pg. 12)	G13568S1 (See Pg. 19)	G14B____ *(See Pg. 25)*	*(See Pg. 25)*
			P3K7P___ (See Pg. 12)	G13568S2 (See Pg. 19)		
			P3K8P___ (See Pg. 12)	G13568S3 RECOMMENDED (See Pg. 19)		
3.50 (88,9)	3.41-4.00in. (86,6-101,6mm)	2.50in. (63,5mm)	P3J6P___ (See Pg. 12)	G13568S1 (See Pg. 19)	G14C____ *(See Pg. 25)*	*(See Pg. 25)*
			P3K7P___ (See Pg. 12)	G13568S2 (See Pg. 19)		
			P3K8P___ (See Pg. 12)	G13568S3 RECOMMENDED (See Pg. 19)		
4.00 (101,6)	3.87-5.00in. (98,3-127,0mm)	2.50in. (63,5mm)	P3K8P___ (See Pg. 12)	G14588F1 (See Pg. 20)	G14C____ *(See Pg. 25)*	*(See Pg. 25)*
			P3K8P___ (See Pg. 12)	G14588F2 RECOMMENDED (See Pg. 20)		
			P3K8P___ (See Pg. 12)	G14588F3 (See Pg. 20)		
			P3M9P___ (See Pg. 12)	G14588F4 (See Pg. 20)		
5.00 (127,0)	4.88-6.13in. (124,0-155,7mm)	2.50in. (63,5mm)	P3K7P___ (See Pg. 12)	G15588F1 (See Pg. 20)	G14C____ *(See Pg. 25)*	*(See Pg. 25)*
			P3K8P___ (See Pg. 12)	G15588F2 RECOMMENDED (See Pg. 20)		
			P3M9P___ (See Pg. 12)	G15588F3 (See Pg. 20)		
6.00 (152,4)	5.76-7.06in. (146,3-179,3mm)	2.50in. (63,5mm)	P3K8P___ (See Pg. 12)	G16688F1 (See Pg. 21)	G14C____ *(See Pg. 25)*	*(See Pg. 25)*
			P3M9P___ (See Pg. 12)	G16688F2 RECOMMENDED (See Pg. 21)		
			P3M10P___ (See Pg. 12)	G16688F3 (See Pg. 21)		

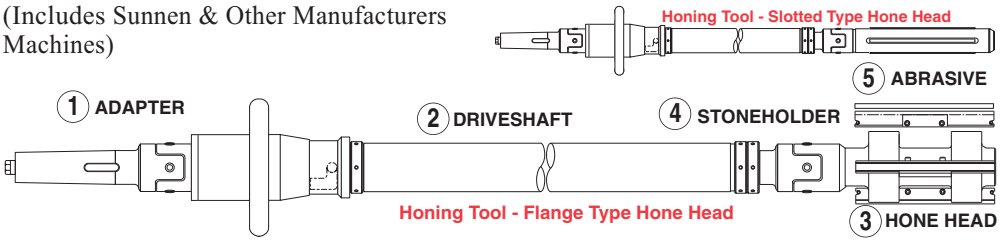
NOTE:
[1] Tool Size OD - For Tools Sizes under 1.37in. (34,8mm) refer to Integrated Tools on Page 13 or Hone Heads on Page 14.
[2] Driveshaft - Refer to Driveshaft Chart on Page 12. Specify Driveshaft/Stroke Length and Diameter.
[3] Stoneholder - Refer to Stoneholder Chart on Page 25. Specify Bore Length and Diameter.

Sunnen GH® Honing Tool System

GH®-210 Horizontal Honing Machines

(Includes Sunnen & Other Manufacturers Machines)

Diameter Range:
0.50 - 16.00 in.
(12,7 - 406,4 mm)



Feed Type - Push (G1)

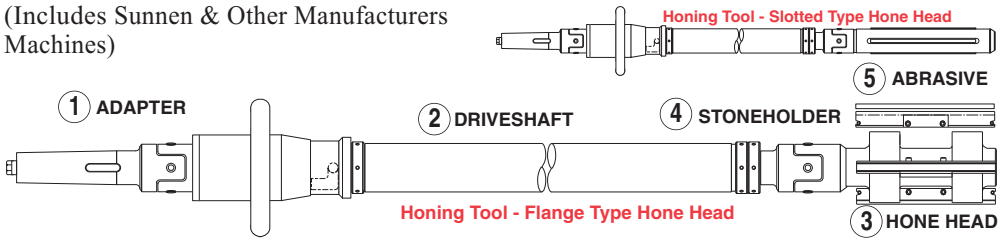
Tool Size O.D.[1] in. (mm)	Range in. (mm)	1 Adapter Socket Size *(See Pg. 10-11)*	2 Driveshaft[2] *(See Pg. 12)*	3 Hone Head Part No. *(See Pg. 14)*	4 Stoneholder[3] Part No. *(See Pg. 25/26)*	5 Abrasive Part No. *(See Pg. 25/26)*
7.00 (177,8)	6.76-8.06in. (171,7-204,7mm)	2.50in. (63,5mm)	P3K8P___ (See Pg. 12)	G17688F1 (See Pg. 21)	G14C____ *(See Pg. 25)*	*(See Pg. 25)*
			P3M9P___ (See Pg. 12)	G17688F2 RECOMMENDED (See Pg. 21)		
			P3M10P___ (See Pg. 12)	G17688F3 (See Pg. 21)		
8.00 (203,2)	7.76-9.06in. (197,1-230,1mm)	2.50in. (63,5mm)	P3K8P___ (See Pg. 12)	G18888F1 (See Pg. 21)	G14C____ *(See Pg. 26)*	*(See Pg. 26)*
			P3M9P___ (See Pg. 12)	G18888F2 RECOMMENDED (See Pg. 21)		
			P3M10P___ (See Pg. 12)	G18888F3 (See Pg. 21)		
9.00 (228,6)	8.76-10.06in. (222,5-255,5mm)	2.50in. (63,5mm)	P3K8P___ (See Pg. 12)	G19888F2 (See Pg. 21)	G14C____ *(See Pg. 26)*	*(See Pg. 26)*
			P3M9P___ (See Pg. 12)	G19888F1 RECOMMENDED (See Pg. 21)		
			P3M10P___ (See Pg. 12)	G19888F3 (See Pg. 21)		
10.00 (254,0)	9.76-11.06in. (247,9-280,9mm)	2.50in. (63,5mm)	P3K8P___ (See Pg. 12)	G110888F1 (See Pg. 22)	G14C____ *(See Pg. 26)*	*(See Pg. 26)*
			P3M9P___ (See Pg. 12)	G110888F2 RECOMMENDED (See Pg. 22)		
			P3M10P___ (See Pg. 12)	G110888F3 (See Pg. 22)		
11.00 (279,4)	10.76-12.06in. (273,3-306,3mm)	2.50in. (63,5mm)	P3K8P___ (See Pg. 12)	G111888F2 (See Pg. 22)	G14C____ *(See Pg. 26)*	*(See Pg. 26)*
			P3M9P___ (See Pg. 12)	G111888F1 RECOMMENDED (See Pg. 22)		
			P3N10P___ (See Pg. 12)	G111888F3 (See Pg. 22)		

NOTE:
[1] Tool Size OD - For Tools Sizes under 1.37in. (34,8mm) refer to Integrated Tools on Page 13 or Hone Heads on Page 14.
[2] Driveshaft - Refer to Driveshaft Chart on Page 12. Specify Driveshaft/Stroke Length and Diameter.
[3] Stoneholder - Refer to Stoneholder Chart on Page 25. Specify Bore Length and Diameter.

Sunnen GH® Honing Tool System

GH®-210 Horizontal Honing Machines

(Includes Sunnen & Other Manufacturers Machines)



Diameter Range: 0.50 - 16.00 in. (12,7 - 406,4 mm)

Feed Type - Push (G1)

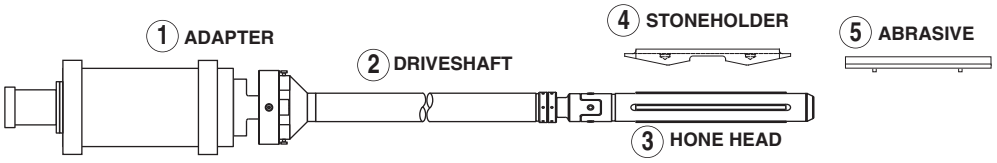
Tool Size O.D.[1] in. (mm)	Range in. (mm)	1 Adapter Socket Size *(See Pg. 10-11)*	2 Driveshaft[2] *(See Pg. 12)*	3 Hone Head Part No. *(See Pg. 14)*	4 Stoneholder[3] Part No. *(See Pg. 26)*	5 Abrasive Part No. *(See Pg. 26)*
12.00 (304,8)	11.76-13.06in. (298,7-331,7mm)	2.50in. (63,5mm)	P3K8P___ (See Pg. 12)	G112888F1 (See Pg. 22)	G14C____ *(See Pg. 26)*	*(See Pg. 26)*
			P3M9P___ (See Pg. 12)	G112888F2 RECOMMENDED (See Pg. 22)		
			P3N10P___ (See Pg. 12)	G112888F3 (See Pg. 22)		
13.00 (330,2)	12.76-14.06in. (324,1-357,1mm)	2.50in. (63,5mm)	P3K8P___ (See Pg. 12)	G1131088F1 (See Pg. 23)	G14C____ *(See Pg. 26)*	*(See Pg. 26)*
			P3M9P___ (See Pg. 12)	G1131088F2 (See Pg. 23)		
			P3N10P___ (See Pg. 12)	G1131088F3 RECOMMENDED (See Pg. 23)		
14.00 (355,6)	13.76-15.06in. (349,5-382,5mm)	2.50in. (63,5mm)	P3K8P___ (See Pg. 12)	G1141088F1 (See Pg. 23)	G14C____ *(See Pg. 26)*	*(See Pg. 26)*
			P3M9P___ (See Pg. 12)	G1141088F2 (See Pg. 23)		
			P3N10P___ (See Pg. 12)	G1141088F3 RECOMMENDED (See Pg. 23)		
15.00 (381,0)	14.76-16.06in. (374,9-407,9mm)	2.50in. (63,5mm)	P3K8P___ (See Pg. 12)	G1151088F1 (See Pg. 23)	G14C____ *(See Pg. 26)*	*(See Pg. 26)*
			P3M9P___ (See Pg. 12)	G1151088F2 (See Pg. 23)		
			P3N10P___ (See Pg. 12)	G1151088F3 RECOMMENDED (See Pg. 23)		

NOTE: [1] Tool Size OD - For Tools Sizes under 1.37in. (34,8mm) refer to Integrated Tools on Page 13 or Hone Heads on Page 14.
[2] Driveshaft - Refer to Driveshaft Chart on Page 12. Specify Driveshaft/Stroke Length and Diameter.
[3] Stoneholder - Refer to Stoneholder Chart on Page 25. Specify Bore Length and Diameter.

Sunnen GH® Honing Tool System

Sunnen STH & HT-Series Horizontal Tube Hones

Diameter Range:
0.50 - 3.50 in.
(12,7 - 88.9 mm)



Honing Tool - Flange Type Hone Head

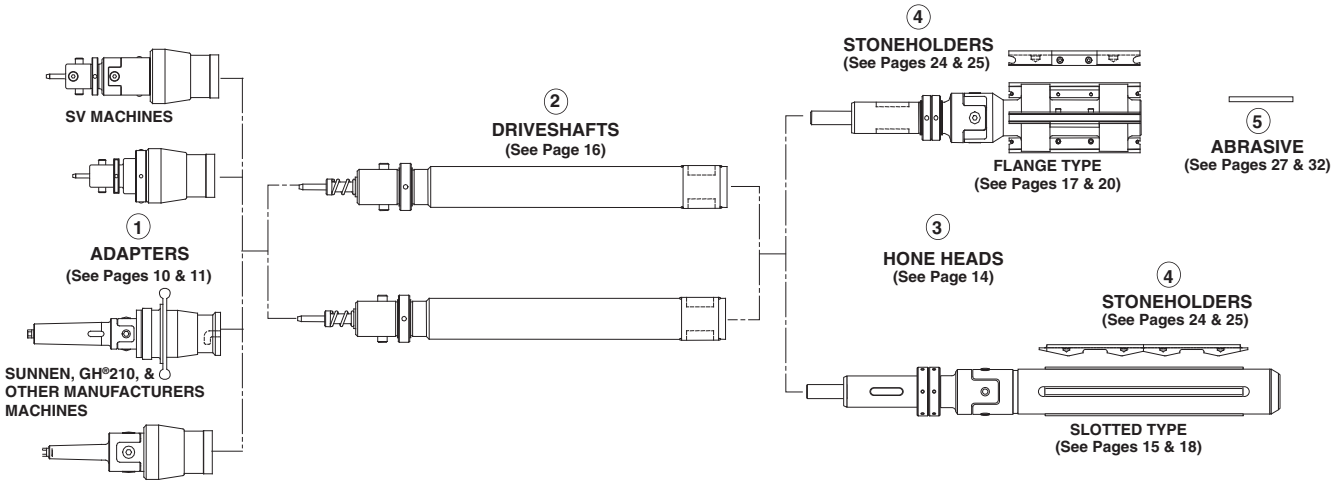
Feed Type - Push (G1)						
Tool Size O.D.[1] in. (mm)	**Range in. (mm)**	**1 Adapter Socket Size** *(See Pg. 10-11)*	**2 Driveshaft[2]** *(See Pg. 12)*	**3 Hone Head Part No.** *(See Pg. 14)*	**4 Stoneholder[3] Part No.** *(See Pg. 25)*	**5 Abrasive Part No.** *(See Pg. 25)*
0.50 (12,7)	0.50-0,70in. (12,7-17,8mm)	N/A	GPH3A1P___ (INTEGRATED- PG. 13)	G1P5322P5S (INTEGRATED- PG. 13)	G14A105__ (See Pg. 25)	*(See Pg. 25)*
0.75 (19,1)	0.74-1.11in. (18,8-28,2mm)	N/A	GPH3C3P___ (INTEGRATED- PG. 13)	G1P75324S (INTEGRATED- PG. 13)	G14B195A__ (See Pg. 25)	*(See Pg. 25)*
1.00 (25,4)	0.93-1.37in. (23,6-34,8mm)	N/A	GPH3D5P___ (INTEGRATED- PG. 13)	G11334S (INTEGRATED- PG. 13)	G14B186A__ (See Pg. 25)	*(See Pg. 25)*
1.25 (31,8)	1.22-1.61in. (31,0-40,9mm)	N/A	P3F4P___ (See Pg. 12)	G11P2537326S1 (See Pg. 18)	G14B187A__ (See Pg. 25)	*(See Pg. 25)*
1.5 (50,8)	1.43-1.81 (36,3-46,0)	N/A	MPXF4P___ (See Pg. 12)	G11P5356S1 (See Pg. 18)	G14B_____ (See Pg. 25)	CONVENTIONAL (See Pg. 28) or SUPERABRASIVE (See Pg. 36)
1.75 (44,5)	1.60-2.02 (40,6-51,3)	N/A	MPXG5P___ (See Pg. 12)	G11P75456S1 (See Pg. 18)	G14B_____ (See Pg. 25)	CONVENTIONAL (See Pg. 28) or SUPERABRASIVE (See Pg. 36)
2.00 (50,8)	1.94-2.50 (49,3-63,5)	N/A	MPXJ6P___ (See Pg. 12)	G12468S2 (See Pg. 18)	G14B_____ (See Pg. 25)	CONVENTIONAL (See Pg. 28) or SUPERABRASIVE (See Pg. 36)
2.50 (63,5)	2.41-3.18 (60,2-80,8)	N/A	MPXJ6P___	G12P5468S1 (See Pg. 18)	G14B_____ (See Pg. 25)	CONVENTIONAL (See Pg. 29) or SUPERABRASIVE (See Pg. 38)
3.00 (76,2)	2.91-3.93in. (73,9-99,8mm)	N/A	MPXK8P___ (See Pg. 12)	G13568S3 (See Pg. 19)	G14B____ (See Pg. 25)	CONVENTIONAL (See Pg. 29) or SUPERABRASIVE (See Pg. 38)

NOTE:
[1] Tool Size OD - For Tools Sizes under 1.37in. (34,8mm) refer to Integrated Tools on Page 13 or Hone Heads on Page 14.
[2] Driveshaft - Refer to Driveshaft Chart on Page 12. Specify Driveshaft/Stroke Length and Diameter.
[3] Stoneholder - Refer to Stoneholder Chart on Page 25, Stoneholders. Specify Bore Length and Diameter.

Sunnen GH® Honing Tool System

Honing Tool Selection Guide

Sunnen GH® Honing Tool System



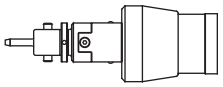
Complete GH® Honing Tool consist of items #: 1, 2, 3, 4, and 5:

NOTE: *Use Order Form on Page 51 of this Catalog to ensure all information is supplied.*

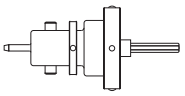
Sunnen GH® Honing Tool System

Adapter - Drive Adapter Type

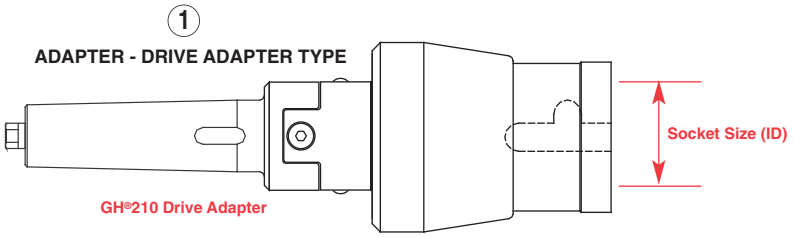
Adapter - Drive Adapters Type



SV Drive Adapter



MPS Drive Adapter



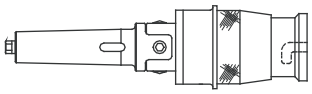
Drive Adapter - Order Item 1:
NOTE: When ordering, specify Part Number for Machine Type.

Used with	1 Adapter Part Number	Socket Size I.D. (in./mm)	Description
Sunnen, GH®-210, or Other Manufacturers	DA-1000	2.00 (50,8)	Rigid #4 w/#6 M.T. and Push Feed
	DA-1002	2.00 (50,8)	Flex. #4 w/#4 M.T. and Push Feed
	DA-1003	2.50 (63,5)	Rigid #5 w/#5 M.T. and Push Feed
	DA-1004	2.50 (63,5)	Rigid #5 w/#6 M.T. and w/o Rev. Key Rotary Feed
	DA-1005	2.50 (63,5)	Rigid #5 w/#6 M.T. and Rev. Key Rotary Feed
	DA-1006	2.50 (63,5)	Rigid #5 w/#6 M.T. and w/o Rev. Key Push Feed
	DA-1007	2.50 (63,5)	Rigid #5 w/#6 M.T. and Rev. Key Push Feed
	DA-1008	2.50 (63,5)	Flex #5 w/#6 M.T. and Rev. Key Push Feed
	DA-1009	2.50 (63,5)	Flex #5 w/#6 M.T. and Push Feed w/o Rev. Key
SV*	DA-2001	N/A	Flex, Rotary Feed for MPS Tooling Used on GV3/SV3
	DA-2002	1.75 (44.5)	Flex, Push/Pull Feed GV3/SV3
	DA-2004	1.75 (44.5)	Flex, Push Feed for GV3/SV3
	DA-2005	2.50 (63,5)	Flex, #5 Push/Pull Feed for SV4
	DA-2006	N/A	Flex, Rotary Feed for MPS Tooling Used on SV4
	DA-2007	2.50 (63,5)	Flex, #5 Rotary Feed for SV4 (GH® Tooling)
	DA-2008	1.75 (44.5)	Flex, Rotary Feed for GV3/SV3 (GH® Tooling)
	DA-2009	2.00 (50,8)	Flex, Push/Pull Feed for SV3/SV500

NOTE: *SV-Series Machines replaces GV-Series Machines.
**M.T.-Morse Taper

Sunnen GH® Honing Tool System

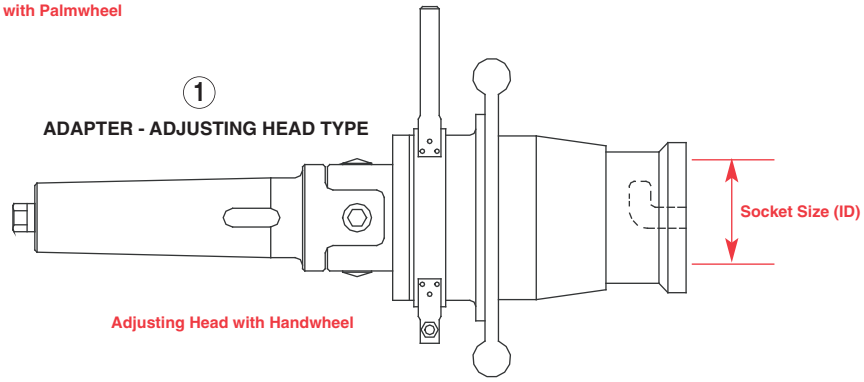
Adapter - Adjusting Head Type



Adjusting Head with Palmwheel

Palmwheel
Designed for use in application where there may not be sufficient clearance for a Handwheel.

① ADAPTER - ADJUSTING HEAD TYPE



Adjusting Head with Handwheel

Adjusting Head - Order Item 1:
NOTE: When ordering, specify Part Number for Machine Type.

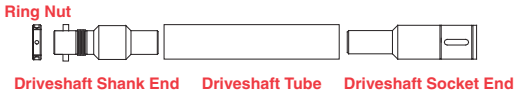
Used with	① Adapter Part Number	Socket Size I.D. (in./mm)	Description
Sunnen, GH-210, or Other Manufacturers	AH-1000	2.00 (50,8)	#4B-GHB with #4 MT and Handwheel
	AH-1001	2.00 (50,8)	#4B-GHB with #5 MT and Handwheel
	AH-1002	2.00 (50,8)	#4B-GHB with #6 MT and Handwheel
	AH-1003	2.00 (50,8)	#4B-GHB with #4 MT and Palmwheel
	AH-1004	2.00 (50,8)	#4B-GHB with #5 MT and Palmwheel
	AH-1005	2.00 (50,8)	#4B-GHB with #6 MT and Palmwheel
	AH-1006	2.50 (63,5)	#4C-GHB with #4 MT and Handwheel
	AH-1007	2.50 (63,5)	#4C-GHB with #5 MT and Handwheel
	AH-1008	2.50 (63,5)	#4C-GHB with #6 MT and Handwheel
	AH-1009	2.50 (63,5)	#5-GHB with #5 MT and Handwheel
	AH-1010	2.50 (63,5)	#5-GHB with #6 MT and Handwheel
	AH-1011	2.50 (63,5)	#5-GHB with #5 MT and Palmwheel
	AH-1012	2.50 (63,5)	#5-GHB with #6 MT and Palmwheel
SV*	N/A	N/A	N/A

NOTE: *SV-Series Machines replaces GV-Series Machines.
**M.T.-Morse Taper

Sunnen GH® Honing Tool System

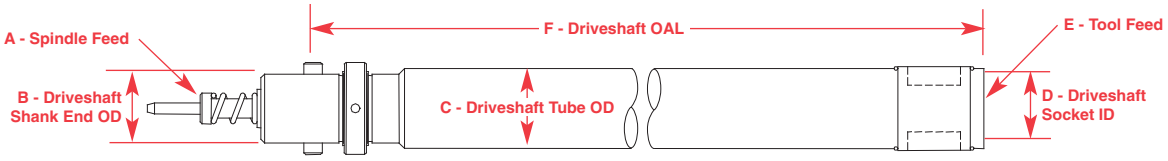
Driveshafts - Numbering System

Driveshaft Numbering System



2

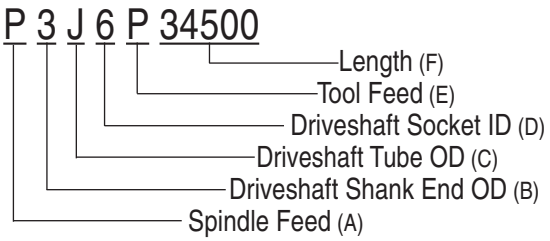
DRIVESHAFTS



A	B	C	D	E	F
P	***3***	***J***	***6***	***P***	***34500***
Driveshaft Prefix (Spindle Feed)	**Driveshank Code (Driveshaft Shank End OD)**	**Driveshaft Code (Driveshaft Tube OD)**	**Drivesocket Code (Driveshaft Socket ID)**	**Tool Code (Tool Feed)**	**Length Code (Driveshaft OAL)**
P = Push PS = Special P R = Rotary RS = Special R PH = Push/Hyd. PP = Push/Pull MP = MPS LD = Light Duty	1 = 1-3/4in. (44,5mm) 2 = 2in. (50,8mm) 3 = 2-1/2in. (63,5mm) 4 = 1-3/16in. (30,2mm) S = Special X = Use with MPS connection	A = 7/16in. (11,1mm) B = 1/2in. (12,7mm) C = 5/8in. (15,9mm) D = 3/4in. (19,1mm) E = 7/8in. (22,2mm) F = 1-1/8in. (28,6mm) G = 1-1/4in. (31,8mm) H = 1-1/2in. (38,1mm) J = 1-9/16in. (39,7mm) K = 2-1/4in. (57,2mm) L = 2-1/2in. (63,5mm) M = 3in. (76,2mm) N = 4-1/8in. (104,8mm) X = Special	1 = 7/8-9THD 2 = 11/16-3THD 3 = 1-3/16-2THD 4 = 3/4in. (19,1mm) 5 = 7/8in. (22,2mm) 6 = 1-1/8in. (28,6mm) 7 = 1-1/4in. (31,8mm) 8 = 1-1/2in. (38,1mm) 9 = 1-3/4n. (44,5mm) 10 = 2-1/4in. (57,2mm) 11 = 3in. (76,2mm) X = No Socket (Rigid Conn.) S = Special	P = Push R = Rotary*	Driveshaft Length in inches Example: 34500 345.00in. or 28ft. 9in.

NOTE: *Rotary Tool Feed is not available in Push Spindle Feed.

Example



Recommended Driveshafts:

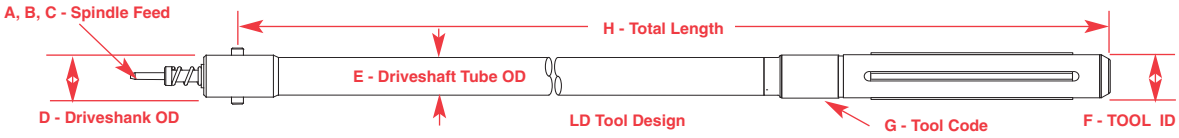
NOTE: When ordering, specify Adapter, Driveshaft Type & Length, Hone Head, Stoneholder, and Abrasive.

Range in. (mm)	Driveshaft P/N (See Chart Above)	Driveshaft Prefix[1] (Spindle Feed)	Driveshank Code[2] Shank End OD	Driveshaft Code Driveshaft Tube OD	Drivesocket Code Driveshaft Socket ID	Tool Code (Tool Feed)	Length Code (Driveshaft OAL)
1.22-1.81 (31,0-46,0)	P3F4P___	P = Push	3 = 2-1/2in. 63,5mm	F = 1-1/8in. 28,6mm	4 = 3/4in. (19,1mm)	P = Push	(See Chart)
1.60-2.02 (40,6-51,3)	P3G5P___	P = Push	3 = 2-1/2in. 63,5mm	G = 1-1/4in. 31,8mm	5 = 7/8in. (22,2mm)	P = Push	(See Chart)
1.94-3.18 (49,3-80,8)	P3J6P___	P = Push	3 = 2-1/2in. 44,5mm	J = 1-9/16in. 39,7mm	6 = 1-1/8in. (28,6mm)	P = Push	(See Chart)
2.91-6.13 (73,9-155,7)	P3K9P___	P = Push	3 = 2-1/2in. 63,5mm	K = 2-1/4in. 57,2mm	9 = 1-3/4in. (44,5mm)	P = Push	(See Chart)
5.76-13.06 (146,3-331,7mm)	P3M10P___	P = Push	3 = 2-1/2in. 635mm	M = 3.00in. 76,2mm	10 = 2-1/4in. (57,2mm)	P = Push	(See Chart)
12.76-16.06 (324,1-407,9MM)	P3N11P___	P = Push	3 = 2-1/2in. 63,5mm	N = 4-1/8in. 104,8mm	11 = 3.0in. (76,2mm)	P = Push	(See Chart)

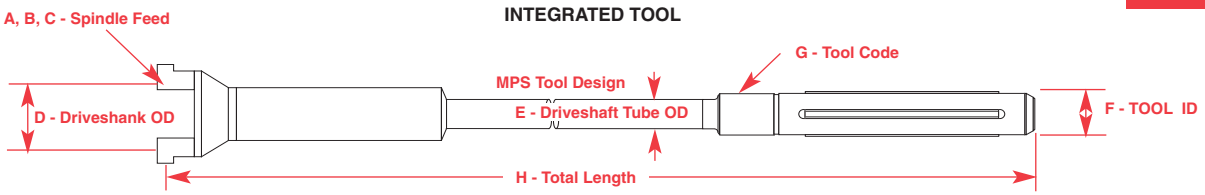
NOTE: [1] For SV-Series Machine insert PH in place of P: PH = Push/Hyd.
[3] For SV-Series Machine insert 1 in place of 3: 1 = 1-3/4in. (44,5)
[3] Adapter, Hone Head, Stoneholder & Abrasives sold separately.

Sunnen GH® Honing Tool System

Driveshafts - Integrated Tools



INTEGRATED TOOL



A	B	C	D	E	F	G	H
G	*S*	*MP*	*X*	*A*	*1*	*P*	*12000*

Driveshaft Prefix (General Hone)	Driveshaft Prefix (Special)	Driveshank Code (Spindle Feed)	Connection / Driveshank OD	Driveshaft Code (Driveshaft Tube OD)	Tool OD in. (mm)	Tool Code (Tool Feed)	Length Code (Total Length**)
G = Gen. Hone	S = Special	MP = MPS LD = Light Duty P = Push R = Rotary PH = Push/Hyd. X = Other	1 = 1-3/4in (44,5mm) 2 = 2in (50,8mm) 3 = 2-1/2in (63,5mm) 4 = 1-3/16in (30,2mm) X = N/A T1 = 7/8-9THD T2 = 11/16-3THD T3 = 1-3/16-2THD CK = CK Style	A = 7/16in. (11,1mm) B = 1/2in. (12,7mm) C = 5/8in. (15,9mm) D = 3/4in. (19,1mm) E = 7/8in. (22,2mm)	1 = 1/2in. (12,7mm) 2 = 5/8in. (15,9mm) 3 = 3/4in. (19,1mm) 4 = 7/8in. (22,2mm) 5 = 1in. (25,4mm) 6 = 1.125in. (28,58mm) 7 = 1.25in. (31.75mm) S = Special #B = Blind End plus #	P = Push R = Rotary*	Driveshaft Length in inches Example: 12000 120in. or 10ft.

NOTE: *Rotary Tool Feed is not available in Push Spindle Feed.
** OAL CALCULATION
MPS = End of Tool to Centerline of Drive Pins.
LD = End of Tool to Connection Face of Driveshank.
P = End of Tool to Centerline of Drive Pins.

Example

GS MP X A 1 P 12000

- Length (G)
- Tool Feed (F)
- Tool ID (E)
- Driveshaft Tube OD (D)
- Driveshank OD (C)
- Spindle Feed (B)
- Prefix = General Hone Special (A)

Integrated Tools: (SV & STH-Series Machines)

NOTE: When ordering, specify Adapter, Driveshaft Type & Length, Hone Head, Stoneholder, and Abrasive.

Range in. (mm)	Integrated Tool P/N (See Chart Above)	Driveshank Code (Spindle Feed)	Connection Shank End OD	Driveshaft Code Driveshaft Tube OD	Tool OD in. (mm)	Tool Code (Tool Feed)	Length Code (Driveshaft OAL)
0.48-0.68 (11,9-17,3)	PH1A1P___ MP1A1P___	PH = Push/Hyd. MP = MPS	1 = 1-3/4in. 44,5mm	A = 7/16in. 11,1mm	1 = 1/2in. (12,7mm).	P = Push	(See Chart)
0.72-1.12 (18,3-28,4)	PH1C3P___ MP1C3P___	PH = Push/Hyd. MP = MPS	1 = 1-3/4in. 44,5mm	C = 5/8in. 15,9mm	3 = 3/4in. (19,1mm)	P = Push	(See Chart)
0.93-1.29 (23,6-32,8)	PH1D5P___ MP1D5P___	PH = Push/Hyd. MP = MPS	1 = 1-3/4in. 44,5mm	D = 3/4in. 19,1mm	5 = 1in. (25,4mm)	P = Push	(See Chart)

Integrated Tools: (GH®210 & Others Machines)

NOTE: When ordering, specify Adapter, Driveshaft Type & Length, Hone Head, Stoneholder, and Abrasive.

Range in. (mm)	Integrated Tool P/N (See Chart Above)	Driveshank Code (Spindle Feed)	Connection Shank End OD	Driveshaft Code Driveshaft Tube OD	Tool OD in. (mm)	Tool Code (Tool Feed)	Length Code (Driveshaft OAL)
0.50-0.70 (12,7-17,8)	PH3A1P___	PH = Push/Hyd.	3 = 2-1/2in. 63,5mm	A = 7/16in. 11,1mm	1 = 1/2in. (12,7mm).	P = Push	(See Chart)
0.74-1.11 (18,8-28,2)	PH3C3P___	PH = Push/Hyd.	3 = 2-1/2in. 63,5mm	C = 5/8in. 15,9mm	3 = 3/4in. (19,1mm)	P = Push	(See Chart)
0.93-1.37 (23,6-34,8)	PH3D5P___	PH = Push/Hyd.	3 = 2-1/2in. 63,5mm	D = 3/4in. 19,1mm	5 = 1in. (25,4mm)	P = Push	(See Chart)

Sunnen GH® Honing Tool System

Hone Heads - Numbering System

Hone Heads Numbering System

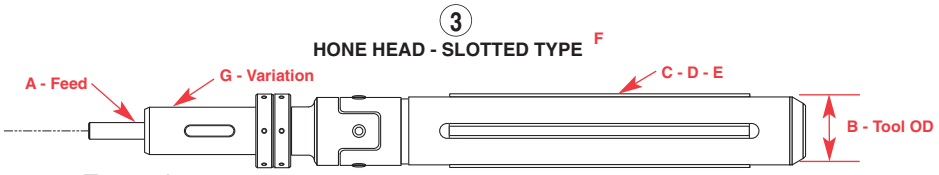
Notes:
1. All Dimensions are in Inches.
2. Decimal points, spaces, dashes and slashes are not allowed in the part number. Use a "P" in lieu of the decimal point.
3. Fractional dimensions will be coded as follows:
   - Sizes smaller than 1 inch will use one place. 1/2" = P5, 3/4"= P8
   - Sizes larger than 1 inch will require one place. 6.5" = 6P5 (as shown)
   - Some stone lengths are odd. For example, 2-1/2 long. These cases will follow the same guidelines. 2.5" = 2P5

A	B	C	D	E	F	G
G1	***3***	***5***	***6***	***8***	***S***	***1***
Tool Prefix (Type of Feed)	**Tool Diameter (OD) (in inches)***	**Number of Stones in Tool**	**Width of Stone (in sixteenth of inch)**	**Length of Stone (in inches)**	**Tool Suffix (Type of Head)**	**Tool Shannk Variations***
G1 = Push G2 = Rotary GS = Special GL = LiteDuty GRF1 = Rough/ Finish (Push/Pull) GRF2 = Rough/ Finish (Rotary)	Tool Diameter in inches P used in place of decimal point	Determined by Application & Hone Head	Width of Stone in sixteenth of an inch	Length of Stone in inches	F = Flange S = Slotted B = Blind GS = LiteDuty SNS = Slotted no spring slt FS = Flange silent SS = Slotted silent	Sequential number add as needed for any variations or options L1 = 7/8-9THD L2 = 11/16-3THD L3 = 1-3/16-2THD SP = Spline X = CK Conn. 0(Zero) = No Shank
Example: G1 G1	Example: 3 = 3.00in. 6 = 6.00	Example: 5 Stones 6 Stones	Example: 6 = 6/16in. 8 = 8/16in.	Example: 6 = 6.00in. 8 = 8.00in.	Example: S = Slotted F = Flange	

NOTE: *For Tool Variation Number refer to the Hone Head P/N in the Tables on the following pages.

Slotted Type Hone Head

Tooling 3in. (76,2mm) diameter and smaller are supplied with slotted type bodies.



Example

G1 3 5 6 8 S 1

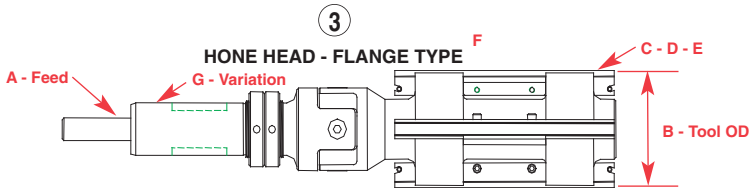
- 1 - Indicates Variations or Options
- S - Indicates Slotted Type Hone Head
- 8 - Indicates Length of Stone as 8in.
- 6 - Indicate Width of Stone as 6/16 or 3/8in
- 5 - Indicates 5 Stones Style Tool
- 3 - Indicates 3in. Diameter Tool
- G1 - Indicates Standard Push Feed Type Tool

Tandem Stoneholders

For Tandem Stoneholders contact your local Sunnen Field Service Engineer or your local authorized Sunnen Distributor.

Flange Type Hone Head

Tooling 3.5in. (88,9mm) diameter and larger are supplied with flange type bodies.



Example

G1 6 6 8 8 F 1

- 1 - Indicates Variations or Options
- F - Indicates Flange Type Hone Head
- 8 - Indicates Length of Stone as 8in.
- 8 - Indicate Width of Stone as 8/16 or 1/2in
- 6 - Indicates 6 Stones Style Tool
- 6 - Indicates 6in. Diameter Tool
- G1 - Indicates Standard Push Feed Type Tool

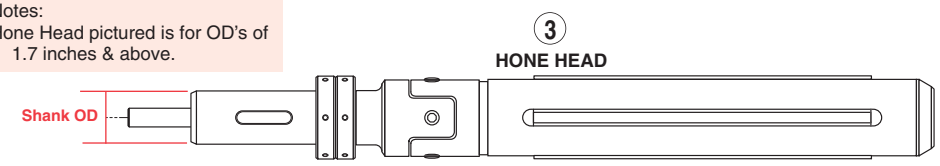
Tandem Stoneholders

For Tandem Stoneholders contact your local Sunnen Field Service Engineer or your local authorized Sunnen Distributor.

Sunnen GH® Honing Tool System

SV-Series Hone Heads - Slotted Type

Notes:
Hone Head pictured is for OD's of 1.7 inches & above.



Diameter Range:
0.50 - 3.12 in.
(12,7 - 79,2 mm)

Hone Head - Order Item 3:
NOTE: When ordering, specify Hone Head, Driveshank OD, Stoneholder, and Abrasive.

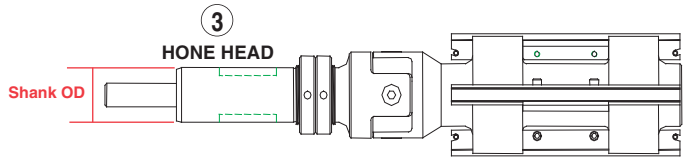
Tool Size O.D. in. (mm)	Range[1] in. (mm)	③ Hone Head P/N[2/4] *(See Pg. 14)*	Driveshank O.D. in. (mm)	④ Stoneholder P/N *(See Pg. 24)*	Abrasive Size[3] (W x H x L) Conv. Abr. (in/mm) *(See Pg. 27)*	Superabr. (in/mm) *(See Pg. 32)*
0.50 (12,7) (3 Stones)	0.47-0.50 (11,9-12,7) -0.56 (-14,2) -0,62 (-15,7) -0,68 (-17,3)	G1P5322P5S	N/A	G14A105SH G14A1051SH G14A1052SH G14A1053SH	N/A	.125x.070x2.5 UNMTD (3,2x1,8x63,5 UNMTD) *(See Pg. 33)*
0.75 (19,1) (3 Stones)	0.72-0.87 (18,3-22,1) -0.93 (-23,6) -0.99 (-25,1) -1.06 (-26,9) -1.12 (-28,4)	G1P75324S	N/A	G14B195ASH G14B195A1SH G14B195A2SH G14B195A3SH G14B195A4SH	N/A	.125x.125x4 UNMTD (3,2x3,2x101,6 UNMTD) *(See Pg. 34)*
1.00 (25,4) (3 Stones)	0.93-1.05 (23,6-26,7) -1.11 (-28,2) -1.17 (-29,7) -1.23 (-31,2) -1.29 (-32,8)	G11334S	N/A	G14B186A2SH G14B186A3SH G14B186A4SH G14B186A5SH G14B186A6SH	N/A	.125x.125x4 UNMTD (3,2x3,2x101,6 UNMTD) *(See Pg. 34)*
1.25 (31,8) (3 Stones)	1.22-1.37 (31,0-34,8) -1.43 (-36,3) -1.49 (-37,8) -1.55 (-39,4) -1.61 (-40,9)	G11P2537326S1	0.75 (19,1)	G14B187ASH G14B187A1SH G14B187A2SH G14B187A3SH G14B187A4SH	N/A	187x.218x6 UNMTD 4,8X6,4X152,4 UNMTD. *(See Pg. 35)*
1.50 (38,1) (3 Stones)	1.43-1.53 (36,3-38,9) -1.62 (-41,1) -1.71 (-43,4) -1.81 (-46,0)	G11P5356S1	0.75 (19,1)	G14B125SH G14B139SH G14B140SH G14B182SH	5/16x5/16x6 MTD (7,9x7,9x152,4 MTD) *(See Pg. 28)*	.187x.250x6(5/16x6 MTD) 4,8X6,4X152,4(7,9X152,4) *(See Pg. 36)*
	1.43-1.53 (36,3-38,9) -1.62 (-41,1) -1.71 (-43,4) -1.81 (-46,0)	G11P5356S2	0.87 (22,2)	G14B125SH G14B139SH G14B140SH G14B182SH	5/16x5/16x6 MTD (7,9x7,9x152,4 MTD) *(See Pg. 28)*	.187x.250x6(5/16x6 MTD) 4,8X6,4X152,4(7,9X152,4) *(See Pg. 36)*
1.75 (44,5) (4 Stones)	1.60-1.75 (40,6-44,5) -1.84 (-46,7) -1.93 (-49,0) -2.02 (-51,3)	G11P75456S1	0.87 (22,2)	G14B1391SH G14B1401SH G14B1821SH G14B1822SH	5/16x5/16x6 MTD (7,9x7,9x152,4 MTD) *(See Pg. 28)*	.187x.250x6(5/16x6 MTD) 4,8X6,4X152,4(7,9X152,4) *(See Pg. 36)*
	1.60-1.75 (40,6-44,5) -1.84 (-46,7) -1.93 (-49,0) -2.02 (-51,3)	G11P75456S3	1.13 (28,6)	G14B1391SH G14B1401SH G14B1821SH G14B1822SH	5/16x5/16x6 MTD (7,9x7,9x152,4 MTD) *(See Pg. 28)*	.187x.250x6(5/16x6 MTD) 4,8X6,4X152,4(7,9X152,4) *(See Pg. 36)*
2.00 (50,8) (4 Stones)	1.94-2.00 (49,3-50,8) -2.12 (-53,8) -2.25 (-57,2) -2.37 (-60,2) -2.50 (-63,5)	G12466S1	0.87 (22,2)	G14B152SH G14B153SH G14B154SH G14B146SH G14B155SH	3/8x3/8x6 MTD (9,5x9,5x152,4 MTD) *(See Pg. 29)*	.250x.250x6(3/8x6 MTD) 6,4X6,4X152,4(9,5x152,4) *(See Pg. 37)*
	1.94-2.00 (49,3-50,8) -2.12 (-53,8) -2.25 (-57,2) -2.37 (-60,2) -2.50 (-63,5)	G12466S2	1.13 (28,6)	G14B152SH G14B153SH G14B154SH G14B146SH G14B155SH	3/8x3/8x6 MTD (9,5x9,5x152,4 MTD) *(See Pg. 29)*	.250x.250x6(3/8x6 MTD) 6,4X6,4X152,4(9,5x152,4) *(See Pg. 37)*
2.50 (63,5) (4 Stones)	2.37-2.62 (60,2-66,5) -2.87 (-72,9) -3.12 (-79,2)	G12P5466S1	1.13 (28,6)	G14B146SH G14B148SH G14B149SH	3/8x3/8x6 MTD (9,5x9,5x152,4 MTD) *(See Pg. 29)*	.250x.250x6(3/8x6 MTD) 6,4X6,4X152,4(9,5X152,4) *(See Pg. 37)*
	2.37-2.62 (60,2-66,5) -2.87 (-74,4) -3.12 (-79,2)	G12P5466S2	1.50 (38,1)	G14B146SH G14B148SH G14B149SH	3/8x3/8x6 MTD (9,5x9,5x152,4 MTD) *(See Pg. 29)*	.250x.250x6(3/8x6 MTD) 6,4X6,4X152,4(9,5X152,4) *(See Pg. 37)*
	2.37-2.62 (60,2-66,5) -2.87 (-72.9) -3.12 (-79,2)	G12P5466S3	1.75 (44,5)	G14B146SH G14B148SH G14B149SH	3/8x3/8x6 MTD (9,5x9,5x152,4 MTD) *(See Pg. 29)*	.250x.250x6(3/8x6 MTD) 6,4X6,4X152,4(9,5X152,4) *(See Pg. 37)*

NOTE: [1] Range reflects minimum Start Diameter
[2] For Integrated Tools refer to Page 13.
[3] MTD = Mounted Stones / UNMTD = Unmounted Stones
[4] For Hone Head Sizes smaller or larger than those shown, contact your local authorized Sunnen Distributor, your local Sunnen Field Service Engineer or Sunnen Customer Service Department.

Sunnen GH® Honing Tool System

SV-Series Hone Heads - Flange Types

Diameter Range:
2.93 - 8.00 in.
(74,4 - 204,7 mm)



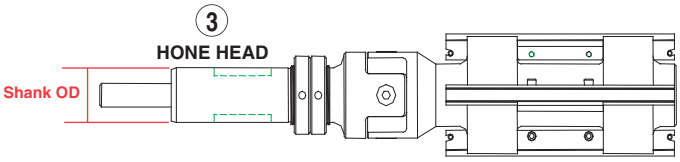
Hone Head - Order Item 3:
NOTE: When ordering, specify Hone Head, Driveshank OD, Stoneholder, and Abrasive.

Tool Size O.D. in. (mm)	Range[1] in. (mm)	3 Hone Head P/N[2/4] *(See Pg. 14)*	Driveshank O.D. in. (mm)	4 Stoneholder P/N *(See Pg. 24)*	Abrasive Size[3] (W x H x L) Conv. Abr. (in/mm) *(See Pg. 27)*	Superabr. (in/mm) *(See Pg. 32)*
3.00 (76,2) (4 Stones)	2.93-3.00 (74,4-76,2) -3.12 (-79,2) -3.25 (-82,6) -3.37 (-85,6) -3.50 (-88,9)	G13466FS1	1.13 (28,6)	G14C1781SH G14C1782SH G14C1783SH G14C1784SH G14C1785SH	3/8x3/8x6 MTD (9,5x9,5x152,4 MTD) *(See Pg. 29)*	.250x.250x6(3/8x6 MTD) 6,4X6,4X152,4(9,5x152,4) *(See Pg. 37)*
	2.93-3.00 (74,4-76,2) -3.12 (-79,2) -3.25 (-82,6) -3.37 (-85,6) -3.50 (-88,9)	G13466FS2	1.50 (38,1)	G14C1781SH G14C1782SH G14C1783SH G14C1784SH G14C1785SH	3/8x3/8x6 MTD (9,5x9,5x152,4 MTD) *(See Pg. 29)*	.250x.250x6(3/8x6 MTD) 6,4X6,4X152,4(9,5x152,4) *(See Pg. 37)*
	2.93-3.00 (74,4-76,2) -3.12 (-79,2) -3.25 (-82,6) -3.37 (-85,6) -3.50 (-88,9)	G13466FS3	1.75 (44,5)	G14C1781SH G14C1782SH G14C1783SH G14C1784SH G14C1785SH	3/8x3/8x6 MTD (9,5x9,5x152,4 MTD) *(See Pg. 29)*	.250x.250x6(3/8x6 MTD) 6,4X6,4X152,4(9,5x152,4) *(See Pg. 37)*
3.50 (88,9) (4 Stones)	3.43-3.55 (87.1- 90,2) -3.68 (- 93,5) -3.80 (- 96,5) -3.93 (- 99,8) -4.05 (-102,9)	G13P5466FS1	1.13 (28,6)	G14C1783 G14C1784 G14C1785 G14C1786 G14C1787	3/8x3/8x6 MTD (9,5x9,5x152,4 MTD) *(See Pg. 29)*	.250x.250x6 (3/8x6 MTD) 6,4X6,4x152,4 (9,5x152,4) *(See Pg. 37)*
	3.43-3.55 (87.1- 90,2) -3.68 (-93,5) -3.80 (- 96,5) -3.93 (-99,8) -4.05 (-102,9)	G13P5466FS2	1.50 (38,1)	G14C1783 G14C1784 G14C1785 G14C1786 G14C1787	3/8x3/8x6 MTD (9,5x9,5x152,4 MTD) *(See Pg. 29)*	.250x.250x6 (3/8x6 MTD) 6,4X6,4x152,4 (9,5x152,4) *(See Pg. 37)*
	3.43-3.55 (87.1- 90,2) -3.68 (-93,5) -3.80 (-96,5) -3.93 (- 99,8) -4.05 (-102,9)	G13P5466FS3	1.75 (44,5)	G14C1783 G14C1784 G14C1785 G14C1786 G14C1787	3/8x3/8x6 MTD (9,5x9,5x152,4 MTD) *(See Pg. 29)*	.250x.250x6 (3/8x6 MTD) 6,4X6,4x152,4 (9,5x152,4) *(See Pg. 37)*
4.00 (101,6) (4 Stones)	3.88-4.18 (98,6-106,2) -4.43(-112,5) -4.68 (-118,9) -4.93 (-125,2) -5.18 (-131,6)	G14466FS1	1.13 (28,6)	G14C1784 G14C1786 G14C1788 G14C17810 G14C17812	3/8x3/8x6 MTD (9,5x9,5x152,4 MTD) *(See Pg. 30)*	.250x.250x6 (3/8x6 MTD) 6,4X6,4x152,4 (9,5x152,4) *(See Pg. 37)*
	3.88-4.18 (98,6-106,2) -4.43(-112,5) -4.68 (-118,9) -4.93 (-125,2) -5.18 (-131,6)	G14466FS2	1.50 (38,1)	G14C1784 G14C1786 G14C1788 G14C17810 G14C17812	3/8x3/8x6 MTD (9,5x9,5x152,4 MTD) *(See Pg. 30)*	.250x.250x6 (3/8x6 MTD) 6,4X6,4x152,4 (9,5x152,4) *(See Pg. 37)*
	3.88-4.18 (98,6-106,2) -4.43(-112,5) -4.68 (-118,9) -4.93 (-125,2) -5.18 (-131,6)	G14466FS3	1.75 (44,5)	G14C1784 G14C1786 G14C1788 G14C17810 G14C17812	3/8x3/8x6 MTD (9,5x9,5x152,4 MTD) *(See Pg. 30)*	.250x.250x6 (3/8x6 MTD) 6,4X6,4x152,4 (9,5x152,4) *(See Pg. 37)*
5.00 (127,0) (4 Stones)	4.82-5.25 (122,4-133,4) -5.50 (-139,7) -5.75 (-146,1) -6.00 (-152,4)	G15466FS1	1.50 (38,1)	G14C129 G14C130 G14C131 G14C132	3/8x3/8x6 MTD (9,5x9,5x152,4 MTD) *(See Pg. 30)*	.250x.250x6 (3/8x6 MTD) 6,4X6,4x152,4 (9,5x152,4) *(See Pg. 37)*
	4.82-5.25 (122,4-133,4) -5.50 (-139,7) -5.75 (-146,1) -6.00 (-152,4)	G15466FS2	1.75 (44,5)	G14C129 G14C130 G14C131 G14C132	3/8x3/8x6 MTD (9,5x9,5x152,4 MTD) *(See Pg. 28)*	.250x.250x6 (3/8x6 MTD) 6,4X6,4x152,4 (9,5x152,4) *(See Pg. 37)*
	4.82-5.25 (122,4-133,4) -5.50 (-139,7) -5.75 (-146,1) -6.00 (-152,4)	G15466FS3	2.25 (57,2)	G14C129 G14C130 G14C131 G14C132	3/8x3/8x6 MTD (9,5x9,5x152,4 MTD) *(See Pg. 30)*	.250x.250x6 (3/8x6 MTD) 6,4X6,4x152,4 (9,5x152,4) *(See Pg. 37)*

NOTE: [1] Range reflects minimum Start Diameter
[2] For Integrated Tools refer to Page 13.
[3] MTD = Mounted Stones / UNMTD = Unmounted Stones
[4] For Hone Head Sizes smaller or larger than those shown, contact your local authorized Sunnen Distributor, your local Sunnen Field Service Engineer or Sunnen Customer Service Department.
[*] Recommended Hone Head

Sunnen GH® Honing Tool System

SV-Series Hone Heads - Flange Type



Diameter Range:
2.93 - 8.00 in.
(74,4 - 204,7 mm)

Hone Head - Order Item 3:
NOTE: When ordering, specify Hone Head Driveshank OD, Hone Head Type/Size, and Abrasive.

Tool Size O.D. in. (mm)	Range[1] in. (mm)	③ Hone Head P/N[2/4] *(See Pg. 14)*	Driveshank O.D. in. (mm)	④ Stoneholder P/N *(See Pg. 24)*	Abrasive Size[3] (W x H x L) Conv. Abr. (in/mm) *(See Pg. 27)*	Superabr. (in/mm) *(See Pg. 32)*
6.00 (152,4) (4 Stones)	5.76-6.25 (146,3-158,8) -6.50 (-165,1) -6.75 (-171,5) -7.00 (-177,8)	G16466FS1	1.50 (38,1)	G14C131 G14C132 G14C133 G14C134	3/8x3/8x6 MTD (9,5x9,5x152,4 MTD) *(See Pg. 30)*	.250x.250x6 (3/8x6 MTD) 6,4X6,4x152,4 (9,5x152,4) *(See Pg. 37)*
	5.76-6.25 (146,3-158,8) -6.50 (-165,1) -6.75 (-171,5) -7.00 (-177,8)	G16466FS2	1.75 (44,5)	G14C131 G14C132 G14C133 G14C134	3/8x3/8x6 MTD (9,5x9,5x152,4 MTD) *(See Pg. 29)*	.250x.250x6 (3/8x6 MTD) 6,4X6,4x152,4 (9,5x152,4) *(See Pg. 37)*
	5.76-6.25 (146,3-158,8) -6.50 (-165,1) -6.75 (-171,5) -7.00 (-177,8)	G16466FS3	2.25 (57,2)	G14C131 G14C132 G14C133 G14C134	3/8x3/8x6 MTD (9,5x9,5x152,4 MTD) *(See Pg. 29)*	.250x.250x6 (3/8x6 MTD) 6,4X6,4x152,4 (9,5x152,4) *(See Pg. 37)*
7.00 (177,8) (4 Stones)	6.76-7.25 (171,7-184,2) -7.50 (-190,5) -7,75 (-196,9) -8.00 (-203,2)	G17466FS1	1.50 (38,1)	G14C131 G14C132 G14C133 G14C134	3/8x3/8x6 MTD (9,5x9,5x152,4 MTD) *(See Pg. 29)*	.250x.250x6 (3/8x6 MTD) 6,4X6,4x152,4 (9,5x152,4) *(See Pg. 37)*
	6.76-7.25 (171,7-184,2) -7.50 (-190,5) -7,75 (-196,9) -8.00 (-203,2)	G17466FS2	1.75 (44,5)	G14C131 G14C132 G14C133 G14C134	3/8x3/8x6 MTD (9,5x9,5x152,4 MTD) *(See Pg. 29)*	.250x.250x6 (3/8x6 MTD) 6,4X6,4x152,4 (9,5x152,4) *(See Pg. 37)*
	6.76-7.25 (171,7-184,2) -7.50 (-190,5) -7,75 (-196,9) -8.00 (-203,2)	G17466FS3	2.25 (57,2)	G14C131 G14C132 G14C133 G14C134	3/8x3/8x6 MTD (9,5x9,5x152,4 MTD) *(See Pg. 29)*	.250x.250x6 (3/8x6 MTD) 6,4X6,4x152,4 (9,5x152,4) *(See Pg. 37)*

NOTE: [1] Range reflects minimum Start Diameter
[2] For Integrated Tools refer to Page 13.
[3] MTD = Mounted Stones / UNMTD = Unmounted Stones
[4] For Hone Head Sizes smaller or larger than those shown, contact your local authorized Sunnen Distributor, your local Sunnen Field Service Engineer or Sunnen Customer Service Department.
[*] Recommended Hone Head

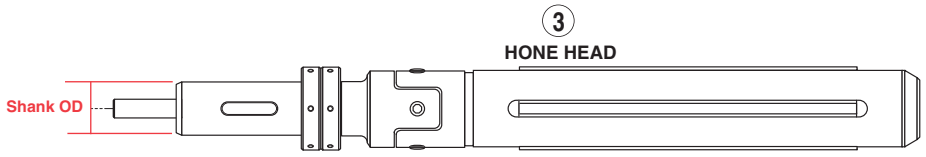
Tandem Stoneholders
For Tandem Stoneholders contact your local Sunnen Field Service Engineer or your local authorized Sunnen Distributor.

Sunnen GH® Honing Tool System

GH®-210 Hone Heads - Slotted Types

(Includes Sunnen & Other Manufacturers Machines)

Diameter Range:
0.50 - 3.50 in.
(12,7 - 88,9 mm)



Hone Head - Order Item 3:

NOTE: When ordering, specify Hone Head, Driveshank OD, Stoneholder, and Abrasive.

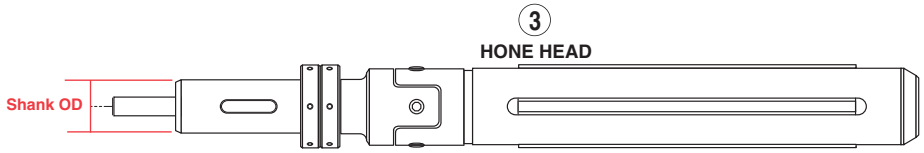
Tool Size O.D. in. (mm)	Range[1] in. (mm)	③ Hone Head P/N[2/4] *(See Pg. 14)*	Driveshank O.D. in. (mm)	④ Stoneholder P/N *(See Pg. 25)*	Abrasive Size[3] (W x H x L) Conv. Abr. (in/mm) *(See Pg. 27)*	Superabr. (in/mm) *(See Pg. 32)*
0.50 (12,7) (3 Stones)	0.50-0.52 (12,7-13,2) -0.58 (-14,7) -0,64 (-16,3) -0,70 (-17,8)	G1P5322P5S	N/A	G14A105SH G14A1051SH G14A1052SH G14A1053SH	N/A	.125x.070x2.5 UNMTD (3,2x1,8x63,5 UNMTD) *(See Pg. 33)*
0.75 (19,1) (3 Stones)	0.74-0.87 (18,8-22,1) -0.93 (-23,6) -0.99 (-25,1) -1.05 (-26,7) -1.11 (-28,2)	G1P75324S	N/A	G14B195ASH G14B195A1SH G14B195A2SH G14B195A3SH G14B195A4SH	N/A	.125x.125x4 UNMTD (3,2x3,2x101,6 UNMTD) *(See Pg. 34)*
1.00 (25,4) (3 Stones)	0.93-1.02 (23,6-25,9) -1.18 (-30,0) -1.25 (-31,8) -1.31 (-33,3) -1.37 (-34,8)	G11334S	N/A	G14B186A2SH G14B186A3SH G14B186A4SH G14B186A5SH G14B186A6SH	N/A	.125x.125x4 UNMTD (3,2x3,2x101,6 UNMTD) *(See Pg. 34)*
1.25 (31,8) (3 Stones)	1.22-1.37 (31,0-34,8) -1.43 (-36,3) -1.49 (-37,8) -1.55 (-39,4) -1.61 (-40,9)	G11P2537326S1	0.75 (19,1)	G14B187ASH G14B187A1SH G14B187A2SH G14B187A3SH G14B187A4SH	N/A	.187x.218x6 UNMTD (4,8x5,6x152,4 UNMTD) *(See Pg. 35)*
1.50 (38,1) (3 Stones)	1.43-1.53 (36,3-38,9) -1.62 (-41,1) -1.71 (-43,4) -1.81 (-46,0)	G11P5356S1	0.75 (19,1)	G14B125SH G14B139SH G14B140SH G14B182SH	5/16x5/16x6 MTD (7,9x7,9x152,4 MTD) *(See Pg. 28)*	.187x.250x6(5/16X6MTD) 4,8x7,9x152,4(7,9X152,4) *(See Pg. 36)*
	1.43-1.53 (36,3-38,9) -1.62 (-41,1) -1.71 (-43,4) -1.81 (-46,0)	G11P5356S2*	0.87 (22,2)	G14B125SH G14B139SH G14B140SH G14B182SH	5/16x5/16x6 MTD (7,9x7,9x152,4 MTD) *(See Pg. 28)*	.187x.250x6(5/16X6MTD) 4,8x7,9x152,4(7,9X152,4) *(See Pg. 36)*
1.75 (44,5) (4 Stones)	1.60-1.75 (40,6-44,5) -1.84 (-46,7) -1.93 (-49,0) -2.02 (-51,3)	G11P75456S1*	0.87 (22,2)	G14B1391SH G14B1401SH G14B1821SH G14B1822SH	5/16x5/16x6 MTD (7,9x7,9x152,4 MTD) *(See Pg. 28)*	.187x.250x6(5/16X6MTD) 4,8x7,9x152,4(7,9X152,4) *(See Pg. 36)*
	1.60-1.75 (40,6-44,5) -1.84 (-46,7) -1.93 (-49,0) -2.02 (-51,3)	G11P75456S3	1.13 (28,6)	G14B1391SH G14B1401SH G14B1821SH G14B1822SH	5/16x5/16x6 MTD (7,9x7,9x152,4 MTD) *(See Pg. 28)*	.187x.250x6(5/16X6MTD) 4,8x7,9x152,4(7,9X152,4) *(See Pg. 36)*
2.00 (50,8) (4 Stones)	1.94-2.00 (49,3-50,8) -2.12 (-53,8) -2.25 (-57,2) -2.37 (-60,2) -2.50 (-63,5)	G12468S1	0.87 (22,2)	G14B1681SH G14B1711SH G14B1721SH G14B1731SH G14B1741SH	3/8x3/8x8 MTD (9,5x9,5x203,2 MTD) *(See Pg. 29)*	.250x.250x8(3/8X8 MTD) 6,4X6,4X203,2(9,5x203,2) *(See Pg. 38)*
	1.94-2.00 (49,3-50,8) -2.12 (-53,8) -2.25 (-57,2) -2.37 (-60,2) -2.50 (-63,5)	G12468S2*	1.13 (28,6)	G14B1681SH G14B1711SH G14B1721SH G14B1731SH G14B1741SH	3/8x3/8x8 MTD (9,5x9,5x203,2 MTD) *(See Pg. 29)*	.250x.250x8(3/8X8 MTD) 6,4X6,4X203,2(9,5x203,2) *(See Pg. 38)*
2.50 (63,5) (4 Stones)	2.41-2.68 (61,2-68,1) -2.93 (-74,4) -3.18 (-80,8)	G12P5468S1*	1.13 (28,6)	G14B130SH G14B131SH G14B132SH	3/8x3/8x8 MTD (9,5x9,5x203,2 MTD) *(See Pg. 29)*	.250x.250x8(3/8X8 MTD) 6,4X6,4X203,2(9,5X203,2) *(See Pg. 38)*
	2.41-2.68 (61,2-68,1) -2.93 (-74,4) -3.18 (-80,8)	G12P5468S2	1.50 (38,1)	G14B130SH G14B131SH G14B132SH	3/8x3/8x8 MTD (9,5x9,5x203,2 MTD) *(See Pg. 29)*	.250x.250x8(3/8X8 MTD) 6,4X6,4X203,2(9,5X203,2) *(See Pg. 38)*
	2.41-2.68 (61,2-68,1) -2.93 (-74,4) -3.18 (-80,8)	G12P5468S3	1.75 (44,5)	G14B130SH G14B131SH G14B132SH	3/8x3/8x8 MTD (9,5x9,5x203,2 MTD) *(See Pg. 29)*	.250x.250x8(3/8X8 MTD) 6,4X6,4X203,2(9,5X203,2) *(See Pg. 38)*

NOTE: [1] Range reflects minimum Start Diameter
[2] For Integrated Tools refer to Page 13.
[3] MTD = Mounted Stones / UNMTD = Unmounted Stones
[4] For Hone Head Sizes smaller or larger than those shown, contact your local authorized Sunnen Distributor, your local Sunnen Field Service Engineer or Sunnen Customer Service Department.
* Recommended Hone Head

Sunnen GH® Honing Tool System

GH®-210 Hone Heads - Slotted Type

(Includes Sunnen & Other Manufacturers Machines)



Diameter Range:
0.50 - 3.50 in.
(12,7 - 88,9 mm)

Hone Head - Order Item 3:

NOTE: When ordering, specify Hone Head, Driveshank OD, Stoneholder, and Abrasive.

Tool Size O.D. in. (mm)	Range[1] in. (mm)	③ Hone Head P/N[2/4] *(See Pg. 14)*	Driveshank O.D. in. (mm)	④ Stoneholder P/N *(See Pg. 25)*	Abrasive Size[3] (W x H x L) Conv. Abr. (in/mm) *(See Pg. 27)*	Superabr. (in/mm) *(See Pg. 32)*
3.00 (76,2) (5 Stones)	2.91-3.18 (73,9-80,8) -3.43 (-87,1) -3.68 (-93,5) -3.93 (-99,8)	G13568S1	1.13 (28,6)	G14B131SH G14B132SH G14B133SH G14B178SH	3/8x3/8x8 MTD (9,5x9,5x203,2 MTD) *(See Pg. 29)*	.250x.250x8(3/8X8 MTD) 6,4X6,4X203,2(9,5X203,2) *(See Pg. 38)*
	2.91-3.18 (73,9-80,8) -3.43 (-87,1) -3.68 (-93,5) -3.93 (-99,8)	G13568S2	1.50 (38,1)	G14B131SH G14B132SH G14B133SH G14B178SH	3/8x3/8x8 MTD (9,5x9,5x203,2 MTD) *(See Pg. 29)*	.250x.250x8(3/8X8 MTD) 6,4X6,4X203,2(9,5X203,2) *(See Pg. 38)*
	2.91-3.18 (73,9-80,8) -3.43 (-87,1) -3.68 (-93,5) -3.93 (-99,8)	G13568S3*	1.75 (44,5)	G14B131SH G14B132SH G14B133SH G14B178SH	3/8x3/8x8 MTD (9,5x9,5x203,2 MTD) *(See Pg. 29)*	.250x.250x8(3/8X8 MTD) 6,4X6,4X203,2(9,5X203,2) *(See Pg. 38)*

NOTE: [1] Range reflects minimum Start Diameter
[2] For Integrated Tools refer to Page 13.
[3] MTD = Mounted Stones / UNMTD = Unmounted Stones
[4] For Hone Head Sizes smaller or larger than those shown, contact your local authorized Sunnen Distributor, your local Sunnen Field Service Engineer or Sunnen Customer Service Department.
* Recommended Hone Head

Tandem Stoneholders

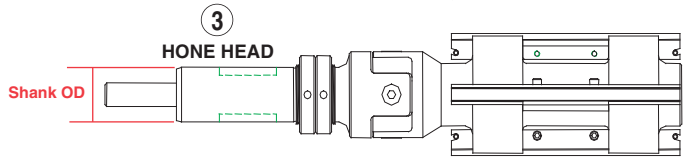
For Tandem Stoneholders contact your local Sunnen Field Service Engineer or your local authorized Sunnen Distributor.

Sunnen GH® Honing Tool System

GH®-210 Hone Heads - Flange Types

(Includes Sunnen & Other Manufacturers Machines)

Diameter Range:
3.50 - 16.00 in.
(88,9 - 406,4 mm)



Hone Head - Order Item 3:

NOTE: When ordering, specify Hone Head Driveshank OD, Hone Head Type/Size, and Abrasive.

Tool Size O.D. in. (mm)	Range[1] in. (mm)	③ Hone Head P/N[2/4] *(See Pg. 14)*	Driveshank O.D. in. (mm)	④ Stoneholder P/N *(See Pg. 25)*	Abrasive Size[3] (W x H x L) Conv. Abr. (in/mm) *(See Pg. 27)*	Superabr. (in/mm) *(See Pg. 32)*
3.50 (88,9) (5 Stones)	3.41-3.50 (86,6- 88,9) -3.62 (- 91,9) -3.75 (-95,3) -3.87 (- 98,3) -4.00 (-101,6)	G13P5568F1	1.50 (38,1)	G14C150 G14C115 G14C162 G14C116 G14C168	3/8x3/8x8 MTD (9,5x9,5x203,2 MTD) *(See Pg. 31)*	.250x.250x8(3/8x8 MTD) 6,4X6,4X203,2(9,5x203,2) *(See Pg. 38)*
	3.41-3.50 (86,6- 88,9) -3.62 (- 91,9) -3.75 (-95,3) -3.87 (-98,3) -4.00 (-101,6)	G13P5568F2*	1.75 (44,5)	G14C150 G14C115 G14C162 G14C116 G14C168	3/8x3/8x8 MTD (9,5x9,5x203,2 MTD) *(See Pg. 31)*	.250x.250x8(3/8x8 MTD) 6,4X6,4X203,2(9,5x203,2) *(See Pg. 38)*
	3.41-3.50 (86,6- 88,9) -3.62 (- 91,9) -3.75 (-95,3) -3.87 (- 98,3) -4.00 (-101,6)	G13P5568F3	2.25 (57,2)	G14C150 G14C115 G14C162 G14C116 G14C168	3/8x3/8x8 MTD (9,5x9,5x203,2 MTD) *(See Pg. 31)*	.250x.250x8(3/8x8 MTD) 6,4X6,4X203,2(9,5x203,2) *(See Pg. 38)*
4.00 (101,6)	3.87-4.00 (98,3-101,6) -4.25 (-108,0) -4.50 (-114,3) -4.75 (-120,7) -5.00 (-127,0)	G14588F1	1.13 (28,6)	G14C108 G14C109 G14C110 G14C111 G14C114	1/2x1/2x8 MTD (12,7x12,7x203,3 MTD) *(See Pg. 31)*	.250x.312x8 (1/2X8 MTD) 6,4X7,9X203,2 (12,7X203,2) *(See Pg. 40)*
	3.87-4.00 (98,3-101,6) -4.25 (-108,0) -4.50 (-114,3) -4.75 (-120,7) -5.00 (-127,0)	G14588F2	1.50 (38,1)	G14C108 G14C109 G14C110 G14C111 G14C114	1/2x1/2x8 MTD (12,7x12,7x203,3 MTD) *(See Pg. 31)*	.250x.312x8 (1/2X8 MTD) 6,4X7,9X203,2 (12,7X203,2) *(See Pg. 40)*
	3.87-4.00 (98,3-101,6) -4.25 (-108,0) -4.50 (-114,3) -4.75 (-120,7) -5.00 (-127,0)	G14588F3*	1.75 (44,5)	G14C108 G14C109 G14C110 G14C111 G14C114	1/2x1/2x8 MTD (12,7x12,7x203,3 MTD) *(See Pg. 31)*	.250x.312x8 (1/2X8 MTD) 6,4X7,9X203,2 (12,7X203,2) *(See Pg. 40)*
	3.87-4.00 (98,3-101,6) -4.25 (-108,0) -4.50 (-114,3) -4.75 (-120,7) -5.00 (-127,0)	G14588F4	2.25 (57,2)	G14C108 G14C109 G14C110 G14C111 G14C114	1/2x1/2x8 MTD (12,7x12,7x203,3 MTD) *(See Pg. 31)*	.250x.312x8 (1/2X8 MTD) 6,4X7,9X203,2 (12,7X203,2) *(See Pg. 40)*
5.00 (127,0)	4.88-5.13 (124,0-130,3) -5.38 (-136,7) -5.63 (-143,0) -5.88 (-149,4) -6.13 (-155,7)	G15588F1	1.50 (38,1)	G14C110 G14C111 G14C114 G14C112 G14C113	1/2x1/2x8 MTD (12,7x12,7x203,3 MTD) *(See Pg. 31)*	.250x.312x8 (1/2X8 MTD) 6,4X7,9X203,2 (12,7X203,2) *(See Pg. 40)*
	4.88-5.13 (124,0-130,3) -5.38 (-136,7) -5.63 (-143,0) -5.88 (-149,4) -6.13 (-155,7)	G15588F2*	1.75 (44,5)	G14C110 G14C111 G14C114 G14C112 G14C113	1/2x1/2x8 MTD (12,7x12,7x203,3 MTD) *(See Pg. 31)*	.250x.312x8 (1/2X8 MTD) 6,4X7,9X203,2 (12,7X203,2) *(See Pg. 40)*
	4.88-5.13 (124,0-130,3) -5.38 (-136,7) -5.63 (-143,0) -5.88 (-149,4) -6.13 (-155,7)	G15588F3	2.25 (57,2)	G14C110 G14C111 G14C114 G14C112 G14C113	1/2x1/2x8 MTD (12,7x12,7x203,3 MTD) *(See Pg. 31)*	.250x.312x8 (1/2X8 MTD) 6,4X7,9X203,2 (12,7X203,2) *(See Pg. 40)*

NOTE: [1] Range reflects minimum Start Diameter
[2] For Integrated Tools refer to Page 13.
[3] MTD = Mounted Stones / UNMTD = Unmounted Stones
[4] For Hone Head Sizes smaller or larger than those shown, contact your local authorized Sunnen Distributor, your local Sunnen Field Service Engineer or Sunnen Customer Service Department.
* Recommended Hone Head

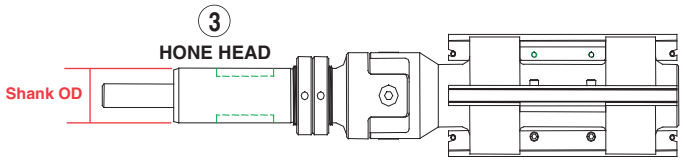
Tandem Stoneholders

For Tandem Stoneholders contact your local Sunnen Field Service Engineer or your local authorized Sunnen Distributor.

Sunnen GH® Honing Tool System

GH®-210 Hone Heads - Flange Type

(Includes Sunnen & Other Manufacturers Machines)



Diameter Range: 3.50 - 16.00 in. (88,9 - 406,4 mm)

Hone Head - Order Item 3:

NOTE: When ordering, specify Hone Head Driveshank OD, Hone Head Type/Size, and Abrasive.

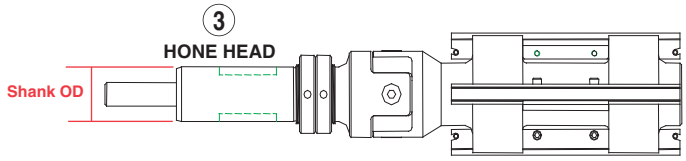
Tool Size O.D. in. (mm)	Range[1] in. (mm)	③ Hone Head P/N[2/4] *(See Pg. 14)*	Driveshank O.D. in. (mm)	④ Stoneholder P/N *(See Pg. 25/26)*	Abrasive Size[3] (W x H x L) Conv. Abr. (in/mm) *(See Pg. 27)*	Superabr. (in/mm) *(See Pg. 32)*
6.00 (152,4) (6 Stones)	5.76-6.06 (146,3-153,9) -6.31 (-160,3) -6.56 (-166,6) -6.81 (-173,0) -7.06 (-179,3)	G16688F1	1.75 (44,5)	G14C101 G14C102 G14C103 G14C104 G14C105	1/2x1/2x8 MTD (12,7x12,7x203,3 MTD) *(See Pg. 31)*	.250x.312x8 (1/2X8 MTD) 6,4X7,9X203,2 (12,7X203,2) *(See Pg. 40)*
	5.76-6.06 (146,3-153,9) -6.31 (-160,3) -6.56 (-166,6) -6.81 (-173,0) -7.06 (-179,3)	G16688F2*	2.25 (57,2)	G14C101 G14C102 G14C103 G14C104 G14C105	1/2x1/2x8 MTD (12,7x12,7x203,3 MTD) *(See Pg. 31)*	.250x.312x8 (1/2X8 MTD) 6,4X7,9X203,2 (12,7X203,2) *(See Pg. 40)*
	5.76-6.06 (146,3-153,9) -6.31 (-160,3) -6.56 (-166,6) -6.81 (-173,0) -7.06 (-179,3)	G16688F3	3.00 (76,2)	G14C101 G14C102 G14C103 G14C104 G14C105	1/2x1/2x8 MTD (12,7x12,7x203,3 MTD) *(See Pg. 31)*	.250x.312x8 (1/2X8 MTD) 6,4X7,9X203,2 (12,7X203,2) *(See Pg. 40)*
7.00 (177,8) (6 Stones)	6.76-7.06 (171,7-179,3) -7.31 (-185,7) -7.56 (-192,0) -7.81 (-198,4) -8.06 (-204,7)	G17688F1	1.75 (44,5)	G14C101 G14C102 G14C103 G14C104 G14C105	1/2x1/2x8 MTD (12,7x12,7x203,3 MTD) *(See Pg. 31)*	.250x.312x8 (1/2X8 MTD) 6,4X7,9X203,2 (12,7X203,2) *(See Pg. 40)*
	6.76-7.06 (171,7-179,3) -7.31 (-185,7) -7.56 (-192,0) -7.81 (-198,4) -8.06 (-204,7)	G17688F2*	2.25 (57,2)	G14C101 G14C102 G14C103 G14C104 G14C105	1/2x1/2x8 MTD (12,7x12,7x203,3 MTD) *(See Pg. 31)*	.250x.312x8 (1/2X8 MTD) 6,4X7,9X203,2 (12,7X203,2) *(See Pg. 40)*
	6.76-7.06 (171,7-179,3) -7.31 (-185,7) -7.56 (-192,0) -7.81 (-198,4) -8.06 (-204,7)	G17688F3	3.00 (76,2)	G14C101 G14C102 G14C103 G14C104 G14C105	1/2x1/2x8 MTD (12,7x12,7x203,3 MTD) *(See Pg. 31)*	.250x.312x8 (1/2X8 MTD) 6,4X7,9X203,2 (12,7X203,2) *(See Pg. 40)*
8.00 (203,2) (8 Stones)	7.76-8.06 (197,1-204,7) -8.31 (-211,1) -8.56 (-217,4) -8.81 (-223,8) -9.06 (-230,1)	G18888F1	1.75 (44,5)	G14C101 G14C102 G14C103 G14C104 G14C105	1/2x1/2x8 MTD (12,7x12,7x203,3 MTD) *(See Pg. 31)*	.250x.312x8 (1/2X8 MTD) 6,4X7,9X203,2 (12,7X203,2) *(See Pg. 40)*
	7.76-8.06 (197,1-204,7) -8.31 (-211,1) -8.56 (-217,4) -8.81 (-223,8) -9.06 (-230,1)	G18888F2*	2.25 (57,2)	G14C101 G14C102 G14C103 G14C104 G14C105	1/2x1/2x8 MTD (12,7x12,7x203,3 MTD) *(See Pg. 31)*	.250x.312x8 (1/2X8 MTD) 6,4X7,9X203,2 (12,7X203,2) *(See Pg. 40)*
	7.76-8.06 (197,1-204,7) -8.31 (-211,1) -8.56 (-217,4) -8.81 (-223,8) -9.06 (-230,1)	G18888F3	3.00 (76,2)	G14C101 G14C102 G14C103 G14C104 G14C105	1/2x1/2x8 MTD (12,7x12,7x203,3 MTD) *(See Pg. 31*	.250x.312x8 (1/2X8 MTD) 6,4X7,9X203,2 (12,7X203,2) *(See Pg. 40)*
9.00 (228,6) (8 Stones)	8.76-9.06 (222,5-230,1) -9.31 (-236,5) -9.56 (-242,8) -9.81 (-249,2) -10.06 (-255,5)	G19888F1	1.75 (44,5)	G14C101 G14C102 G14C103 G14C104 G14C105	1/2x1/2x8 MTD (12,7x12,7x203,3 MTD) *(See Pg. 31)*	.250x.312x8 (1/2X8 MTD) 6,4X7,9X203,2 (12,7X203,2) *(See Pg. 40)*
	8.76-9.06 (222,5-230,1) -9.31 (-236,5) -9.56 (-242,8) -9.81 (-249,2) -10.06 (-255,5)	G19888F2*	2.25 (57,2)	G14C101 G14C102 G14C103 G14C104 G14C105	1/2x1/2x8 MTD (12,7x12,7x203,3 MTD) *(See Pg. 31)*	.250x.312x8 (1/2X8 MTD) 6,4X7,9X203,2 (12,7X203,2) *(See Pg. 40)*
	8.76-9.06 (222,5-230,1) -9.31 (-236,5) -9.56 (-242,8) -9.81 (-249,2) -10.06 (-255,5)	G19888F3	3.00 (76,2)	G14C101 G14C102 G14C103 G14C104 G14C105	1/2x1/2x8 MTD (12,7x12,7x203,3 MTD) *(See Pg. 31)*	.250x.312x8 (1/2X8 MTD) 6,4X7,9X203,2 (12,7X203,2) *(See Pg. 40)*

Sunnen GH® Honing Tool System

GH®-210 Hone Heads - Flange Types

(Includes Sunnen & Other Manufacturers Machines)

Diameter Range:
3.50 - 16.00 in.
(88,9 - 406,4 mm)



Hone Head - Order Item 3:

NOTE: When ordering, specify Hone Head Driveshank OD, Hone Head Type/Size, and Abrasive.

Tool Size O.D. in. (mm)	Range[1] in. (mm)	③ Hone Head P/N[2/4] *(See Pg. 14)*	Driveshank O.D. in. (mm)	④ Stoneholder P/N *(See Pg. 26)*	Abrasive Size[3] (W x H x L) Conv. Abr. (in/mm) *(See Pg. 27)*	Superabr. (in/mm) *(See Pg. 32)*
10.00 (254,0) (8 Stones)	9.76-10.06 (247,9-255,5) -10.31 (-261,9) -10.56 (-268,2) -10.81 (-274,6) -11.06 (-280,9)	G110888F1	1.75 (44,5)	G14C101 G14C102 G14C103 G14C104 G14C105	1/2x1/2x8 MTD (12,7x12,7x203,3 MTD) *(See Pg. 31)*	.250x.312x8 (1/2X8 MTD) 6,4X7,9X203,2 (12,7X203,2) *(See Pg. 40)*
	9.76-10.06 (247,9-255,5) -10.31 (-261,9) -10.56 (-268,2) -10.81 (-274,6) -11.06 (-280,9)	G110888F2	2.25 (57,2)	G14C101 G14C102 G14C103 G14C104 G14C105	1/2x1/2x8 MTD (12,7x12,7x203,3 MTD) *(See Pg. 31)*	.250x.312x8 (1/2X8 MTD) 6,4X7,9X203,2 (12,7X203,2) *(See Pg. 40)*
	9.76-10.06 (247,9-255,5) -10.31 (-261,9) -10.56 (-268,2) -10.81 (-274,6) -11.06 (-280,9)	G110888F3	3.00 (76,2)	G14C101 G14C102 G14C103 G14C104 G14C105	1/2x1/2x8 MTD (12,7x12,7x203,3 MTD) *(See Pg. 31)*	.250x.312x8 (1/2X8 MTD) 6,4X7,9X203,2 (12,7X203,2) *(See Pg. 40)*
11.00 (279,4) (8 Stones)	10.76-11.06 (273,3-280,9) -11.31 (-287,3) -11.56 (-293,6) -11.81 (-300,0) -12.06 (-306,3)	G111888F1	1.75 (44,5)	G14C101 G14C102 G14C103 G14C104 G14C105	1/2x1/2x8 MTD (12,7x12,7x203,3 MTD) *(See Pg. 31)*	.250x.312x8 (1/2X8 MTD) 6,4X7,9X203,2 (12,7X203,2) *(See Pg. 40)*
	10.76-11.06 (273,3-280,9) -11.31 (-287,3) -11.56 (-293,6) -11.81 (-300,0) -12.06 (-306,3)	G111888F2	2.25 (57,2)	G14C101 G14C102 G14C103 G14C104 G14C105	1/2x1/2x8 MTD (12,7x12,7x203,3 MTD) *(See Pg. 31)*	.250x.312x8 (1/2X8 MTD) 6,4X7,9X203,2 (12,7X203,2) *(See Pg. 40)*
	10.76-11.06 (273,3-280,9) -11.31 (-287,3) -11.56 (-293,6) -11.81 (-300,0) -12.06 (-306,3)	G111888F3	3.00 (76,2)	G14C101 G14C102 G14C103 G14C104 G14C105	1/2x1/2x8 MTD (12,7x12,7x203,3 MTD) *(See Pg. 31)*	.250x.312x8 (1/2X8 MTD) 6,4X7,9X203,2 (12,7X203,2) *(See Pg. 40)*
12.00 (304,8) (8 Stones)	11.76-12.06 (298,7-306,3) -12.31 (-312,7) -12.56 (-319,0) -12.81 (-325,4) -13.06 (-331,7)	G112888F1	1.75 (44,5)	G14C101 G14C102 G14C103 G14C104 G14C105	1/2x1/2x8 MTD (12,7x12,7x203,3 MTD) *(See Pg. 31)*	.250x.312x8 (1/2X8 MTD) 6,4X7,9X203,2 (12,7X203,2) *(See Pg. 40)*
	11.76-12.06 (298,7-306,3) -12.31 (-312,7) -12.56 (-319,0) -12.81 (-325,4) -13.06 (-331,7)	G112888F2	2.25 (57,2)	G14C101 G14C102 G14C103 G14C104 G14C105	1/2x1/2x8 MTD (12,7x12,7x203,3 MTD) *(See Pg. 31)*	.250x.312x8 (1/2X8 MTD) 6,4X7,9X203,2 (12,7X203,2) *(See Pg. 40)*
	11.76-12.06 (298,7-306,3) -12.31 (-312,7) -12.56 (-319,0) -12.81 (-325,4) -13.06 (-331,7)	G112888F3	3.00 (76,2)	G14C101 G14C102 G14C103 G14C104 G14C105	1/2x1/2x8 MTD (12,7x12,7x203,3 MTD) *(See Pg. 31)*	.250x.312x8 (1/2X8 MTD) 6,4X7,9X203,2 (12,7X203,2) *(See Pg. 40)*

NOTE: [1] Range reflects minimum Start Diameter
[2] For Integrated Tools refer to Page 13.
[3] MTD = Mounted Stones / UNMTD = Unmounted Stones
[4] For Hone Head Sizes smaller or larger than those shown, contact your local authorized Sunnen Distributor, your local Sunnen Field Service Engineer or Sunnen Customer Service Department.
[*] Recommended Hone Head

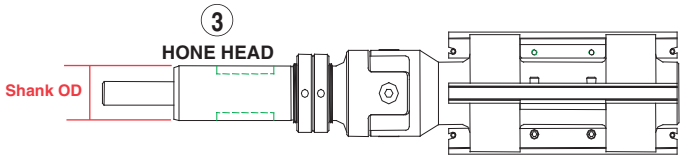
Tandem Stoneholders

For Tandem Stoneholders contact your local Sunnen Field Service Engineer or your local authorized Sunnen Distributor.

Sunnen GH® Honing Tool System

GH®-210 Hone Heads - Flange Type

(Includes Sunnen & Other Manufacturers Machines)



Diameter Range:
3.50 - 16.00 in.
(88,9 - 406,4 mm)

Hone Head - Order Item 3:

NOTE: When ordering, specify Hone Head Driveshank OD, Hone Head Type/Size, and Abrasive.

Tool Size O.D. in. (mm)	Range[1] in. (mm)	③ Hone Head P/N[2/4] *(See Pg. 14)*	Driveshank O.D. in. (mm)	④ Stoneholder P/N *(See Pg. 26)*	Abrasive Size[3] (W x H x L) Conv. Abr. (in/mm) *(See Pg. 27)*	Superabr. (in/mm) *(See Pg. 32)*
13.00 (330,2) (10 Stones)	12.76-13.06 (324,1-331,7) -13.31 (-338,1) -13.56 (-344,4) -13.81 (-350,8) -14.06 (-357,1)	G1131088F1	1.75 (44,5)	G14C101 G14C102 G14C103 G14C104 G14C105	1/2x1/2x8 MTD (12,7x12,7x203,3 MTD) *(See Pg. 31)*	.250x.312x8 (1/2X8 MTD) 6,4X7,9X203,2 (12,7X203,2) *(See Pg. 40)*
	12.76-13.06 (324,1-331,7) -13.31 (-338,1) -13.56 (-344,4) -13.81 (-350,8) -14.06 (-357,1)	G1131088F2	2.25 (57,2)	G14C101 G14C102 G14C103 G14C104 G14C105	1/2x1/2x8 MTD (12,7x12,7x203,3 MTD) *(See Pg. 31)*	.250x.312x8 (1/2X8 MTD) 6,4X7,9X203,2 (12,7X203,2) *(See Pg. 40)*
	12.76-13.06 (324,1-331,7) -13.31 (-338,1) -13.56 (-344,4) -13.81 (-350,8) -14.06 (-357,1)	G1131088F3	3.00 (76,2)	G14C101 G14C102 G14C103 G14C104 G14C105	1/2x1/2x8 MTD (12,7x12,7x203,3 MTD) *(See Pg. 31)*	.250x.312x8 (1/2X8 MTD) 6,4X7,9X203,2 (12,7X203,2) *(See Pg. 40)*
14.00 (355,6) (10 Stones)	13.76-14.06 (349,5-357,1) -14.31 (-363,5) -14.56 (-369,8) -14.81 (-376,2) -15.06 (-382,5)	G1141088F1	1.75 (44,5)	G14C101 G14C102 G14C103 G14C104 G14C105	1/2x1/2x8 MTD (12,7x12,7x203,3 MTD) *(See Pg. 31)*	.250x.312x8 (1/2X8 MTD) 6,4X7,9X203,2 (12,7X203,2) *(See Pg. 40)*
	13.76-14.06 (349,5-357,1) -14.31 (-363,5) -14.56 (-369,8) -14.81 (-376,2) -15.06 (-382,5)	G1141088F2	2.25 (57,2)	G14C101 G14C102 G14C103 G14C104 G14C105	1/2x1/2x8 MTD (12,7x12,7x203,3 MTD) *(See Pg. 31)*	.250x.312x8 (1/2X8 MTD) 6,4X7,9X203,2 (12,7X203,2) *(See Pg. 40)*
	13.76-14.06 (349,5-357,1) -14.31 (-363,5) -14.56 (-369,8) -14.81 (-376,2) -15.06 (-382,5)	G1141088F3	3.00 (76,2)	G14C101 G14C102 G14C103 G14C104 G14C105	1/2x1/2x8 MTD (12,7x12,7x203,3 MTD) *(See Pg. 31)*	.250x.312x8 (1/2X8 MTD) 6,4X7,9X203,2 (12,7X203,2) *(See Pg. 40)*
15.00 (381,0) (10 Stones)	14.76-15.06 (374,9-382,5) -15.31 (-388,9) -15.56 (-395,2) -15.81 (-401,6) -16.06 (-407,9)	G1151088F1	1.75 (44,5)	G14C101 G14C102 G14C103 G14C104 G14C105	1/2x1/2x8 MTD (12,7x12,7x203,3 MTD) *(See Pg. 31)*	.250x.312x8 (1/2X8 MTD) 6,4X7,9X203,2 (12,7X203,2) *(See Pg. 40)*
	14.76-15.06 (374,9-382,5) -15.31 (-388,9) -15.56 (-395,2) -15.81 (-401,6) -16.06 (-407,9)	G1151088F2	2.25 (57,2)	G14C101 G14C102 G14C103 G14C104 G14C105	1/2x1/2x8 MTD (12,7x12,7x203,3 MTD) *(See Pg. 31)*	.250x.312x8 (1/2X8 MTD) 6,4X7,9X203,2 (12,7X203,2) *(See Pg. 40)*
	14.76-15.06 (374,9-382,5) -15.31 (-388,9) -15.56 (-395,2) -15.81 (-401,6) -16.06 (-407,9)	G1151088F3	3.00 (76,2)	G14C101 G14C102 G14C103 G14C104 G14C105	1/2x1/2x8 MTD (12,7x12,7x203,3 MTD) *(See Pg. 31)*	.250x.312x8 (1/2X8 MTD) 6,4X7,9X203,2 (12,7X203,2) *(See Pg. 40)*

NOTE: [1] Range reflects minimum Start Diameter
[2] For Integrated Tools refer to Page 13.
[3] MTD = Mounted Stones / UNMTD = Unmounted Stones
[4] For Hone Head Sizes smaller or larger than those shown, contact your local authorized Sunnen Distributor, your local Sunnen Field Service Engineer or Sunnen Customer Service Department.
[*] Recommended Hone Head

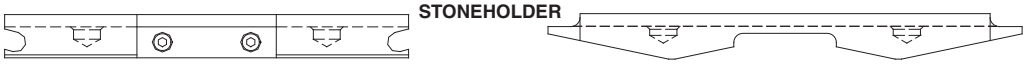
Tandem Stoneholders

For Tandem Stoneholders contact your local Sunnen Field Service Engineer or your local authorized Sunnen Distributor.

Sunnen GH® Honing Tool System

SV-Series Stoneholders

Stoneholders



④ STONEHOLDER

Flatback Stoneholder
used with Flange Type Hone Head

Angleback Stoneholder
used with Slotted Type Hone Head

Order Item 4:

NOTE: When ordering, specify Part Number, Stoneholder and Hone Head.

Tool Size O.D. in. (mm)	Range in. (mm)	④ Stoneholder Part Number	Height in. (mm)	Abrasive Size[1] (W x H x L) Conv. Abr. (See Pg. 27)	Superabr. (See Pg. 32)	Abrasive Mounting[2] Type
0.50 (12,7) (for G1/G2/GS/GL Tools)	0.47-0.50 (11,9-12,7) -0.56 (-14,2) -0.62 (-15,7) -0.68 (-17,3)	G14A105SH G14A1051SH G14A1052SH G14A1053SH	0.120in. (3,0mm) 0.151in. (3,8mm) 0.182in. (4,6mm) 0.213in. (5,4mm)	N/A	.125x.070x2.5 UNMTD (3,2x1,8x63,5 UNMTD) *(See Pg. 33)*	DO BK GJ BL
0.75 (19,1) (for G1/G2/GS/GL Tools)	0.72-0.87 (18,3-22,1) -0.93 (-23,6) -0.99 (-25,1) -1.06 (-26,9) -1.12 (-28,4)	G14B195ASH G14B195A1SH G14B195A2SH G14B195A3SH G14B195A4SH	0.187in. (4,8mm) 0.218in. (5,5mm) 0.250in. (6,4mm) 0.281in. (7,1mm) 0.312in. (7,9mm)	N/A	.125x.125x4 UNMTD (3,2x3,2x101,6 UNMTD) *(See Pg. 34)*	BF BG BH BI BJ
1.00 (25,4) (for G1/G2/GS/GL Tools)	0.93-1.05 (23,6-26,7) -1.11 (-28,2) -1.17 (-29,7) -1.23 (-31,2) -1.29 (-32,8)	G14B186A1SH G14B186A2SH G14B186A3SH G14B186A4SH G14B186A5SH	0.218in. (5,5mm) 0.250in. (6,4mm) 0.281in. (7,1mm) 0.312in. (7,9mm) 0.343in. (8,7mm)	N/A	.125x.125x4 UNMTD (3,2x3,2x101,6 UNMTD) *(See Pg. 34)*	BM BN BO QA BP
1.25 (31,8) (for G1/G2/GS/GL Tools)	1.22-1.37 (31,0-34,8) -1.43 (-36,3) -1.49 (-37,8) -1.55 (-39,4) -1.61 (-40,9)	G14B187ASH G14B187A1SH G14B187A2SH G14B187A3SH G14B187A4SH	0.312in. (7,9mm) 0.343in. (8,7mm) 0.375in. (9,5mm) 0.406in. (10,3mm) 0.437in. (11,1mm)	N/A	.187x.218x6 UNMTD (4,8x5,6x152,4 UNMTD) *(See Pg. 35)*	BQ BR BS BB BT
1.50 (38,1) (for G1/G2/GS/GL Tools)	1.43-1.53 (36,3-38,9) -1.62 (-41,1) -1.71 (-43,4) -1.81 (-46,0)	G14B125SH G14B139SH G14B140SH G14B182SH	0.312in. (7,9mm) 0.357in. (9,1mm) 0.402in. (10,2mm) 0.447in. (11,4mm)	5/16x5/16x6 MTD (7,9x7,9x152,4 MTD) *(See Pg. 28)*	.187x.312x6(5/16X6MTD) 4,8x7,9x152,4(7,9X152,4) *(See Pg. 36)*	N/A
1.75 (44,5) (for G1/G2/GS/GL Tools)	1.60-1.75 (40,6-44,5) -1.84 (-46,7) -1.93 (-49,0) -2.02 (-51,3)	G14B1391SH G14B1401SH G14B1821SH G14B1822SH	0.325in. (8,3mm) 0.370in. (9,4mm) 0.415in. (10,5mm) 0.460in. (11,7mm)	5/16x5/16x6 MTD (7,9x7,9x152,4 MTD) *(See Pg. 28)*	.187x.312x6(5/16X6MTD) 4,8x7,9x152,4(7,9X152,4) *(See Pg. 36)*	N/A
2.00 (50,8) (for G1/G2/GS/GRF Tools)	1.94-2.00 (49,3-50,8) -2.12 (-53,8) -2.25 (-57,2) -2.37 (-60,2) -2.50 (-63,5)	G14B152SH G14B153SH G14B154SH G14B146SH G14B155SH	0.421in. (10,7mm) 0.484in. (12,3mm) 0.546in. (13,9mm) 0.609in. (15,5mm) 0.671in. (17,0mm)	3/8x3/8x6 MTD (9,5x9,5x152,4 MTD) *(See Pg. 29)*	.250x.250x6 (3/8x6 MTD) 6,4X6,4x152,4 (9,5x152,4) *(See Pg. 37)*	N/A
2.50 (63,5) (for G1/G2/GS/GRF Tools)	2.37-2.62 (60,2-66,5) -2.87 (-72,9) -3.12 (-79,2)	G14B146SH G14B148SH G14B149SH	0.625in. (15,9mm) 0.750in. (19,1mm) 0.875in. (22,2mm)	3/8x3/8x6 MTD (9,5x9,5x152,4 MTD) *(See Pg. 29)*	.250x.250x6 (3/8x6 MTD) 6,4X6,4x152,4 (9,5x152,4) *(See Pg. 37)*	N/A
3.00 (76,2) (for G1/G2/GS/GRF Tools)	2.93-3.00 (74,4-76,2) -3.12 (-79,2) -3.25 (-82,6) -3.37 (-86,0) -3.50 (-88,9)	G14C1781 G14C1782 G14C1783 G14C1784 G14C1785	0.625in. (15,9mm) 0.750in. (19,1mm) 0.875in. (22,2mm) 1.000in. (25,4mm) 1.125in. (28,6mm)	3/8x3/8x6 MTD (9,5x9,5x152,4 MTD) *(See Pg. 29)*	.250x.250x6 (3/8x6 MTD) 6,4X6,4x152,4 (9,5x152,4) *(See Pg. 37)*	N/A
3.50 (88,9) (for G1/G2/GS/GRF Tools)	3.43-3.55 (87,1-90,2) -3.68 (-93,5) -3.80 (-96,5) -3.93 (-99,8) -4.05 (-102,9)	G14C1783 G14C1784 G14C1785 G14C1786 G14C1787	0.437in. (11,1mm) 0.499in. (12,7mm) 0.562in. (14,8mm) 0.625in. (15,9mm) 0.687in. (17,4mm)	3/8x3/8x6 MTD (9,5x9,5x152,4 MTD) *(See Pg. 29)*	.250x.250x6 (3/8x6 MTD) 6,4x6,4x152,4 (9,5x152,4) *(See Pg. 37)*	N/A
4.00 (101,6) (for G1/G2/GS/GRF Tools)	3.88-4.18 (98,6-106,2) -4.43 (-112,5) -4.68 (-118,9) -4.93 (-125,2) -5.18 (-131,6)	G14C1784 G14C1786 G14C1788 G14C17810 G14C17812	0.375in. (9,5mm) 0.500in. (12,7mm) 0.625in. (15,9mm) 0.750in. (19,1mm) 0.875in. (22,2mm)	3/8x3/8x6 MTD (9,5x9,5x152,4 MTD) *(See Pg. 29)*	.250x.250x6 (3/8x6 MTD) 6,4x6,4x152,4 (9,5x152,4) *(See Pg. 37)*	N/A
5.00 (127,0) (for G1/G2/GS/GRF Tools)	4.82-5.25 (122,4-133,4) -5.50 (-139,7) -5.75 (-146,1) -6.00 (-152,4)	G14C129 G14C130 G14C131 G14C132	0.625in. (15,9mm) 0.750in. (19,1mm) 0.875in. (22,2mm) 1.000in. (25,4mm)	3/8x3/8x6 MTD (9,5x9,5x152,4 MTD) *(See Pg. 29)*	.250x.250x6 (3/8x6 MTD) 6,4x6,4x152,4 (9,5x152,4) *(See Pg. 37)*	N/A
6.00 (152,4) (for G1/G2/GS/GRF Tools)	5.76-6.25 (146,3-158,8) -6.50 (-165,1) -6.75 (-171,5) -7.00 (-177,8)	G14C131 G14C132 G14C133 G14C134	0.850in. (21,6mm) 0.975in. (24,8mm) 1.100in. (27,9mm) 1.225in. (31,1mm)	3/8x3/8x6 MTD (9,5x9,5x152,4 MTD) *(See Pg. 29)*	.250x.250x6 (3/8x6 MTD) 6,4x6,4x152,4 (9,5x152,4) *(See Pg. 37)*	N/A
7.00 (177,8) (for G1/G2/GS/GRF Tools)	6.76-7.25 (171,7-184,2) -7.50 (-190,5) -7.75 (-196,9) -8.00 (-203,4)	G14C131 G14C132 G14C133 G14C134	0.850in. (21,6mm) 0.975in. (24,8mm) 1.100in. (27,9mm) 1.225in. (31,1mm)	3/8x3/8x6 MTD (9,5x9,5x152,4 MTD) *(See Pg. 29)*	.250x.250x6 (3/8x6 MTD) 6,4x6,4x152,4 (9,5x152,4) *(See Pg. 37)*	N/A

***NOTE:** 1. Refer to abrasive tables for aluminum oxide, silicon carbide, or CBN/diamond.
2. Stoneholders for .50-1.25in. (12,7-31,8mm) make use of an unmounted abrasive mounted directly onto the stoneholder. Stoneholders for 1.50-3.50in. (38,1-88,9mm) make use of shell mounted abrasives "press fit" into the stoneholder. Stoneholders for 4.00in. & up (101,6mm) make use of shell mounted abrasives "clamped" into the stoneholder.

Tandem Stoneholders

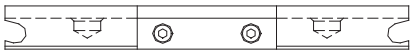
For Tandem Stoneholders contact your local Sunnen Field Service Engineer or your local authorized Sunnen Distributor.

Sunnen GH® Honing Tool System

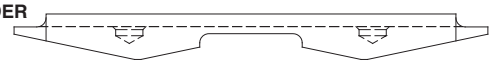
GH®-210 Stoneholders

(Includes Sunnen & Other Manufacturers Machines)

4 STONEHOLDER



Flatback Stoneholder
used with Flange Type Hone Head



Angleback Stoneholder
used with Slotted Type Hone Head

Order Item 4:

NOTE: When ordering, specify Part Number, Stoneholder and Hone Head.

Tool Size O.D. in. (mm)	Range in. (mm)	4 Stoneholder Part Number[3]	Height in. (mm)	Abrasive Size[1] (W x H x L) Conv. Abr. (See Pg. 27)	Abrasive Size[1] (W x H x L) Superabr. (See Pg. 32)	Abrasive Mounting[2] Type
0.50 (12,7) (for G1/G2/GS/GLTools)	0.50-0.52 (12,7-13,2) -0.58 (-14,7) -0.64 (-16,3) -0.70 (-17,8)	G14A105SH G14A1051SH G14A1052SH G14A1053SH	0.120in. (3,0mm) 0.151in. (3,8mm) 0.182in. (4,6mm) 0.213in. (5,4mm)	N/A	.125x.070x2.5 UNMTD (3,2x1,8x63,5 UNMTD) *(See Pg. 33)*	DO BK GJ BL
0.75 (19,1) (for G1/G2/GS/GL Tools)	0.74-0.87 (18,8-22,1) -0.93 (-23,6) -0.99 (-25,1) -1.05 (-26,7) -1.11 (-28,2)	G14B195ASH G14B195A1SH G14B195A2SH G14B195A3SH G14B195A4SH	0.187in. (4,8mm) 0.218in. (5,5mm) 0.250in. (6,4mm) 0.281in. (7,1mm) 0.312in. (7,9mm)	N/A	.125x.125x4 UNMTD (3,2x3,2x101,6 UNMTD) *(See Pg. 34)*	BF BG BH BI BJ
1.00 (25,4) (for G1/G2/GS/GL Tools)	0.93-1.02 (23,6-25,9) -1.18 (-30,0) -1.25 (-31,8) -1.31 (-33,3) -1.37 (-34,8)	G14B186A1SH G14B186A2SH G14B186A3SH G14B186A4SH G14B186A5SH	0.218in. (5,5mm) 0.250in. (6,4mm) 0.281in. (7,1mm) 0.312in. (7,9mm) 0.343in. (8,7mm)	N/A	.125x.125x4 UNMTD (3,2x3,2x101,6 UNMTD) *(See Pg. 34)*	BM BN BO QA BP
1.25 (31,8) (for G1/G2/GS/GL Tools)	1.19-1.28 (30,2-32,5) -1.34 (-34,0) -1.40 (-35,6) -1.56 (-37,1) -1.53 (-38,9)	G14B187ASH G14B187A1SH G14B187A2SH G14B187A3SH G14B187A4SH	0.312in. (7,9mm) 0.343in. (8,7mm) 0.375in. (9,5mm) 0.406in. (10,3mm) 0.437in. (11,1mm)	N/A	.187x.218x6 UNMTD (4,8x5,6x152,4 UNMTD) *(See Pg. 35)*	BQ BR BS BB BT
1.50 (38,1) (for G1/G2/GS/GL Tools)	1.43-1.53 (36,3-38,9) -1.62 (-41,1) -1.71 (-43,4) -1.81 (-46,0)	G14B125SH G14B139SH G14B140SH G14B182SH	0.312in. (7,9mm) 0.357in. (9,1mm) 0.402in. (10,2mm) 0.447in. (11,4mm)	5/16x5/16x6 MTD (7,9x7,9x152,4 MTD) *(See Pg. 28)*	.187x.312x6(5/16X6MTD) 4,8x7,9x152,4(7,9X152,4) *(See Pg. 36)*	N/A
1.75 (44,5) (for G1/G2/GS/GL Tools)	1.60-1.75 (40,6-44,5) -1.84 (-46,7) -1.93 (-49,0) -2.02 (-51,3)	G14B1391SH G14B1401SH G14B1821SH G14B1822SH	0.325in. (8,3mm) 0.370in. (9,4mm) 0.415in. (10,5mm) 0.460in. (11,7mm)	5/16x5/16x6 MTD (7,9x7,9x152,4 MTD) *(See Pg. 28)*	.187x.312x6(5/16X6MTD) 4,8x7,9x152,4(7,9X152,4) *(See Pg. 36)*	N/A
2.00 (50,8) (for G1/G2/GS/GRF Tools)	1.94-2.00 (49,3-50,8) -2.12 (-53,8) -2.25 (-57,2) -2.37 (-60,2) -2.50 (-63,5)	G14B1681SH G14B1711SH G14B1721SH G14B1731SH G14B1741SH	0.421in. (10,7mm) 0.484in. (12,3mm) 0.546in. (13,9mm) 0.609in. (15,5mm) 0.671in. (17,0mm)	3/8x3/8x8 MTD (9,5x9,5x203,2 MTD) *(See Pg. 29)*	.250x.250x8 (3/8X8 MTD) 6,4X6,4X203,2 (9,5x203,2) *(See Pg. 38)*	N/A
2.50 (63,5) (for G1/G2/GS/GRF Tools)	2.41-2.68 (61,2-68,1) -2.93 (-74,4) -3.18 (-80,8)	G14B130SH G14B131SH G14B132SH	0.625in. (15,9mm) 0.750in. (19,1mm) 0.875in. (22,2mm)	3/8x3/8x8 MTD (9,5x9,5x203,2 MTD) *(See Pg. 29)*	.250x.250x8 (3/8X8 MTD) 6,4X6,4X203,2 (9,5x203,2) *(See Pg. 38)*	N/A
3.00 (76,2) (for G1/G2/GS/GRF Tools)	2.91-3.18 (73,9-80,8) -3.43 (-87,1) -3.68 (-93,5) -3.93 (-99,8)	G14B131SH G14B132SH G14B133SH G14B178SH	0.750in. (19,1mm) 0.875in. (22,2mm) 1.000in. (25,4mm) 1.125in. (28,6mm)	3/8x3/8x8 MTD (9,5x9,5x203,2 MTD) *(See Pg. 29)*	.250x.250x8 (3/8X8 MTD) 6,4X6,4X203,2 (9,5x203,2) *(See Pg. 38)*	N/A
3.50 (88.9) (for G1/G2/GS/GRF Tools)	3.41-3.50 (86,6- 88,9) -3.62 (-91,9) -3.75 (-95,3) -3.87 (-98,3) -4.00 (-101,6)	G14C150 G14C115 G14C162 G14C116 G14C168	0.406in. (10,3mm) 0.475in. (12,1mm) 0.531in. (13,5mm) 0.600in. (15,2mm) 0.656in. (16,7mm)	3/8x3/8x8 MTD (9,5x9,5x203,2 MTD) *(See Pg. 29)*	.250x.250x8 (3/8x8 MTD) (6,4x6,4x203,2 (9,5x203,2) *(See Pg. 38)*	N/A
4.00 (101,6) (for G1/G2/GS/GRF Tools)	3.87-4.00 (98,3-101,6) -4.25 (-108,0) -41.2 (-114,3) -4.75 (-120,7) -5.00 (-127,0)	G14C108 G14C109 G14C110 G14C111 G14C114	0.375in. (9,5mm) 0.500in. (12,7mm) 0.625in. (15,9mm) 0.750in. (19,1mm) 0.875in. (22,2mm)	1/2x1/2x8 MTD (12,7x12,7x203,2 MTD) *(See Pg. 31)*	.250x.312x8 (1/2x8 MTD) (6,4x7,9x203,2 (12,7x203,2) *(See Pg. 40)*	N/A
5.00 (127,0) (for G1/G2/GS/GRF Tools)	4.88-5.13 (124,0-130,3) -5.38 (-136,7) -5.63 (-143,0) -5.88 (-149,4) -6.13 (-155,7)	G14C110 G14C111 G14C114 G14C112 G14C113	0.625in. (15,9mm) 0.750in. (19,1mm) 0.875in. (22,2mm) 1.000in. (25,4mm) 1.125in. (28,6mm)	1/2x1/2x8 MTD (12,7x12,7x203,2 MTD) *(See Pg. 31)*	.250x.312x8 (1/2x8 MTD) (6,4x7,9x203,2 (12,7x203,2) *(See Pg. 40)*	N/A
6.00 (152,4) (for G1/G2/GS/GRF Tools)	5.76-6.06 (146,3-153,9) -6.31 (-160,3) -6.56 (-166,6) -6.81 (-173,0) -7.06 (-179,3)	G14C101 G14C102 G14C103 G14C104 G14C105	0.850in. (21,6mm) 0.975in. (24,8mm) 1.100in. (27,9mm) 1.225in. (31,1mm) 1.350in. (34,3mm)	1/2x1/2x8 MTD (12,7x12,7x203,2 MTD) *(See Pg. 31)*	.250x.312x8 (1/2x8 MTD) (6,4x7,9x203,2 (12,7x203,2) *(See Pg. 40)*	N/A

***NOTE:**
1. Refer to abrasive tables for aluminum oxide, silicon carbide, or CBN/diamond.
2. Stoneholders for 0.50-1.25in. (12,7-31,8mm) make use of an unmounted abrasive mounted directly onto the stoneholder. Stoneholders for 1.50-3.50in. (38,1-88,9mm) make use of shell mounted abrasives "press fit" into the stoneholder. Stoneholders for 4.00in. & up (101,6mm) make use of shell mounted abrasives "clamped" into the stoneholder.
3. The stoneholder series G14C101 thru G14C105 called out for the 6in. tool are used in all tools in the range: 6-18in. diameter. Each holder will cover the same range for a given diameter.
   Ex.: G14C102 used in 13.0in. Dia. Tool
   Range: 13.01-13.31

Tandem Stoneholders

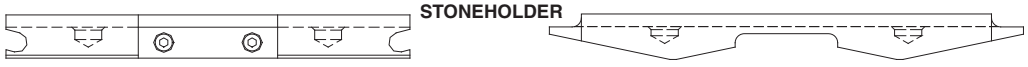
For Tandem Stoneholders contact your local Sunnen Field Service Engineer or your local authorized Sunnen Distributor.

Sunnen GH® Honing Tool System

GH®-210 Stoneholders

(Includes Sunnen & Other Manufacturers Machines)

Stoneholders



Flatback Stoneholder
used with Flange Type Hone Head

Angleback Stoneholder
used with Slotted Type Hone Head

Order Item 4:

NOTE: When ordering, specify Part Number, Stoneholder and Hone Head.

Tool Size O.D. in. (mm)	Range in. (mm)	4 Stoneholder Part Number[3]	Height in. (mm)	Abrasive Size[1] (W x H x L) Conv. Abr. (See Pg. 27)	Superabr. (See Pg. 32)	Abrasive Mounting[2] Type
7.00 (177,8) (for G1/G2/GS/GRF Tools)	6.76-7.06 (171,7-179,3) -7.31 (-185,7) -7.56 (-192,0) -7.81 (-198,4) -8.06 (-204,7)	G14C101 G14C102 G14C103 G14C104 G14C105	0.850in. (21,6mm) 0.975in. (24,8mm) 1.100in. (27,9mm) 1.225in. (31,1mm) 1.350in. (34,3mm)	1/2x1/2x8 MTD (12,7x12,7x203,2 MTD) *(See Pg. 31)*	.250x.312x8 (1/2x8 MTD) (6,4x7,9x203,2 (12,7x203,2) *(See Pg. 40)*	N/A
8.00 (203,2) (for G1/G2/GS/GRF Tools)	7.76-8.06 (197,1-204,7) -8.31 (-211,1) -8.56 (-217,4) -8.81 (-223,8) -9.06 (-230,1)	G14C101 G14C102 G14C103 G14C104 G14C105	0.850in. (21,6mm) 0.975in. (24,8mm) 1.100in. (27,9mm) 1.225in. (31,1mm) 1.350in. (34,3mm)	1/2x1/2x8 MTD (12,7x12,7x203,2 MTD) *(See Pg. 31)*	.250x.312x8 (1/2x8 MTD) (6,4x7,9x203,2 (12,7x203,2) *(See Pg. 40)*	N/A
9.00 (228,6) (for G1/G2/GS/GRF Tools)	8.76-9.06 (222,5-230,1) -9.31 (-236,5) -9.56 (-242,8) -9.81 (-249,2) -10.06 (-255,5)	G14C101 G14C102 G14C103 G14C104 G14C105	0.850in. (21,6mm) 0.975in. (24,8mm) 1.100in. (27,9mm) 1.225in. (31,1mm) 1.350in. (34,3mm)	1/2x1/2x8 MTD (12,7x12,7x203,2 MTD) *(See Pg. 31)*	.250x.312x8 (1/2x8 MTD) (6,4x7,9x203,2 (12,7x203,2) *(See Pg. 40)*	N/A
10.00 (254,0) (for G1/G2/GS/GRF Tools)	9.76-10.06 (247,9-255,5) -10.31 (-261,9) -10.56 (-268,2) -10.81 (-274,6) -11.06 (-280,9)	G14C101 G14C102 G14C103 G14C104 G14C105	0.850in. (21,6mm) 0.975in. (24,8mm) 1.100in. (27,9mm) 1.225in. (31,1mm) 1.350in. (34,3mm)	1/2x1/2x8 MTD (12,7x12,7x203,2 MTD) *(See Pg. 31)*	.250x.312x8 (1/2x8 MTD) (6,4x7,9x203,2 (12,7x203,2) *(See Pg. 40)*	N/A
11.00 (279,4) (for G1/G2/GS/GRF Tools)	10.76-11.06 (273,3-280,9) -11.31 (-287,3) -11.56 (-293,6) -11.81 (-300,0) -12.06 (-306,3)	G14C101 G14C102 G14C103 G14C104 G14C105	0.850in. (21,6mm) 0.975in. (24,8mm) 1.100in. (27,9mm) 1.225in. (31,1mm) 1.350in. (34,3mm)	1/2x1/2x8 MTD (12,7x12,7x203,2 MTD) *(See Pg. 31)*	.250x.312x8 (1/2x8 MTD) (6,4x7,9x203,2 (12,7x203,2) *(See Pg. 40)*	N/A
12.00 (304,8) (for G1/G2/GS/GRF Tools)	11.76-12.06 (298,7-306,3) -12.31 (-312,7) -12.56 (-319,0) -12.81 (-325,4) -13.06 (-331,7)	G14C101 G14C102 G14C103 G14C104 G14C105	0.850in. (21,6mm) 0.975in. (24,8mm) 1.100in. (27,9mm) 1.225in. (31,1mm) 1.350in. (34,3mm)	1/2x1/2x8 MTD (12,7x12,7x203,2 MTD) *(See Pg. 31)*	.250x.312x8 (1/2x8 MTD) (6,4x7,9x203,2 (12,7x203,2) *(See Pg. 40)*	N/A
13.00 (330,2) (for G1/G2/GS/GRF Tools)	12.76-13.06 (324,1-331,7) -13.31 (-338.1) -13.56 (-344,4) -13.81 (-350,8) -14.06 (-357,1)	G14C101 G14C102 G14C103 G14C104 G14C105	0.850in. (21,6mm) 0.975in. (24,8mm) 1.100in. (27,9mm) 1.225in. (31,1mm) 1.350in. (34,3mm)	1/2x1/2x8 MTD (12,7x12,7x203,2 MTD) *(See Pg. 31)*	.250x.312x8 (1/2x8 MTD) (6,4x7,9x203,2 (12,7x203,2) *(See Pg. 40)*	N/A
14.00 (335,6) (for G1/G2/GS/GRF Tools)	13.76-14.06 (349,5-357,1) -14.31 (-363,5) -14.56 (-369,8) -14.81 (-376,2) -14.06 (-382,5)	G14C101 G14C102 G14C103 G14C104 G14C105	0.850in. (21,6mm) 0.975in. (24,8mm) 1.100in. (27,9mm) 1.225in. (31,1mm) 1.350in. (34,3mm)	1/2x1/2x8 MTD (12,7x12,7x203,2 MTD) *(See Pg. 31)*	.250x.312x8 (1/2x8 MTD) (6,4x7,9x203,2 (12,7x203,2) *(See Pg. 40)*	N/A
15.00 (381,0) (for G1/G2/GS/GRF Tools)	14.76-15.06 (374,9-382,5) -15.31 (-388,9) -15.56 (-395,2) -15.81 (-401,6) -16.06 (-407,9)	G14C101 G14C102 G14C103 G14C104 G14C105	0.850in. (21,6mm) 0.975in. (24,8mm) 1.100in. (27,9mm) 1.225in. (31,1mm) 1.350in. (34,3mm)	1/2x1/2x8 MTD (12,7x12,7x203,2 MTD) *(See Pg. 31)*	.250x.312x8 (1/2x8 MTD) (6,4x7,9x203,2 (12,7x203,2) *(See Pg. 40)*	N/A

***NOTE:**
1. Refer to abrasive tables for aluminum oxide, silicon carbide, or CBN/diamond.
2. Stoneholders for .50-1.25in. (12,7-31,8mm) make use of an unmounted abrasive mounted directly onto the stoneholder. Stoneholders for 1.50-3.50in. (38,1-88,9mm) make use of shell mounted abrasives "press fit" into the stoneholder. Stoneholders for 4.00in. & up (101,6mm) make use of shell mounted abrasives "clamped" into the stoneholder.
3. The stoneholder series G14C101 thru G14C105 called out for the 6in. tool are used in all tools in the range: 6-18in. diameter. Each holder will cover the same range for a given diameter.
   Ex.: G14C102 used in 13.0in. Dia. Tool
   Range: 13.01-13.31

Tandem Stoneholders

For Tandem Stoneholders contact your local Sunnen Field Service Engineer or your local authorized Sunnen Distributor.

Sunnen GH® Honing Tool System

Abrasives - Conventional Abrasive Stone Numbering System

Conventional Abrasive Stone Numbering System

A	B	C	D	E	F	G	H	I
GC	***A***	***09***	***K***	***06***	***B***	***FR***		***MP***
Abrasive Prefix	**Grit Type**	**Grit Size**	**Hardness/ Grade**	**Structure/ Porosity**	**Bond Type**	**Stone Dimension**	**Impregnation Type**	**Mounting Configuration**
	Aluminum Oxide	01 = 36	(SOFTER)		**Vitrified**	KT =	Blank = sulfur	LB = 5/16x6
GC = press to size	A = Reg. A/O	05 = 80	I	06	B = V3P	5/16x5/16x6	1 = no sulfur	Shell Mtd
SN = cut to size	AW = Blend of "A" & "9A"	07 = 100	J	12	F = V4P	IU =		LA = 3/8x6
PR = cut to size	9A = White A/O	09 = 120	K		G = VSN	3/8x3/8x6		Shell Mtd
		11 = 150	L			IV =		ML = 3/8x8
		13 = 180	M		**Resin**	3/8x3/8x8		Shell Mtd
		17 = 240	(HARDER)		Q = BSN	FP =		MI = 1/2x6
	Silicon Carbide	19 = 280			H = BSN	1/2x1/2x6		Shell Mtd
	C = Black Silicon Carbide	21 = 320				FR =		MP = 1/2x8
	1C = Green Silicon Carbide	23 = 400				1/2x1/2x8		Shell Mtd
		25 = 500						Blank = unmounted
		27 = 600						

Example: Description:

GC A 09 K 06 B FR _ MP

- MP — Holder (I)
- FR — Impregnation Type (H)
- B — Stone Dimension (F)
- 06 — Bond Type (F)
- K — Structure / Porosity (E)
- 09 — Hardness / Grade (D)
- A — Grit Size (C)
- GC — Grit Type (B)
- Abrasive Prefix (A)

Abrasive Spec. (See Chart Below): A120K6V3SP

Stone Size: 1/2 x 1/2 x 8" (12,7 x 12,7 x 203,2mm)

Mounting: 1/2 x 8" (12,7 x 203,2mm) Shell mount with 5-1/2" (139,7mm) hole spacing w/ no hooks

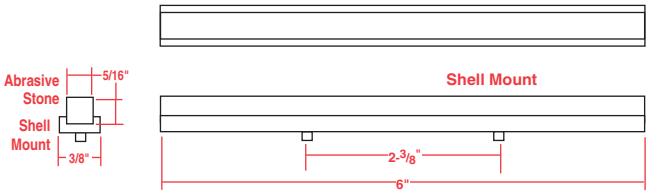
Abrasive Spec

A	120	K	6	V3	S	P
Grit Type	**Grit Size**	**Hardness**	**Structure**	**Bond Type**	**Impregnation**	**Manufacturer**
Aluminum Oxide A = Reg. A/O AW = 50/50 mix of "A" & "9A" 9A = White A/O **Silicon Carbide** C = Black SiC 1C = Green SiC	80 100 120 150 180 240 280 320 400 500 600 800 1000 1200	(SOFTER) G H I J K L M (HARDER)	(MORE DENSE) 6* 12 (LESS DENSE) *6 is standard	V3 = Vitrified A/O V4 = Vitrified SiC VSN = Vitrified (other) BSN = Resin	S = Sulfur Blank = no impregnation	P = Pressed to size NO "P" = Other

Sunnen GH® Honing Tool System

Abrasives - Conventional Abrasive Stone Assemblies

Abrasive Size:
5/16 x 5/16 x 6in.
(7,9 x 7,9 x 152,4mm)



5
ABRASIVE

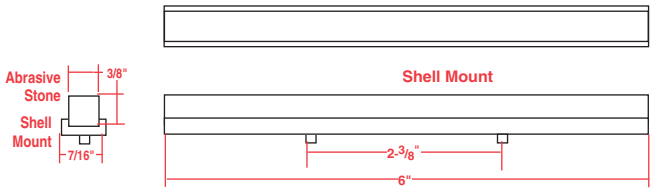
Available Stone Assemblies

	Grit Sizes							
	36	80	120	120[3] Color Coding	150	180	240	400
	Reg. Aluminum Oxide Stone (A) - 345 per box							
Hard - - Soft	PRA01X07HKT1LB	GCA05K06BKTLB	GCA09J06BKTLB GCA09K06BKTLB GCA09L06BKTLB GCA09M06BKTLB	 (Blu) (Red) (Yel)				
	Mixed Reg. & White Aluminum Oxide Stones (AW) - 345 per box							
Hard - - Soft		GCAW05K06BKTLB	GCAW09J06BKTLB GCAW09K06BKTLB					

NOTES:
1. Abrasives items listed are SULFUR FILLED.
2. Abrasives items listed are for MOUNTED abrasives.
3. Color Coding for Reg. Aluminum Oxide 120 Grit ONLY:
   J=Black K=Blue L=Red M=Yellow

Sunnen GH® Honing Tool System

Abrasives - Conventional Abrasive Stone Assemblies



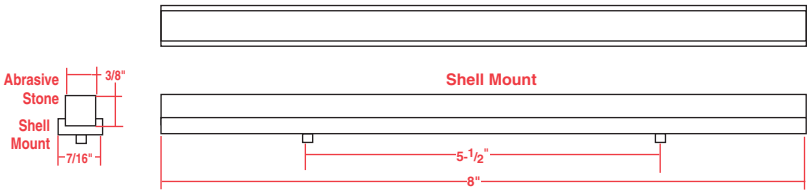
5 ABRASIVE

Abrasive Size:
3/8 x 3/8 x 6in.
(9,5 x 9,5 x 152,4mm)

Available Stone Assemblies

Grit Sizes	80	100	120	120[3] Color Coding	150	180	240	400
Reg. Aluminum Oxide Stone (A) - 260 per box			GCA09J06BIULA GCA09K06BIULA GCA09L06BIULA	(Blu) (Red)				SNA23J99GIULA
Mixed Reg. & White Aluminum Oxide Stones (AW) - 260 per box			GCAW09J06BIULA					
White Aluminum Oxide Stones (9A) - 260 per box			GC9A09G12BIULA					

Hard - - Soft



5 ABRASIVE

Abrasive Size:
3/8 x 3/8 x 8in.
(9,5 x 9,5 x 203,2mm)

Available Stone Assemblies

Grit Sizes	36	80	120	120[3] Color Coding	150	180	240	400
Reg. Aluminum Oxide Stone (A) - 195 per box	PRA01X07HIV1ML	GCA05K06BIVML PRA05X07HIV1ML	GCA09J06BIVML GCA09K06BIVML GCA09L06BIVML GCA09M06BIVML	(Blk) (Blu) (Red) (Yel)				SNA23J99GIVML
Mixed Reg. & White Aluminum Oxide Stones (AW) - 195 per box			GCAW09I06BIVML GCAW09J06BIVML GCAW09K06BIVML					
White Aluminum Oxide Stones (9A) - 195 per box			GC9A09G12BIVML					
White Aluminum Oxide Stones (1C) - 195 per box			GC1C07I12FIVML					

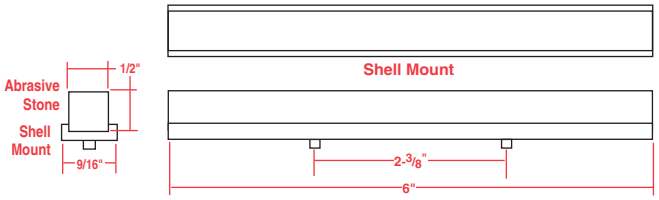
Hard - - Soft

NOTES:
1. Abrasives items listed are SULFUR FILLED.
2. Abrasives items listed are for MOUNTED abrasives.
3. Color Coding for Reg. Aluminum Oxide 120 Grit ONLY:
   J=Black K=Blue L=Red M=Yellow

Sunnen GH® Honing Tool System

Abrasives - Conventional Abrasive Stone Assemblies

Abrasive Size:
1/2 x 1/2 x 6in.
(12,7 x 12,7 x 152,4mm)



⑤
ABRASIVE

Available Stone Assemblies

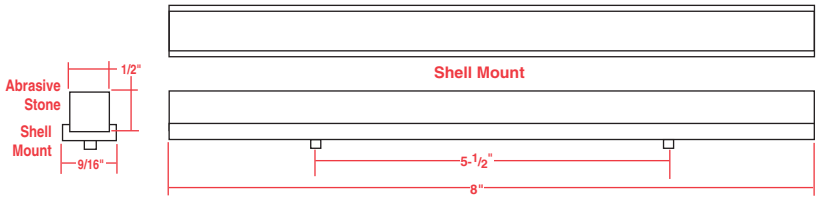
Grit Sizes

	80	100	120	120[3] Color Coding	150	180	240	400
Reg. Aluminum Oxide Stone (A) - 160 per box								
Hard - - Soft			GCA09J06BFPMI					
Mixed Reg. & White Aluminum Oxide Stones (AW) - 160 per box								
Hard - - Soft								

NOTES:
1. Abrasives items listed are SULFUR FILLED.
2. Abrasives items listed are for MOUNTED abrasives.
3. Color Coding for Reg. Aluminum Oxide 120 Grit ONLY:
   J=Black K=Blue L=Red M=Yellow

Sunnen GH® Honing Tool System

Abrasives - Conventional Abrasive Stone Assemblies



5
ABRASIVE

Abrasive Size:
1/2 x 1/2 x 8in.
(12,7 x 12,7 x 152,4mm)

Available Stone Assemblies

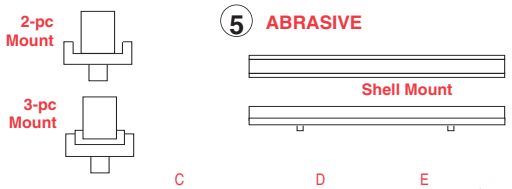
Grit Sizes							
80	100	120	120[3] Color Coding	150	180	240	400
Reg. Aluminum Oxide Stone (A) - 110 per box							
GCA05I06BFRMP		GCA09I06BFRMP					
		GCA09J06BFRMP	(Blk)			GCA17J06BFRMP	SNA23J99GFRMP
GCA05K06BFRMP		GCA09K06BFRMP	(Blu)				
		GCA09L06BFRMP	(Red)				
PRA01X07HRIMP(36)		GCA09M06BFRMP	(Yel)				
Mixed Reg. & White Aluminum Oxide Stones (AW) - 110 per box							
		GCAW09I06BFRMP					
GCAW05J06BFRMP		GCAW09J06BFRMP					
GCAW05K06BFRMP		GCAW09K06BFRMP					
White Aluminum Oxide Stones (9A) - 110 per box							
		GC9A09G12BFRMP					
Black Silicon Carbide Stones (C) - 110 per box							
	GCC07K06FFRMP						
GCC05L06FFRMP							
Green Silicon Carbide Stones (1C) - 110 per box							
	GC1C07I12FFRMP						

NOTES:
1. Abrasives items listed are SULFUR FILLED.
2. Abrasives items listed are for MOUNTED abrasives.
3. Color Coding for Reg. Aluminum Oxide 120 Grit ONLY:
   J=Black K=Blue L=Red M=YellowM

Sunnen GH® Honing Tool System

Abrasives - Superabrasive Stone Numbering System

Superabrasive Stone Numbering System



A	B	C	D	E	F	G	H	I
GH	***N***	***01***	***M***	***D***	***E***	***19***	***SF***	***FC***
Superabrasive Prefix	**Abrasive Type**	**Grit Size**	**Bond Type**	**Bond Durability**	**Grit Conc.**	**Abrasive Depth**	**Stone Dimension**	**Mounting Configuration**
GH or GS = GHC	**Diamond** D = Std Syn Diamond, semi-tough G = Syn Diamond, semi-friable R = Syn Diamond, friable **CBN/Borazon** N = Std Microcystalline CBN	**Mesh Size** 01 = 30/40 04 = 50/60 05 = 60/80 07 = 80/100 09 = 100/120 10 = 120/140 11 = 140/170 13 = 170/200 15 = 200/230 17 = 230/270 19 = 270/325 21 = 325/400 **Micron / Mesh Size**[1] 31 = 36-51 / 500 32 = 30-40 33 = 22-36 / 600 35 = 15-25 / 800 37 = 12-22 / 900 39 = 6-12 / 1200 41 = 3-6 43 = 2-4	M = Metal	**Metalbond** (MORE DURABLE) D A B G (LESS DURABLE) X = Misc.	B = 25 C = 35 D = 50 E = 75 F = 100 X = Misc.	Depth in 1/100in. 13 = .125(3,2) 16 = .160(4,1) 19 = .190(4,8) 25 = .250(6,4)	RB = .062x.062x2 UG = .125x.070x2.5 RD = .125x.125x3 RE = .125x.125x4 RV = .187x.218x6 SC = .187x.250x6 RL = .250x.250x6 SH = .250x.312x6 SF = .250x.250x8 SG = .250x.312x8	LB = 5/16x6 2pc Shell Mtd FG = 3/8x6 3pc Shell Mtd FB = 3/8x8 3pc Shell Mtd FH = 1/2x6 3pc Shell Mtd FC = 1/2x8 3pc Shell Mtd

Note 1: Mesh Size is an approximation and for reference purpose only.

Example:

GH N 01 M D E 19 SF FC

Description:

- FC — Mounting Type (I)
- SF — Stone Dimension (H)
- 19 — Abrasive Depth (G)
- E — Grit Conc. (F)
- D — Bond Durability (E)
- M — Bond Type (D)
- 01 — Grit Size (C)
- N — Abrasive Type (B)
- GH — Superabrasive Prefix (A)

Abrasive Spec. **(See Chart Below):**
CBN 30/40 mesh; 75 conc.;
D-metalbond; (NMDD8)

Stone Size: .250 x .250 x 8 (6,4 x 6,4 x 203,2mm)

Abrasive Depth: .190in. (4,8mm)

Mounting: 1/2 x 8in. (12,7 x 203,2mm)
3-pc Shell mount

Abrasive Spec

N — **MD** — **D** — **8**

Grit Type	Bond
Diamond D = semi-tough G = semi-friable R = friable CBN / Borazon N = Microcystalline	(MORE DURABLE) MD MA MB MC MG MF (LESS DURABLE)

Grit Size		
Diamond	**CBN**	**Grain Size**
D	D	30/40
C	C	40/60
CP	CP	50/60
1	1	60/80
2	2	80/100
3	3	100/120
3F	3F	120/140
4	4	140/170
5	4F	170/200
5D	5	200/230
6	5T	230/270
7	6	270/325
8	8	325/400
9	9	36-54 micron
9T	9T	30-40 micron
0	0	22-36 micron
80	80	15-25 micron
A or 90	A or 90	12-22 micron
B or 00	B or 00	6-12 micron
000	000	3-6 micron
00K	00K	2-4 micron

Concentration
5 = 25
6 = 35
7 = 50
8 = 75
9 = 100

Sunnen GH® Honing Tool System

Abrasives - Superabrasive Stones

5
ABRASIVE

Abrasive Size:
.062 x .062 x 2in.
(1,6 x 1,6 x 50,8mm)

Available Stones	Grit Sizes							
	60/80	80/100	100/120	140/170	200/230	270/325	325/400	22-36 Microns
			GSN09MAD06RB		GSN15MAD06RB		GSN21MAE06RB	

5
ABRASIVE

Abrasive Size:
.125 x .070 x 2.5in.
(3,2 x 1,8 x 63,5mm)

Available Stones	Grit Sizes							
	60/80	80/100	100/120	140/170	200/230	270/325	325/400	22-36 Microns
		GSN07MAD07UG[][]			GSN15MAD07UG[][]		GSN21MAD07UG[][]	

NOTES:

1. Abrasives items listed are for UNMOUNTED Abrasives.
2. If stone is to be mounted, fill in last [2] digits (shown as [][]) with Abrasive Mounting Type (see Pg. 24 & 25).
3. Abrasives may be special order. - Contact Customer Service for availability.

Sunnen GH® Honing Tool System

Abrasives - Superabrasive Stones

Abrasive Size:
.125 x .125 x 3in.
(3,2 x 3,2 x 76,2mm)

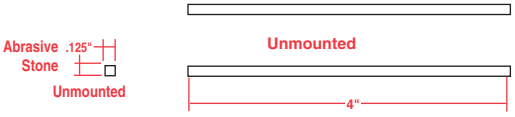
5
ABRASIVE

Available Stones

Grit Sizes

60/80	80/100	100/120	140/170	200/230	270/325	325/400	22-36 Microns
GHD05MAD13RD[][] GHN05MDE13RD[][]		GHD09MAD13RD[][] GHN09MAD13RD[][]		GHN15MAD13RD[][]		GHD21MAD13RD[][] GHN21MAD13RD[][]	

Abrasive Size:
.125 x .125 x 4in.
(3,2 x 3,2 x 101,6mm)



5
ABRASIVE

Available Stones

Grit Sizes

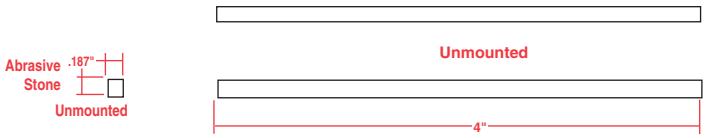
30/40	60/80	100/120	140/170	200/230	270/325	325/400	22-36 Microns
	GHD05MAD13RE[][] GHN05MAD13RE[][]	GHD09MAD13RE[][] GHN09MAD13RE[][]		GHN15MAD13RE[][]		GHD21MAD13RE[][] GHN21MAD13RE[][]	

NOTES:

1. Abrasives items listed are for UNMOUNTED Abrasives.
2. If stone is to be mounted, fill in last [2] digits (shown as [][]) with Abrasive Mounting Type (see Pg. 24 & 25).
3. Abrasives may be special order. - Contact Customer Service for availability.

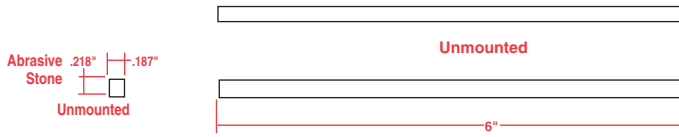
Sunnen GH® Honing Tool System

Abrasives - Superabrasive Stones



Abrasive Size:
.187 x .187 x 4in.
(4,8 x 4,8 x 101,6mm)

Available Stones	Grit Sizes						
30/40	80/100	100/120	140/170	200/230	270/325	325/400	22-36 Microns
GHN01MAE13RF		GHN09MAB13RF		GHN15MAD13RF		GHN21MAD19RF	



Abrasive Size:
.187 x .218 x 6in.
(4,8 x 5,6 x 152,4mm)

Available Stones	Grit Sizes						
60/80	80/100	100/120	140/170	200/230	270/325	325/400	22-36 Microns
GHN05MAD16RV[][]		GHN09MAD16RV[][]		GHN15MAD16RV[][]		GHN21MAD16RV[][]	

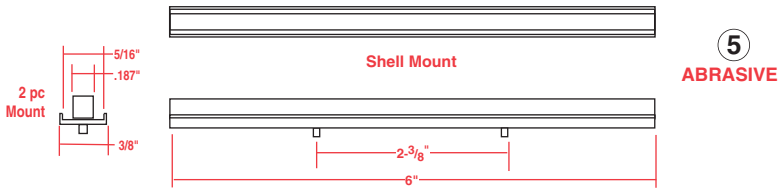
NOTES:

1. Abrasives items listed are for UNMOUNTED Abrasives.
2. If stone is to be mounted, fill in last [2] digits (shown as [][]) with Abrasive Mounting Type (see Pg. 24 & 25).
3. Abrasives may be special order. - Contact Customer Service for availability.

Sunnen GH® Honing Tool System

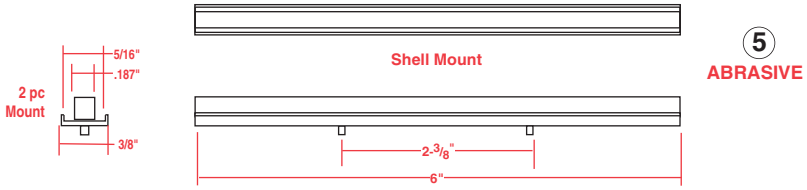
Abrasives - Superabrasive Stone Assemblies

Abrasive Size:
.187 x .250 x 6in.
(4,8 x 6,4 x 152,4mm)
Assembly Size:
5/16x6in. (7,9 x 152,4mm)



Available Stones	Grit Sizes							
	60/80	80/100	100/120	140/170	200/230	270/325	325/400	22-36 Microns
	GHN05MAD13SCLB		GHN09MAD19SCLB		GHN15MAB19SCLB		GHN21MAB19SCLB	

Abrasive Size:
.187 x .312 x 6in.
(4,8x 7,9 x 152,4mm)
Assembly Size:
5/16x6in. (7,9 x 152,4mm)

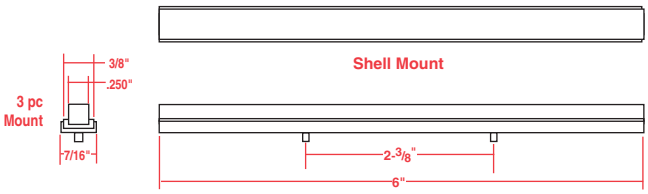


Available Stones	Grit Sizes							
	30/40	80/100	100/120	140/170	200/230	270/325	325/400	22-36 Microns
			GHN09MAD25SMLB				GHN21MBB25SMLB	

NOTES:
1. Abrasives items listed are for MOUNTED Abrasives.
2. Abrasives may be special order. - Contact Customer Service for availability.

Sunnen GH® Honing Tool System

Abrasives - Superabrasive Stone Assemblies

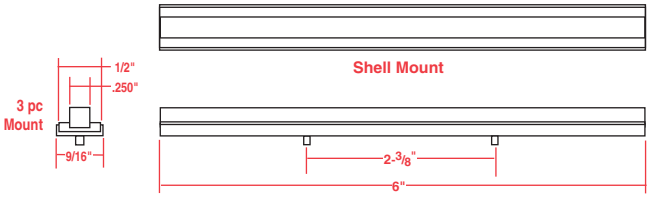


5 ABRASIVE

Abrasive Size:
.250 x .250 x 6in.
(6,4 x 6,4 x 152,4mm)
Assembly Size:
3/8x6in. (9,5 x 152,4mm)

Available Stones

Grit Sizes							
30/40	80/100	100/120	140/170	200/230	270/325	325/400	22-36 Microns
GHN01MDE19RLFG		GHN09MAD19RLFG		GHN15MAD19RLFG			



5 ABRASIVE

Abrasive Size:
.250 x .250 x 6in.
(6,4 x 6,4 x 152,4mm)
Assembly Size:
1/2x6in. (12,7 x 152,4mm)

Available Stones

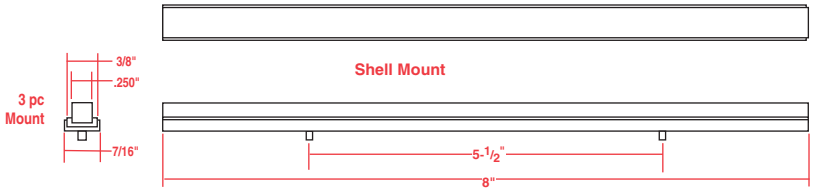
Grit Sizes							
30/40	80/100	100/120	140/170	200/230	270/325	325/400	22-36 Microns
		GHN09MAD19RLFH			GHN15MGD19RLFH		

NOTES:
1. Abrasives items listed are for MOUNTED Abrasives.
2. Abrasives may be special order. - Contact Customer Service for availability.

Sunnen GH® Honing Tool System

Abrasives - Superabrasive Stone Assemblies

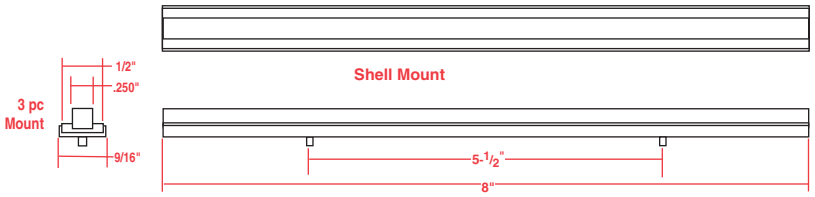
Abrasive Size:
.250 x .250 x 8in.
(6,4 x 6,4 x 203,2mm)
Assembly Size:
3/8x8in. (9,5x 203,2mm)



5
ABRASIVE

Available Stones	Grit Sizes							
	30/40	80/100	100/120	140/170	200/230	270/325	325/400	22-36 Microns
	GHN01MAE19SFFB GHN01MDE19SFFB		GHN09MAD19SFFB		GHN15MAD19SFFB		GHN21MAD19SFFB	

Abrasive Size:
.250 x .250 x 8in.
(6,4 x 6,4 x 203,2mm)
Assembly Size:
1/2x8in. (12,7 x 203,2mm)



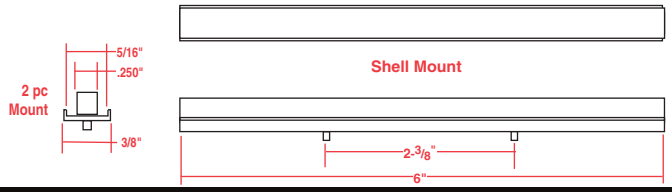
5
ABRASIVE

Available Stones	Grit Sizes							
	30/40	80/100	100/120	140/170	200/230	270/325	325/400	22-36 Microns
	GHN01MDE19SFGN				GHN15MAD19SFGN		GHN21MAD19SFGN	

NOTES:
1. Abrasives items listed are for MOUNTED Abrasives.
2. Abrasives may be special order. - Contact Customer Service for availability.

Sunnen GH® Honing Tool System

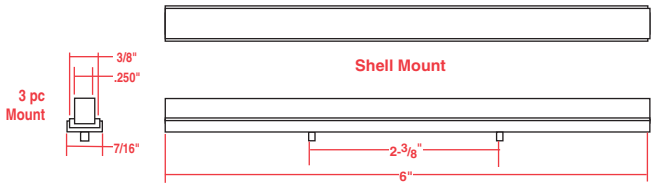
Abrasives - Superabrasive Stone Assemblies



5
ABRASIVE

Abrasive Size:
.250 x .312 x 6in.
(6,4 x 7,9 x 152,4mm)
Assembly Size:
5/16x6in. (7,9 x 152,4mm)

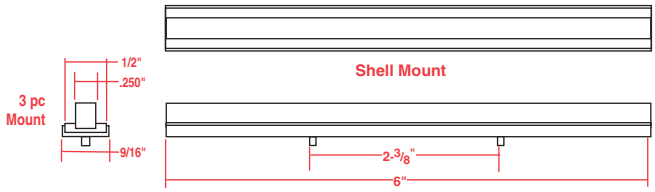
Available Stones	Grit Sizes						
30/40	80/100	100/120	140/170	200/230	270/325	325/400	22-36 Microns
GHN01MDE25SHLB		GHN09MAD25SHLB		GHN15MADSHLB			



5
ABRASIVE

Abrasive Size:
.250 x .312 x 6in.
(6,4 x 7,9 x 152,4mm)
Assembly Size:
3/8x6in. (9,5 x 152,4mm)

Available Stones	Grit Sizes						
30/40	80/100	100/120	140/170	200/230	270/325	325/400	22-36 Microns
		GHN09MAD25SHFG		GHN15MAD19SHFG			



5
ABRASIVE

Abrasive Size:
.250 x .312 x 6in.
(6,4 x 7,9 x 152,4mm)
Assembly Size:
1/2x6in. (12,7 x 152,4mm)

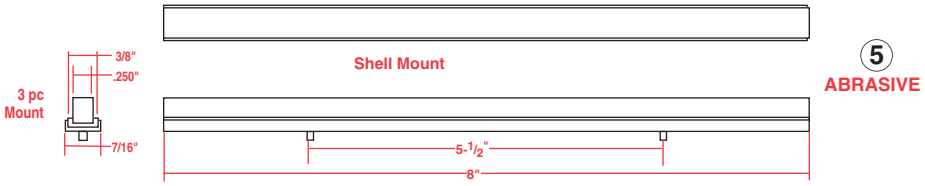
Available Stones	Grit Sizes						
30/40	80/100	100/120	140/170	200/230	270/325	325/400	22-36 Microns
GHN01MDE25SHFH				GHN15MAD25SHFH			

NOTES:
1. Abrasives items listed are for MOUNTED Abrasives.
2. Abrasives may be special order. - Contact Customer Service for availability.

Sunnen GH® Honing Tool System

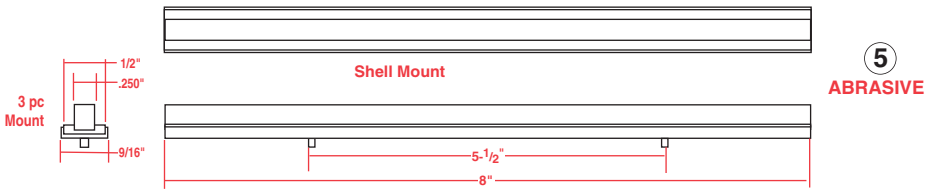
Abrasives - Superabrasive Stone Assemblies

Abrasive Size:
.250 x .312 x 8in.
(6,4 x 7,9 x 203,2mm)
Assembly Size:
3/8x8in. (9,5 x 203,2mm)



Available Stones	Grit Sizes							
	30/40	80/100	100/120	140/170	200/230	270/325	325/400	22-36 Microns
	GHN01MDE25SGFB		GHN09MAE25SGFB		GHN15MAD25SGFB			

Abrasive Size:
.250 x .312 x 8in.
(6,4 x 7,9 x 203,2mm)
Assembly Size:
1/2x8in. (12,7 x 203,2mm)



Available Stones	Grit Sizes							
	30/40	80/100	100/120	140/170	200/230	270/325	325/400	22-36 Microns
	GHN01MDE25SGGN				GHN15MAD25SGGN			

NOTES:
1. Abrasives items listed are for MOUNTED Abrasives.
2. Abrasives may be special order. - Contact Customer Service for availability.

Sunnen GH® Honing Tool System

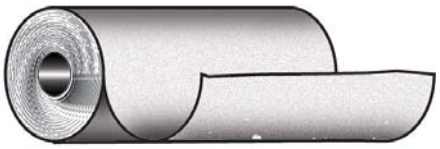
Sand Paper

Sand Paper

Part Number	Roll Width (IN)	Roll Length (YDS)	Grit Size	Availability
ROLLS6X5080X	6	50	80	4 Weeks
ROLLS6X50100X			100	4 Weeks
ROLLS6X50180X			180	Stock
ROLLS6X50220X			220	Stock
ROLLS8X5080X	8	50	80	Stock
ROLLS8X50100X			100	Stock
ROLLS8X50150X			150	Stock
ROLLS8X50180X			180	Stock
ROLLS8X50240X			240	Stock
ROLLS8X50320X			320	Stock
ROLLS8X50400X			400	Stock

Sunnen GH® Honing Tool System

Filter Paper



Filter Paper

Part Number	Micron Size	Roll Width (IN)	Roll Length (YDS)	Core Size	Availability
F322064	10	18	100	2	2 Wks
F322073	20	39.5	150	2	2 Wks
F322037		48	500	2	2 Wks
F322066	40	18	100	2	2 Wks
F322038	50	20.5	250	2	Stock
F322062		21	250	2	2 Wks
F322058		24	100	2	2 Wks
F322077			100	3	2 Wks
F322069		26.75	250	2	2 Wks
F322002		30	250	2	2 Wks
F322053		32	250	2	Stock
F322072		36	100	2	2 weeks
F322008			250	2	stock
F322065		38	150	2	2 weeks
F322067		39.5	150	2	2 weeks
F322071		40	250	2	2 weeks
F322020		48	250	2	stock
F322068		50	250	2	2 weeks
F322070		50.65	250	2	2 weeks
F322074		55	250	2	stock
F322026	80	20	250	2	stock
F322075		30	150	2	2 weeks
F322044			250	2	2 weeks
F322041		36	250	2	stock
F322056		50	250	2	stock
F322076			250	3	2 weeks

NOTE: 2 inch core size is standard; 3 inch is available as special order.
Table sorted by micron size first, then roll width, then roll length.

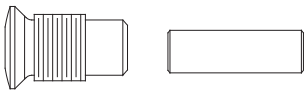
Coolants

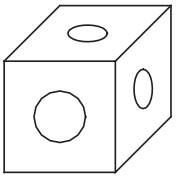
Oils

Description	Part Number
Honing Base (55gal. Drum)	GHC200
Premixed Coolant (55gal. Drum)	GHC351C55

Sunnen GH Honing Tool System

Replacement Parts - Universal Blocks, Drive Screws & Pins





Pins

Tool Size	Part Number
1.25in. (31,8mm)	G16A139
1.50in. (38,1mm)	G16A122
1.75in. (44,5mm)	G16A138

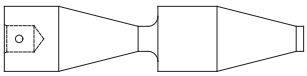
Drive Screws

Tool Size	Part Number
2.00in. (50,8mm)	G16A102
2.50in. (63,5mm)	G16A109
3.00-4.00in. (76,2-101,6mm)	G16A116
4.50-5.00in. (76,2-127,0mm)	G16A112
6.00-13.00in. (152,4-330,2mm)	G16A101
13.00-19.00in. (330,2-482,6mm)	G16A121
19.00-40.00in. (482,6-1016mm)	G16A105
#2 GHB	G16A102
#4 & #5 GHB	G16A112
#4M & #6M GHB	G16A112
#6 GHB	G16A101
#7 GHB	G16A105

Universal Blocks

Tool Size		Part Number
1.25in. (31,8mm)		G15A120
1.50in. (38,1mm)		G15A120
1.75in. (44,5mm)		G15A121
2.00in. (50,8mm)		G15A104
2.50in. (63,5mm)		G15A110
3.00in. (76,2mm)		G15A111
3.50in. (88,9mm)		G15A111
4.00in. (101,6mm)		G15A111
5.00in. (127,0mm)		G15A111
5.00-13.00in. (127,0-330,2mm)		G15A101
13.00-40.00in. (330,2-1016mm)		G15A115
#2 GHB		G15A104
#4 GHB		G15A107
#4M GHB	1.56in.	G15A107
#4M GHB	1.68in.	G15A108
#5 GHB		G15A106
#6 GHB		G15A101
#7 GHB		G15A112

Replacement Parts - Cones & Ring Nuts



Cones

Tool Size	Angles	Part Number
0.50in. (12,7mm)	3	G12B189
0.75in. (19,1mm)	3	G12B178
1.00in. (25,4mm)	3	G12C128
1.25in. (31,8mm)	3	G12B158
1.50in. (38,1mm)	3	G12B131
1.75in. (44,5mm)	3	G12B157
2.00in. (50,8mm)	3	G12B147
2.50in. (63,5mm)	3	G12B135
3.00in. (76,2mm)	3	G12B136
3.50in. (88,9mm)	2	G12B138
4.00in. (101,6mm)	2	G12B119
4.50in. (114,3mm)	2	G12B125
5.00in. (127,0mm)	2	G12B125
6.00-18.00in. (152,4-406,4mm)	2	G12B117

Ring Nuts - Tools

Tool Size	Shank	Part Number
1.25in. (31,8mm)	0.75in.	G19A114
1.50in. (38,1mm)	0.75in. 0.87in.	G19A114 G19A118
1.75in. (44,5mm)	0.87in. 1.12in.	G19A118 G19A111
2.00in. (50,8mm)	0.87in. 1.12in.	G19A104 G19A111
2.50in. (63,5mm)	1.12in. 1.50in. 1.75in.	G19A111 G19A109 G19A139
3.00in. (76,2mm)	1.12in. 1.50in. 1.75in.	G19A111 G19A109 G19A106
3.50-5.00in. (88,9-152,4mm)	1.50in. 1.75in. 2.25in.	G19A109 G19A106 G19A101
6.00-13.00in. (152,4-330,2mm)	1.75in. 2.25in. 3.00in.	G19A106 G19A101 G19A107
13.00-40.00in. (330,2-1016mm)	3.00in.	G19A107

Ring Nuts - Driveshaft

Shank End OD	Part Number
1.25in. (31,8mm)	G19A113
2.00in. (50,8mm)	G19A102
2.50in. (63,5mm)	G19A103
3.00in. (76,2mm)	G19A108
4.00in. (101,6mm)	G19A112
5.00in. (127,0mm)	G19A110

Sunnen GH® Honing Tool System

Replacement Parts - Expansion Pins

Expander Pins

Tool Size	Part Number
3.50in. (88,9mm)	G13A139
4.00in. (101,6mm)	G13A108
4.50in. (114,3mm)	G13A109
5.00in. (127,0mm)	G13A110
6.00in. (152,4mm)	G13A101
7.00in. (177,8mm)	G13A102
8.00in. (203,2mm)	G13A103
9.00in. (228,6mm)	G13A104
10.00in. (254,0mm)	G13A105
11.00in. (279,4mm)	G13A106
12.00in. (304,8mm)	G13A107
13.00-18.00in. (330,2-406,4mm)	G13A___
18.00-24.00in. (152,4-406,4mm)	G13A___
24.00-40.00in. (152,4-406,4mm)	G13A___

Replacement Parts - Retaining & Pigtail Springs

Retaining Springs used with Flange Type Hone Head

Retaining Spring[1]

Tool Size	Spring[2] Dia.	Spring[2] Length	Part Number
3.50 - 5.00in. (88,9 - 127,0mm)	3/16in.	12in.	F2076
6.00 - 7.00in. (152,4 - 177,8mm)	1/4in.	12in.	F2072
8.00 in. & Up (203,2mm & Up)	1/4in.	24in.	F2030

Retaining Springs For Other Applications

Retaining Spring[1]

Application	Spring[2] Dia.	Spring[2] Length	Part Number
Driveshaft	3/32in.	12in.	F2079
Special	3/32in.	12in.	F2077
Tooling	1/8in.	12in.	F2033
Tooling	5/32in.	12in.	F2080

Pigtail Springs used with Slotted Type Hone Head

Pigtail Spring[1] & Screw[3]

Tool Size	Spring[2] Dia.	Spring[2] Length	Part Number
1.25in. (31,8mm)			G21A104
1.50in. & Up (38,1mm & Up)			G21A134
Spring Screw[3]			G20A136-_

NOTES:

1. All springs sold in minimum quantities of 12 pcs. No mixing to attain minimum
2. Springs can be cut to length, for an additional cost.
3. Re: Spring Screws
   G20A136-3 1.25in.
   G20A136-1 1.50, 1.75, 2.00in.
   G20A136-2 2.50 & 3.00in.

Sunnen GH® Honing Tool System

Replacement Parts - Bushings & Wipers

Bushings

Shaft Diameter	Part Number
3/4 in. (19,1 mm)	G150C12322
1-1/8 in. (28,6 mm)	G150C12318
1-1/4 in. (31,8 mm)	G150C12317
1-3/8 in. (34,9 mm)	G150C12319
1-9/16 in. (39,7 mm)	G150C12316
1.90 in. (48,3 mm)	G150C12320
2 in. (50,8 mm)	G150C12321
2-1/4 in. (57,2mm)	G150C1235
2-1/2 in. (63,5 mm)	G150C1236
3 in. (76,2 mm)	G150C1237

Wipers

Shaft Diameter	Part Number
3/4 in. (19,1 mm)	F4302
7/8 in. (22,2 mm)	F4303
1-1/8 in. (28,6 mm)	F4304
1-1/4 in. (31,8 mm)	F4305
1-3/8 in. (34,9 mm)	F43019
1-1/2 in. (38,1 mm)	F4306
1-9/16 in. (39,7 mm)	F4307
2 in. (50,8 mm)	F43031
2-1/4 in. (57,2mm)	F4308
2-1/2 in. (63,5 mm)	F4309
3 in. (76,2 mm)	F43010
3-1/2 in. (88,9 mm)	F43011

Microfinishes

Microfinishes

This Chart gives the approximate microinch (µin) and micrometer (µm) readings to be expected on a variety of materials with specific grain sizes.

Material	Abrasive Type	Grit Size 80	100	120	150	180	220	240	320	400
Hard Steel	Aluminum Oxide/ Silicon Carbide	70-80 (1,8 -2,0)	60-70 (1,5-1,8)	40-60 (1,0-1,5)	40-50 (1,0-1,3)	20-40 (0,5-1,0)	20-30 (0,5-0,8)	15-30 (0,4-0,8)	10-20 (0,3-0,5)	5-10 (0,1-0,3)
	CBN	60-80 (1,5-2,0)	- -	- -	30-40 (0,9-1,0)	- -	25-35 (0,6-0,9)	- -	- -	14-30 (0,4-0,8)
Soft Steel	Aluminum Oxide/ Silicon Carbide	80-100 (2,0-2,5)	70-90 (1,8-2,3)	60-80 (1,5-2,0)	50-70 (1,3-1,8)	30-50 (0,8-1,3)	20-40 (0,5-1,0)	20-30 (0,5-0,8)	10-20 (0,3-0,5)	5-20 (0,1-0,5)
	CBN	60-110 (1,5-2,5)	- -	- -	40-60 (0,9-1,0)	- -	30-45 (0,8-1,3)	- -	- -	20-40 (0,5-1,0)
Carbide	Diamond	60-80 (1,5-2,0)	- -	- -	30-40 (0,8-1,0)	- -	25-35 (0,6-0,9)	- -	- -	15-25 (0,4-0,6)
Cast Iron	Silicon Carbide	80-100 (2,0-2,5)	80-90 (2,0-2,3)	60-80 (1,5-2,0)	60-70 (1,5-1,8)	40-60 (1,0-1,5)	40-50 (1,0-1,3)	20-40 (0,5-1,0)	20-30 (0,5-0,8)	5-20 (0,1-0,5)
	Diamond	80-120 (2,0-3,0)	- -	- -	40-60 (1,0-1,5)	- -	30-40 (0,8-1,0)	- -	- -	20-30 (0,5-0,8)
Chrome	Diamond	75-90 (1,9-2,3)	- -	- -	50-65 (1,3-1,6)	- -	35-50 (0,9-1,3)	- -	- -	20-35 (0,5-0,9)
Ceramic	Diamond	80-100 (2,0-2,5)	- -	- -	40-55 (1,0-1,4)	- -	35-45 (0,9-1,3)	- -	- -	25-35 (0,6-0,9)
Aluminum, Brass, Bronze	Silicon Carbide	80-100 (2,0-2,5)	80-90 (2,0-2,3)	60-80 (1,5-2,0)	60-70 (1,5-1,8)	40-60 (1,0-1,5)	20-40 (0,5-1,0)	20-30 (0,5-0,8)	10-20 (0,3-0,5)	5-20 (0,1-0,5)

GENERAL NOTES

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 Abrasive Engineering for recommendations.

☛Stone orders involving large quantities or unusual requirements available 2 - 4 weeks after receipt of order.

Sunnen GH® Honing Tool System

Troubleshooting Chart

Troubleshooting Chart

Witnessed Conditions	Corrective Action (In Usual Order of Importance)
Abrasive Glazing	Decrease spindle RPM Increase reciprocation Increase feed rate Use softer abrasives Decrease run-out time Use coarser grit stones Check coolant for hydraulic oil contamination
Abrasive Loading	Decrease spindle RPM Increase reciprocation Use softer abrasives Increase coolant's base content Use finer grit stones Use less porous stone Check coolant for hydraulic oil contamination
Abrasive Galling	Decrease spindle RPM Increase reciprocation Increase coolant's base content Use softer abrasives Check filtration of coolant Use finer grit stones Use less porous stone Use more coolant Check coolant for hydraulic oil contamination
Abrasive Spalling	Use light feed pressure at start of hone cycle Decrease feed rate Check tool slots, pins, cone, for wear Trial other abrasives
Finish Too Rough	Increase spindle RPM Decrease reciprocation Decrease feed rate Use finer grit stones Use harder abrasives Increase coolant's base content Increase run-out time
Finish too smooth	Decrease spindle RPM Increase reciprocation Increase feed rate Use coarser grit stones Use softer abrasives Decrease coolant's base content Decrease run-out time
Excessive Abrasive Usage	Increase spindle RPM Decrease reciprocation Decrease feed rate Use harder abrasives Increase coolant's base content
Tapered Stone Wear	Check spindle to part alignment Check tool slots, pins, cone, for wear Check that abrasives are on grade Use harder abrasives

Witnessed Conditions	Corrective Action (In Usual Order of Importance)
Eccentric Stone Wea	Check spindle to part alignment Check tool slots, pins, cone, for wear Check that abrasives are on grade Use harder abrasives
Slow Stock Removal	Increase feed rate Increase reciprocation Decrease spindle RPM Decrease coolant's base content Check coolant for hydraulic oil contamination Use softer abrasives Use coarser grit stones
Excessive Heat Generation	Check refrigeration of coolant Decrease feed rate Decrease coolant's base content Check coolant for hydraulic oil contamination Use more coolant Use softer abrasives Use more porous stone
Part Out-of-Round	Decrease feed rate Decrease spindle RPM Increase reciprocation Increase run-out time Check spindle to part alignment Use softer abrasives Check to see that fixture is not distorting part
Part Bell-Mouthed / Tapered	Adjust over-run of stroke Increase run-out time Check spindle to part alignment Check to see that fixture is not distorting part
Part Not Axially Straight	Use longer abrasives Check spindle to part alignment Check to see that fixture is not distorting part Check part accuracy prior to honing
Part Being Honed Eccentric to OD	Check spindle to part alignment Tram part face to determine that it is square to spindle Rotate part occasionally while honing
Swipe Marks in Bore	Use guides
Bore Not Square to Face	Tram part face to determine that it is square to spindle Check spindle to part alignment Check part accuracy prior to honing
Washout Around Keyways, Ports	Decrease feed rate Use finer grit stones Use fibre clad abrasives

Sunnen GH® Honing Tool System

RPM - Reciprocation - Feed Rate

Increasing RPM

1. Will make stones act harder ...
2. Will give finer surface finishes
3. Will cause a stone to stop cutting if increase is too great
4. Will increase noise level
5. will decrease crosshatch angle
6. Will decrease torque on part
7. Will decrease geometric accuracies if increase is too great

Increasing Reciprocation Speed

1. Will make stones act softer
2. Will give rougher surface finishes
3. Will increase a stone's ability to stay sharp and not glaze
4. Will decrease noise level
5. Will increase crosshatch angle
6. Will remove stock slower if speed is too excessive

Increasing Feed Pressure

1. Will cause stones to act softer
2. Will increase a stone's ability to stay sharp and not glaze
3. Will remove stock faster
4. Will increase torque on the part
5. Will contribute to geometric inaccuracies if too excessive
6. Will increase wear on machine and tooling
7. Will generate more heat
8. Will generate more noise
9. Will give rougher surface finishes
10. Will waste abrasive if too excessive

Decreasing RPM

1. will make stones act softer
2. Will give rougher surface finishes
3. Will increase a stone's ability to stay sharp and not glaze
4. Will decrease noise level
5. Will increase crosshatch angle
6. Will increase torque on part
7. Will allow bore to take greater possession of the tool, thereby contributing to greater geometric accuracies

Decreasing Reciprocation Speed

1. Will make stones act harder
2. Will give finer surface finishes
3. Will decrease a stone's ability to stay sharp and not glaze if too slow
4. Will increase noise level
5. Will decrease crosshatch angle
6. Will remove stock slower if speed is too slow

Decreasing Feed Pressure

1. Will cause stones to act harder
2. Will decrease a stone's ability to stay sharp and not glaze if reduced too much
3. Will remove stock more slowly
4. Will decrease torque on the part
5. Will contribute to better geometric accuracies
6. Will decrease wear on machine and tooling
7. Will generate less heat
8. Will generate less noise
9. Will give finer surface finishes
10. Will produce too long a time cycle if too light

Sunnen GH® Honing Tool System

Speed Conversion Chart - RPM / SFPM

Speed Conversion Chart

Recommended RPM for Aluminum Oxide / Silicon Carbide

Recommended RPM for CBN / Diamond

Bore Dia. (in.)	Surface Feet Per Minute (SFPM)											
	100	120	140	160	180	200	220	240	260	280	300	320
0.250	1528	1834	2139	2445	2751	3056	3362	3668	3973	4279	4585	4890
0.375	1019	1223	1426	1630	1834	2038	2241	2445	2649	2853	3056	3260
0.500	764	917	1070	1223	1375	1528	1681	1834	1987	2139	2292	2445
0.625	611	734	856	978	1100	1223	1345	1467	1589	1712	1834	1956
0.750	509	611	713	815	917	1019	1121	1223	1324	1426	1528	1630
0.875	437	524	611	699	786	873	961	1048	1135	1223	1310	1397
1.000	382	458	535	611	688	764	840	917	993	1070	1146	1223
1.125	340	408	475	543	611	679	747	815	883	951	1019	1087
1.250	306	367	428	489	550	611	672	734	795	856	917	978
1.375	278	333	389	445	500	556	611	667	722	778	834	889
1.500	255	306	357	408	458	509	560	611	662	713	764	815
1.625	235	282	329	376	423	470	517	564	611	658	705	752
1.750	218	262	306	349	393	437	480	524	568	611	655	699
1.875	204	245	285	326	367	408	448	489	530	571	611	652
2.000	191	229	267	306	344	382	420	458	497	535	573	611
2.250	170	204	238	272	306	340	374	408	441	475	509	543
2.500	153	183	214	245	275	306	336	367	397	428	458	489
2.750	139	167	194	222	250	278	306	333	361	389	417	445
3.000	127	153	178	204	229	255	280	306	331	357	382	408
3.250	118	141	165	188	212	235	259	282	306	329	353	376
3.500	109	131	153	175	196	218	240	262	284	306	327	349
3.750	102	122	143	163	183	204	224	245	265	285	306	326
4.000	96	115	134	153	172	191	210	229	248	267	287	306
4.250	90	108	126	144	162	180	198	216	234	252	270	288
4.500	85	102	119	136	153	170	187	204	221	238	255	272
4.750	80	97	113	129	145	161	177	193	209	225	241	257
5.000	76	92	107	122	138	153	168	183	199	214	229	245
5.500	69	83	97	111	125	139	153	167	181	194	208	222
6.000	64	76	89	102	115	127	140	153	166	178	191	204
6.500	59	71	82	94	106	118	129	141	153	165	176	188
7.000	55	65	76	87	98	109	120	131	142	153	164	175
7.500	51	61	71	82	92	102	112	122	132	143	153	163
8.000	48	57	67	76	86	96	105	115	124	134	143	153
8.500	45	54	63	72	81	90	99	108	117	126	135	144
9.000	42	51	59	68	76	85	93	102	110	119	127	136
9.500	40	48	56	64	72	80	88	97	105	113	121	129
10.000	38	46	53	61	69	76	84	92	99	107	115	122
11.000	35	42	49	56	63	69	76	83	90	97	104	111
12.000	32	38	45	51	57	64	70	76	83	89	96	102
13.000	29	35	41	47	53	59	65	71	76	82	88	94
14.000	27	33	38	44	49	55	60	65	71	76	82	87
15.000	25	31	36	41	46	51	56	61	66	71	76	82

GH® TOOLING SELECTION GUIDE
WORKSHEET

MACHINE INFORMATION

Make: _____ Model: _____

Stroke Length: _____ Spindle Speed: _____

Fixture Type: _____ Type Table: _____

Feed Type: _____ Coolant Type / Mix: _____

PART INFORMATION

Material: _____ Material Hardness: _____

Rough Bore Size: _____ Bore Condition: _____

Finish Bore Size: _____ Finish Tolerance: _____

Finish Required: _____ Open / Blind Bore: _____

Bore Length: _____ Part OD: _____

Part Deviations: _____ Part Geometric: _____

SELECT

Hone Head Type: _____

Slotted Type Tool / Flange Type Tool / Special

Body Size: _____ Stoneholder: _____

Flatback / Angleback / Tandem

Shank Size: _____

Driveshaft

Driveshaft OD: _____ Length: _____

Shank End: _____ Socket End: _____

Adapter

Maximum OD: _____ Type: _____

Drive Adapter / Adjusting Head

Feed: _____ Adapter Shank: _____

Morse Taper

☐ Brake ☐ Reversing Key ☐ Handwheel ☐ Palmwheel

Abrasive

Size: _____ Grit Type: _____

Grit Size: _____ Bond: _____

Remarks: _____

_____

_____

_____

_____

_____

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