



THE CUTTING EDGE

HP7A OPTIONAL EQUIPMENT CATALOG



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NOTE: WHEN ORDERING OPTIONS ORDER BY PART NUMBER
ALONG WITH MACHINE MODEL AND SERIAL NUMBER

THERE IS A MINIMUM ORDER OF \$25.00

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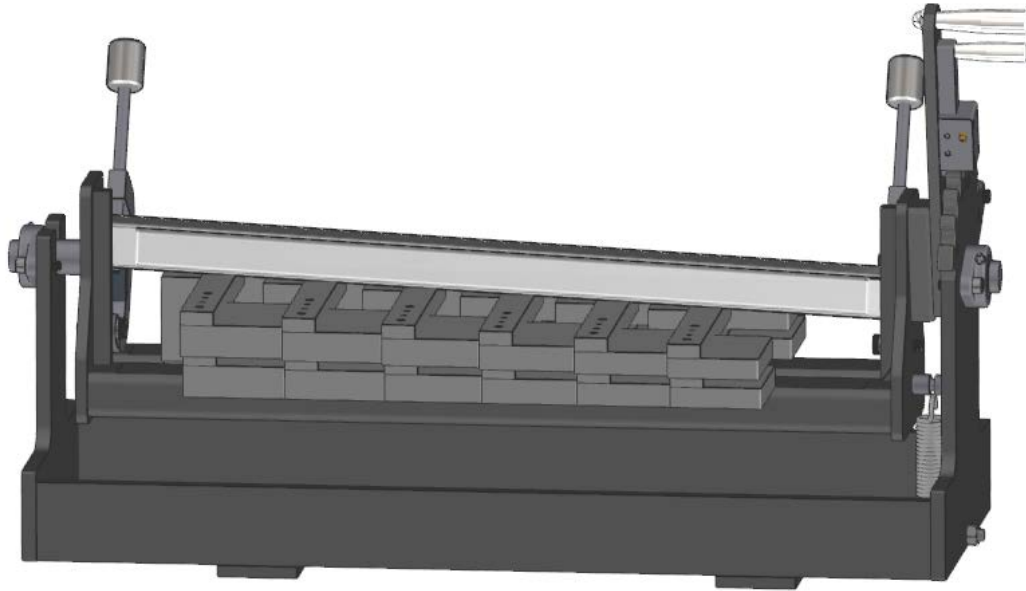


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Fixturing

514-7C Manual Indexable Roll Over Fixture

For small to medium size In-line and V Blocks up to 31" (787mm) overall length including 6 sets of parallels



Splash Tray & Magnet

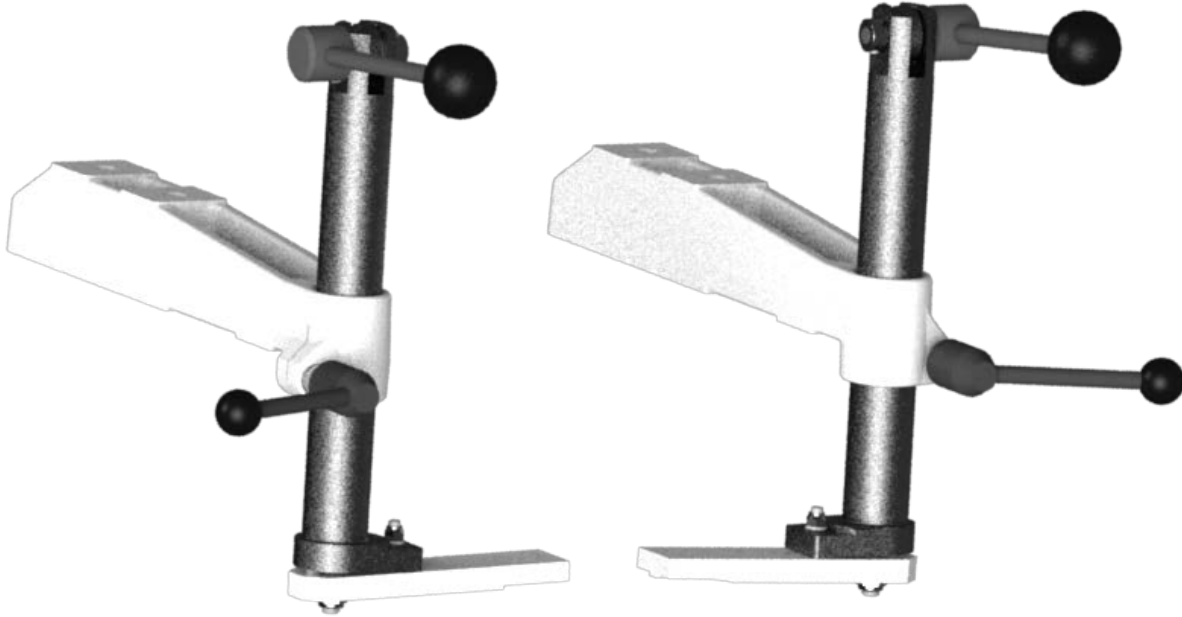
514-7-65S Splash Tray

514-7-65T Magnet Assembly



502-1-30H Clamp Arm Assembly

Set of 2, for blocks without main caps when using manual Roll Over Fixture and large in-line blocks without roll over fixture, max length of block 50" 1270mm



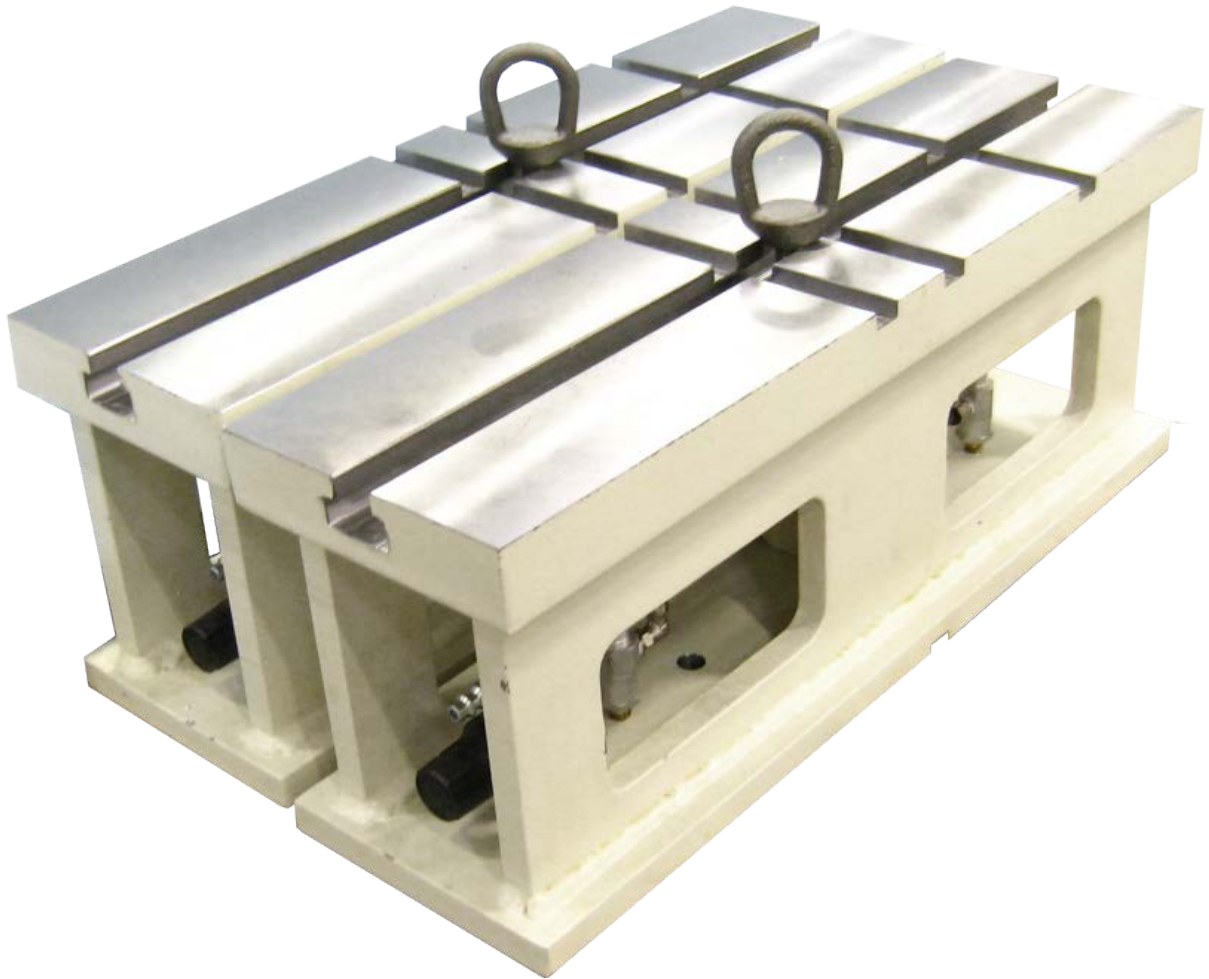
11115 2" (50mm) X 3" (75mm) Parallels

for general purpose machine work such as setting up small in-line blocks such as motorcycle or small single cylinders such as Harley



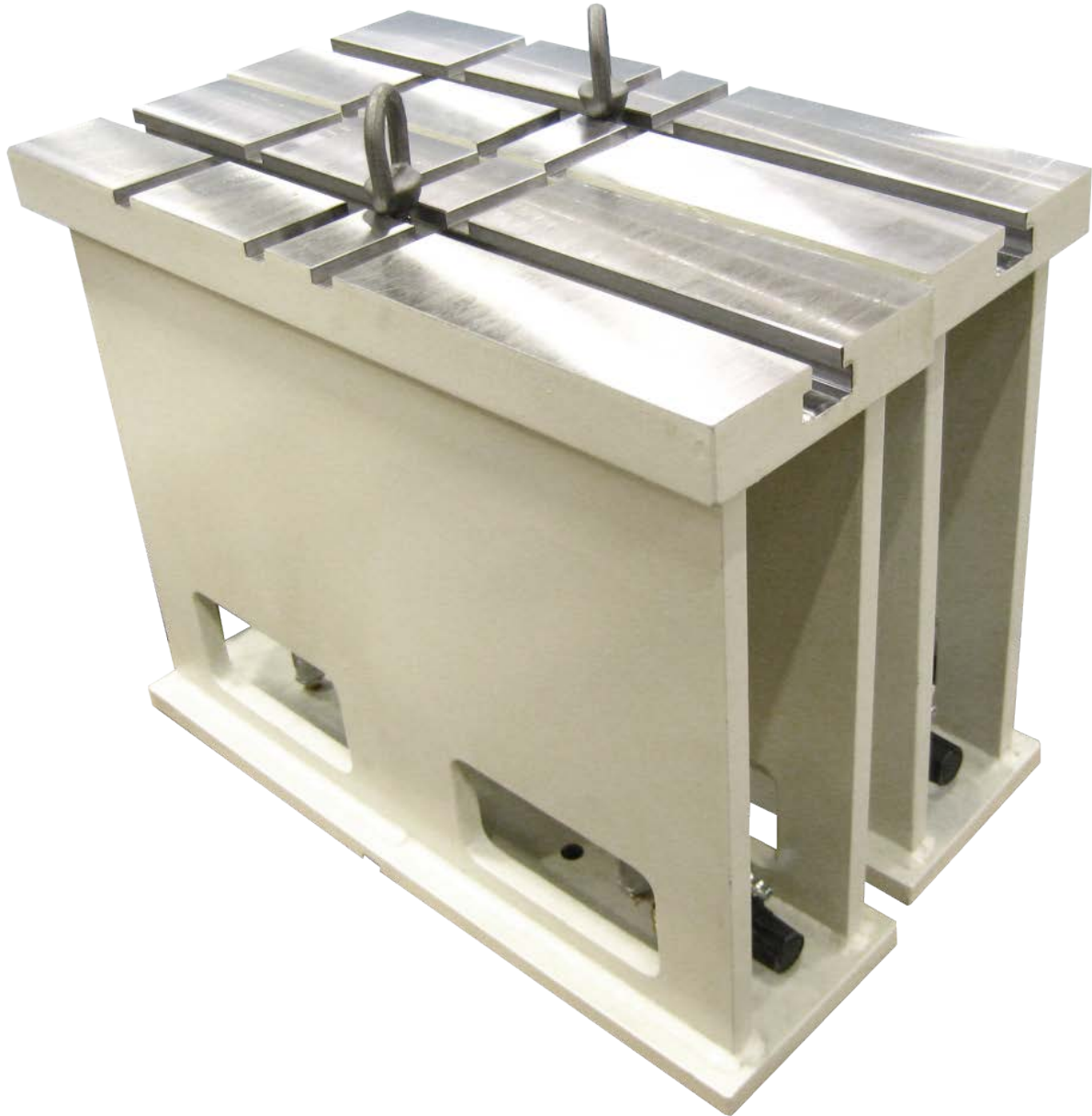
11112 Universal 8" (203mm) Heavy Duty T-Slot Parallels

for general purpose machine work such as setting up small in-line blocks such as motorcycle or small single cylinders such as Harley



11114 Universal 16" (405mm) Heavy Duty T-Slot Parallels

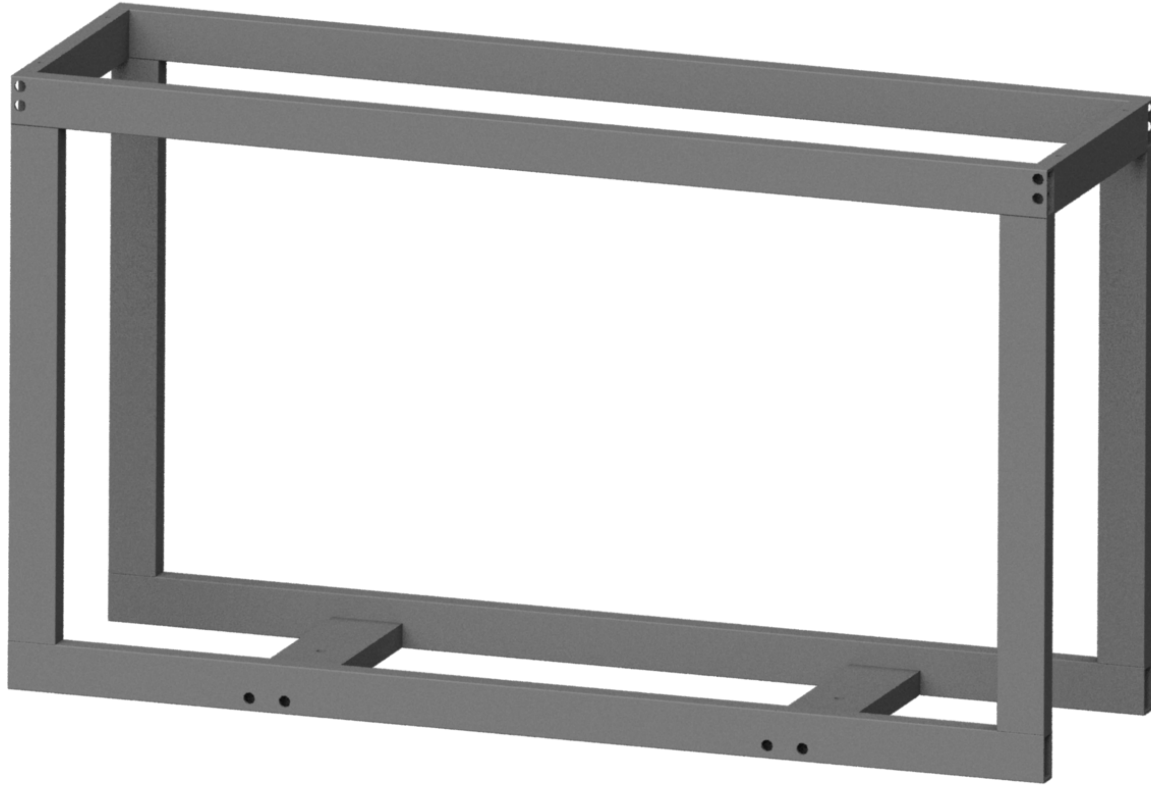
for general purpose machine work such as setting up small in-line blocks such as motorcycle or small single cylinders such as Harley



Cylinder Liner Fixtures

514-11-5 Cylinder Liner Honing Fixture

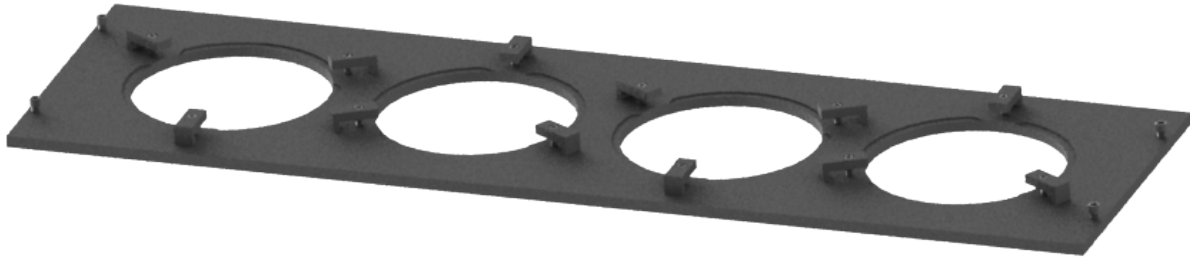
(Note: Must order Fixture Plate Separately)



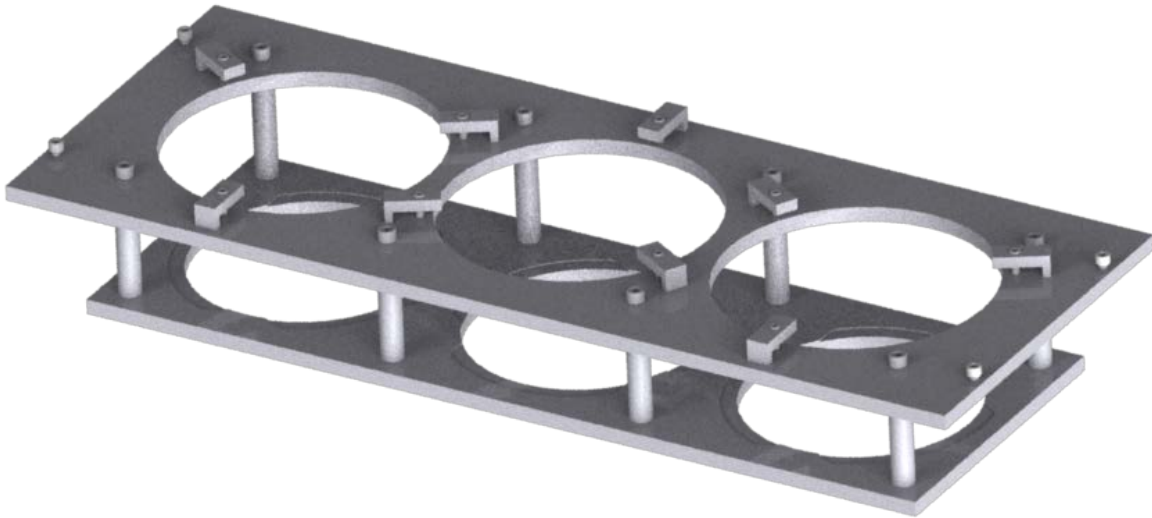
514-11-6 Fixture Plate, CAT 3400



514-11-7 Fixture Plate, CAT 3500



514-11-4 Fixture Plate, CAT C175



Optional Coolant and Filter Equipment

514-4-71C Synthetic coolant

(for use with diamond stones) 5 gal (20 liter) (mix with water 20:1)



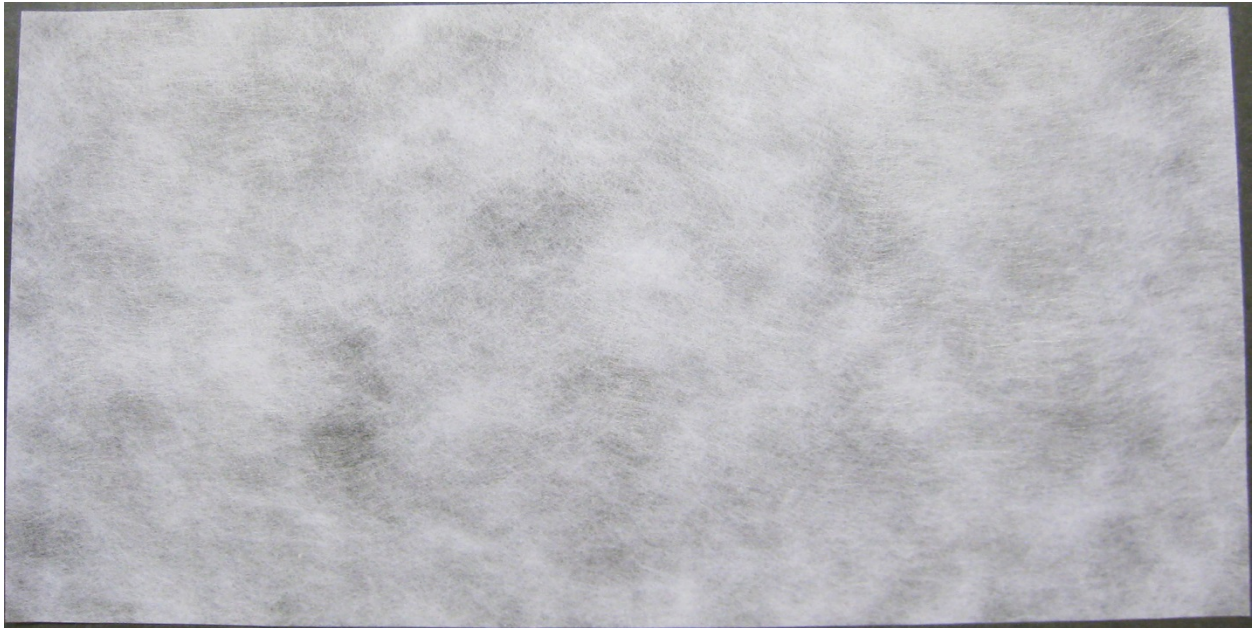
514-4-71D Coolant refractor

(for measuring synthetic coolant to water mix ratio)



514-7-66D Filter paper

For standard coolant system (minimum order of 25)



514-2-40 Optional canister filter system

With high volume pump includes (1) one 10 micron and (1) one 20 micron canister filter



514-2-39P Filter Cartridge 10 micron
(replacement filter for 514-2-40) for synthetic coolant only

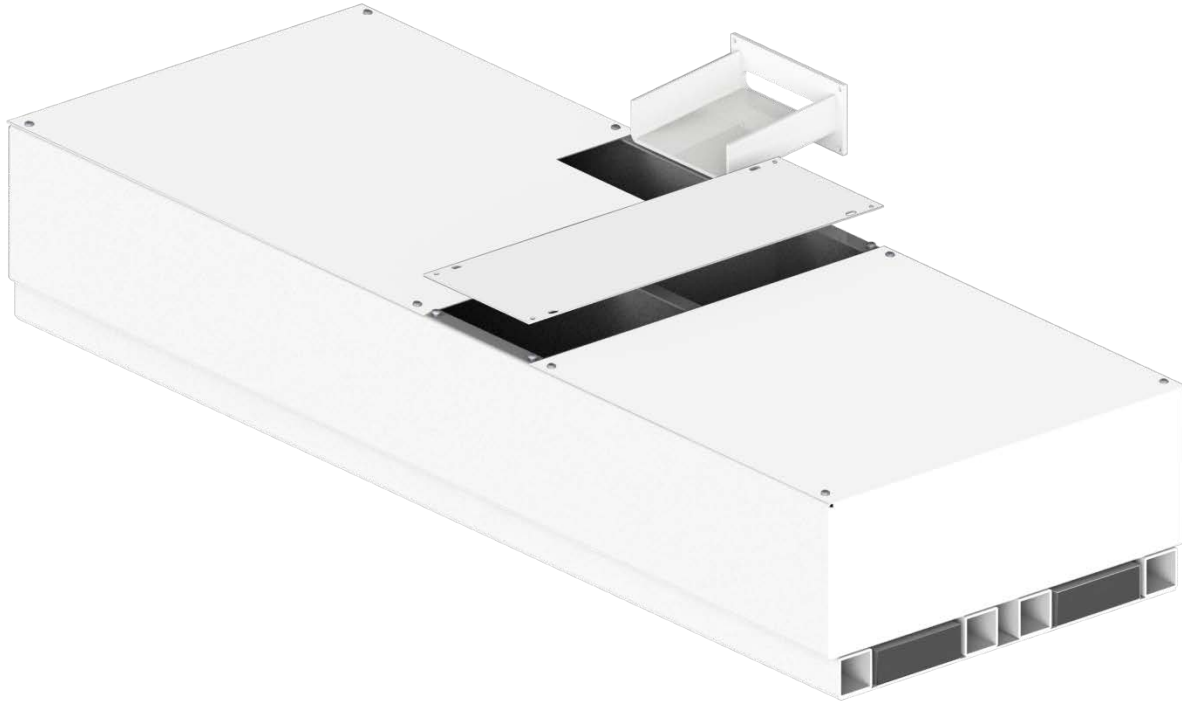
514-2-39Q Filter Cartridge 20 micron
(replacement filter for 514-2-40) for synthetic coolant only

514-2-39Z Filter Cartridge 150 micron
(replacement filter for 514-2-40 for oil base coolant only)



514-3-68W External Coolant Tank System

With High Volume Pump and Magnetic Filtration System



Precision Hone Heads, Sleeves and Stone Holders




Diameters specified are with new stones .312" (7.90mm) height with maximum height of stone

514-10 Medium Hone Head

2.25 - 3.0" (57.15 - 75.20mm) Bore Diameter Range



Stone Holders for Medium Hone Head

<p>514-10-13A Stone holder, 2.25 - 2.43" (57.15 - 61.72mm), set of 4</p> 	<p>514-10-13B Stone holder, 2.38 - 2.63" (60.45 - 66.80mm), set of 4</p> 
<p>514-10-13C Stone holder, 2.58 - 2.83" (65.53 - 71.88mm), set of 4</p> 	<p>514-10-13D Stone holder, 2.78 - 3.03" (70.61 - 76.96mm), set of 4</p> 

514-9A Large Hone Head

2.840" - 7.38" (72.14mm - 187.45mm) Bore Diameter Range



514-9-4A Sleeve assembly

2.840" - 3.880" (72.14 - 98.55mm)



514-9-6J Stone Holder

2.990 - 3.44" (75.95 - 87.38mm) set of 4 (Requires Sleeve 514-9-4A)

Note: To hone diameter 2.84" (72.14mm) use 514-9-14D Stone Set .200" (5.1mm) height with 514-9-6J Stone Holders



514-9-6A Stone Holder

3.165 - 3.630" (80.39 - 92.20mm) set of 4 (Requires Sleeve 514-9-4A)



514-9-6B Stone Holder

3.415 - 3.880" (86.74 - 98.55mm) set of 4
(Requires Sleeve 514-9-4A)



514-9-4B Sleeve assembly

3.500 - 4.670" (88.00 - 118.62mm)



514-9-6C Stone Holder

3.665 - 4.130" (93.09 - 104.90mm) set of 4
(Requires Sleeve 514-9-4B)



514-9-6D Stone Holder

3.915 - 4.380" (99.44 - 111.25mm) set of 4
(Requires Sleeve 514-9-4B)



514-9-6E Stone Holder

4.165 - 4.630" (105.79 - 117.60mm) set of 4
(Requires Sleeve 514-9-4B)



514-9-4C Sleeve assembly

4.250 - 7.380" (107.95 - 187.45mm)



514-9-6F Stone Holder

4.415 - 4.880" (112.14 - 123.95mm) set of 4
(Requires Sleeve 514-9-4C)



514-9-6G Stone Holder

4.665 - 5.130" (118.49 - 130.30mm) set of 4
(Requires Sleeve 514-9-4C)



514-9-6H Stone Holder

4.915 - 5.380" (124.84 - 136.65mm) set of 4
(Requires Sleeve 514-9-4C)



514-9-6K Stone Holder

5.165 - 5.630" (131.19 - 143.00mm) set of 4
(Requires Sleeve 514-9-4C)



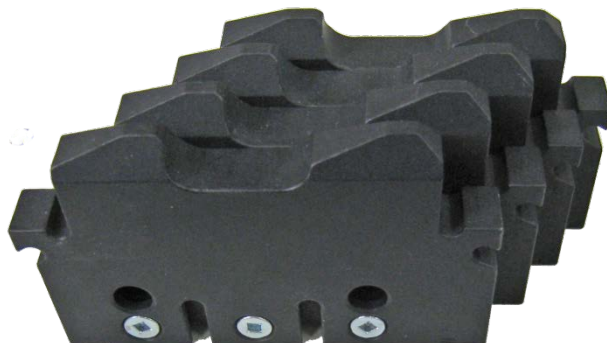
514-9-6L Stone Holder

5.415 - 5.880" (137.54 - 149.35mm) set of 4
(Requires Sleeve 514-9-4C)



514-9-6M Stone Holder

5.665 - 6.130" (143.89 - 155.70mm) set of 4
(Requires Sleeve 514-9-4C)



514-9-6N Stone Holder

5.915 - 6.380" (150.24 - 162.05mm) set of 4
(Requires Sleeve 514-9-4C)



514-9-6P Stone Holder

6.165 - 6.630" (156.59 - 168.40mm) set of 4
(Requires Sleeve 514-9-4C)



514-9-6Q Stone Holder

6.415 - 6.880" (162.94 - 174.75mm) set of 4
(Requires Sleeve 514-9-4C)



514-9-6R Stone Holder

6.665 - 7.130" (169.29 - 181.10mm) set of 4
(Requires Sleeve 514-9-4C)



514-9-6S Stone Holder

6.915 - 7.380" (175.64 - 187.45mm) set of 4
(Requires Sleeve 514-9-4C)



Bore Sizing Charts

Stones Inch

Diameter (New Stones)

	0.312 Stones		0.200 Stones	
	Min	Max	Min	Max
514-9-6J	2.99	3.45	2.77	3.23
514-9-6A	3.17	3.63	2.94	3.41
514-9-6B	3.42	3.88	3.19	3.66
514-9-6C	3.67	4.13	3.44	3.91
514-9-6D	3.92	4.38	3.69	4.16
514-9-6E	4.17	4.63	3.94	4.41
514-9-6F	4.42	4.88	4.19	4.66
514-9-6G	4.67	5.13	4.44	4.91
514-9-6H	4.92	5.38	4.69	5.16
514-9-6K	5.17	5.63	4.94	5.41
514-9-6L	5.42	5.88	5.19	5.66
514-9-6M	5.67	6.13	5.44	5.91
514-9-6N	5.92	6.38	5.69	6.16
514-9-6P	6.17	6.63	5.94	6.41
514-9-6Q	6.42	6.88	6.19	6.66
514-9-6R	6.67	7.13	6.44	6.91
514-9-6S	6.92	7.38	6.69	7.16

Stones Metric

Diameter (New Stones) (Metric)

	7.925 Stones		5.08 Stones	
	Min	Max	Min	Max
514-9-6J	75.92	87.73	70.23	82.04
514-9-6A	80.39	92.20	74.70	86.51
514-9-6B	86.74	98.55	81.05	92.86
514-9-6C	93.09	104.90	87.40	99.21
514-9-6D	99.44	111.25	93.75	105.56
514-9-6E	105.79	117.60	100.10	111.91
514-9-6F	112.14	123.95	106.45	118.26
514-9-6G	118.49	130.30	112.80	124.61
514-9-6H	124.84	136.65	119.15	130.96
514-9-6K	131.19	143.00	125.50	137.31
514-9-6L	137.54	149.35	131.85	143.66
514-9-6M	143.89	155.70	138.20	150.01
514-9-6N	150.24	162.05	144.55	156.36
514-9-6P	156.59	168.40	150.90	162.71
514-9-6Q	162.94	174.75	157.25	169.06
514-9-6R	169.29	181.10	163.60	175.41
514-9-6S	175.64	187.45	169.95	181.76

Brushes Inch

Diameter (New Brushes)

	0.550 Brushes		0.395 Brushes	
	Min	Max	Min	Max
514-9-6J	3.47	3.93	3.16	3.62
514-9-6A	3.64	4.11	3.33	3.80
514-9-6B	3.89	4.36	3.58	4.05
514-9-6C	4.14	4.61	3.83	4.30
514-9-6D	4.39	4.86	4.08	4.55
514-9-6E	4.64	5.11	4.33	4.80
514-9-6F	4.89	5.36	4.58	5.05
514-9-6G	5.14	5.61	4.83	5.30
514-9-6H	5.39	5.86	5.08	5.55
514-9-6K	5.64	6.11	5.33	5.80
514-9-6L	5.89	6.36	5.58	6.05
514-9-6M	6.14	6.61	5.83	6.30
514-9-6N	6.39	6.86	6.08	6.55
514-9-6P	6.64	7.11	6.33	6.80
514-9-6Q	6.89	7.36	6.58	7.05
514-9-6R	7.14	7.61	6.83	7.30
514-9-6S	7.39	7.86	7.08	7.55

Brushes Metric

Diameter (New Brushes) (Metric)

	13.970 Brushes		10.033 Brushes	
	Min	Max	Min	Max
514-9-6J	88.01	99.82	80.14	91.95
514-9-6A	92.48	104.29	84.61	96.42
514-9-6B	98.83	110.64	90.96	102.77
514-9-6C	105.18	116.99	97.31	109.12
514-9-6D	111.53	123.34	103.66	115.47
514-9-6E	117.88	129.69	110.01	121.82
514-9-6F	124.23	136.04	116.36	128.17
514-9-6G	130.58	142.39	122.71	134.52
514-9-6H	136.93	148.74	129.06	140.87
514-9-6K	143.28	155.09	135.41	147.22
514-9-6L	149.63	161.44	141.76	153.57
514-9-6M	155.98	167.79	148.11	159.92
514-9-6N	162.33	174.14	154.46	166.27
514-9-6P	168.68	180.49	160.81	172.62
514-9-6Q	175.03	186.84	167.16	178.97
514-9-6R	181.38	193.19	173.51	185.32
514-9-6S	187.73	199.54	179.86	191.67

Abrasives for Precision Hone Heads

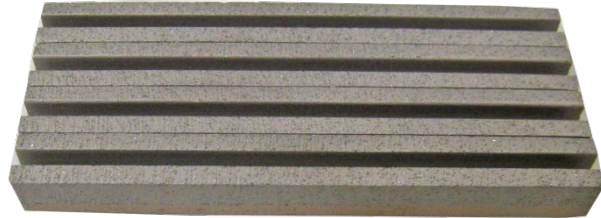
NOTE: Ra - Roughness Average. Value before Ra is in micro inches. Value in brackets um is micro meters. Long designates length of stone. Height designated thickness of stone.

Diamond Stones

.312" (7.90mm) Height

514-9-14F Diamond stones, 80 grit

3" (76mm) long, 90Ra (2.25um)
stock removal .004-.007/min.



514-9-14R Diamond stones

80 grit, 3 1/2" (89mm) long, 90Ra (2.25um)
stock removal .004-.007/min. (.102 - .178mm)



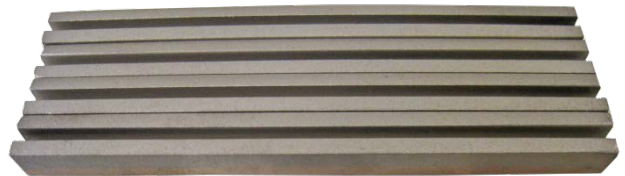
514-9-14W Diamond stones, 140/170 grit

3" (76mm) long, 50-75Ra (1.25 - 1.875um)



514-9-14K Diamond stones, 170/200 grit

3" (76mm) long, 45-60Ra (1.125 - 1.5um)

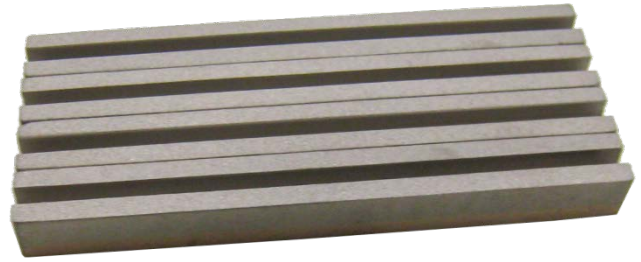


514-9-14M Diamond stones, 170/200 grit

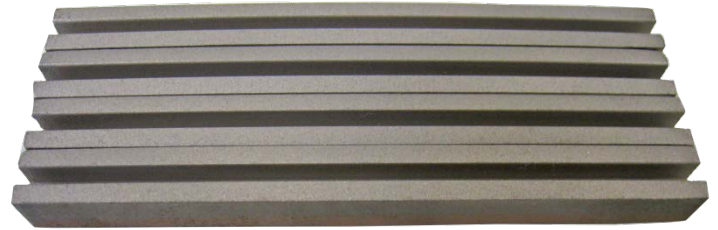
3 1/2" (89mm) long, 45-60Ra (1.125 - 1.5um)



514-9-14J Diamond stones, 270/325 grit
3" (76mm) long, 35-45Ra (.875 - 1.125um)



514-9-14T Diamond stones, 270/325 grit
3 1/2" (89mm) long, 35-45Ra (.875 - 1.125um)



514-9-14Z Diamond Stones 270/325 grit
4" (102mm) long, 35-45Ra (.875 - 1.125um)



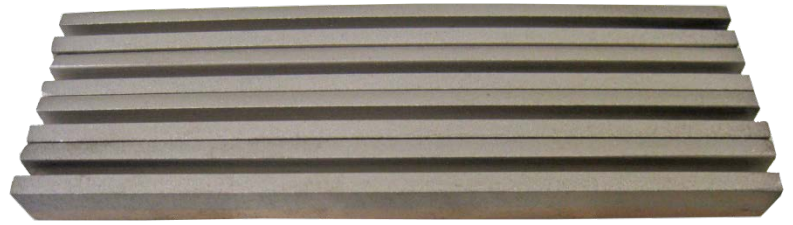
514-9-14E Diamond stones, 325/400 grit
3" (76mm) long, 24-30Ra (.6 - .75um)



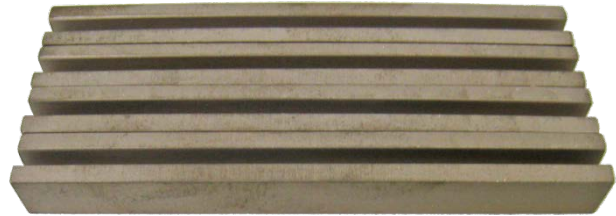
514-9-14Q Diamond stones, 325/400 grit
3 1/2" (89mm) long, 24-30Ra (.6 - .75um)



514-9-14X Diamond stones, 325/400 grit
4" (102mm) long, 24-30Ra (.6 - .75um)



514-9-14V Diamond stones, 400 grit
3" (76mm) long, 15-19Ra (.375 - .475um)



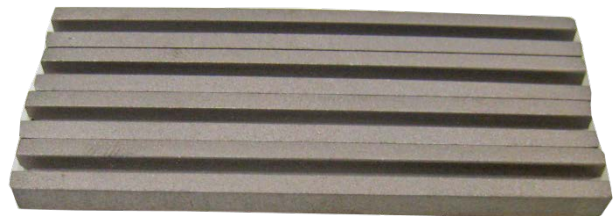
514-9-14C Diamond stones, 500 grit
3" (76mm) long, 18-22Ra (.45 - .55um)



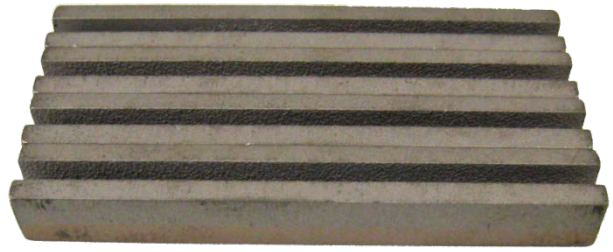
514-9-14P Diamond stones, 500 grit
3-1/2" (89mm) long, 18-22Ra (.45 - .55um)



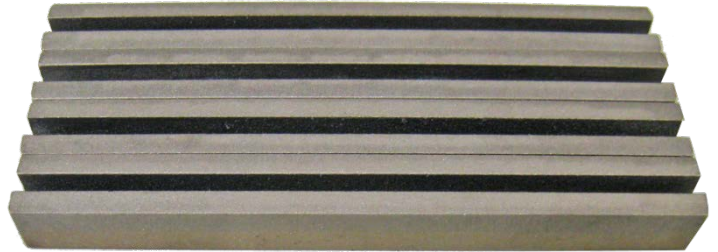
514-9-14D Diamond stones, 325/400 grit
3" (76mm) long, 18-22Ra (.45 - .55um)
Special required for bores under 2.990" diameter
(75.94mm) .200" (5.1mm) Height



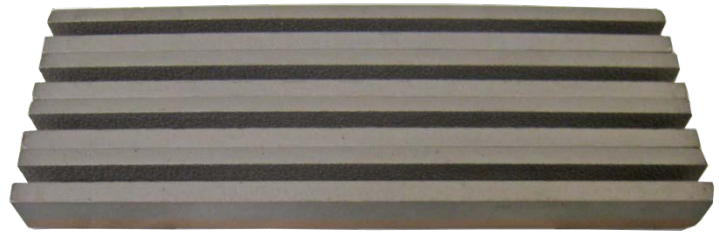
514-9-14U Diamond stones, 500 grit
2 1/2" (64mm) long, 18-22Ra (.45 - .55um)



514-9-14L Diamond stones, 550 grit
3" (76mm) long, 15-19Ra (.375 - .475um)



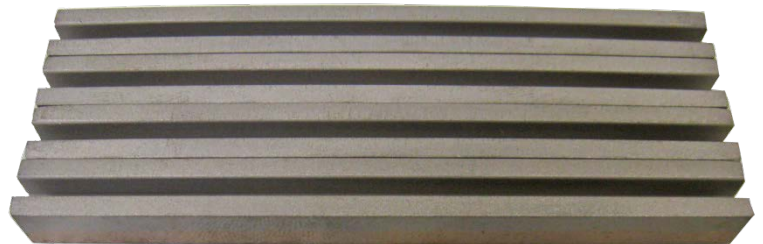
514-9-14N Diamond stones, 550 grit
3 1/2" (89mm) long, 15-19Ra (.375 - .475um)



514-9-14G Diamond stones, 600 grit
3" (76mm) long, 8-12Ra (.2 - .3um)



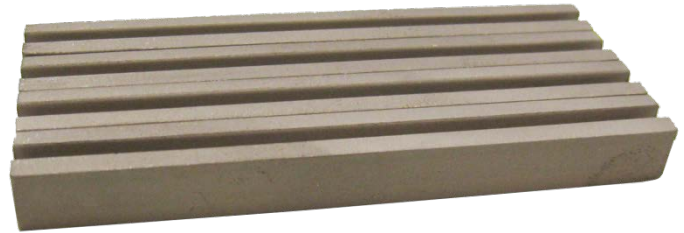
514-9-14S Diamond stones, 600 grit
3 1/2" (89mm) long, 8-12Ra (.2 - .3um)



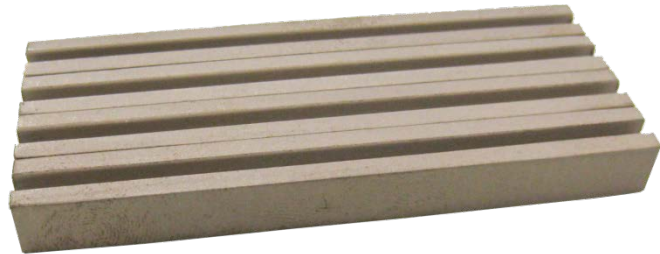
514-9-21G Diamond stones, 800 grit
3" (76mm) long



514-9-21H Diamond stones, 1000 grit
3" (76mm) long



514-9-21J Diamond stones, 1200 grit
3" (76mm) long



Brushes for Plateau Finishing

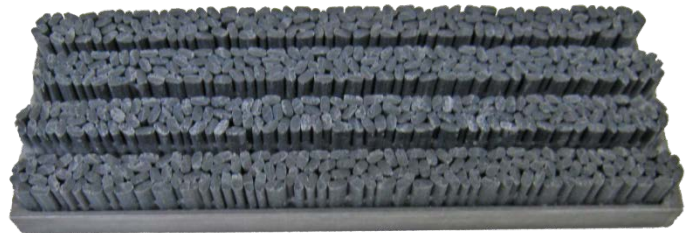
514-9-14H Brushes, for Plateau Finishing

.550" (14mm) height, 3 1/2" (89mm) long, requires one or two size smaller stone holder compared to .312" (7.90mm) height diamond stone. For diameter range, please see HP7A manual.



514-9-14Y Brushes, for Plateau Finishing

.395" (10mm) height, 3 1/2" (89mm) long, requires same or one size smaller stone holder compared to .312" (7.90mm) height diamond stone. For diameter range, please see HP7A manual.



Special Stones for Finishing Aluminum Silicone Cylinders

(Refer to bulletin No. 284) Requires Rottler Precision Hone Heads

514-9-18P Special Red Finish Diamonds

For final sizing (set of 4)



514-9-18N Silicone Abrasive Exposing Stones

For Removing Aluminum (set of 4)



514-9-21 Polishing felt pads

For use with 514-9-21F silicon paste. (set of 4)

514-9-21F Silicone Paste

For use with 514-9-21 Polishing felt pads



Optional Measuring Equipment

201 Mitutoyo Surface Tester Surfptest



514-8-27 Stone Depth Scale and Holder Assembly (inch)

514-8-27F Stone Depth Scale and Holder Assembly (metric)

