

ROTTLER

THE CUTTING EDGE

F107AH & F109AH OPTIONAL EQUIPMENT CATALOG



ORDERING PROCEDURE

Contact your regional Rottler sales rep for assistance in ordering optional equipment, replacement parts, or tooling.

If you are unable to contact your regional Rottler sales rep, call the factory at 253-872-7050 and ask to speak to the parts sales specialist.

Have the following information handy to expedite the ordering process:

1. Your name, business name, and contact number
2. Customer number
3. If you don't have a customer number, your billing address
4. Shipping address if different from billing address
5. Machine model and serial number
6. Part number and description of what you want to order
7. Preferred method of shipment

You may also contact us via e-mail with the above information. Send e-mail requests to:
parts@rottermfg.com

In some cases you may be requested to send a photo of the part you are ordering if it is a replacement part, or doesn't appear in the database.

If you are unsure which part you need to order, contact our service department and ask to speak to one of our service consultants. They will assist you in determining which part you require.

THERE IS A MINIMUM ORDER OF \$25.00



Contents

Optional Equipment 1

6761 Factory Supplied Transformer Package..... 1

Conversational Touch Screen Software Packages 1

9040 Boring and Sleaving Software..... 1

9041 Surfacing Software..... 1

9042 Line Boring Software 1

9046 Lifter Bore Machining Software 1

9044 Connecting Rod Boring Software..... 1

CAM (Computer Aided Manufacturing) Software 1

9043 Rottler CAM Software Package..... 1

Wireless Probing System for Automatic Centering and Measuring..... 2

10110 Renishaw Wireless Radio Probing System..... 2

Automatic Tool Changing System 3

10360 Automatic Tool Changing System 3

Optional Equipment for Boring and Surfacing..... 4

Fixturing for Extra Large In-Line and V Blocks 4

10100 Fixture.....4

10100A Fixture.....5

10100D Fixture.....6

Main Bearing Bore Locator Sets 7

10102A Main Line Locators 7

10102C Main Line Locators 7

10102E Main Line Locators 8

10102L Main Line Locators..... 8

10102N Main Line Locators 9

10102R Main Line Locators 9

10102G Main Line Locators	10
6309P Clamping System	11
10355 Set of Parallels with Air Float	11
Fixturing for Mid Range to Large In-Line and V Blocks	12
6405F Large V Block Fixture	12
6405L 6" (150mm) Parallel Risers	12
Main Bearing Bore Locator Sets	13
6407A Locator Assembly	13
6407C Locator Assembly	13
6407E Locator Assembly	14
6407G Locator Assembly	14
6407J Locator Assembly	15
6407L Locator Assembly	15
6407N Locator Assembly	16
6407Q Locator Assembly	16
6407S Locator Assembly	17
6407U Locator Assembly	17
6407W Locator Assembly	18
7152A Dual Axis Level Assembly	19
6370Z Set Of Parallels with Air Float	19
6370C Set Of Parallels with Air Float	20
7219W Heavy Duty T-Slot Universal Parallels	20
6725 Mid-Range In-Line and V Block Fixture	21
6511 3/4" (19.05mm) Clamp Kit	22
Fixturing for Surfacing Cylinder Heads and Manifolds	23
7209M Leveling Table With Air Float	23
7209N 2-Piece Vise	23
Boring and Sleeving Tooling for HSK80A Spindle Taper	24
10118 Blind Hole Stub Cutterhead Package	24

10108B Blind Hole Stub Cutterhead	25
10117A Blind Hole Cutterhead	26
10116 Extended Spindle Blind Hole Cutterhead.....	27
10107B Blind Hole Cutterhead	28
10104B Blind Hole Cutterhead	29
10105B Blind Hole Cutterhead	30
6593S Cartridge Assembly	30
Surfacing Tooling for HSK80A Spindle Taper.....	31
10119 10" (250mm) Diameter Surfacing Cutterhead Assembly	31
10106C 14" (360mm) Diameter Surfacing Cutterhead Assembly	31
10115 18" (460mm) Diameter Surfacing Cutterhead Assembly	32
10106B 22" (560mm) Diameter Surfacing Cutterhead Assembly	32
6301J CBN Insert.....	32
6303V CBN Insert.....	32
Special Surfacing Tooling for Milling Metal Sprayed Head Gasket Decks.....	33
10109B Special 18" (420mm) Diameter Multi Tooth Milling Head.....	33
10120 Special 12" (300mm) Diameter Multi Tooth Milling Head.....	34
6864E Replacement Insert.....	34
6864D Replacement Cartridge.....	34
General Purpose Accessories.....	35
502-12-7B Digital Runout Probe and Readout.....	35
General Purpose Tooling	36
10121 Caterpillar 3400 Series Tappet Bore Repair Tooling Package.....	36
10122 Small Precision Adjustable Boring Head	36
10123 Large Heavy Duty Adjustable Boring/Facing Head.....	37
10124 Collet Kit.....	37
650-2-45G Solid Carbide End Mill	38
650-2-43F Four Fluted End Mill	38



Spindle Adapters for Mounting Universal Tooling 38

10113 1” (25.4mm) Spindle Adapter..... 38

10125 Blank Adapter 39

10126 #40 Taper Adapter..... 39

10127 R8 Taper Adaptor..... 39

10128 #5 Morse Taper Adapter 40

Main Line Bore Equipment 40

6898 Extra Heavy Duty 90 Degree Right Angle Drive..... 40

10114 Heavy Duty Offset 90 Degree Right Angle Drive 41

6779A Heavy Duty Line Bore Cutterhead Assembly 42

6519V Heavy Duty Line Bore Cutterhead Assembly 43

6519P Heavy Duty Line Bore Cutterhead Assembly 44

6519M Heavy Duty Line Bore Cutterhead Assembly 45

6519N Heavy Duty Line Bore Cutterhead Assembly 46

Line Bore Fixturing for Extra Large Blocks 47

10200 Adjustable Universal Line Boring Fixture 47

10200 Boring Fixture Adaptor Packages..... 47

10201 Adapter Package and Support Cradle for CAT 3600 V blocks 47

10202 Adapter Package and Support Cradle for Waukesha AT V Blocks 48

10203 Adapter Package and Support Cradle for Superior 2400 V Blocks 48

10204 Adapter Package for CAT 3600 In-Line Blocks..... 49

10205 Adapter Package and Support Cradle for GE EVO V Blocks 49

10206 Adapter Package and Support Cradle for EMD 645 & 710 V Blocks 50

10207 Adapter Package and Support Cradle for MTU 1163 V Blocks 50

10208 Adapter Package and Support Cradle for MTU 8000 V Blocks 51

Line Bore Fixturing for Large Blocks 51

6810 Waukesha 7042, 9390 and CAT 379, 398, 399 Line Boring Fixture 51

6815 White Superior 8G825 Line Boring Fixture - Requires Fixture 6821..... 52

6846 White Superior 12 & 16 G825 Line Boring Fixture - Requires Fixture 6821 52

Line Bore Fixturing for Large Blocks 53

6821 Adjustable Universal Line Boring Parallel Assembly 53



6823B 120 Degree V Block Supports for Large 120 Degree V Blocks..... 54

6823E 90 Degree V Block Supports for Large 90 Degree V Blocks..... 54

Line Bore Tooling for Small to Large Blocks and Heads..... 55

Straight 90 Degree Right Angle Drive Assembly..... 55

650-2-39B Cutterhead Assembly Line Boring..... 56

650-2-39C Cutterhead Assembly Line Boring..... 57

650-2-39A Cutterhead Assembly Line Boring..... 58

Line Bore Fixturing for Small to Large Blocks and Heads..... 59

650-3-56 Line Bore Pivot Table Fixture..... 59

6821 Adjustable Universal Line Boring Fixture Assembly 59

6843 90 Degree V Block Supports 60

6823E 90 Degree V Block Supports 60

6789L 113 Degree V Block Supports 61

6789N 116 Degree V Block Supports 61

6789E 115 Degree V Block Supports 62

6823B 120 Degree V Block Supports..... 62

6789K 130 Degree V Block Supports..... 63

6789Q 140 Degree V Block Supports..... 63

Line Bore Set Up and Alignment Equipment..... 64

6889B Adapter 64

502-12-7B Digital Runout Probe and Readout..... 64

502-12-4 General Purpose Magnetic Indicator Holder 65

502-12-4A Magnetic Indicator Holder 65

502-9-9A Mechanical Run Out Indicator..... 65

502-9-9J Mechanical Run Out Indicator 65

Equipment for Preparing Blocks for Line Boring..... 66

7209N 2-Piece Vise..... 66

7209M Leveling Table With Air Float..... 66

10129 Shell Mill..... 67

10130 Shell Mill	67
10109C Shell Mill	68
6514T Insert	69
6514Y Insert	69
Equipment for Facing Thrust Bearing Surfaces for Main Line	69
6855C Thrust Facing Tooling Package	69
6855G Thrust facing tooling package	70
Special Tooling for Block End Machining	70
6779H Adaptor for 40 Taper Tooling	70
6779L 10" (250mm) Diameter Surfacing Cutterhead Assembly	71
6779M 14" (360mm) Diameter Surfacing Cutterhead Assembly	71
6779N Crossfeed Head Assembly	72
Connecting Rod Boring and Surfacing Equipment	73
650-3-44R Rottler Precision Connecting Rod Fixturing System	73
Fixturing & Tooling for Machining Large Engine & Compressor Connecting Rods	74
650-3-64 Rottler Precision Connecting Rod Fixturing System	74
650-3-66 Rottler Precision Compressor Conrod Cap Surfacing Fixture	75
6870 Rottler Precision Connecting Rod Boring Fixturing System	76
Tooling for Connecting Rod Boring	77
10118 Blind Hole Cutterhead Assembly	77
10131 Blind Hole Cutterhead Assembly	78
Tool Changing and Storage System for Heavy Tooling	79
6875A Tool Changing and Storage System	79
Suggested Hold Down Anchor System	80
9203Q Hold down anchor kit for F107/9 machine installation	80

Optional Equipment

6761 Factory Supplied Transformer Package

For Voltage Above or Below 208-240 Volts - Customer to Specify Electrical Supply When Placing Order
Contact your Rottler representative or the factory concerning this option.

Conversational Touch Screen Software Packages

For Programmable Automated Engine Rebuilding Machine Work
Contact your Rottler representative or the factory concerning this option.

9040 Boring and Sleeving Software

Including: (1) Circular Interpolation Counterbore Finishing for Corner Radius Undercut and Facing Very Wide Counterbores (2) Lower Offset for Boring Larger Diameters Commonly Found When Resleeving Lower Seal Areas of Wet Liner
Contact your Rottler representative or the factory concerning this option.

9041 Surfacing Software

Including Multiple Pass Programmable Depth of Cuts Including Different Settings for Rough and Finish Milling/Surfacing
Contact your Rottler representative or the factory concerning this option.

9042 Line Boring Software

Including Circular Interpolation for Thrust Facing
Contact your Rottler representative or the factory concerning this option.

9046 Lifter Bore Machining Software

Contact your Rottler representative or the factory concerning this option.

9044 Connecting Rod Boring Software

Contact your Rottler representative or the factory concerning this option.

CAM (Computer Aided Manufacturing) Software

9043 Rottler CAM Software Package

When Rottler CAM #9043 is purchased together with a new machine, one day of introductory training is available for purchase on the CAM software. Additional training on Rottler CAM is provided through instructional videos at www.RottlerTube.com

Wireless Probing System for Automatic Centering and Measuring**10110 Renishaw Wireless Radio Probing System**

Including a selection of (6) probes/stylus and Software for (1) Automatic Centering in Cylinder Bores (2) Measuring Cylinder Bore Diameters.

Price Includes Factory Installation During Machine Manufacture, Extra Charge Applies for Field Fitments.



Automatic Tool Changing System

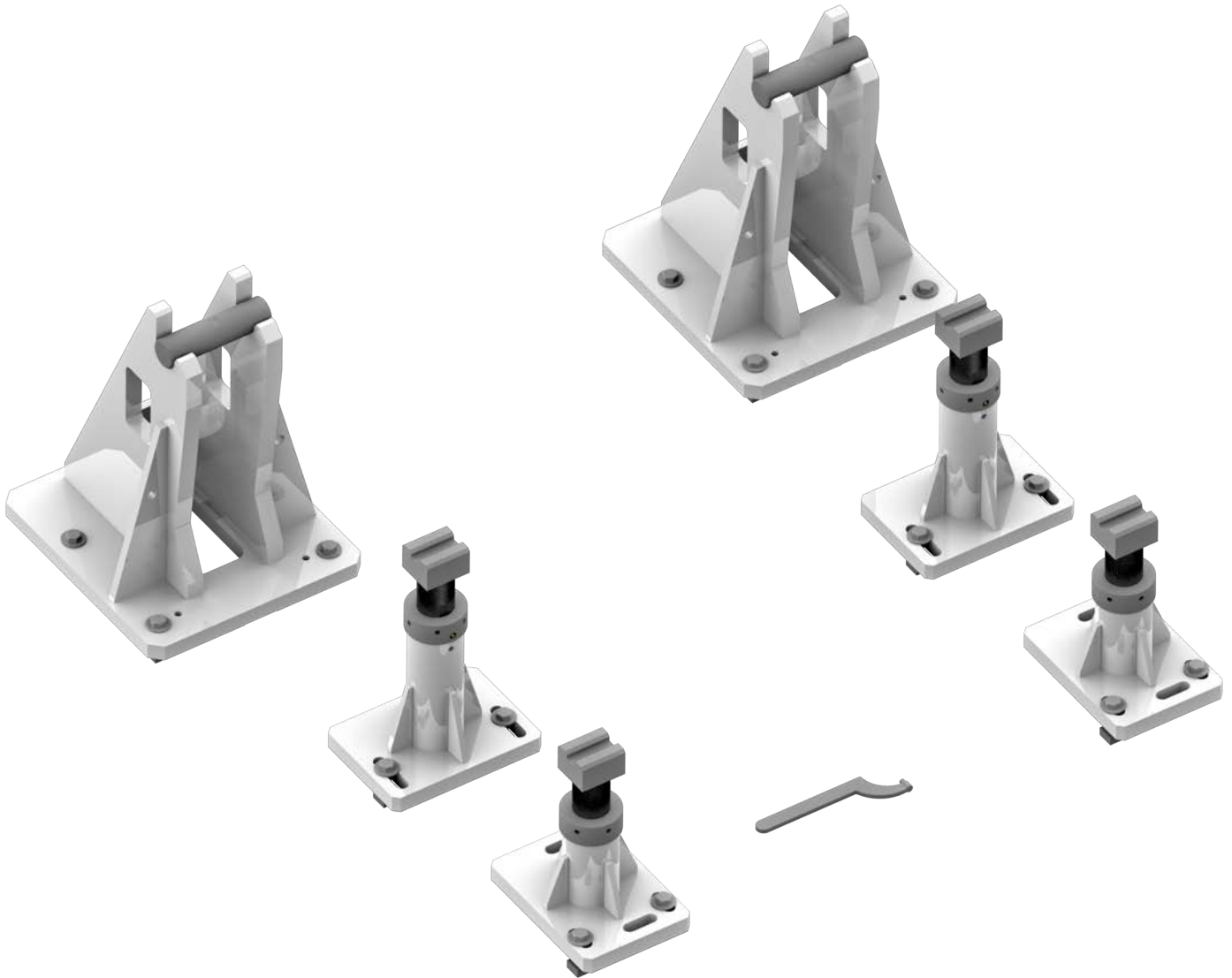
10360 Automatic Tool Changing System

For up to 20 HSK80A tools. Large diameter tools may occupy more than one tool pocket.



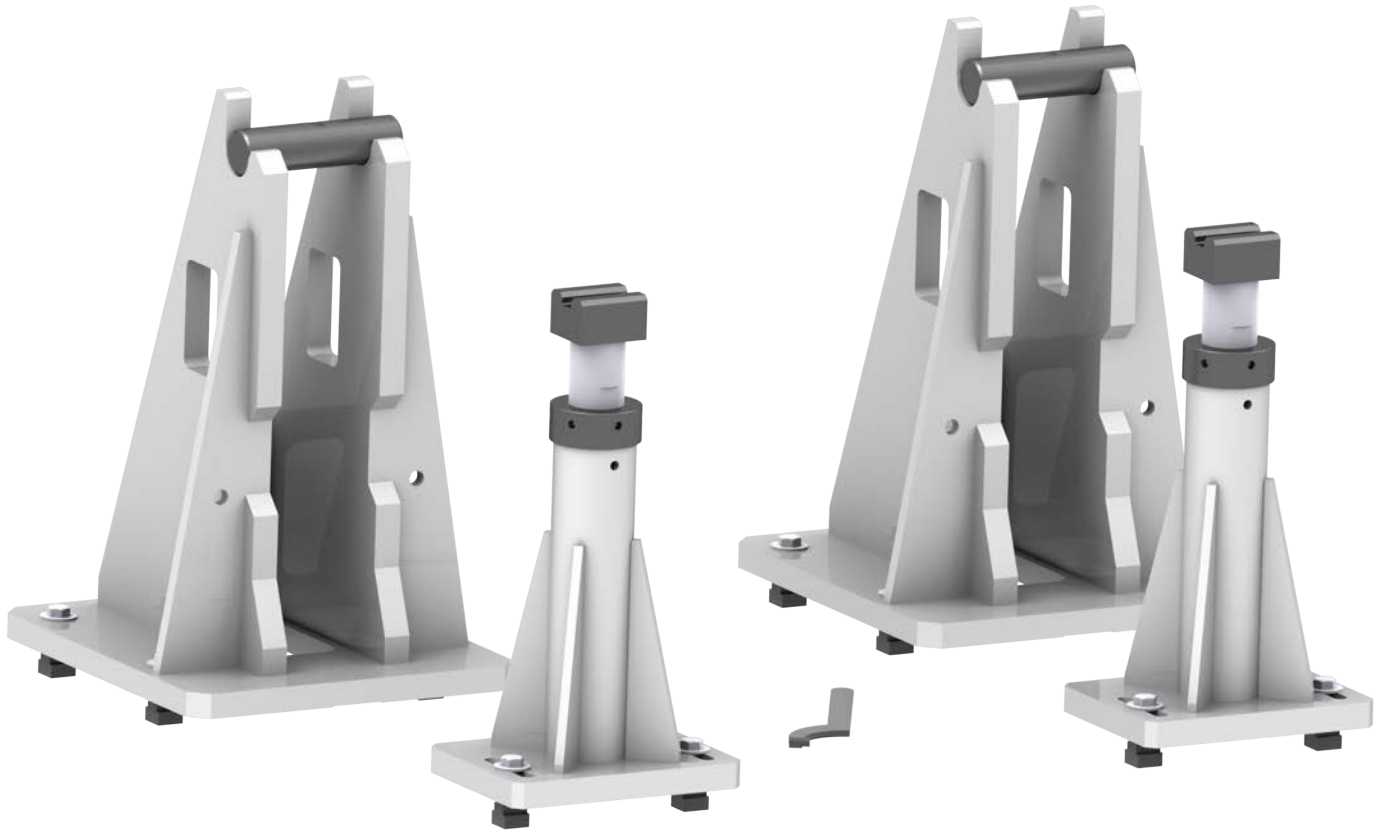
Optional Equipment for Boring and Surfacing**Fixturing for Extra Large In-Line and V Blocks****10100 Fixture**

For Upper End Machining - Boring and Surfacing of V blocks such as CAT 3600 and Superior 2400. Centerline to deck dimension is 24.65" (626mm) Saddle pin diameter is 2.5" (63.5mm) Main Line Locators must be ordered separately



10100A Fixture

For Upper End Machining - Boring and Surfacing of V blocks such as Waukesha AT. Centerline to deck dimension is 29.28" (743.7mm) Saddle pin diameter is 2.5" (63.5mm) Main Line Locators must be ordered separately. Centerline to base 29.28"



10100D Fixture

For Upper End Machining - Boring and Surfacing of V Blocks such as EMD 645 & 710. Main Line Locators must be ordered separately.

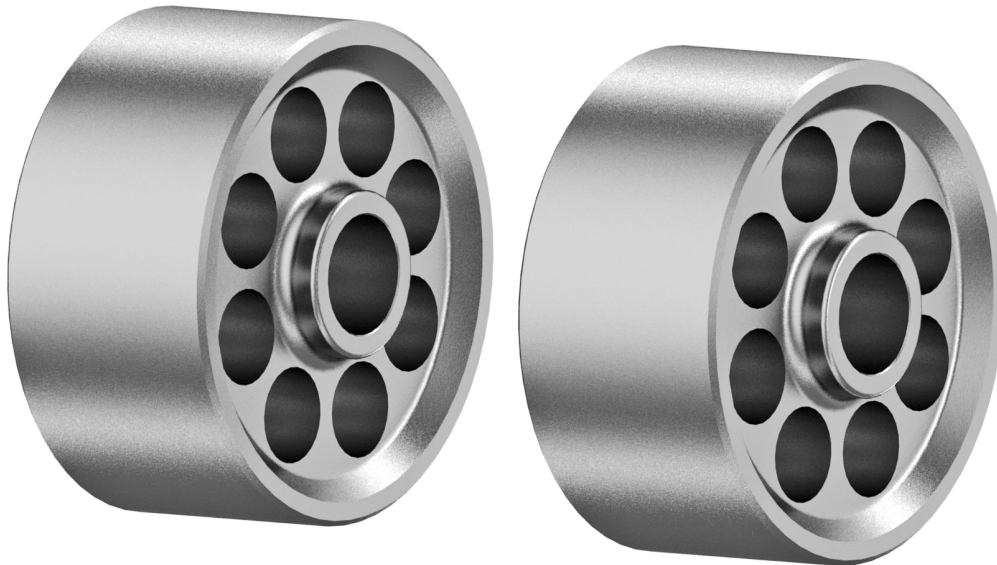


Main Bearing Bore Locator Sets

For 10100 & 10100A Block Fixture. (If Customer Requires Size Other than Available from Stock, Rottler will Manufacture the Required Size.) Customer Must Provide the Size, Including Tolerance of the Main Bearing Bore.

10102A Main Line Locators

For CAT 3600



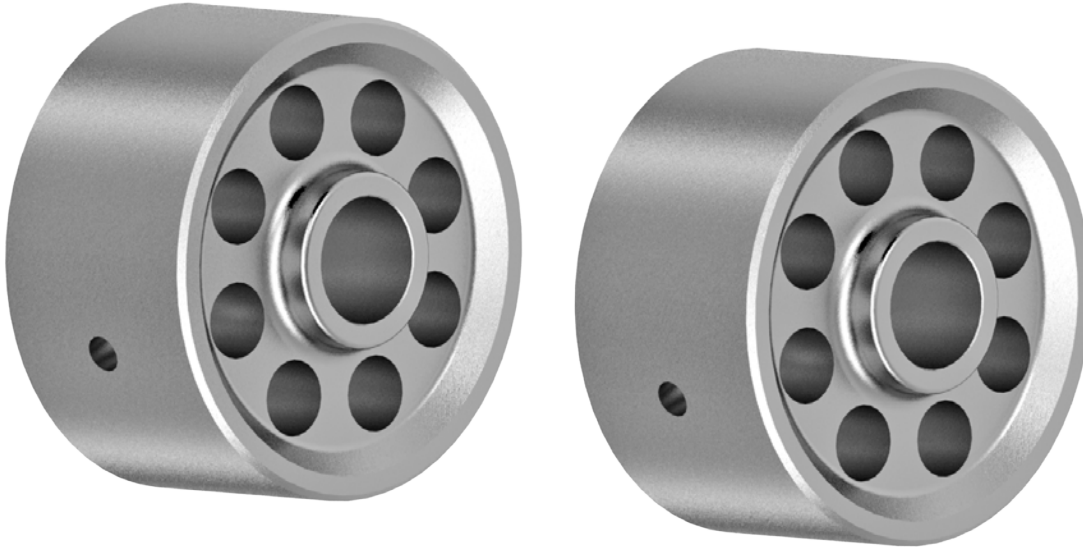
10102C Main Line Locators

For Superior 2400



10102E Main Line Locators

For Waukesha AT



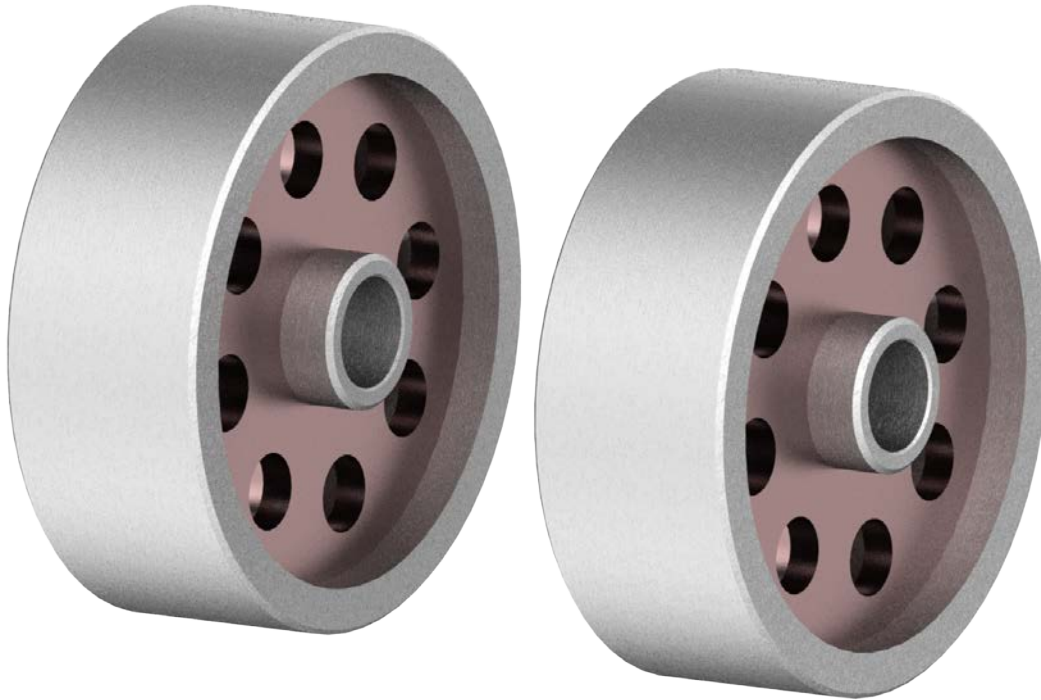
10102L Main Line Locators

For MTU 1163



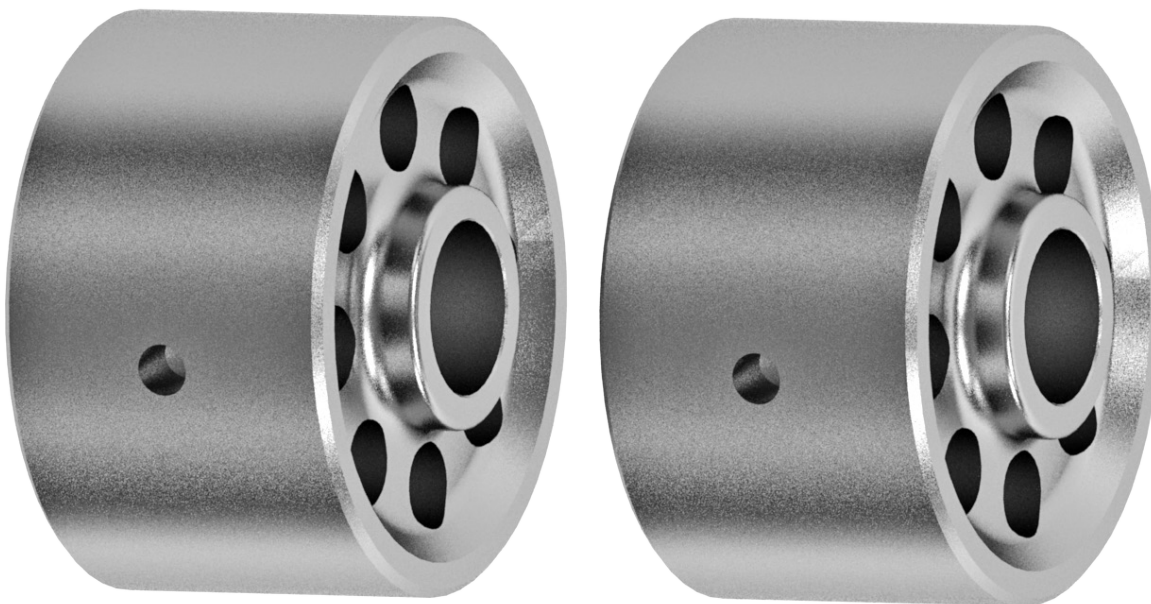
10102N Main Line Locators

For MTU 8000



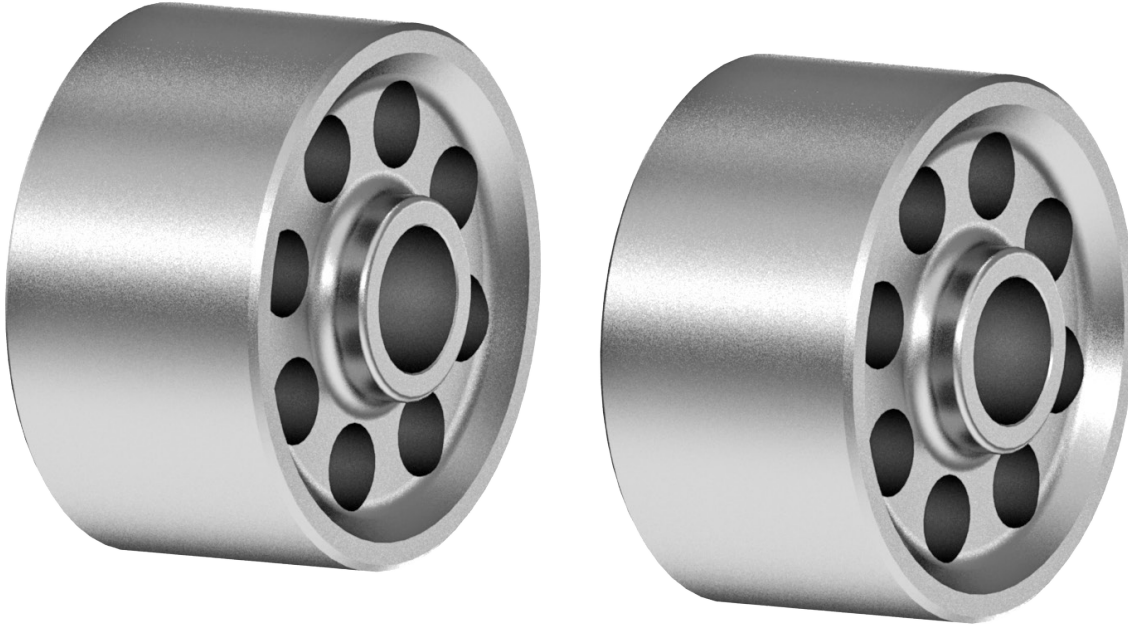
10102R Main Line Locators

For Locomotive EMD 645 (8.242")



10102G Main Line Locators

For Locomotive EMD 710 (9.242")

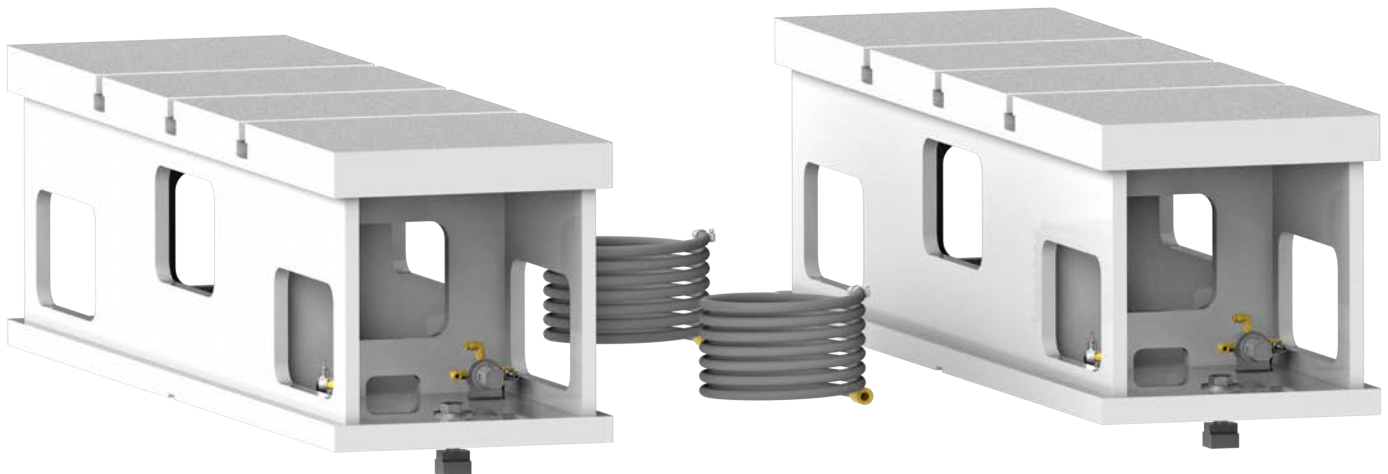


6309P Clamping System
For Fixtures 10100 & 10100A



10355 Set of Parallels with Air Float

15 1/2" (394mm) - 55" (1400mm) long. Required when using Large Block Fixtures 6405F and 6821.



Fixturing for Mid Range to Large In-Line and V Blocks

Requires Parallels 10355

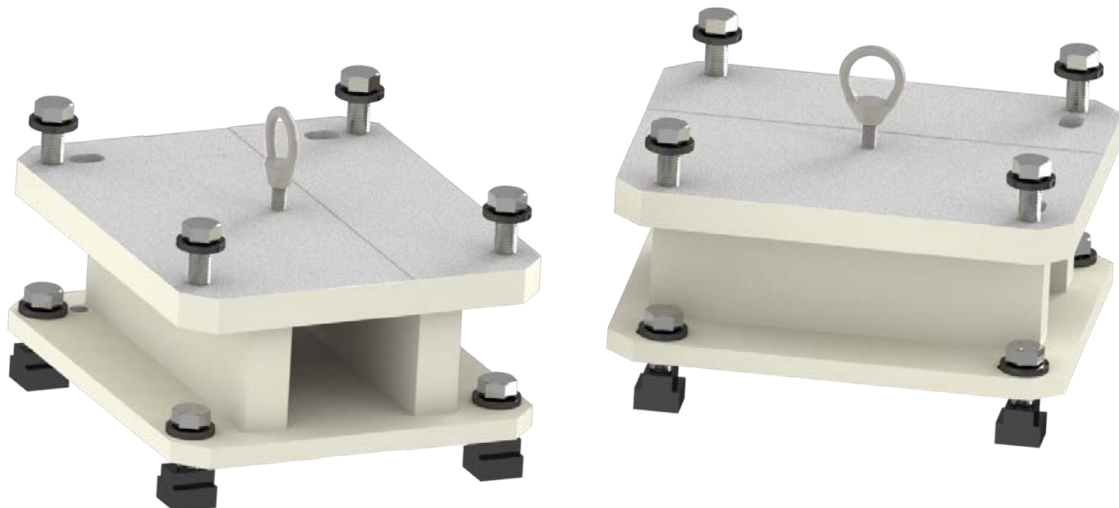
6405F Large V Block Fixture

For Blocks such as CAT 3500/399, Cummins K and QSK, MTU 4000, Waukesha 7042, etc. Centerline to deck dimension is 16.28" (413.5mm) Saddle pin diameter is 2.5" (63.5mm) Requires Locators as listed below.



6405L 6" (150mm) Parallel Risers

For 6405F Large V Block Fixture for low head gasket fire deck engine blocks such as MTU 4000, Jenbacher 3&4 and Cummins QSK & K50

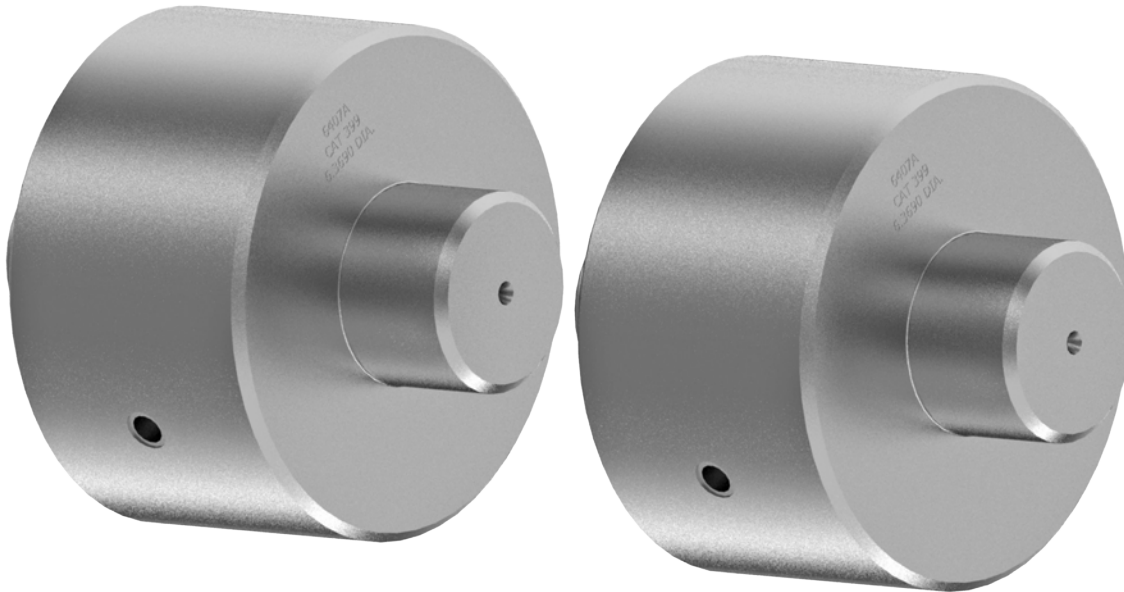


Main Bearing Bore Locator Sets

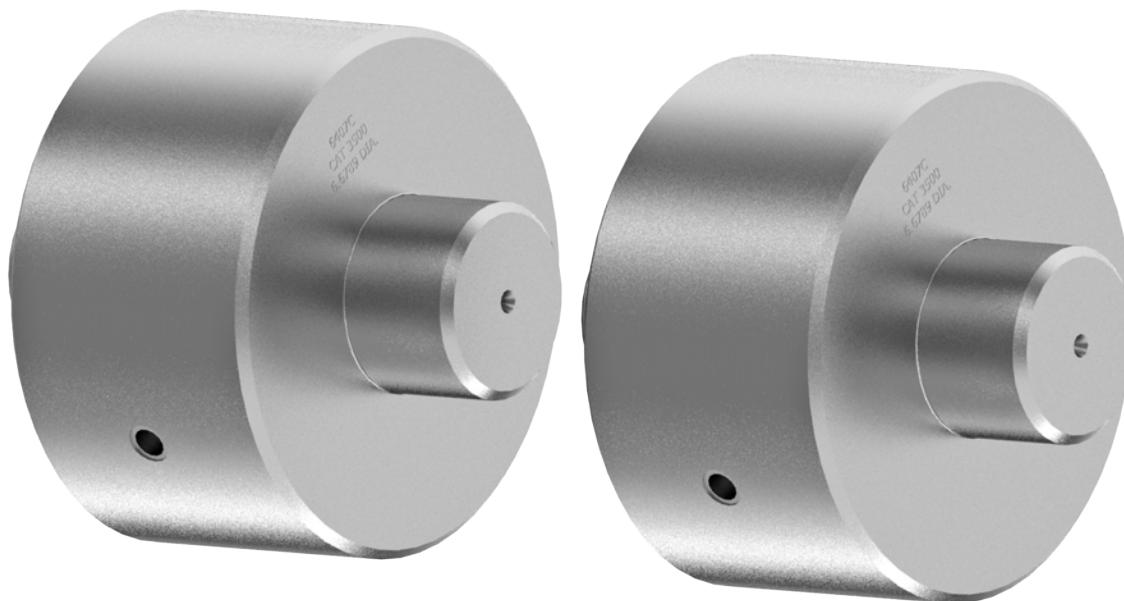
For 6405F Block Fixture. (If Customer Requires Size Other than Available from Stock, Rottler will Manufacture the Required Size.) Customer Must Provide the Size, Including Tolerance of the Main Bearing Bore.

6407A Locator Assembly

Main, CAT 399 / Large V-Block Fixture (Matched Pair)

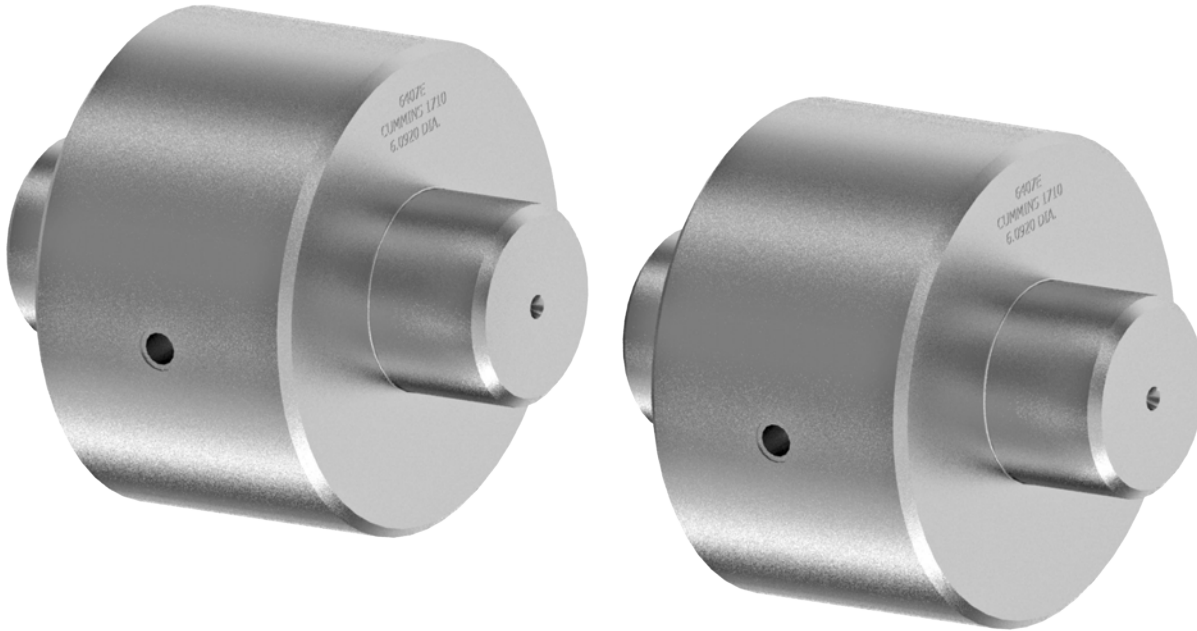
**6407C Locator Assembly**

Main, CAT 3500 / Large V-Block Fixture (Matched Pair)



6407E Locator Assembly

Main, Cummins 1710 / Large V-Block Fixture (Matched Pair)



6407G Locator Assembly

Main, Cummins K50 / Large V-Block Fixture (Matched Pair)



6407J Locator Assembly

Main, Cummins QSK / Large V-Block Fixture (Matched Pair)



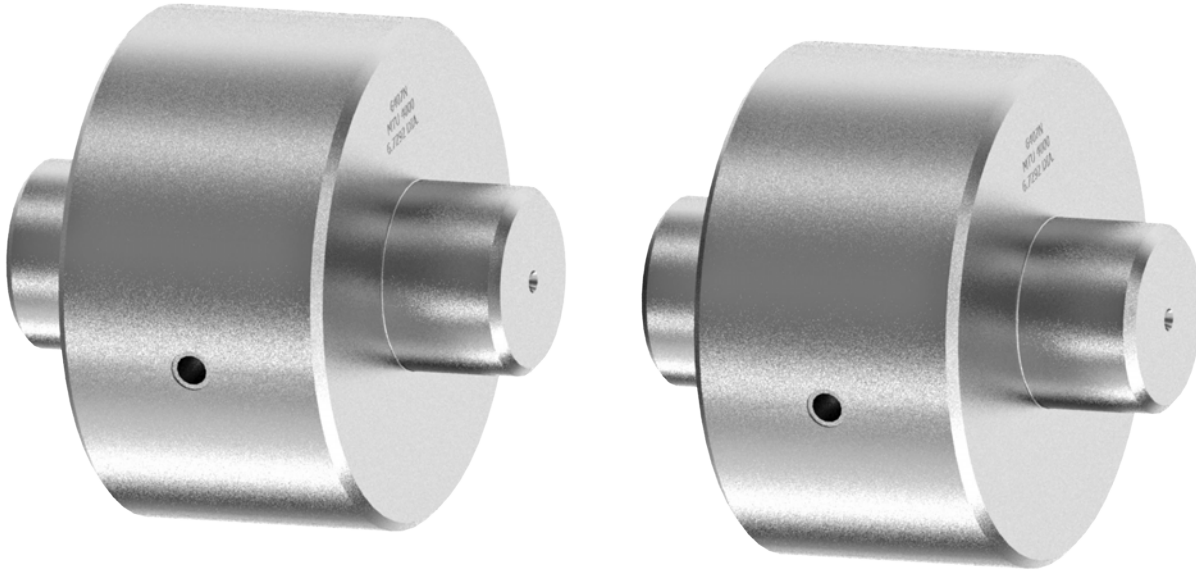
6407L Locator Assembly

Main, Waukesha 7042 / Large V-Block Fixture (Matched Pair)



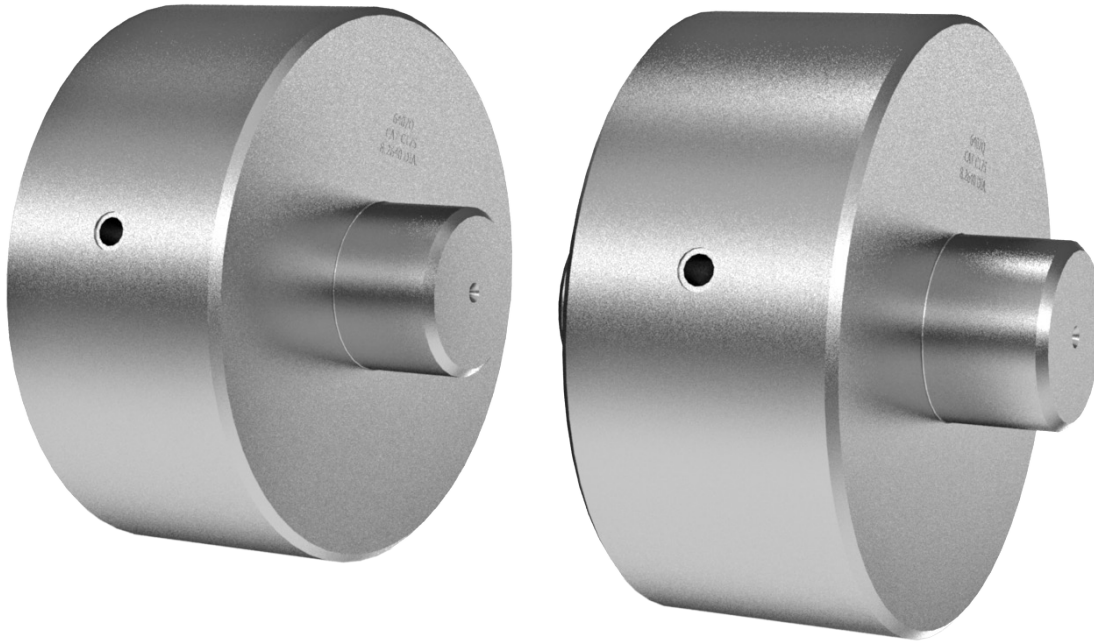
6407N Locator Assembly

Main, MTU 4000 / Large V-Block Fixture (Matched Pair)



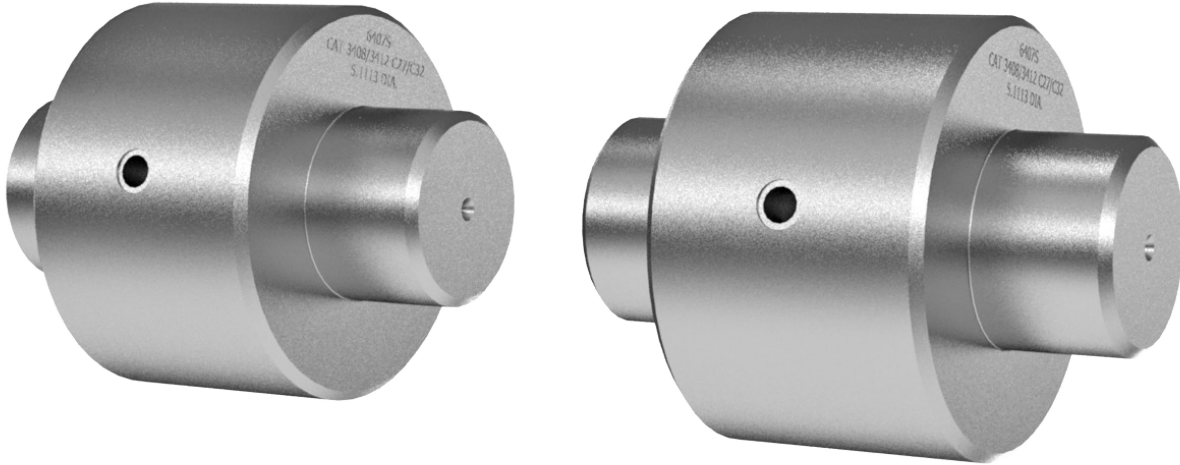
6407Q Locator Assembly

Main, CAT C175 / Large V-Block Fixture (Matched Pair)



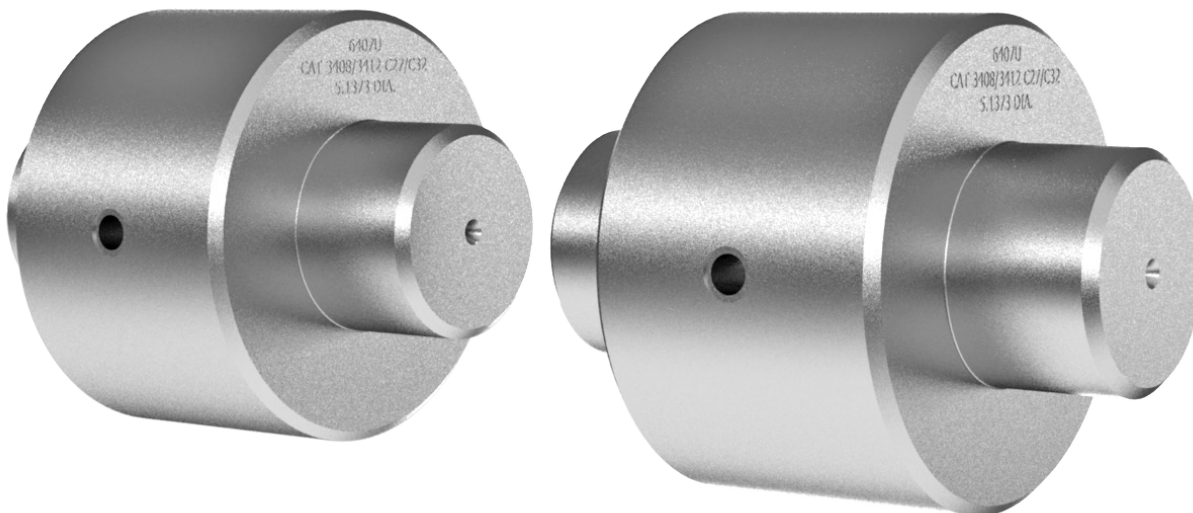
6407S Locator Assembly

Main, 5.1143 diameter bore (Matched Pair)



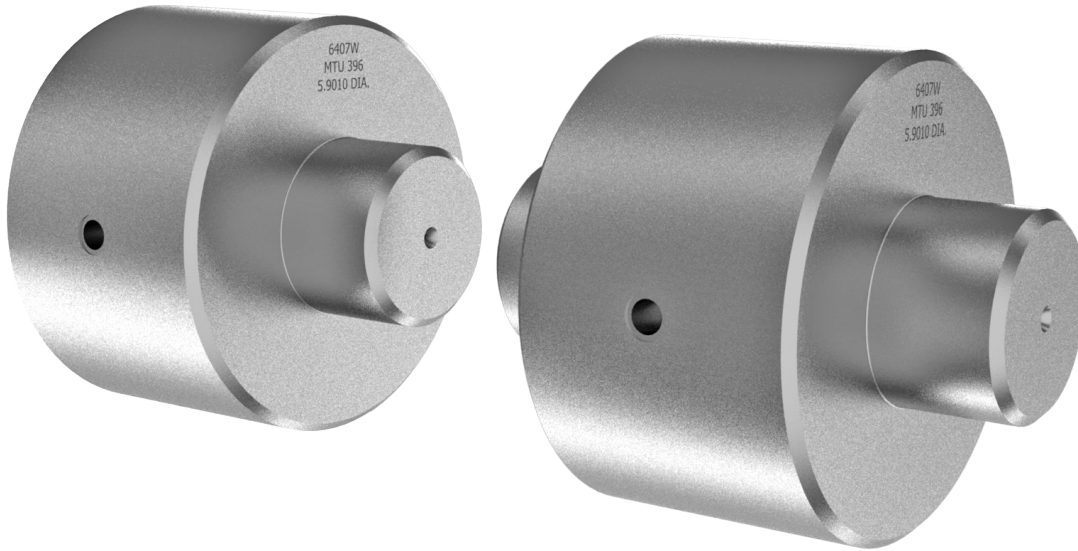
6407U Locator Assembly

Main, 5.1393 diameter bore (Matched Pair)



6407W Locator Assembly

Main, MTU 396

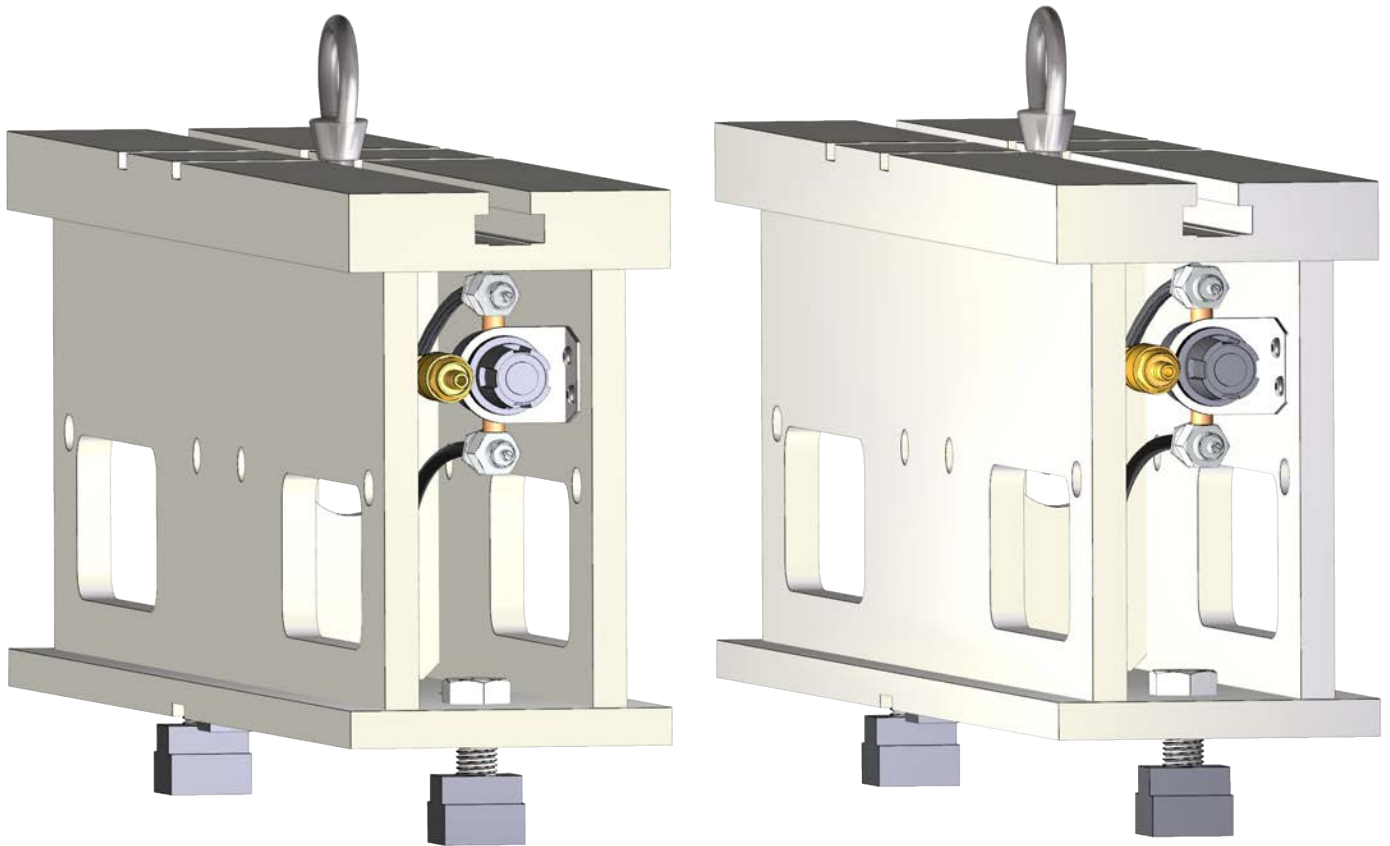


7152A Dual Axis Level Assembly



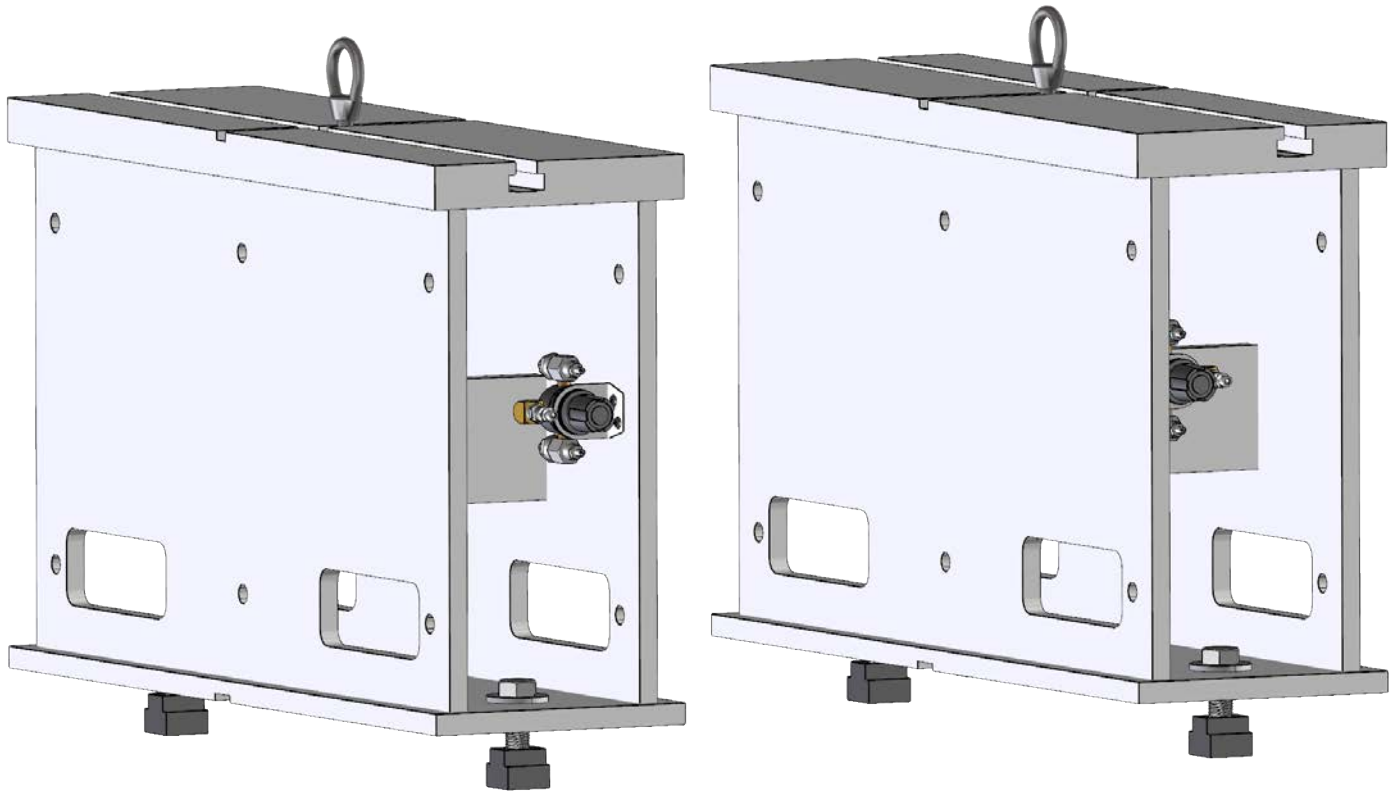
6370Z Set Of Parallels with Air Float

10" (254mm) - 3 T Slots



6370C Set Of Parallels with Air Float

18" (457mm) - 3 T Slots



7219W Heavy Duty T-Slot Universal Parallels

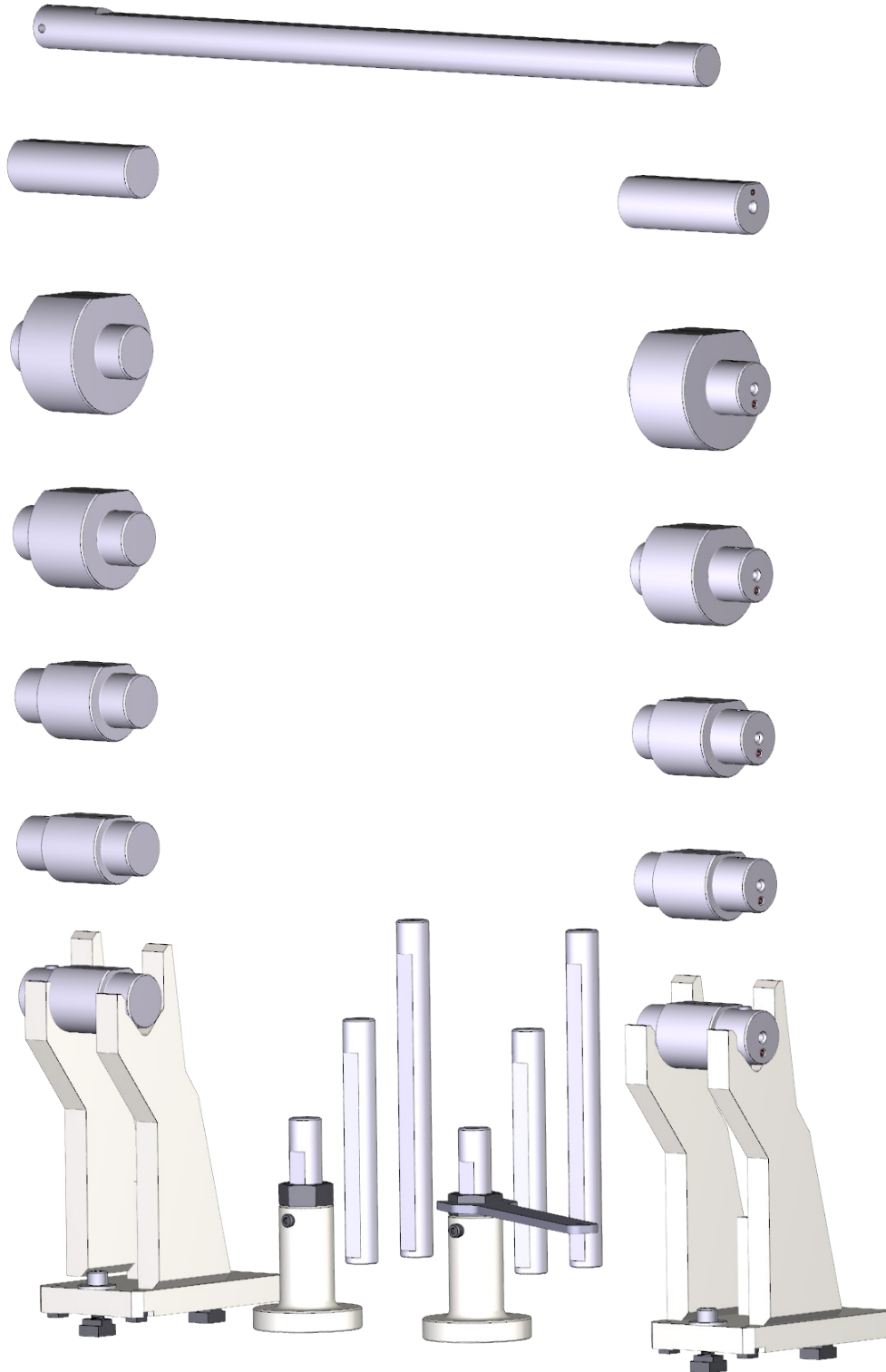
5.2" (132mm) Required when Machining Small In-Line Blocks on their Pan Rails.



6725 Mid-Range In-Line and V Block Fixture

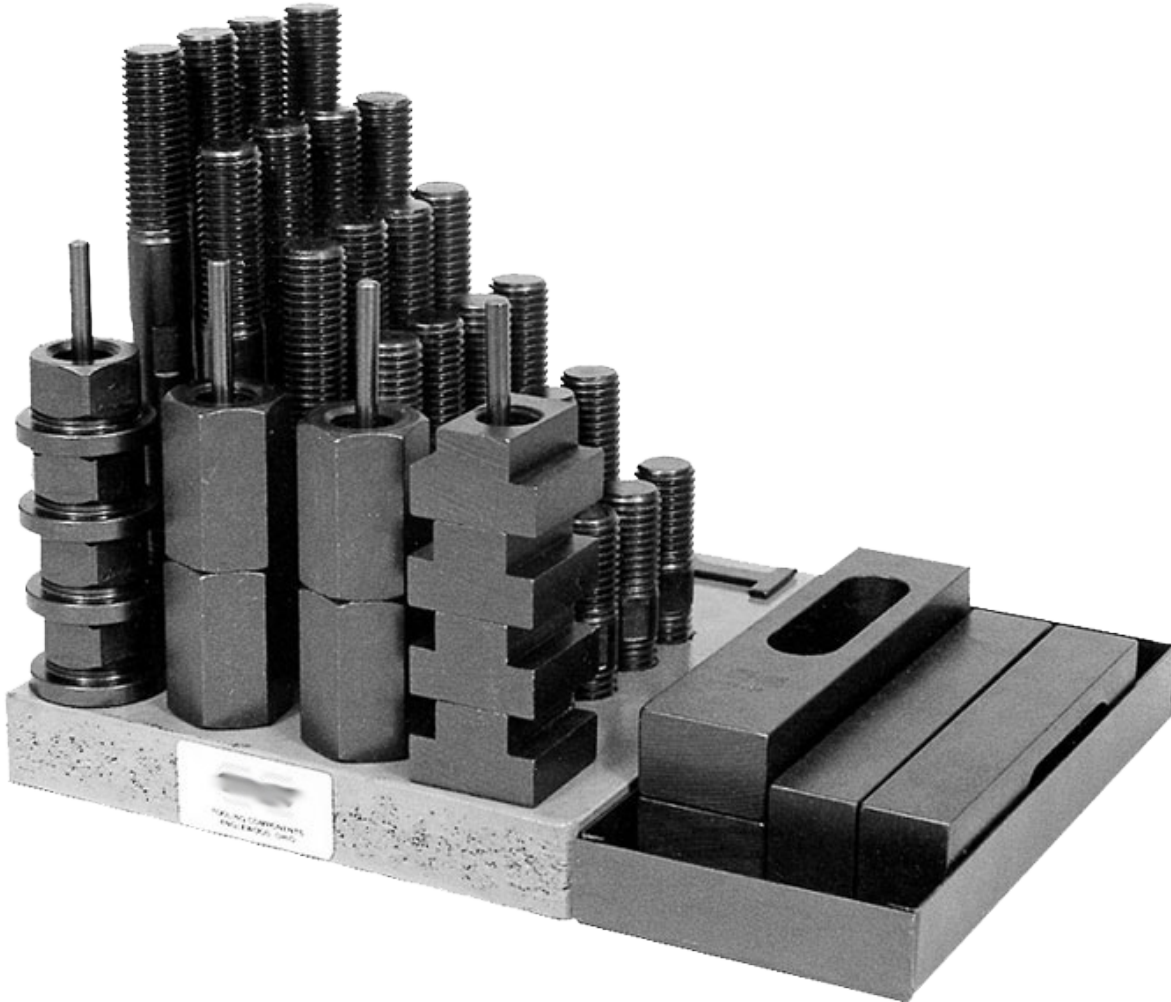
For Blocks Up to V12 Such as CAT C27, Cummins Nv12, Etc. Fixture Includes Five Pair Locators to Cover 2.5 - 6.0" (63.5 - 152mm) Main Line Diameter Range. Package includes 2" (50.8mm) bar to support small in-line and V-blocks, selection of locators available for most common blocks.

Note: 6725 requires 6370Z 10" (254mm) parallels.



6511 3/4" (19.05mm) Clamp Kit

T-Nuts, Bolts, Strap Clamps, Etc.

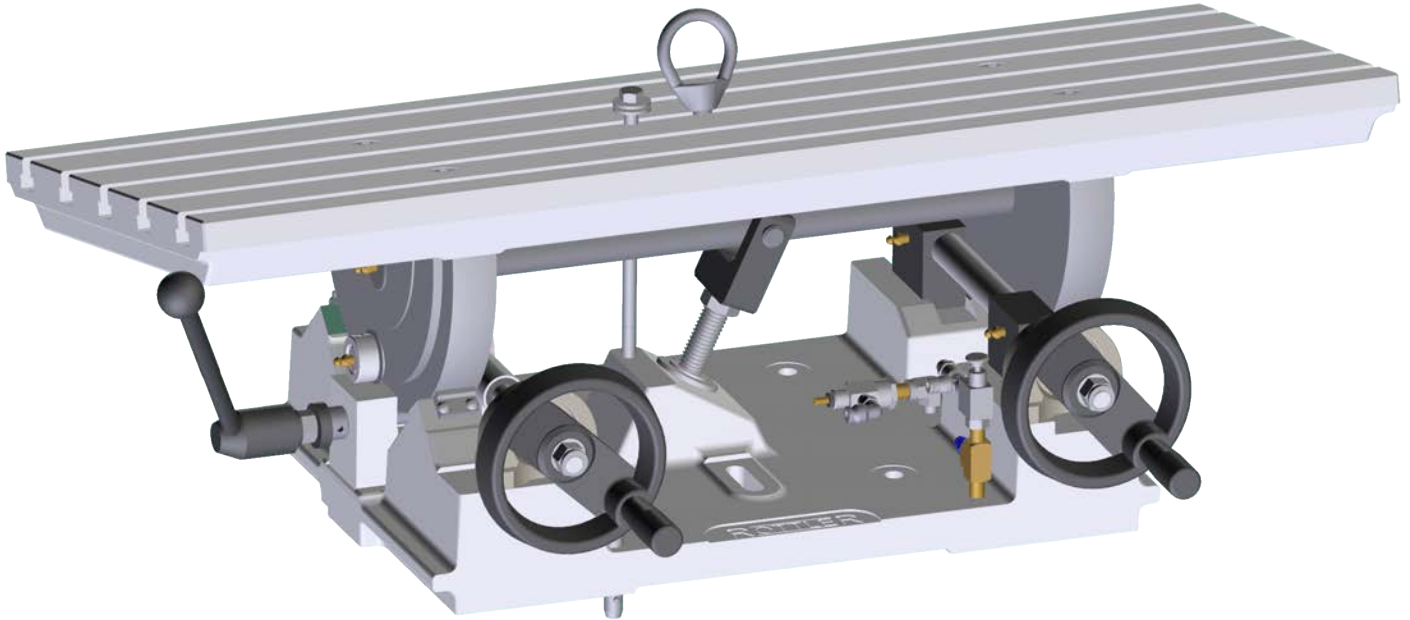


Fixturing for Surfacing Cylinder Heads and Manifolds

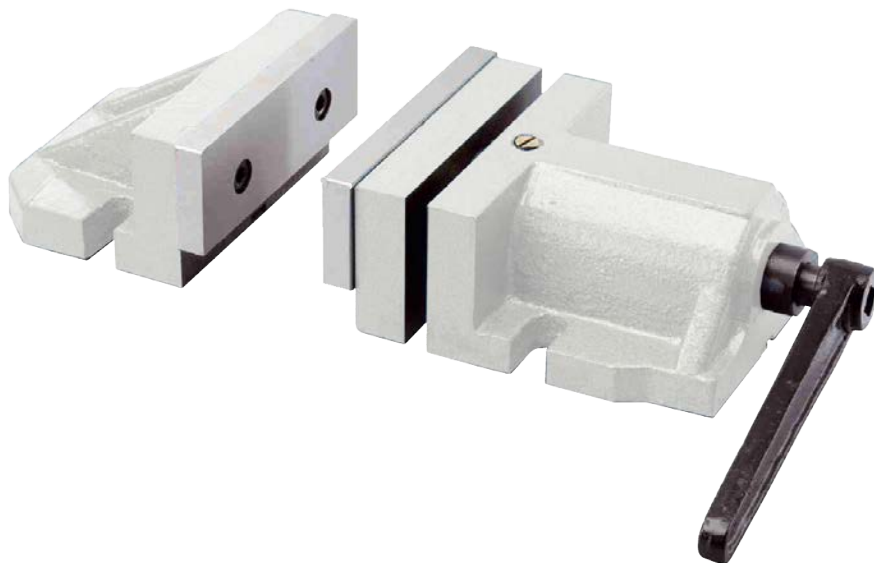
Requires Parallels 10355

7209M Leveling Table With Air Float

Complete With Universal Work Holding System for Surfacing Cylinder Heads and Manifolds. Requires One Set of 6370C Parallels

**7209N 2-Piece Vise**

For Holding Exhaust Manifolds for Surfacing. Also Used for Surfacing Main Bearing Housing Caps In Preparation for Main Line Boring. Requires 7209M Leveling Table.



Boring and Sleeving Tooling for HSK80A Spindle Taper

10118 Blind Hole Stub Cutterhead Package

1.5 - 4.2" (38 - 107mm) diameter x 6.5" (165mm) length complete with tooling and Digital Micrometer



10108B Blind Hole Stub Cutterhead

2.9 - 5.0" (74 - 152mm) diameter X 9.7" (246mm) length Complete With Tooling and Digital Micrometer



10117A Blind Hole Cutterhead

4.5 - 9.0" (114 - 229mm) diameter complete with tooling and Digital Micrometer suitable for boring diameters larger than spindle diameter 6" (152.5mm)



10116 Extended Spindle Blind Hole Cutterhead

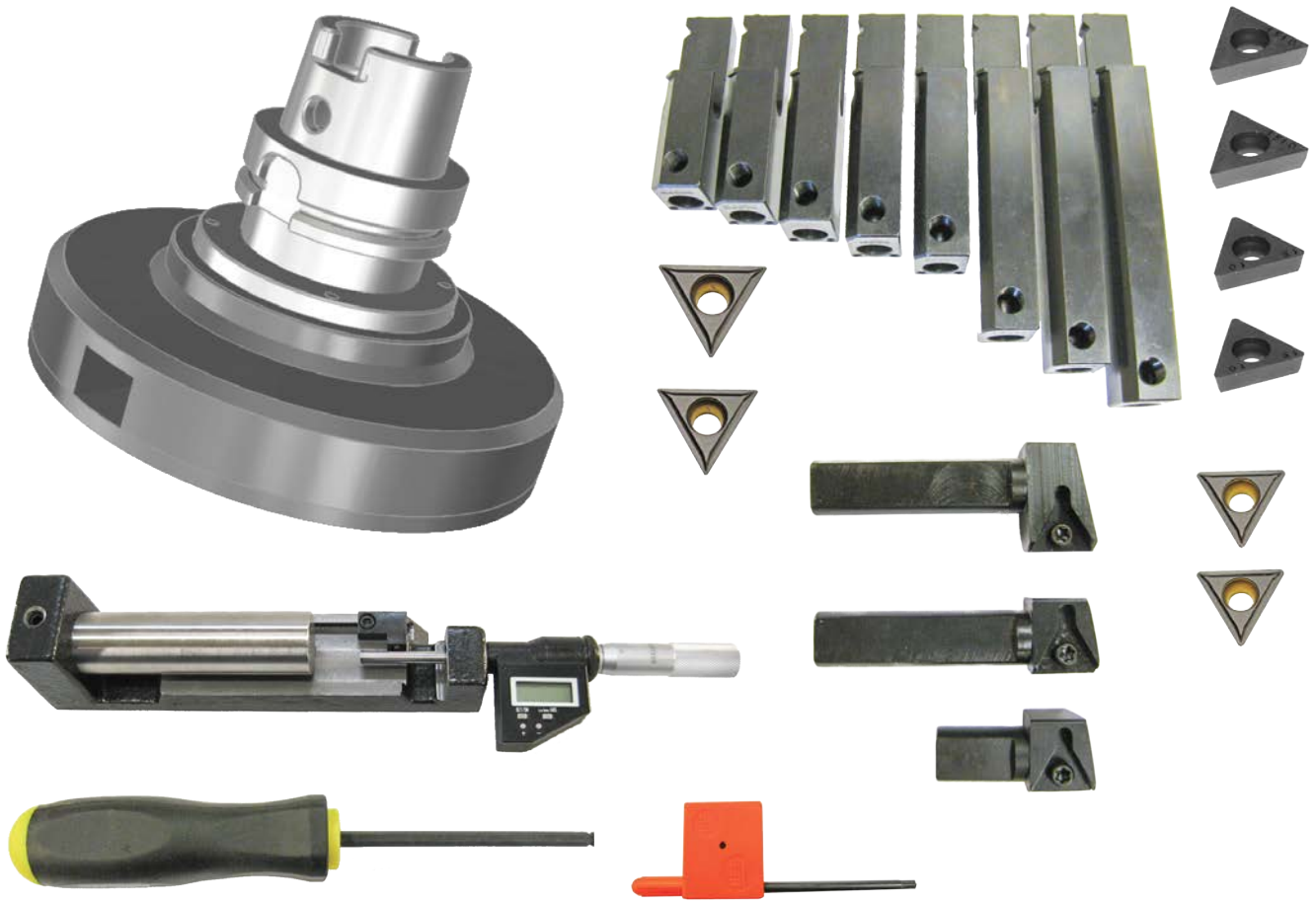
4.5 - 9.0" (114 - 228mm) diameter x 12.5" (318mm) length complete with tooling and Digital Micrometer



P C D I E F G

10107B Blind Hole Cutterhead

8.0 - 14.0" (203 - 360mm) diameter complete with tooling and Digital Micrometer



10104B Blind Hole Cutterhead

11.75 - 16" (298 - 406mm) diameter - Complete with tooling and Digital Micrometer



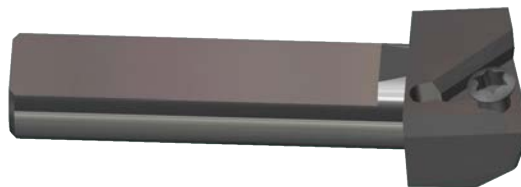
10105B Blind Hole Cutterhead

14.0 - 20.0" (356 - 508mm) diameter complete with tooling and Digital Micrometer



6593S Cartridge Assembly

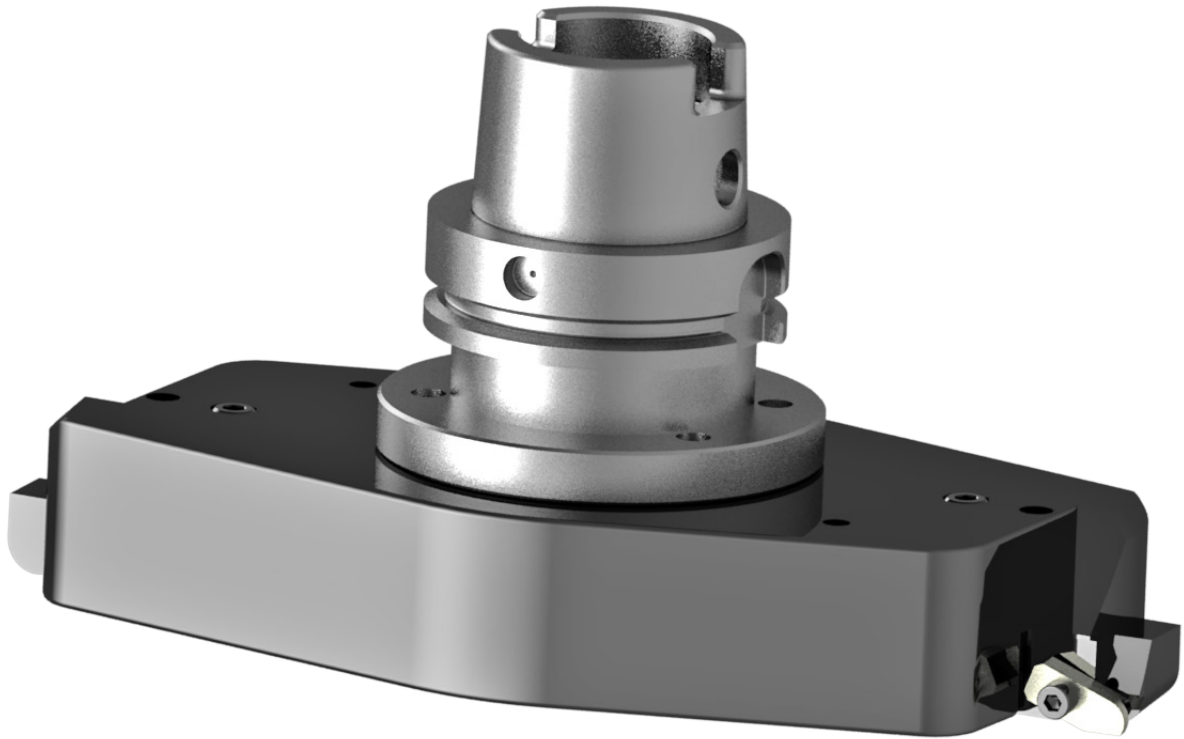
Circular Interpolation Counterbore Facing



Surfacing Tooling for HSK80A Spindle Taper

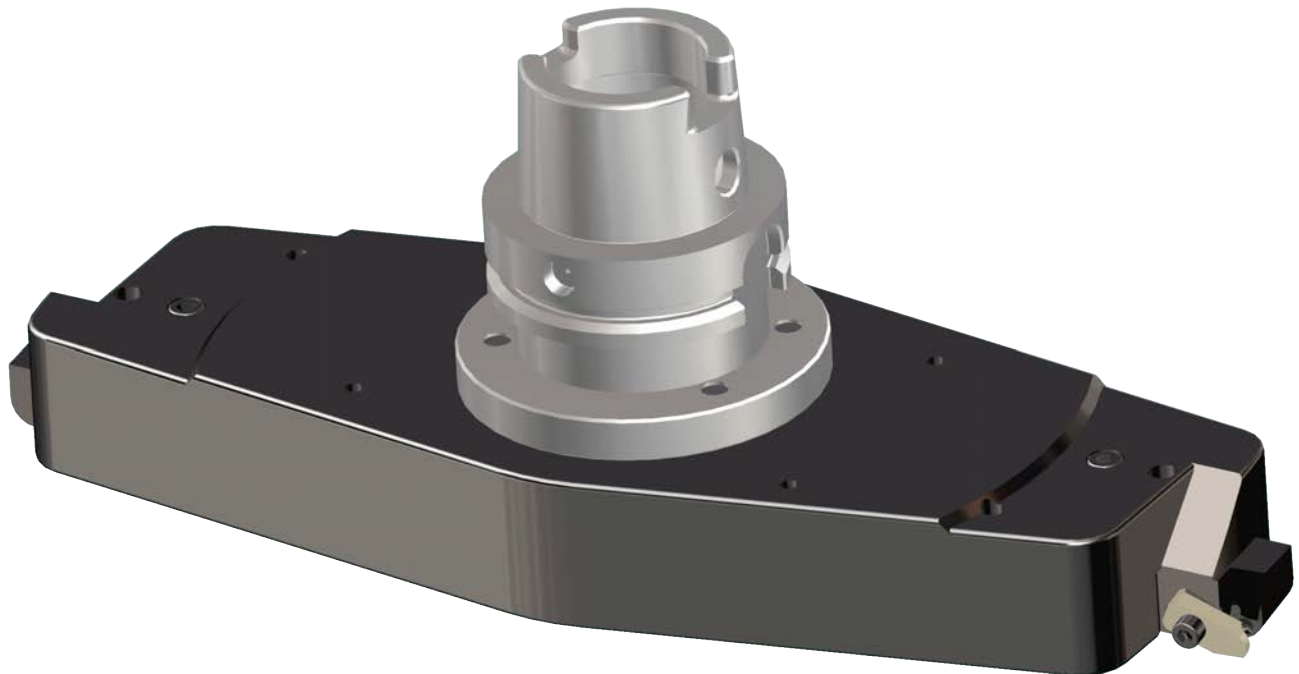
10119 10" (250mm) Diameter Surfacing Cutterhead Assembly

Complete With Tooling



10106C 14" (360mm) Diameter Surfacing Cutterhead Assembly

Complete With Tooling



10115 18" (460mm) Diameter Surfacing Cutterhead Assembly

Complete With Tooling



10106B 22" (560mm) Diameter Surfacing Cutterhead Assembly

Complete With Tooling



6301J CBN Insert

1/16 Radius, for Surfacing Large Blocks (15% Discount on orders of 10 or more)



6303V CBN Insert

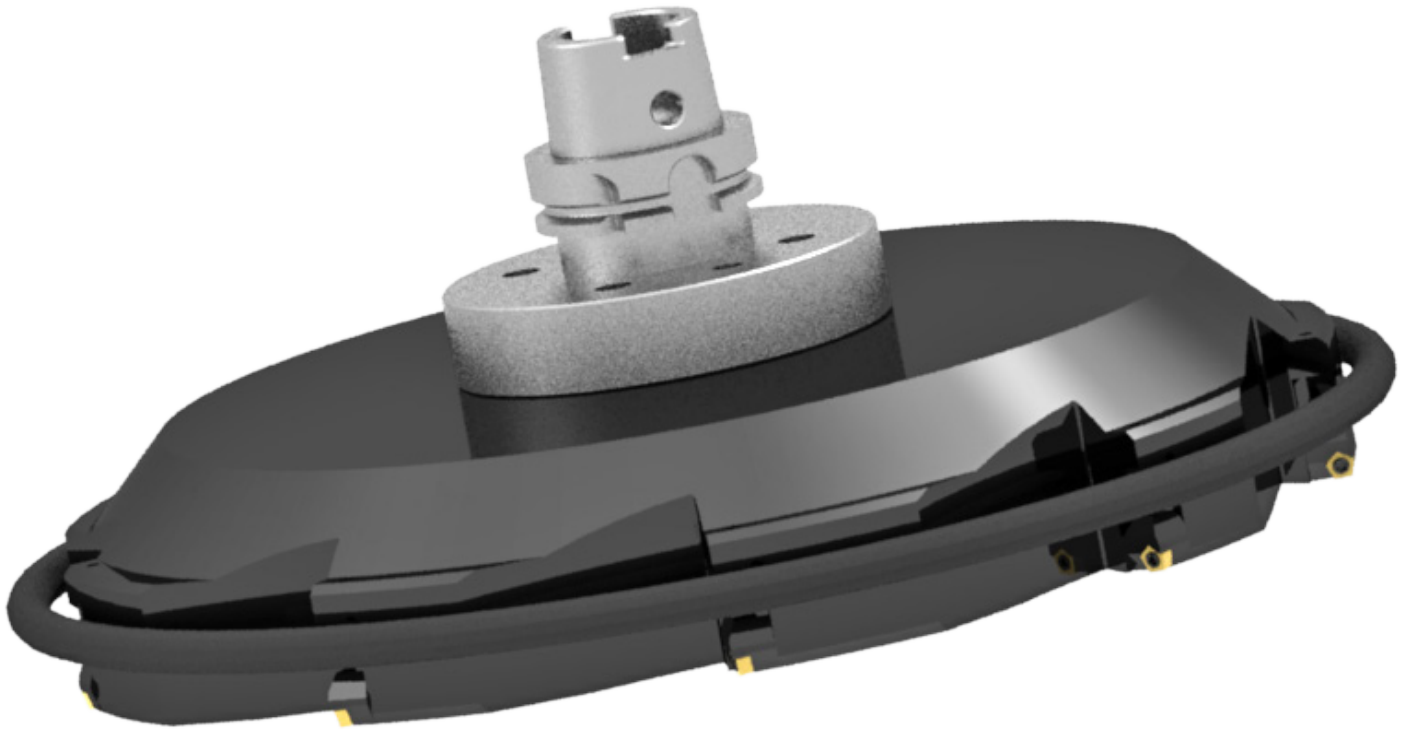
Octagonal (16-Cutting Corners) for surfacing large diesel blocks (15% Discount on orders of 10 or more)



Special Surfacing Tooling for Milling Metal Sprayed Head Gasket Decks

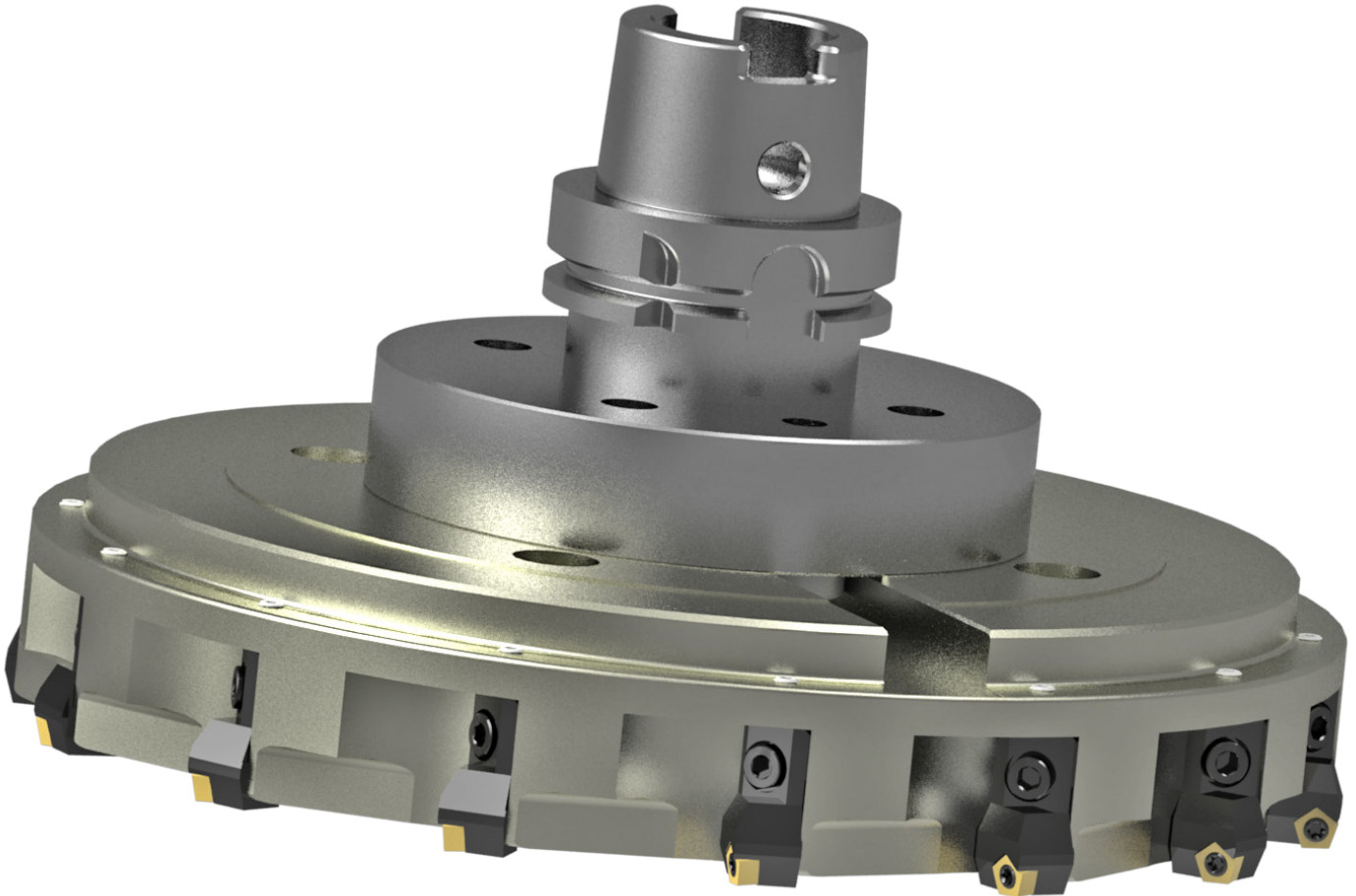
10109B Special 18" (420mm) Diameter Multi Tooth Milling Head

Including 9 Cartridges with 10 cutting edges per insert: Cutting inserts must be ordered separately



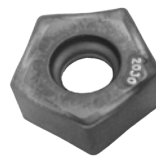
10120 Special 12" (300mm) Diameter Multi Tooth Milling Head

Including 14 Cartridges with 10 cutting edges per insert: Cutting inserts must be ordered separately



6864E Replacement Insert

(10 cutting edges per insert) for 10109B and 10120 Milling Head



6864D Replacement Cartridge

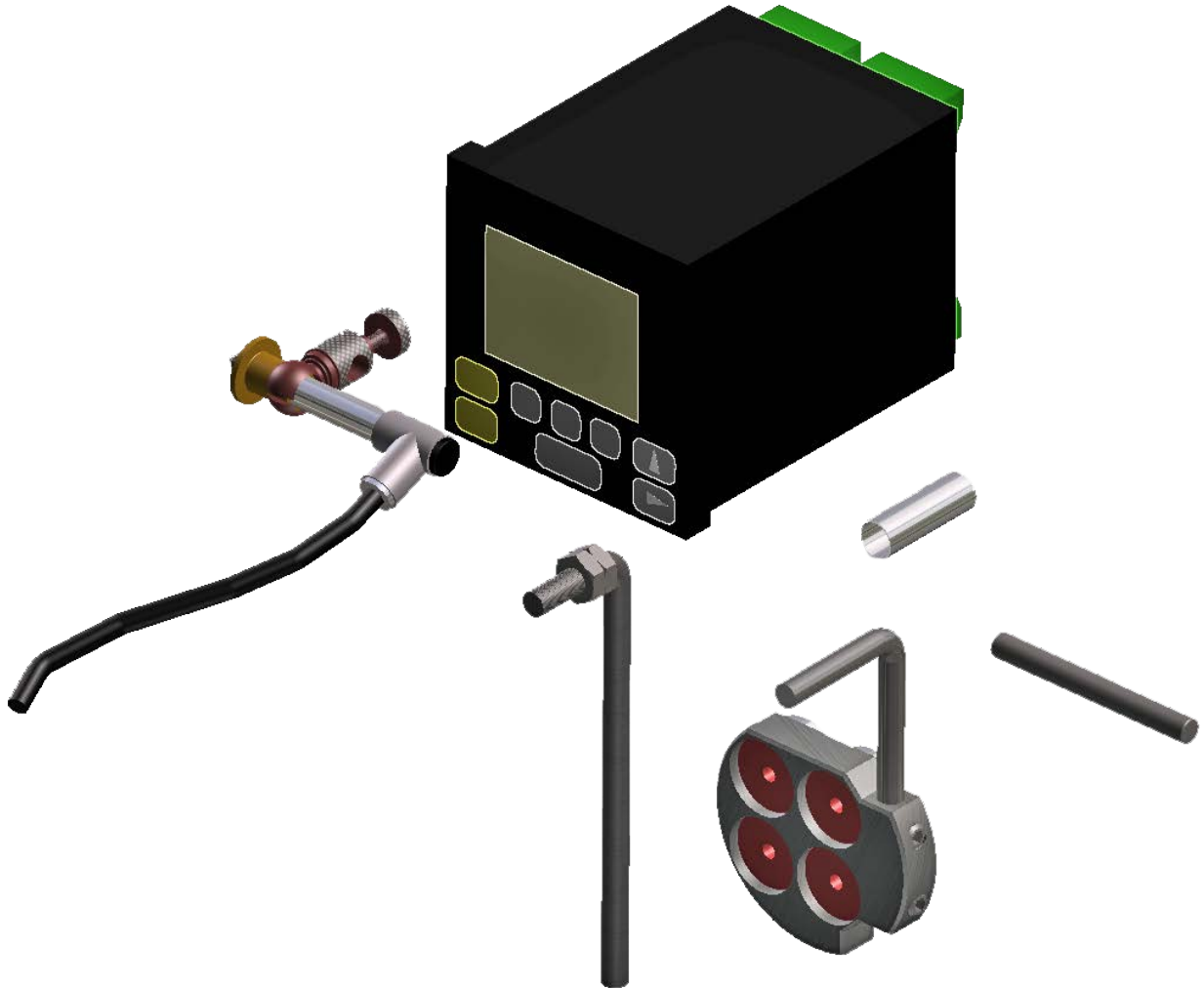
For 10120 Milling Head



General Purpose Accessories

502-12-7B Digital Runout Probe and Readout

Including Magnetic Holder for Block Set Up and Manual Centering of Cylinder Bores and Main Line Bores



General Purpose Tooling

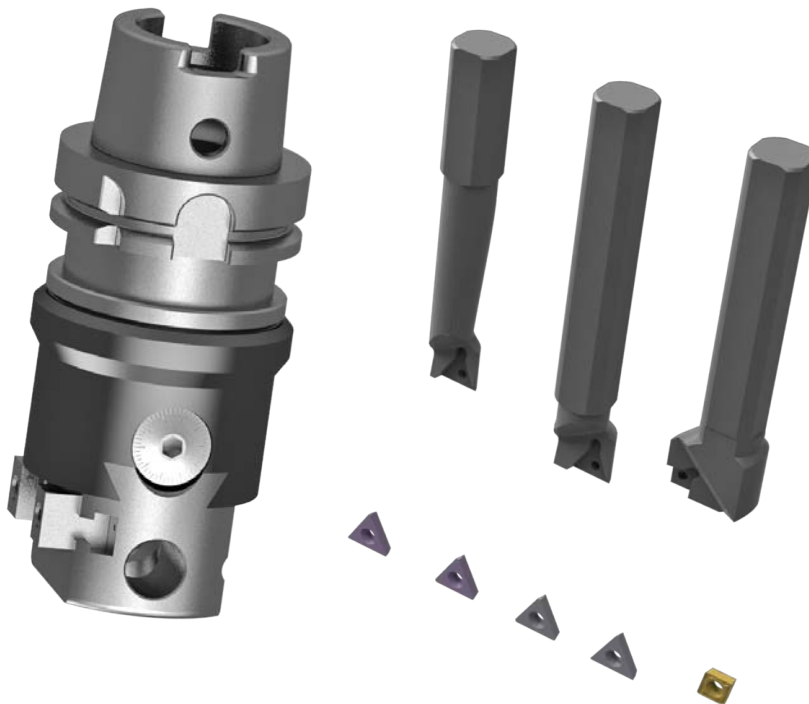
10121 Caterpillar 3400 Series Tappet Bore Repair Tooling Package

Including Digital Indicator and 1" Spindle Adaptor

Image Currently Unavailable

10122 Small Precision Adjustable Boring Head

Including Spindle Adapter and Digital Indicator for General Purpose Boring and Facing Work, Boring Range 3/4 - 3" (20 - 75mm) and Facing Range 4.9 - 7" (125 - 180mm)



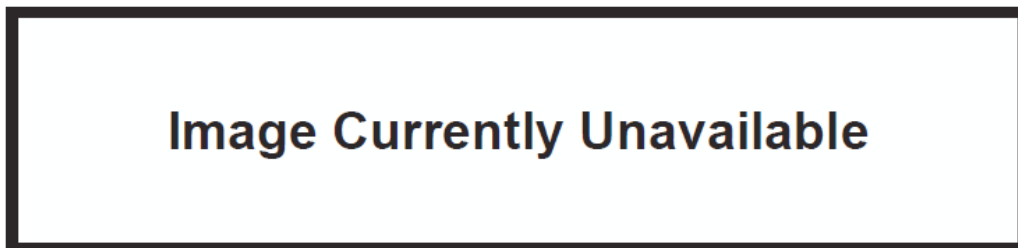
10123 Large Heavy Duty Adjustable Boring/Facing Head

Including Spindle Adapter for General Purpose Boring and Facing Work, and Cutting Wide Chamfers



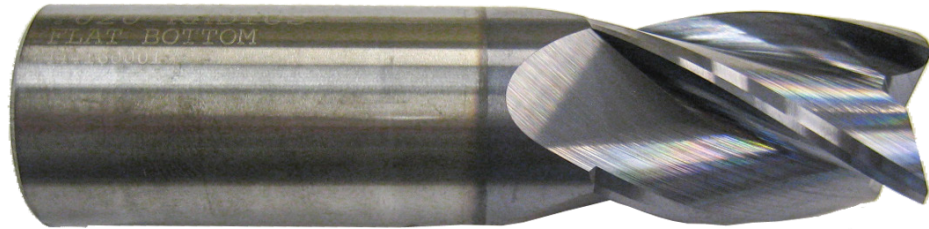
10124 Collet Kit

1/8 - 1" (3 - 26mm) 23 Collets Including Storage Box and Wrench. Requires 6170J #40 Spindle Adapter



650-2-45G Solid Carbide End Mill

1" (25.4mm) Diameter x 4.00" (101.4mm) overall length. Used for machining head gasket fire deck surface for water hole corrosion repairs.



650-2-43F Four Fluted End Mill

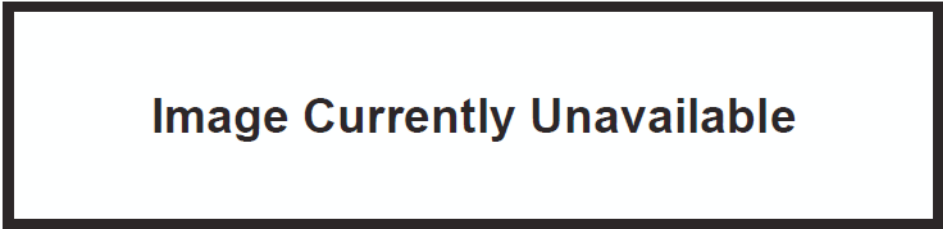
3/4" (19.05mm) X 4" (101.4mm) Overall length (.020" corner radius, flat bottom, no dish) Used for Machining Head Gasket Fire Deck Surface for Water Hold Corrosion Repairs



Spindle Adapters for Mounting Universal Tooling

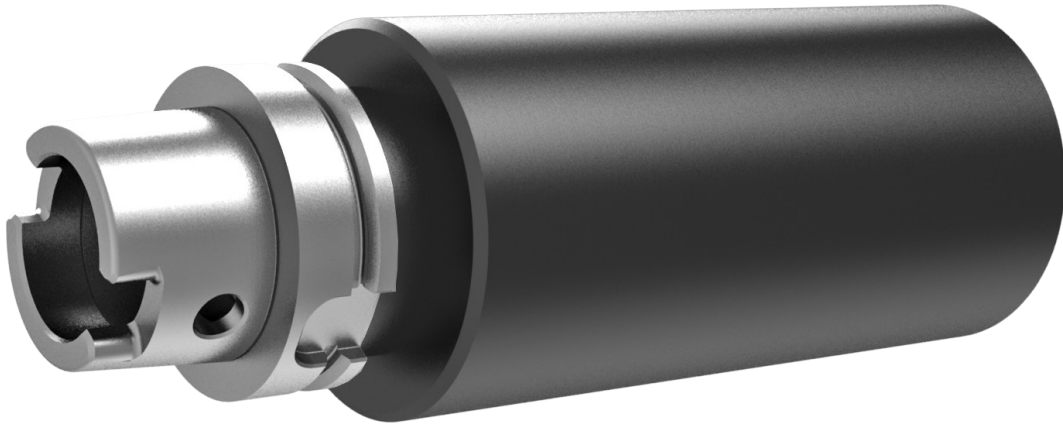
10113 1" (25.4mm) Spindle Adapter

For Driving 1" (25.4mm) Diameter Shank Tooling

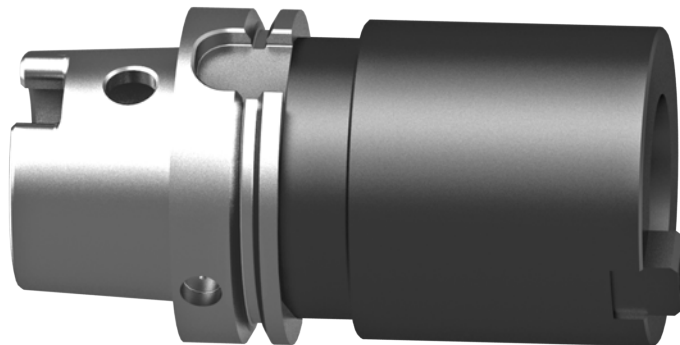


10125 Blank Adapter

Can be Machined by Customer to Suit Special Requirements



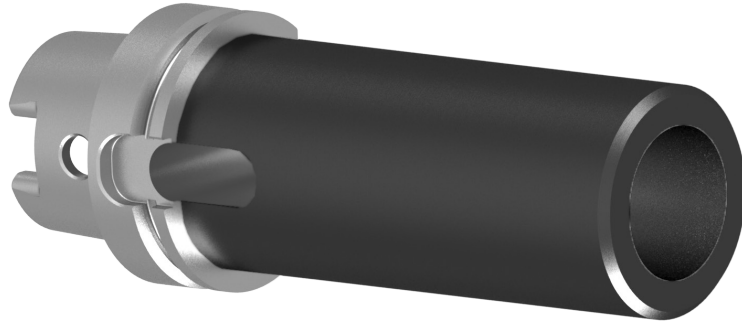
10126 #40 Taper Adapter



10127 R8 Taper Adaptor



10128 #5 Morse Taper Adapter

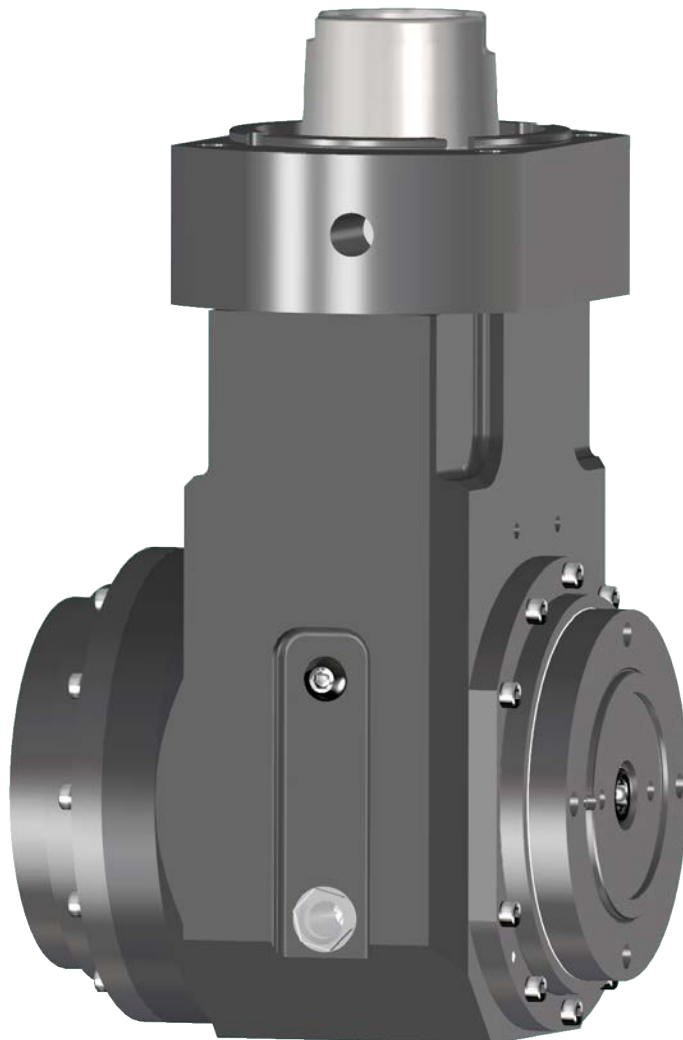


Main Line Bore Equipment

Line Bore Tooling for Extra Large Blocks Such as CAT 3600, 3500 & 399, Waukesha AT, 7042 and 9390, White Superior 2400 and 825

6898 Extra Heavy Duty 90 Degree Right Angle Drive

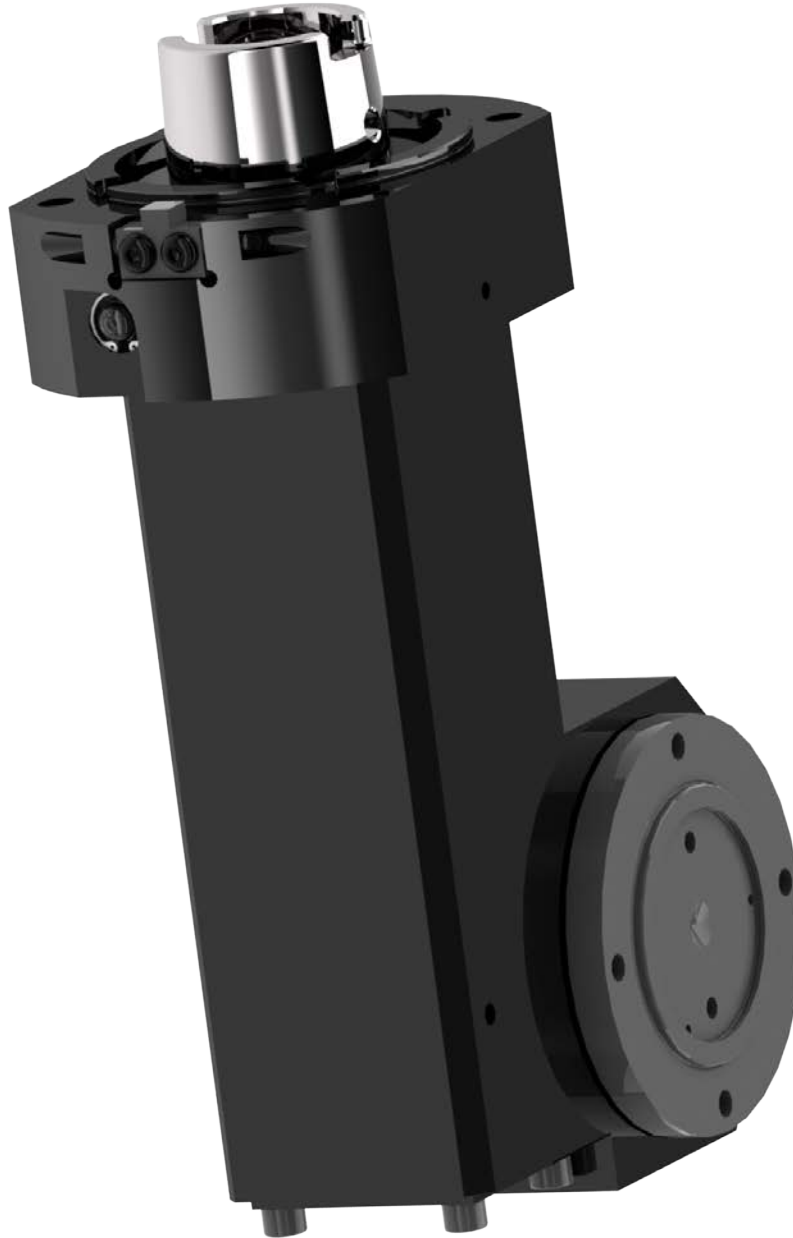
Double Sided for machining in left and right directions



10114 Heavy Duty Offset 90 Degree Right Angle Drive

Single Sided

Note: Cutterheads are Not Included With Right Angle Drive and Must be Ordered Separately



6779A Heavy Duty Line Bore Cutterhead Assembly

8 - 14" (203 - 356mm) Diameter Complete with Tooling and Digital Micrometer



6519V Heavy Duty Line Bore Cutterhead Assembly

6.0 - 8.50" (152.40 - 215.90mm) Diameter X 3" (76mm) Length Complete with Tooling and Digital Micrometer. Minimum Distance Between Bearing Housings 7.94" (102mm)



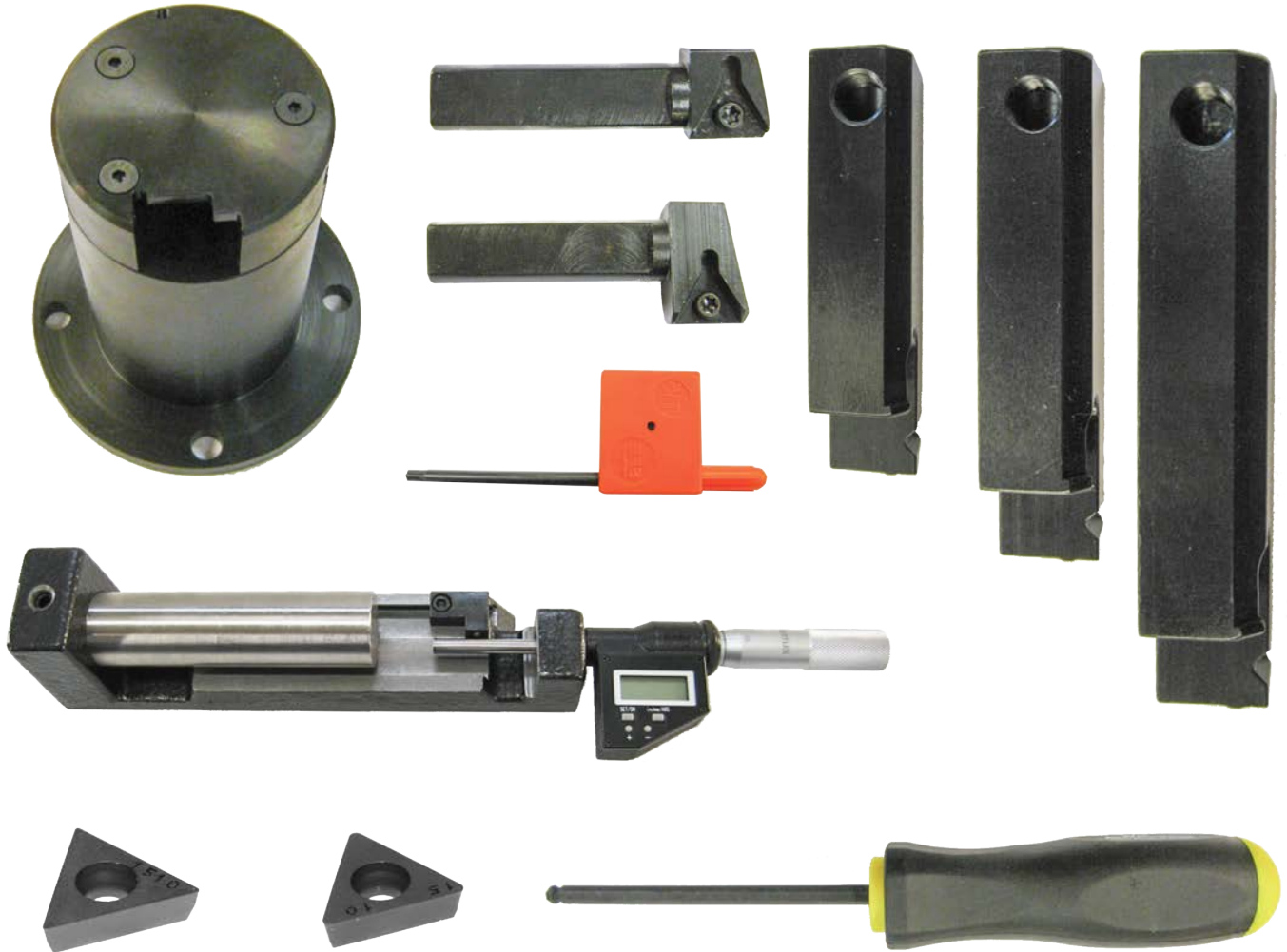
6519P Heavy Duty Line Bore Cutterhead Assembly

6.0 - 8.50" (152.40-215.90mm) Diameter X 4.25" (108mm) Length Complete with Tooling and Digital Micrometer. Minimum Distance Between Bearing Housings 8.94" (227mm)



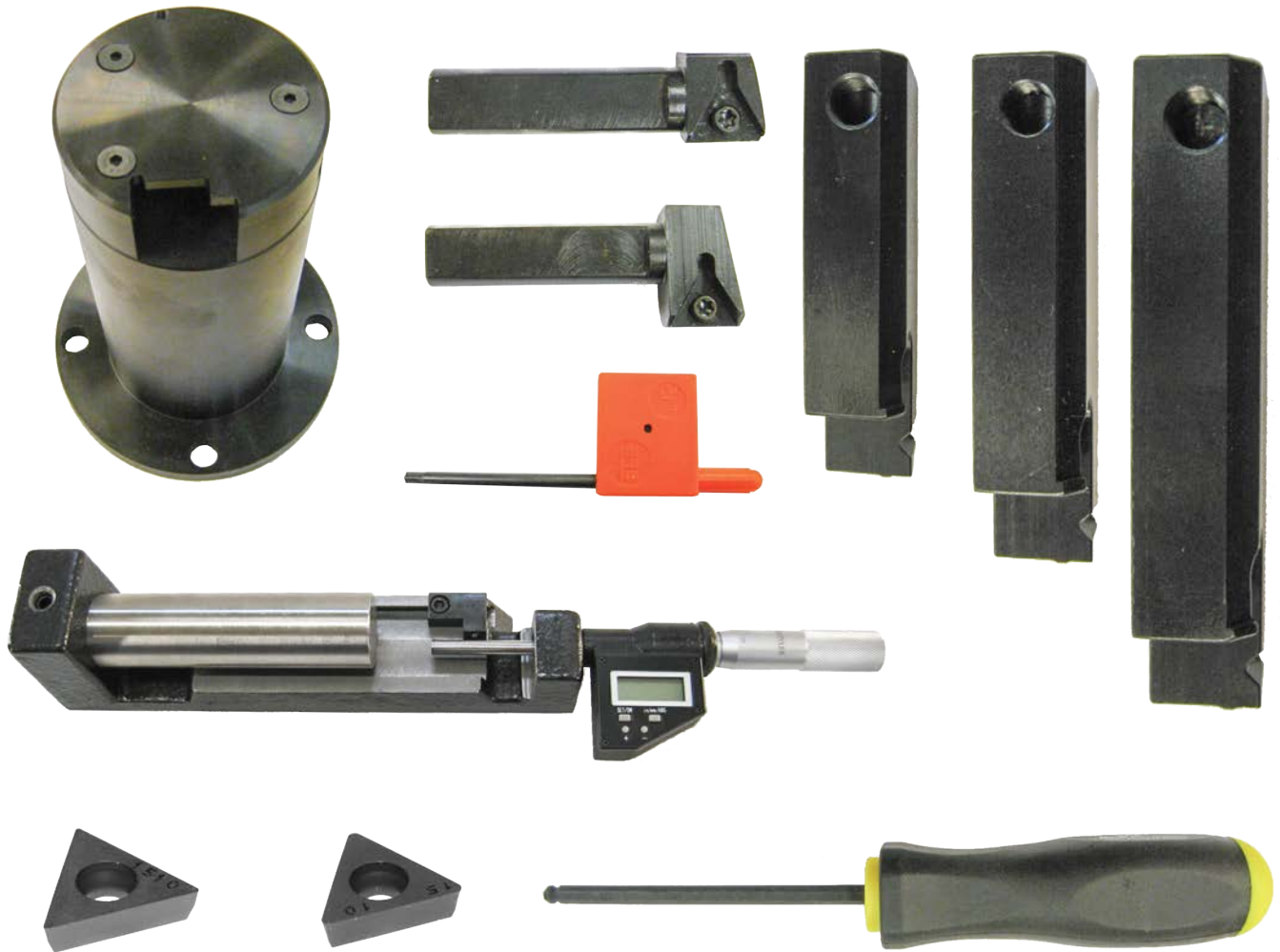
6519M Heavy Duty Line Bore Cutterhead Assembly

6.0 - 8.50" (152.40 - 215.90mm) Diameter X 5.10" (130mm) Length Complete with Tooling and Digital Micrometer.
Minimum Distance Between Bearing Housings 10.04" (255mm)



6519N Heavy Duty Line Bore Cutterhead Assembly

6.0 - 8.50" (152.40 - 215.90mm) Diameter X 6.0" (152mm) Length Complete with Tooling and Digital Micrometer. Minimum Distance Between Bearing Housings 10.94" (278mm)

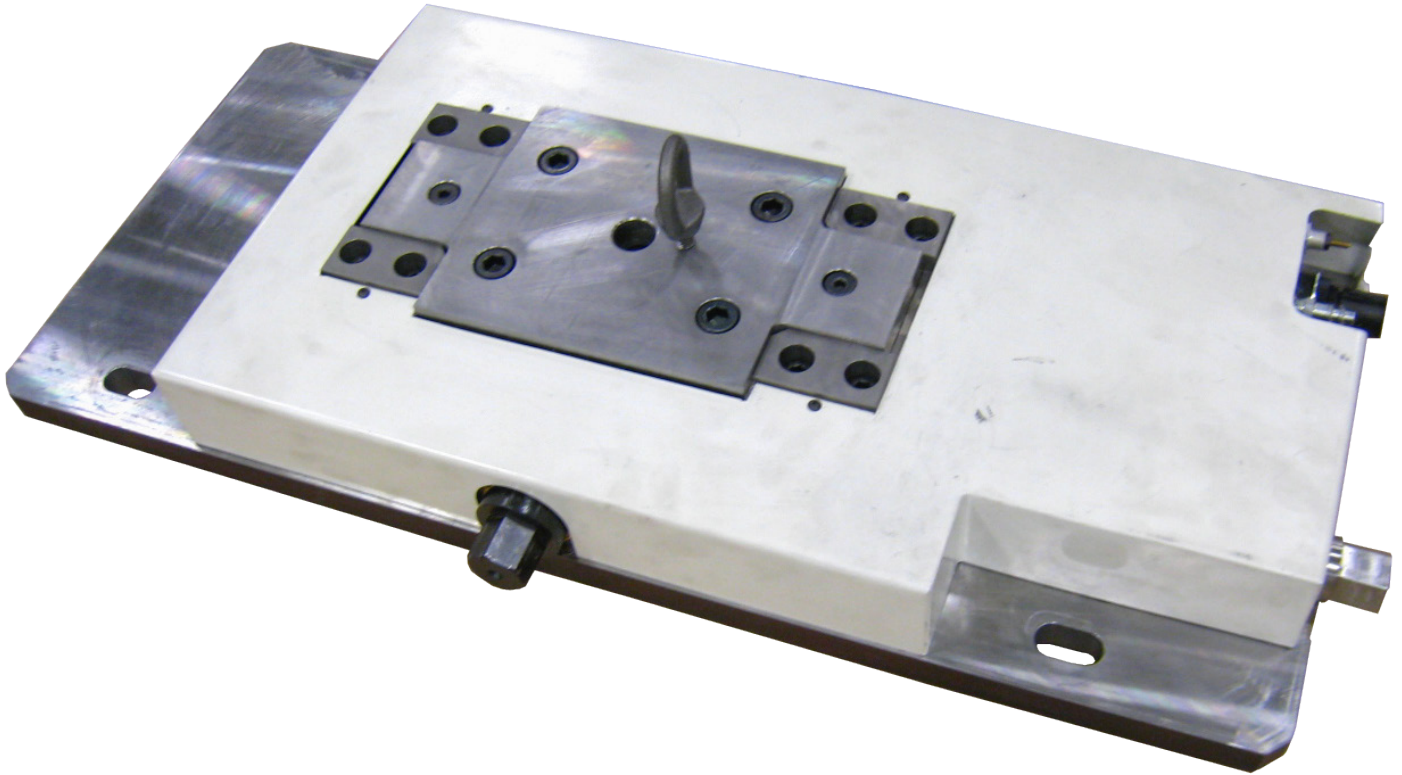


Line Bore Fixturing for Extra Large Blocks

Such as CAT 3600, Waukesha AT, Locomotive EMD and GE Frames, MTU 1163 & 8000

10200 Adjustable Universal Line Boring Fixture

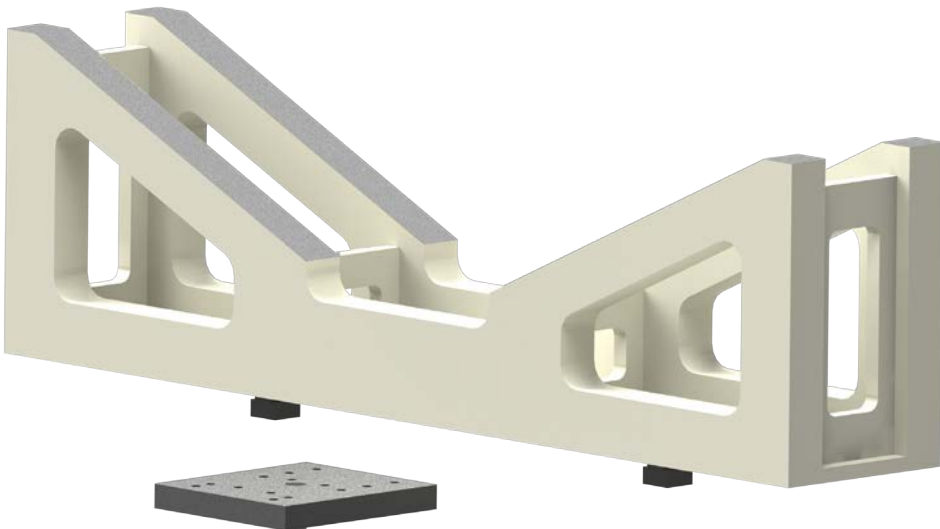
Adapter Package and Support Cradle must be Ordered Separately.



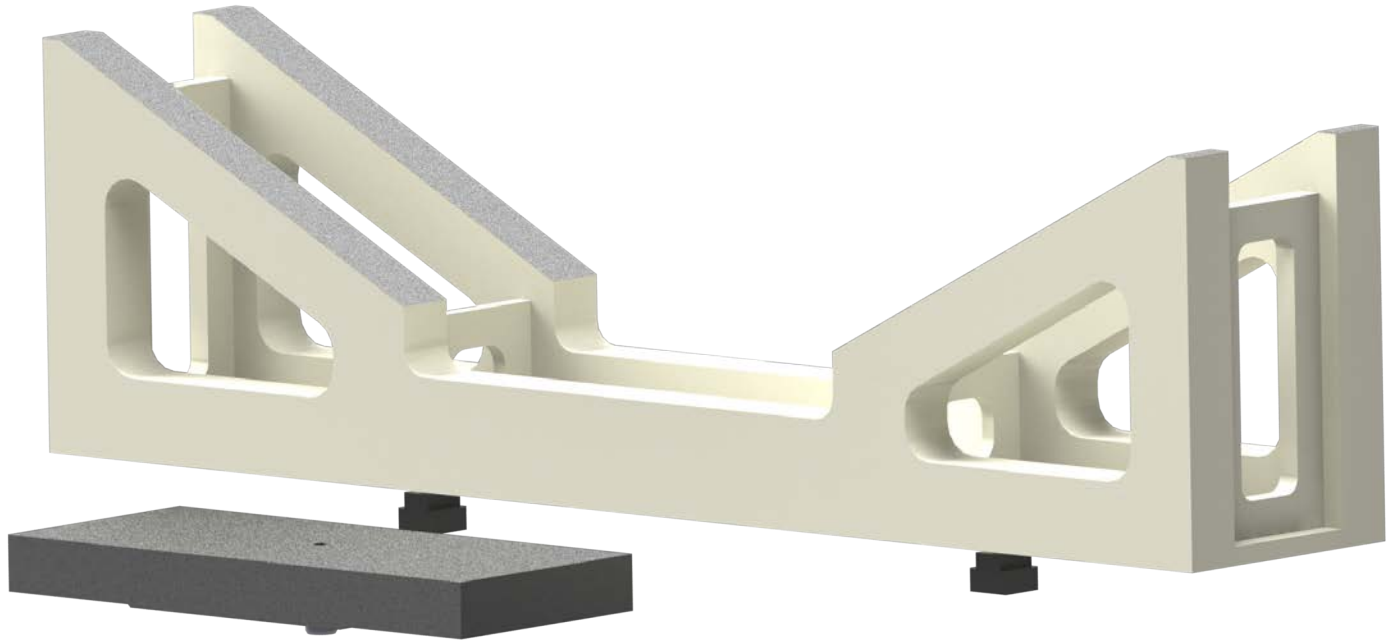
10200 Boring Fixture Adaptor Packages

Note: 10200 series fixture packages fit only the 10200 Line Boring Fixture

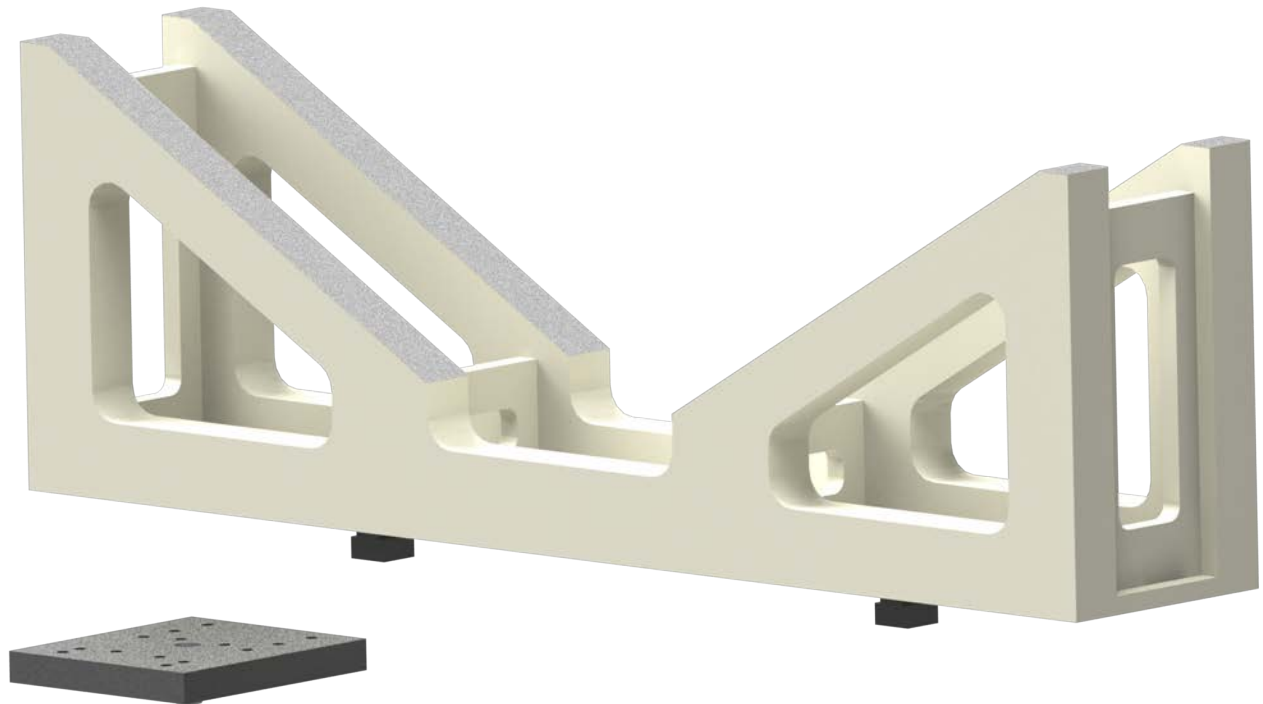
10201 Adapter Package and Support Cradle for CAT 3600 V blocks



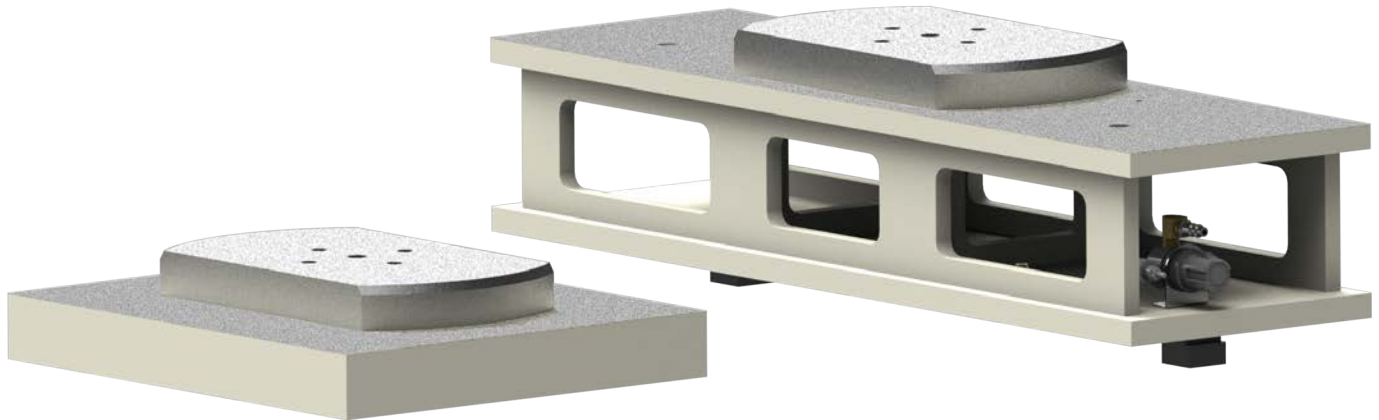
10202 Adapter Package and Support Cradle for Waukesha AT V Blocks



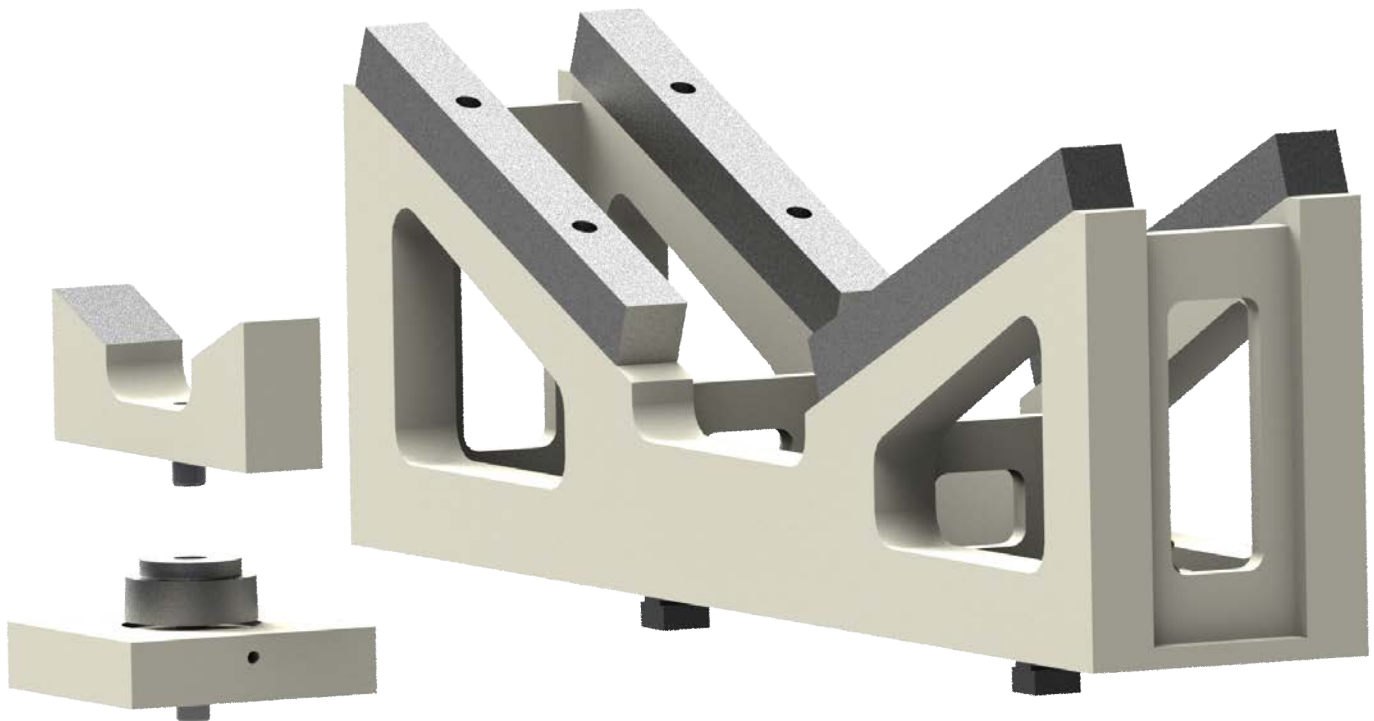
10203 Adapter Package and Support Cradle for Superior 2400 V Blocks



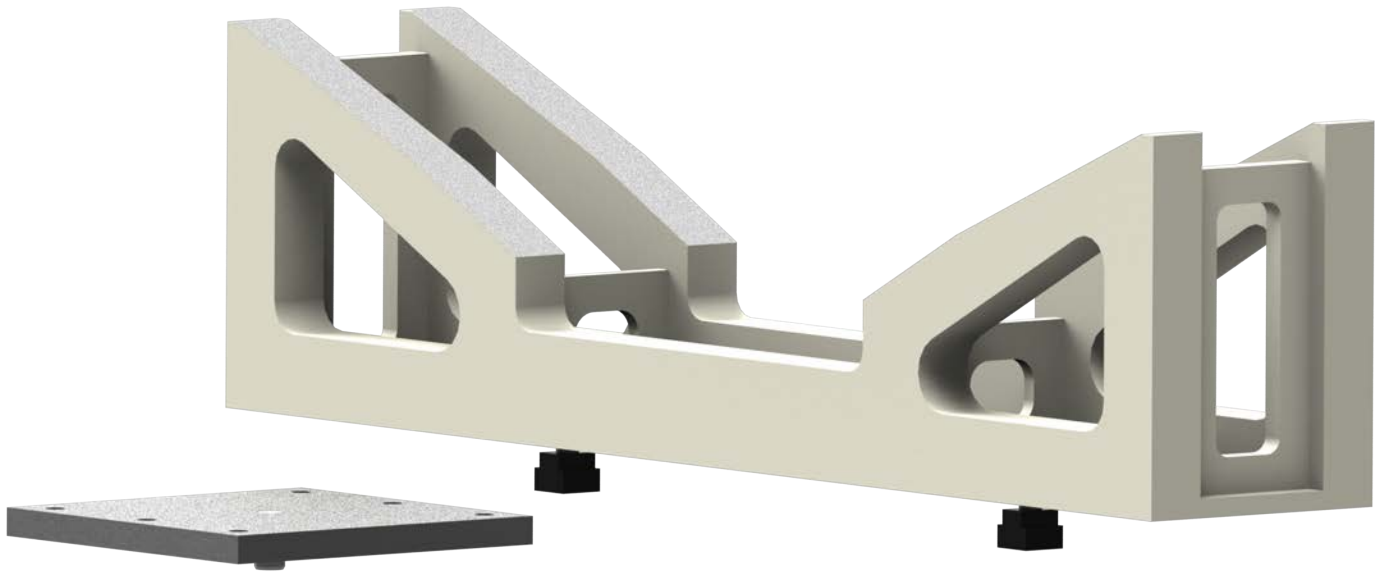
10204 Adapter Package for CAT 3600 In-Line Blocks



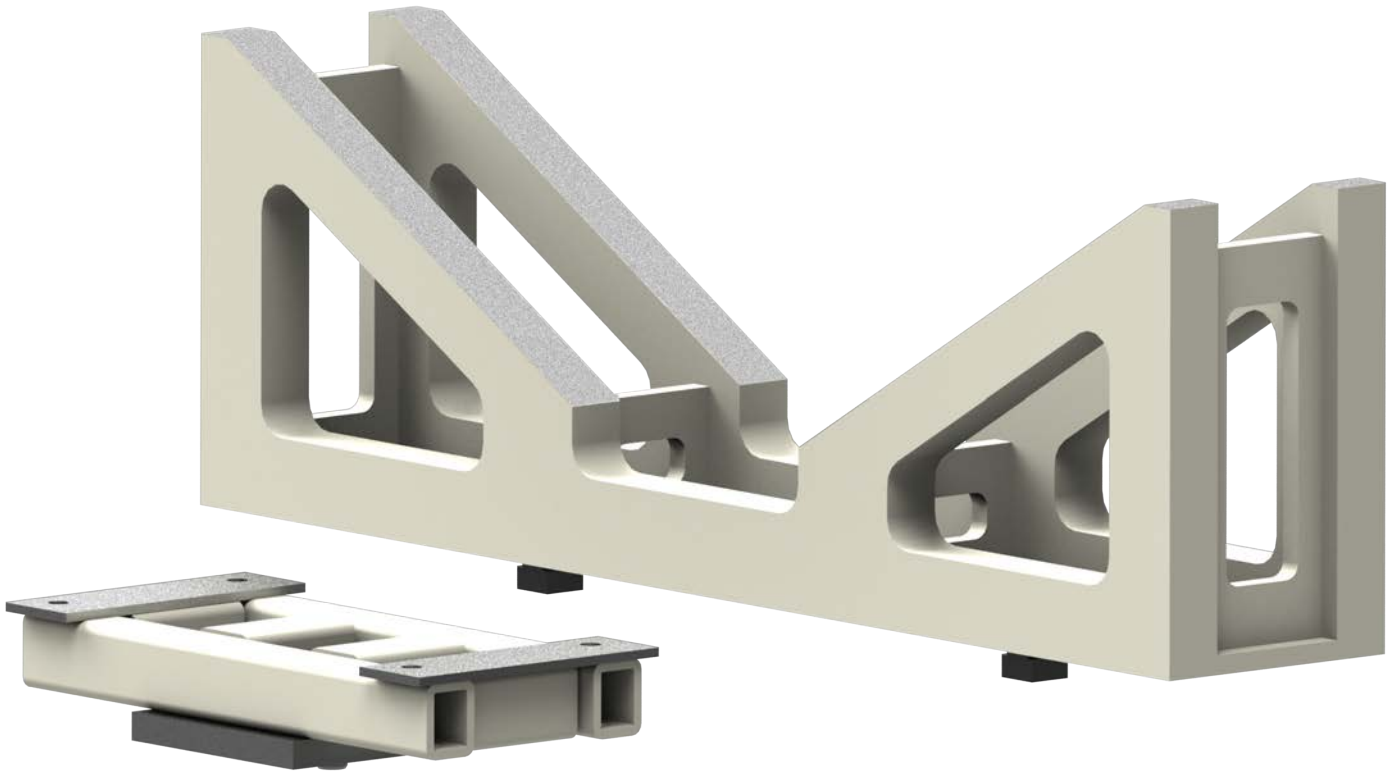
10205 Adapter Package and Support Cradle for GE EVO V Blocks



10206 Adapter Package and Support Cradle for EMD 645 & 710 V Blocks



10207 Adapter Package and Support Cradle for MTU 1163 V Blocks



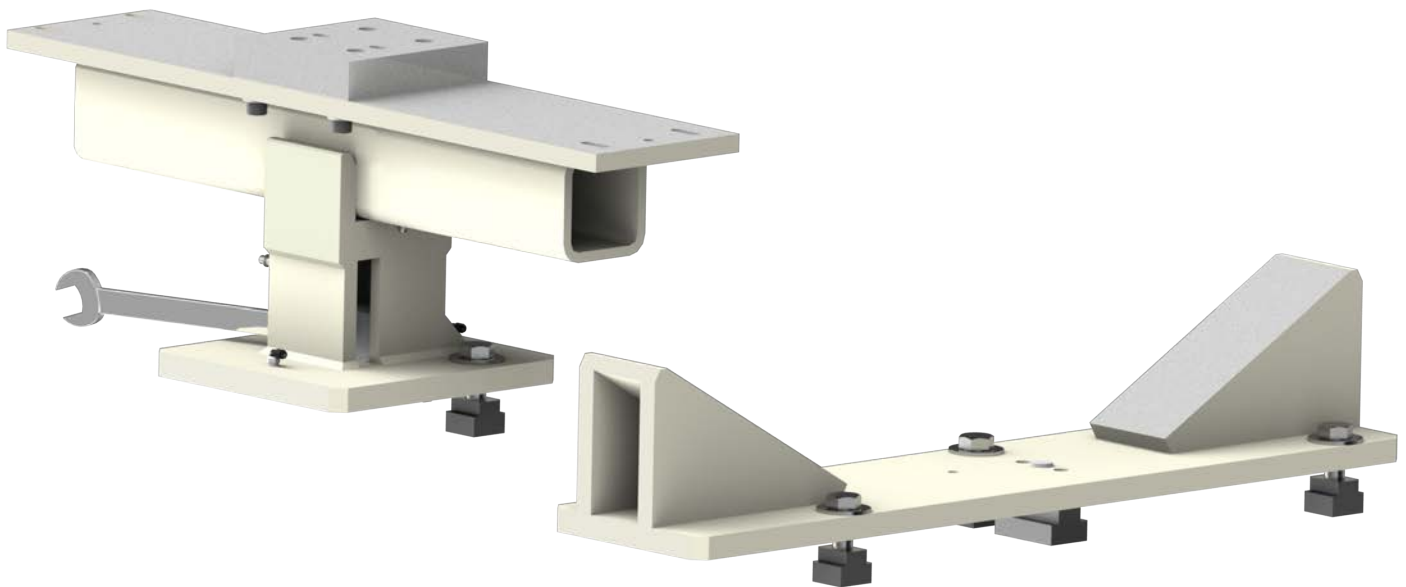
10208 Adapter Package and Support Cradle for MTU 8000 V Blocks



Line Bore Fixturing for Large Blocks

Such as Waukesha 7042, 9390 and White Superior 825 - Requires Parallels 10355

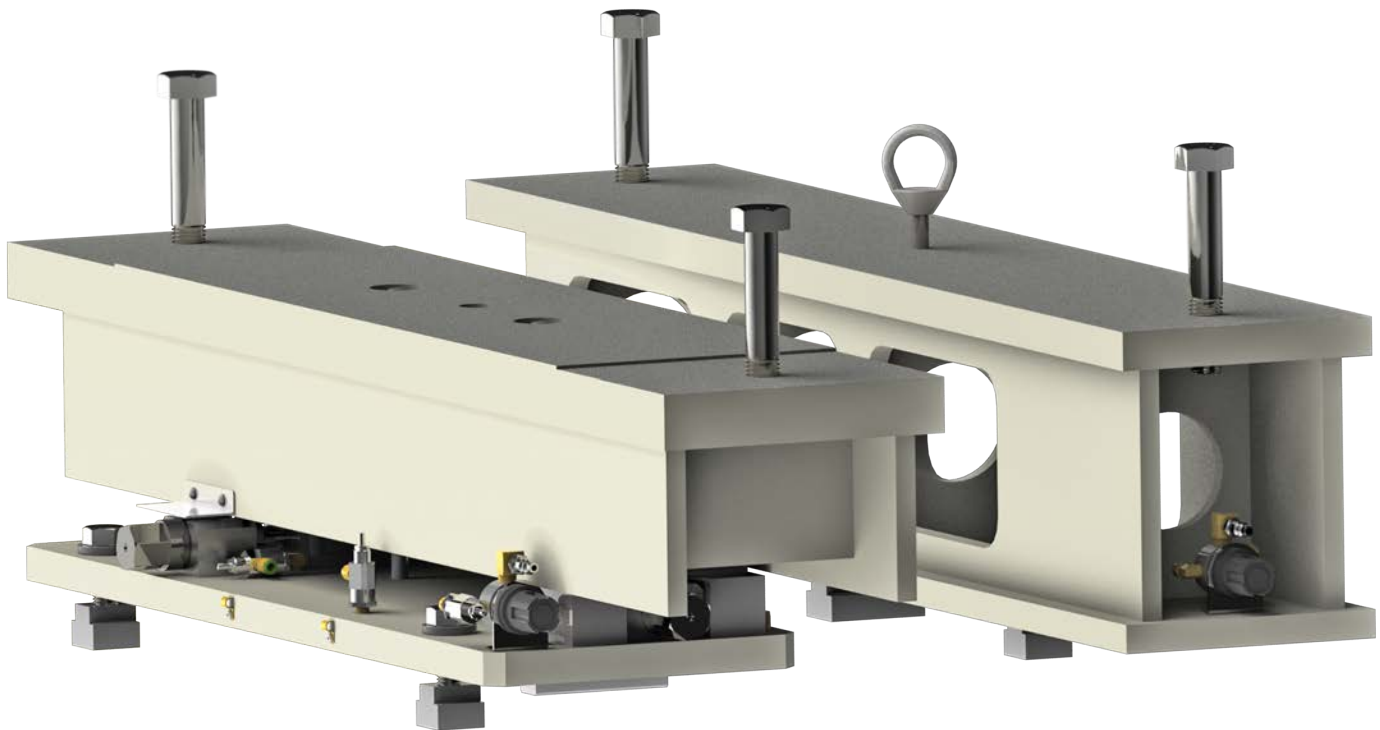
6810 Waukesha 7042, 9390 and CAT 379, 398, 399 Line Boring Fixture



6815 White Superior 8G825 Line Boring Fixture - Requires Fixture 6821



6846 White Superior 12 & 16 G825 Line Boring Fixture - Requires Fixture 6821



Line Bore Fixturing for Large Blocks

Such as CAT 3500, MTU 4000, Cummins QSK

6821 Adjustable Universal Line Boring Parallel Assembly

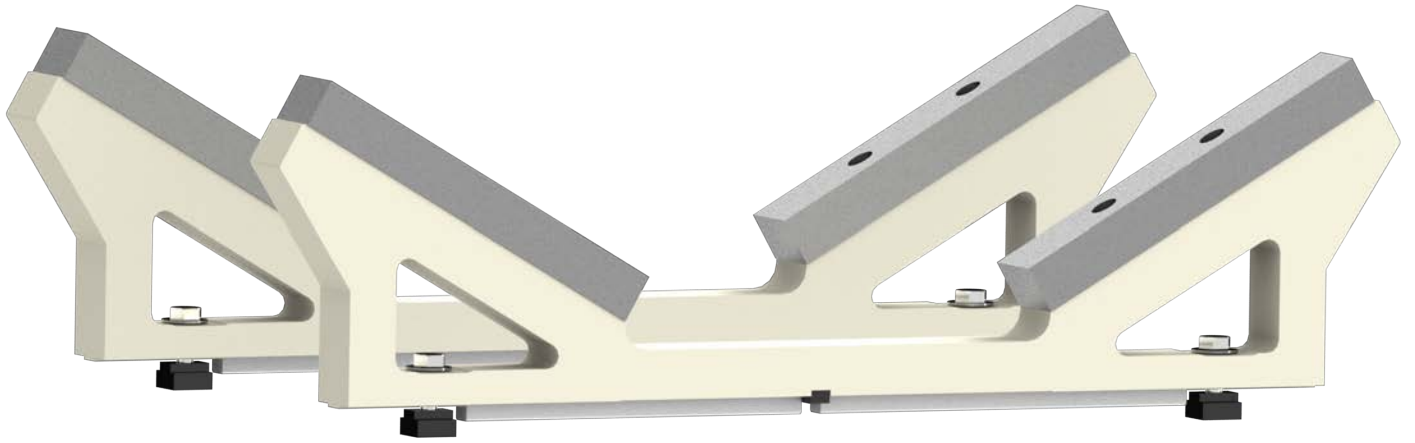
Includes Locators for Mid Range In-Line Blocks.

Supports for V Blocks Must Be Ordered Separately.



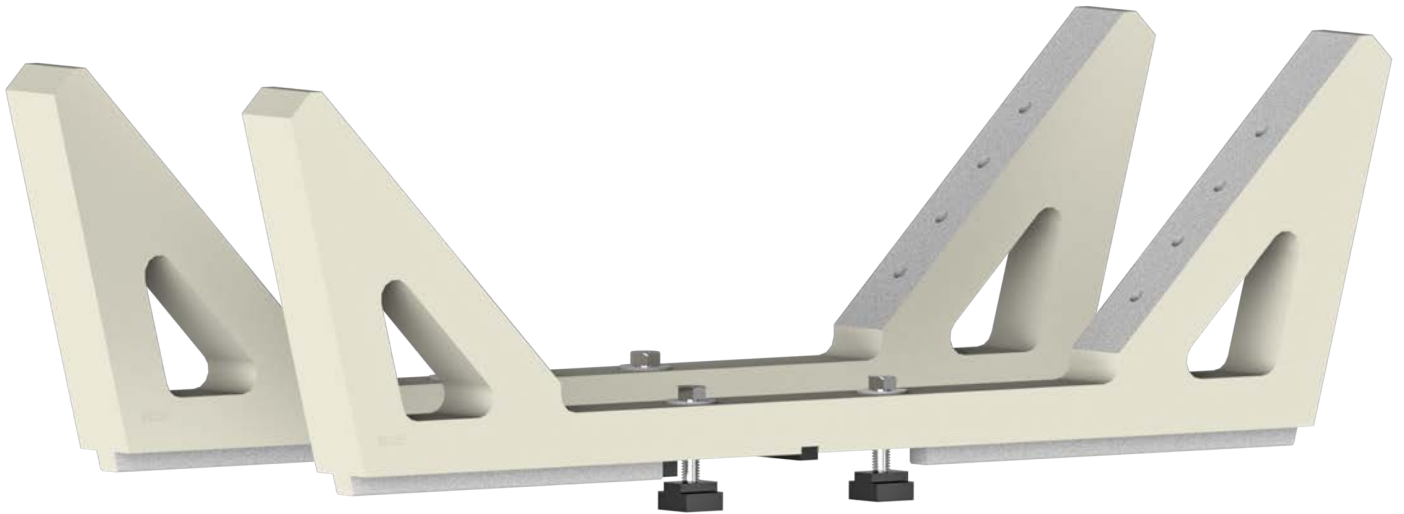
6823B 120 Degree V Block Supports for Large 120 Degree V Blocks

Such as CAT 3500, Komatsu 170 for use on Adjustable Parallels 6821



6823E 90 Degree V Block Supports for Large 90 Degree V Blocks

Such as MTU4000 for use on Adjustable Parallels 6821



Line Bore Tooling for Small to Large Blocks and Heads

Straight 90 Degree Right Angle Drive Assembly

For Medium to Large Blocks. Includes a .41" (10.41mm), .700" (17.78mm), 1.05" (25.725mm), 1.215" (30.86mm) and 1.50" (38.10mm) spacer

Note: Cutterheads are Not Included with Right Angle Drive and Must be Ordered Separately

A large, empty rectangular box with a thick black border, centered on the page. Inside the box, the text "Image Currently Unavailable" is displayed in a bold, black, sans-serif font.

Image Currently Unavailable

650-2-39B Cutterhead Assembly Line Boring

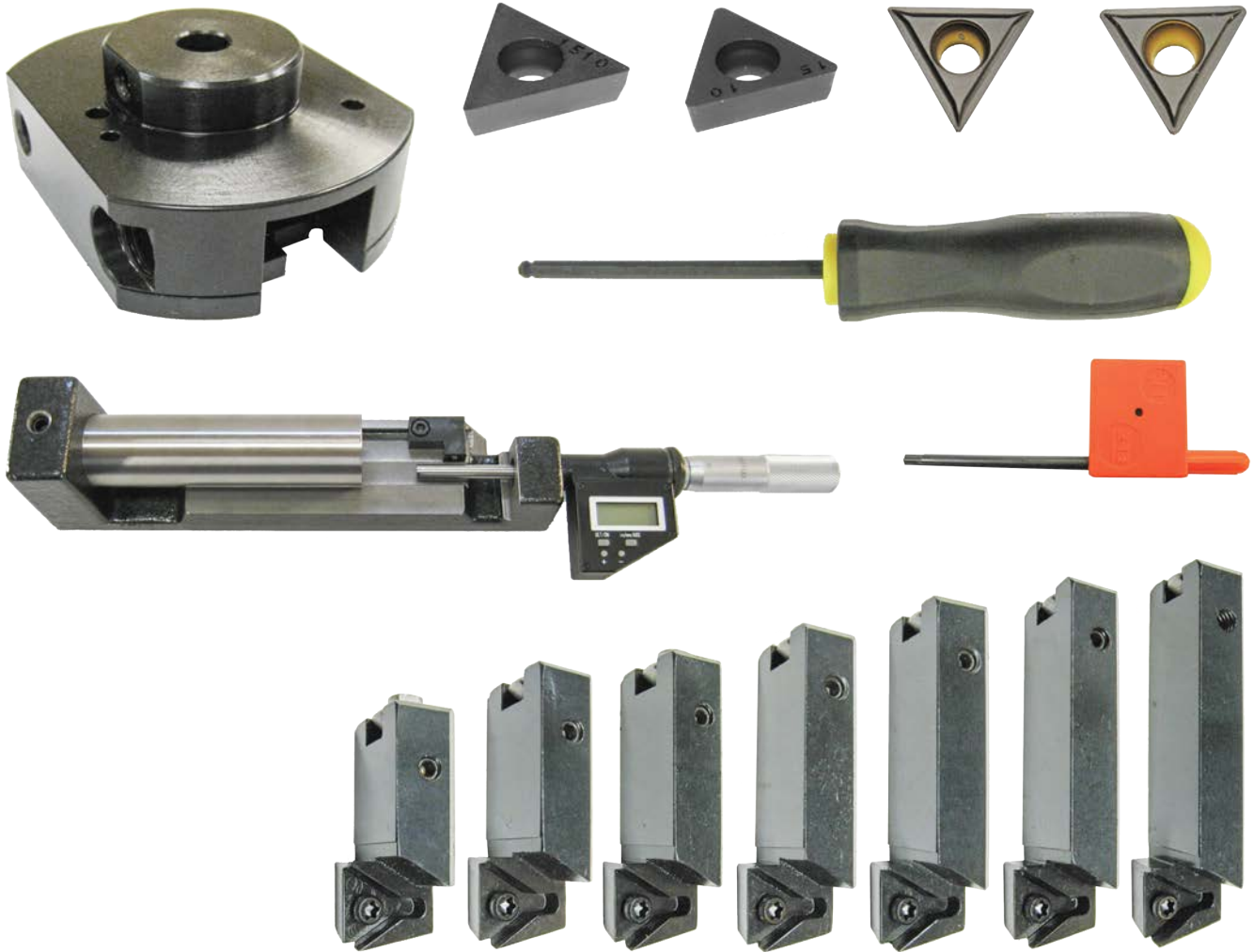
1.9 - 4.0" (48.26 - 101.60mm) diameter complete with tooling and Digital Micrometer (When used with 6753J Drive, minimum distance between bearing housings 3.29") (83.6mm)



650-2-39C Cutterhead Assembly Line Boring

2.9 - 5.6" (73.66 - 142.24mm) diameter complete with tooling and Digital Micrometer. When used with 6753J Drive, minimum distance between bearing housings 4.18" (106.2mm)

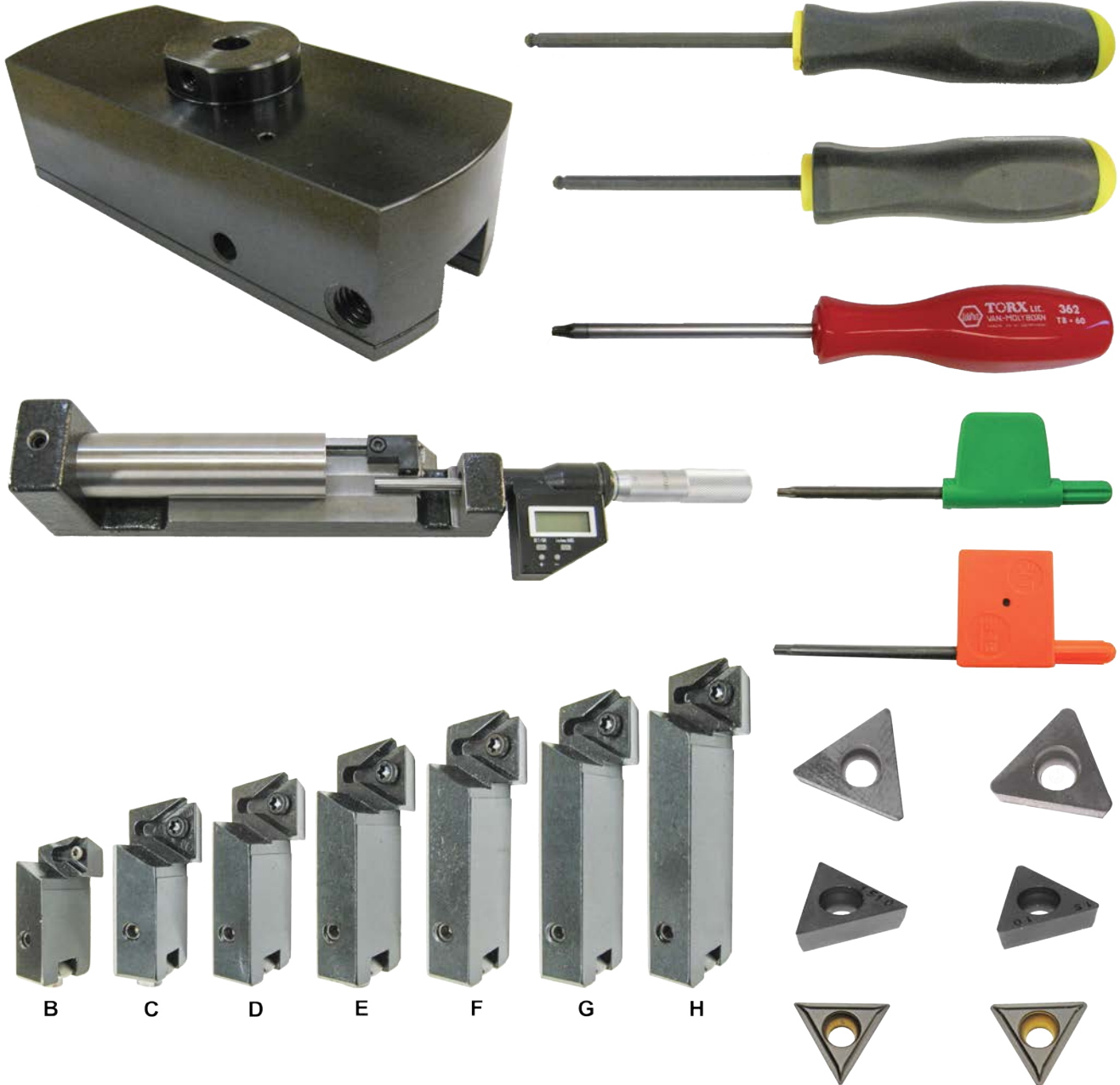
Note: Cutterheads are not included with Right Angle Drive and must be ordered separately



650-2-39A Cutterhead Assembly Line Boring

5.4 - 8.1" (137 - 206mm) diameter complete with tooling and Digital Micrometer. When used with 6753J Drive, minimum distance between bearing housings 4.19" (106.4mm)

Note: Length of Bores can be Increased with Extension Spacers. The Addition of Extension Spacers will Increase the Minimum Distance Between Bearing Housings by the Length of the Spacer. Allow for Some Clearance Either Side of the Assembly for Safety



Line Bore Fixturing for Small to Large Blocks and Heads

650-3-56 Line Bore Pivot Table Fixture

Complete with Universal Work Holding System for Small In Line and 90 Degree V Blocks, Includes 6843 90 Degree V Block Supports. Also Used for Setting Up Cylinder Heads Such as CAT3406E and Detroit 50/60 Series for Camshaft Line Boring.



6821 Adjustable Universal Line Boring Fixture Assembly

Includes Locators for In-Line Blocks, Supports for V Blocks Must Be Ordered Separately, Listed Below.



6843 90 Degree V Block Supports

For Small To Mid-Size 90 Degree V Blocks for use on Line Bore Fixtures 6821 and 11113



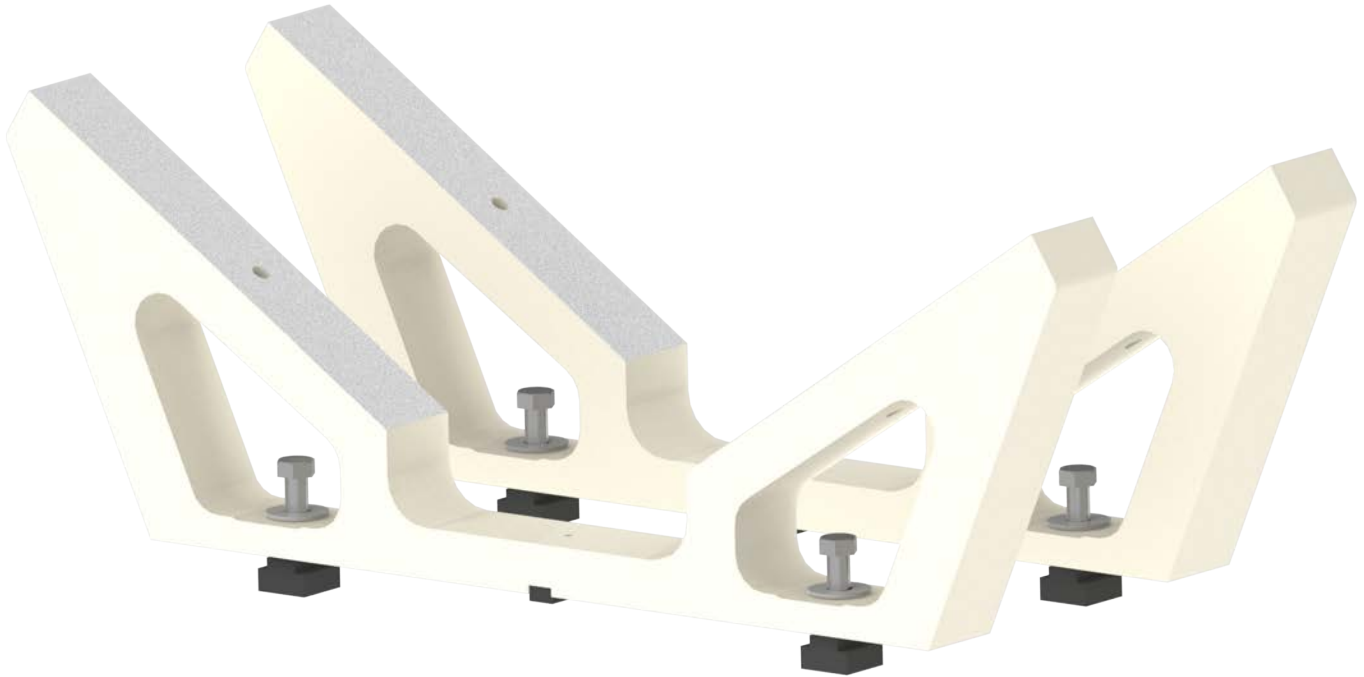
6823E 90 Degree V Block Supports

For Large 90 Degree V Blocks Such as MTU4000 for use on Line Bore Fixture 6821



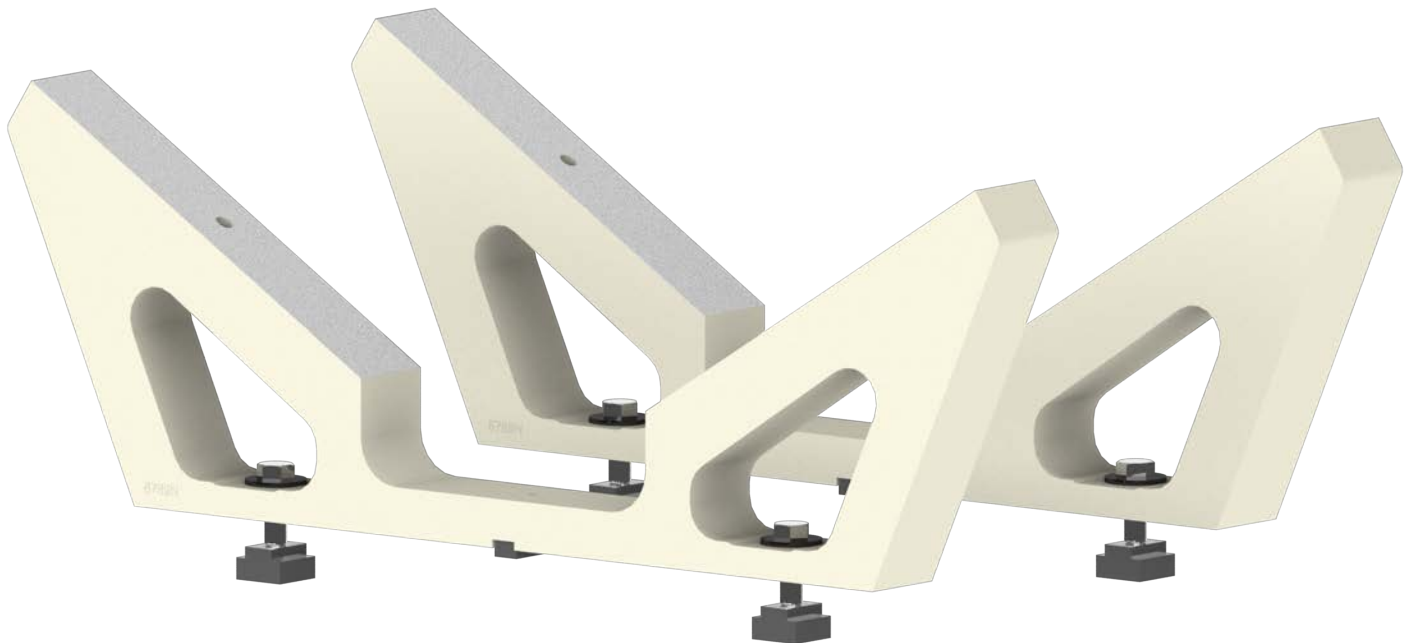
6789L 113 Degree V Block Supports

For Detroit Diesel V53 for use on Line Bore Fixture 6821 and 11113



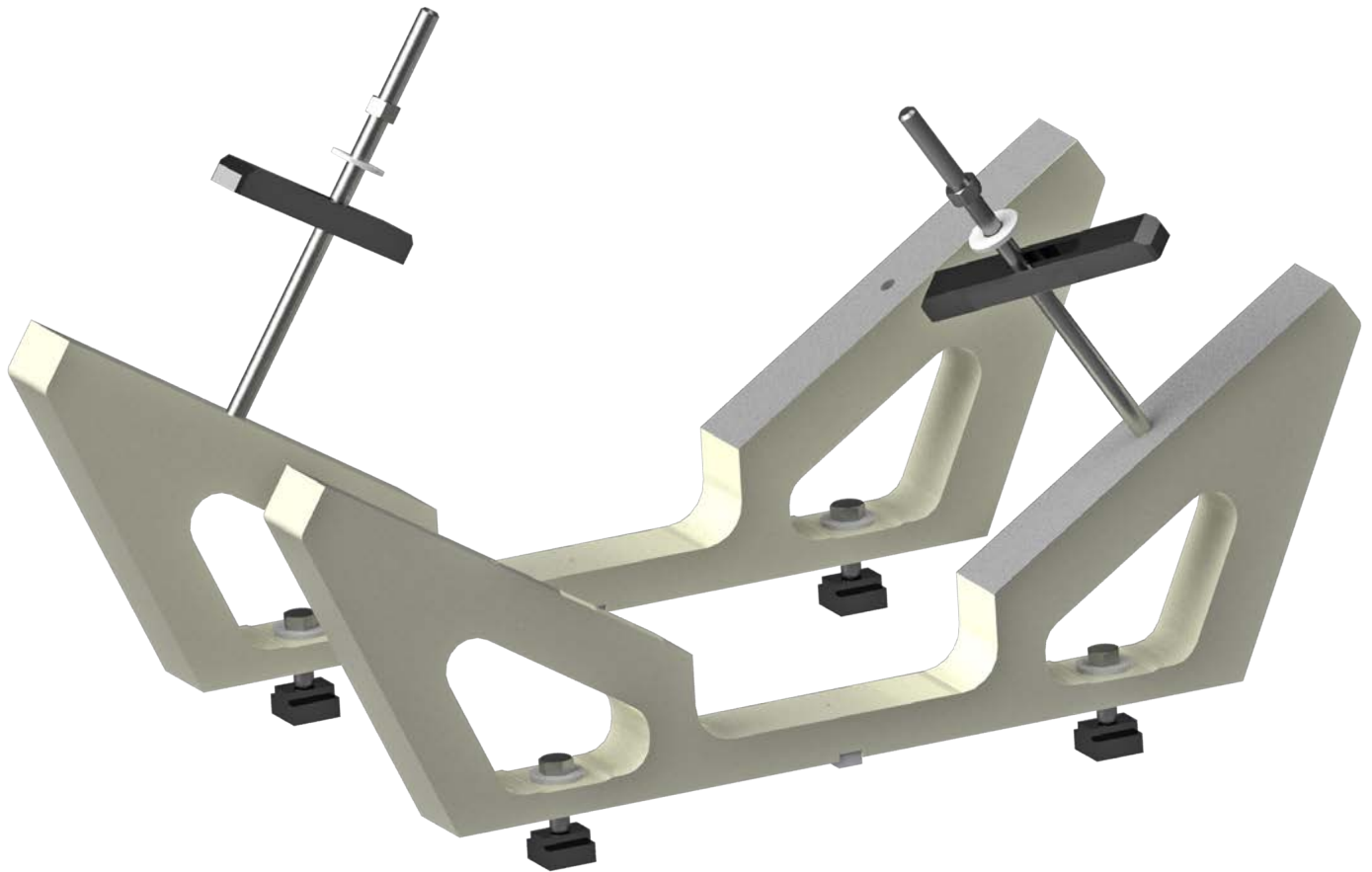
6789N 116 Degree V Block Supports

For Detroit Diesel V71 & V92 for use on Line Bore Fixture 6821 and 11113



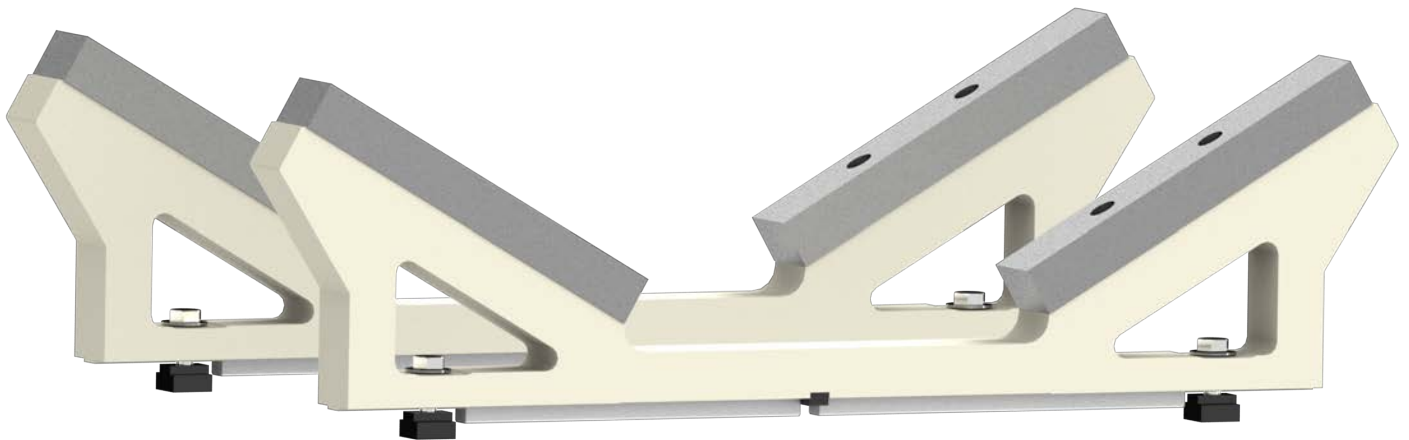
6789E 115 Degree V Block Supports

For CAT 3400 for use on Line Bore Fixture 6821 and 11113



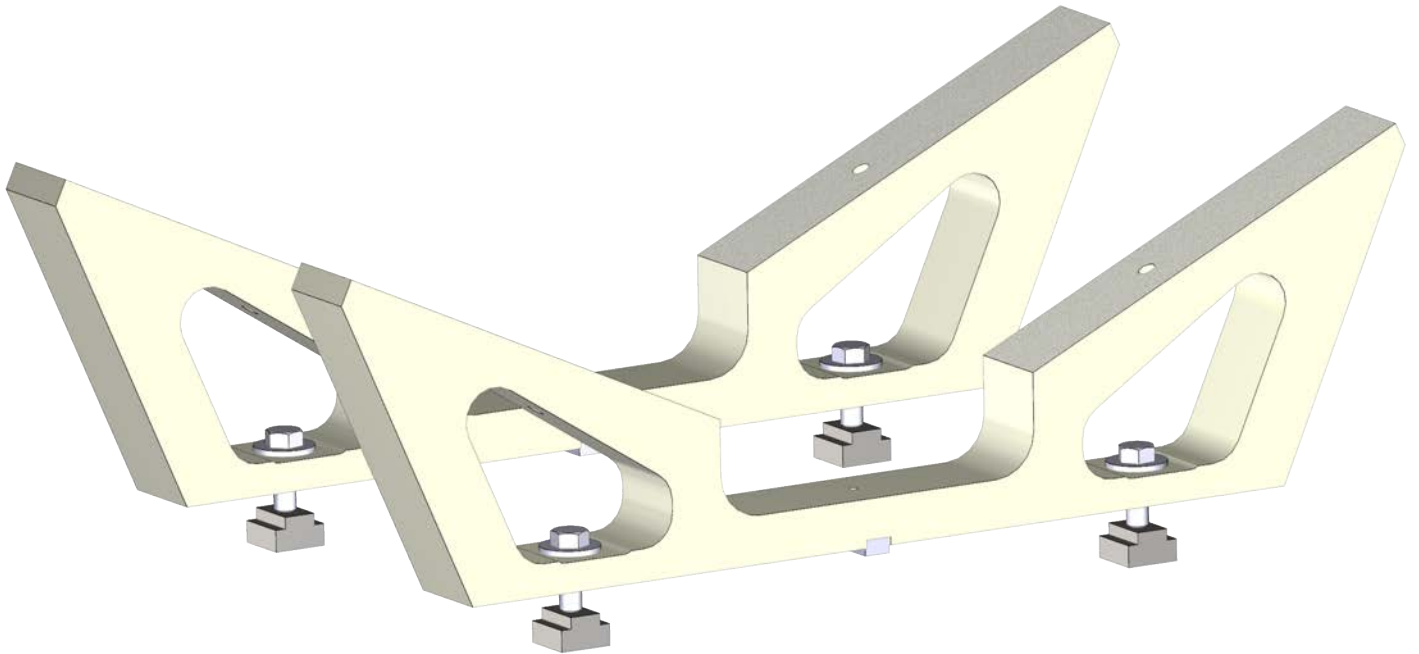
6823B 120 Degree V Block Supports

For Large 120 Degree V Blocks such as CAT 3500, Cummins K & QSK, Komatsu 170 for use on Line Bore Fixture 6821



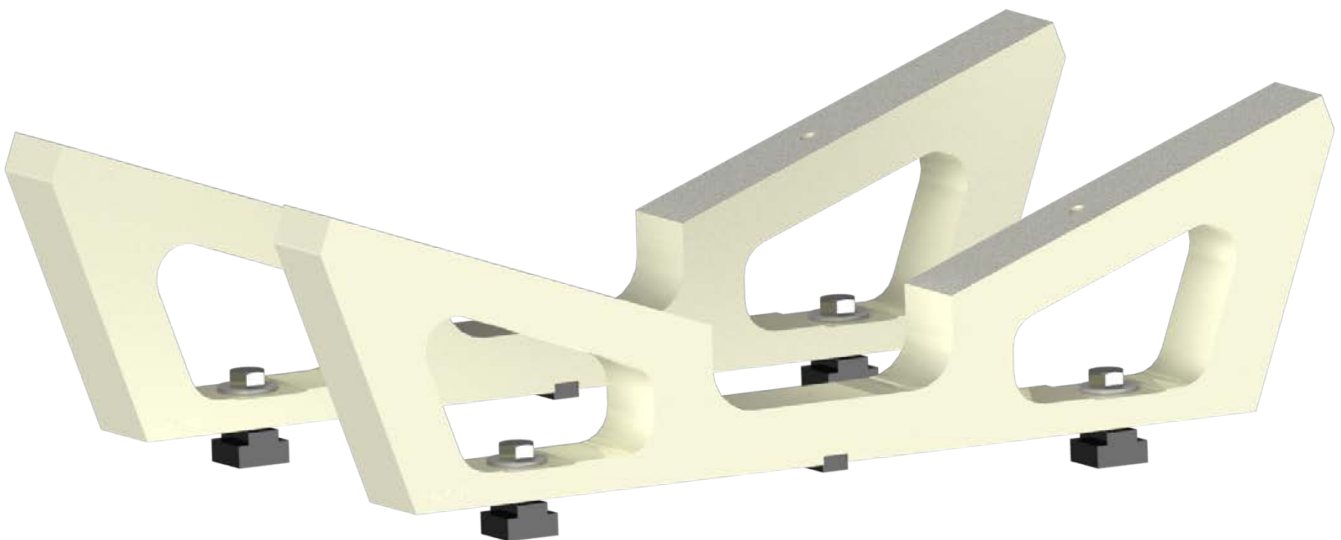
6789K 130 Degree V Block Supports

For Komatsu 140 for use on Line Bore Fixture 6821



6789Q 140 Degree V Block Supports

For Cummins 1710 for use on Line Bore Fixture 6821



Line Bore Set Up and Alignment Equipment

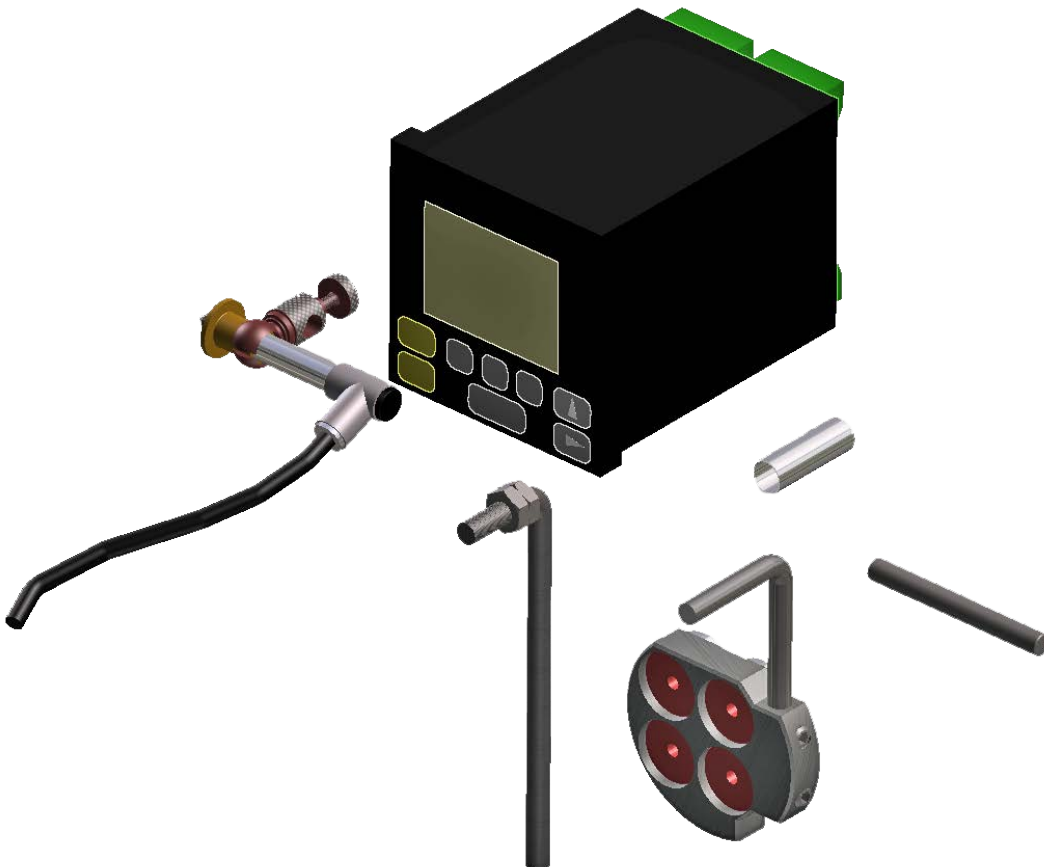
6889B Adapter

Including Radio Probe and Stylus to check main line alignment , requires Software Package 10200A and Radio Probe 650-3-59X.
Note: Main Line probing is only available for very large blocks such as EMD and GE locomotives.

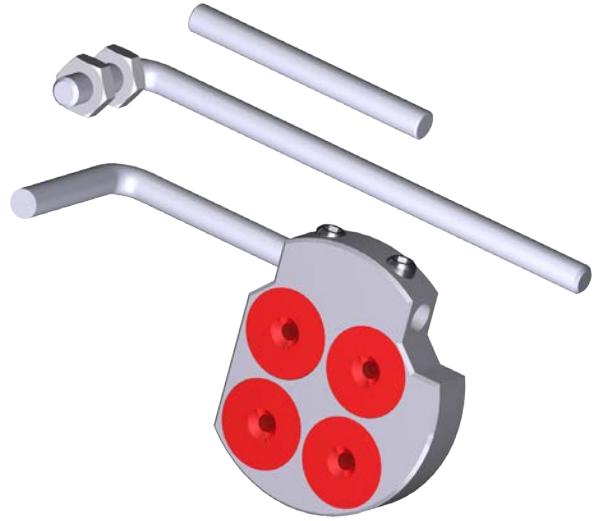


502-12-7B Digital Runout Probe and Readout

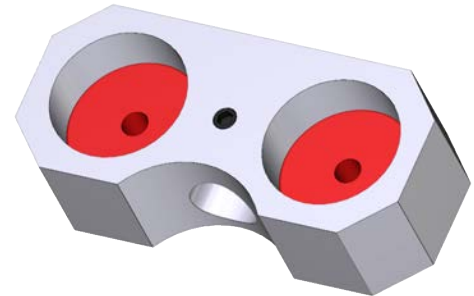
Including Magnetic Holder for Block Set Up and Manual Centering of Cylinder Bores and Main Line Bores



502-12-4 General Purpose Magnetic Indicator Holder
(Requires #502-9-9A or J Indicator)



502-12-4A Magnetic Indicator Holder
For 2 - 3" (50 - 75mm) Diameter (Requires 502-9-9A Or J Indicator)



502-9-9A Mechanical Run Out Indicator
General Purpose (.001" Inch Resolution)



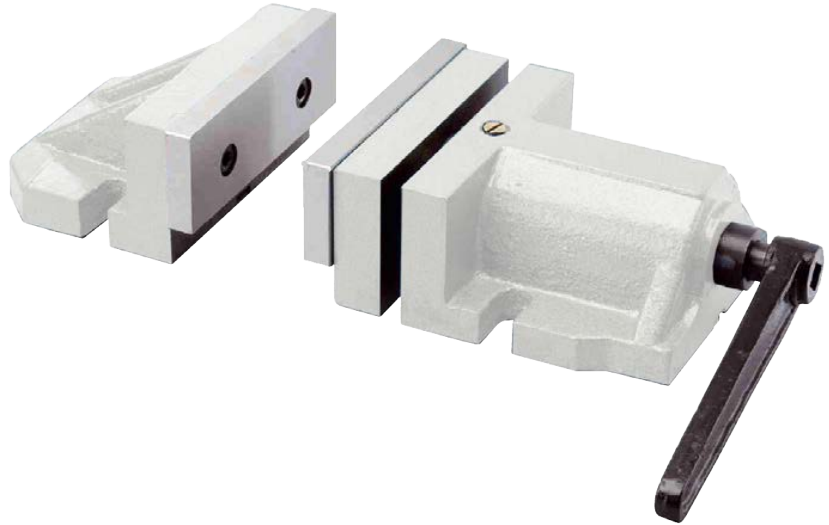
502-9-9J Mechanical Run Out Indicator
General Purpose (.01mm Metric Resolution)



Equipment for Preparing Blocks for Line Boring

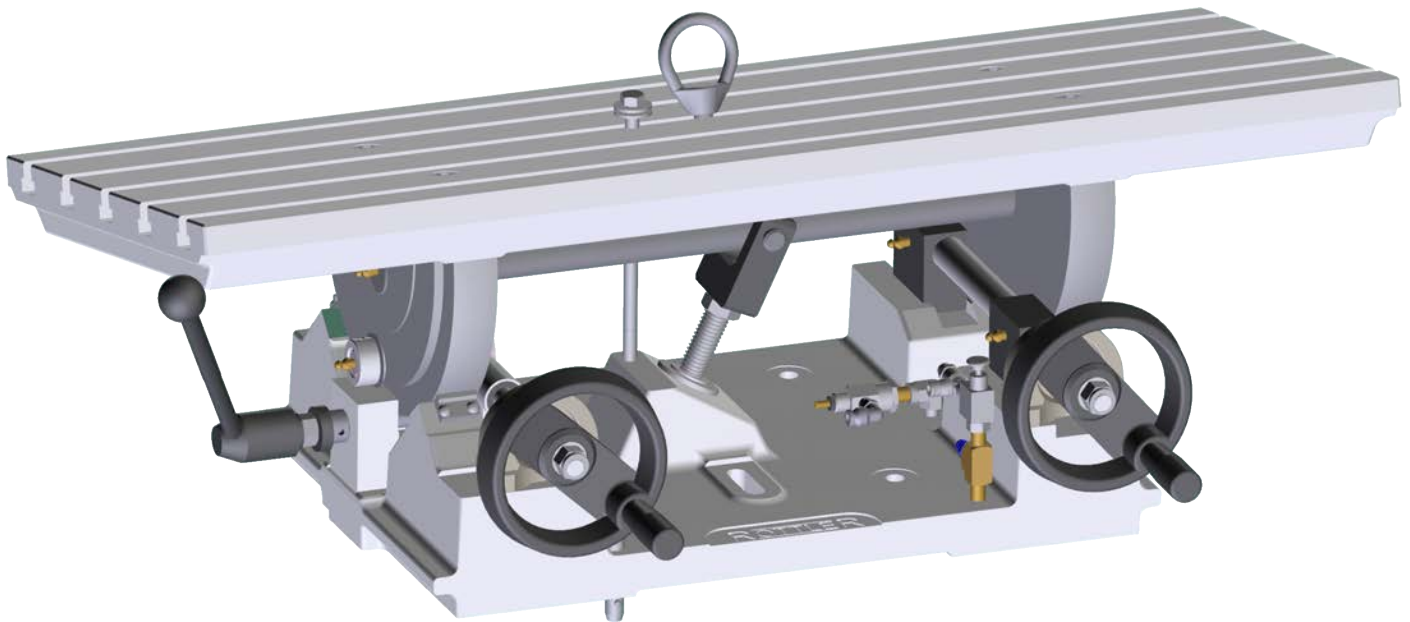
7209N 2-Piece Vise

For Surfacing Main Bearing Housing Caps in Preparation for Main Line Boring. also used for Holding Exhaust Manifolds for Surfacing. Requires 7209M Leveling Table.



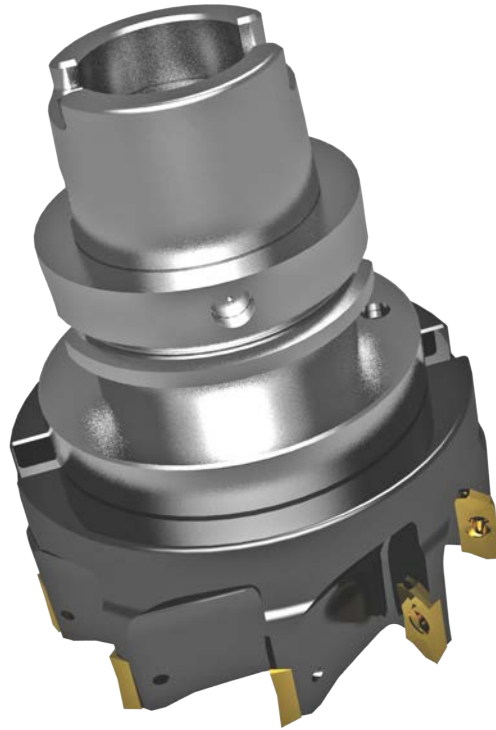
7209M Leveling Table With Air Float

Complete with Universal Work Holding System for Surfacing Cylinder Heads and Manifolds. Requires One Set of 6370C Parallels



10129 Shell Mill

5" (127mm) Diameter for Surfacing Main Bearing Cap Register Face in Blocks in Preparation for Main Line Boring



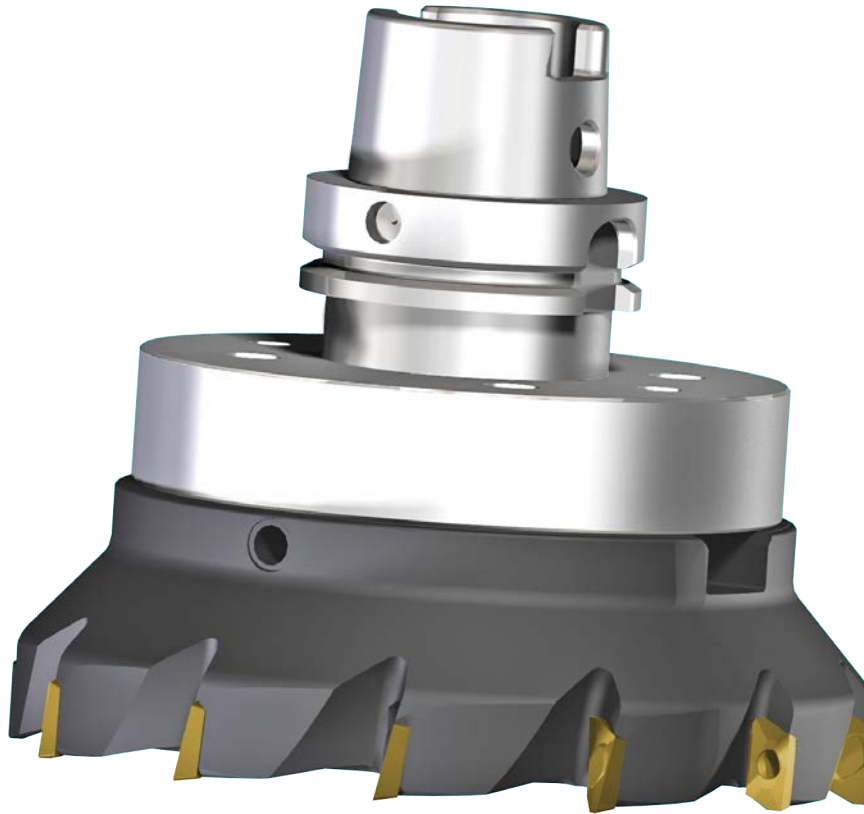
10130 Shell Mill

6" (152mm) Diameter for surfacing main bearing cap register face in blocks in preparation for main line boring



10109C Shell Mill

8" (203mm) Diameter for surfacing main bearing cap register face in blocks in preparation for main line boring



6514T Insert

For 6514L & 6514V Shell Mills, .030" (0.8mm) Corner Radius, different radius available on request



6514Y Insert

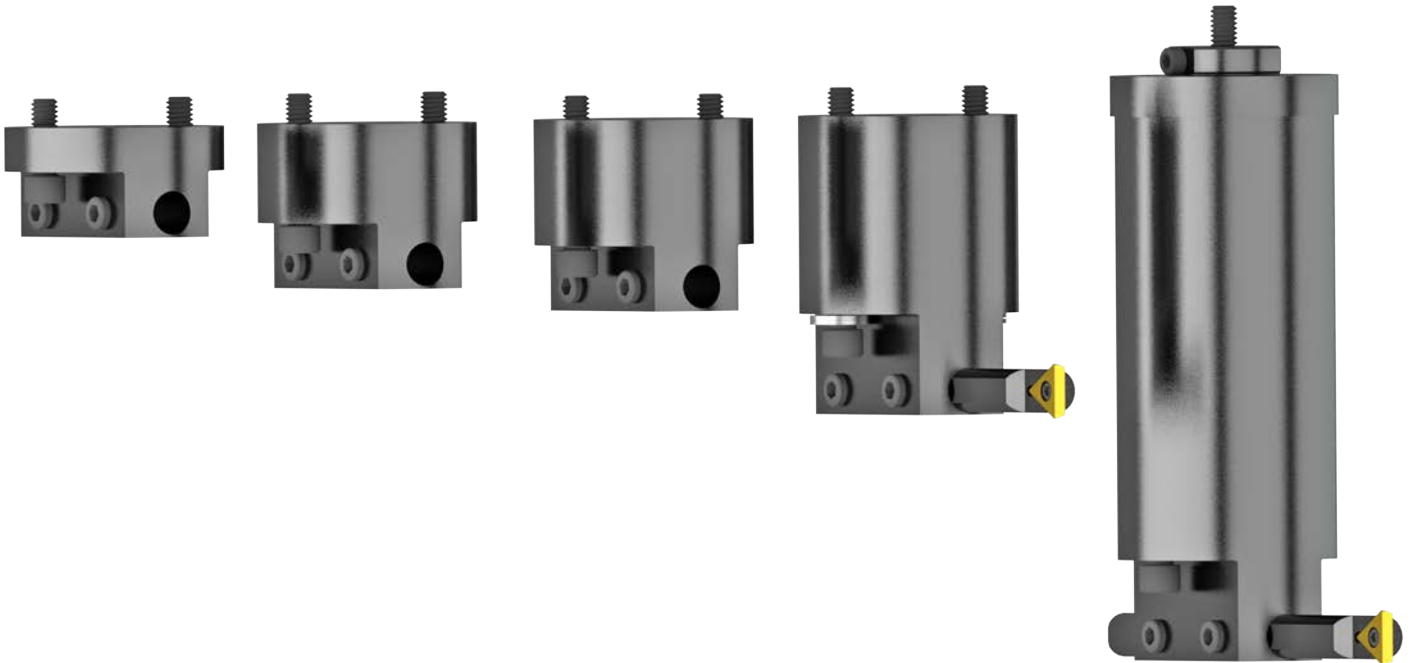
For 6514L, 6514V & 6514W Shell Mills, .125" (3.2mm) Corner Radius, different radius available on request



Equipment for Facing Thrust Bearing Surfaces for Main Line

6855C Thrust Facing Tooling Package

For main line bore for small to large blocks



6855G Thrust facing tooling package
For main line bore for extra large blocks



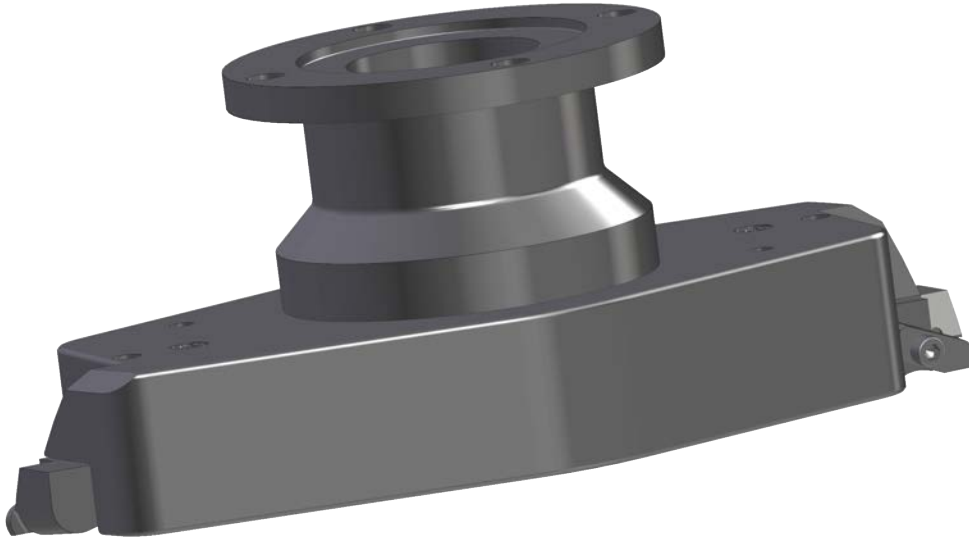
Special Tooling for Block End Machining
Requires Heavy Duty Right Angle Drive 6773F or 6779K

6779H Adaptor for 40 Taper Tooling
Such as 6648K Collet Kit



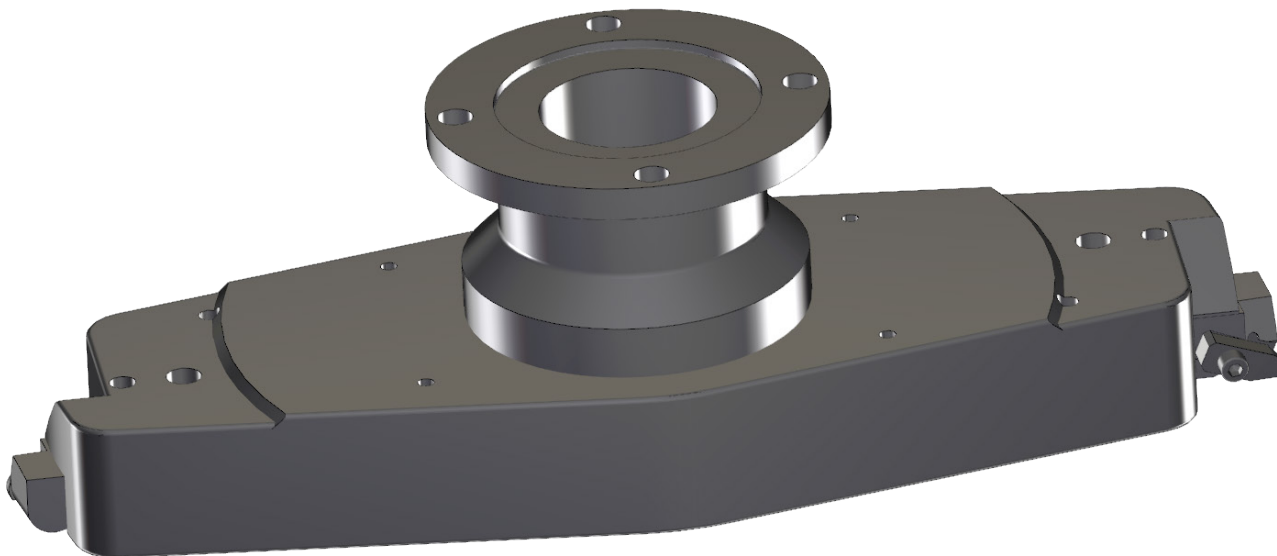
6779L 10" (250mm) Diameter Surfacing Cutterhead Assembly

Complete with Tool holders for .375" (9.52mm) round or square inserts for Block End Surfacing

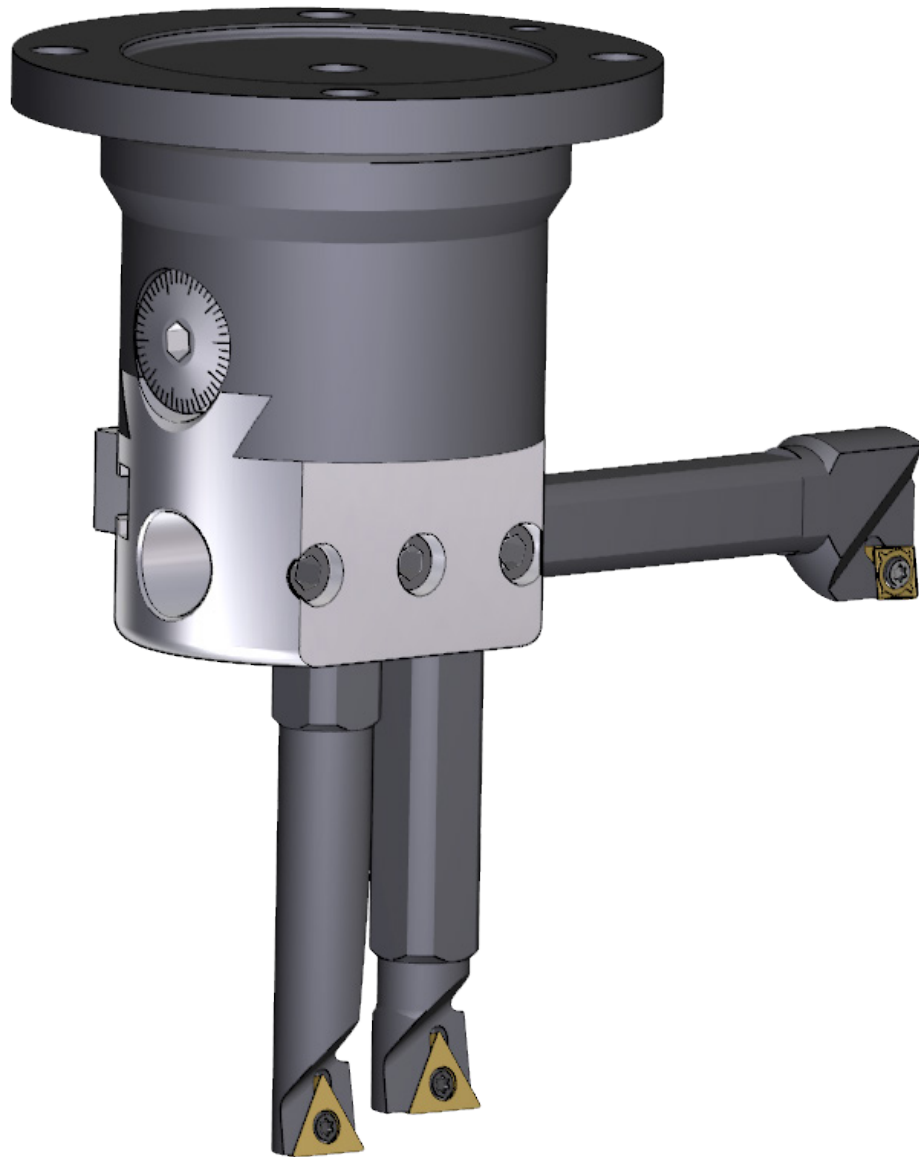


6779M 14" (360mm) Diameter Surfacing Cutterhead Assembly

Complete with Tool holders for .375" (9.52mm) round or square inserts for Block End Surfacing



6779N Crossfeed Head Assembly
Heavy Duty Offset 90 degree right angle drive



Connecting Rod Boring and Surfacing Equipment

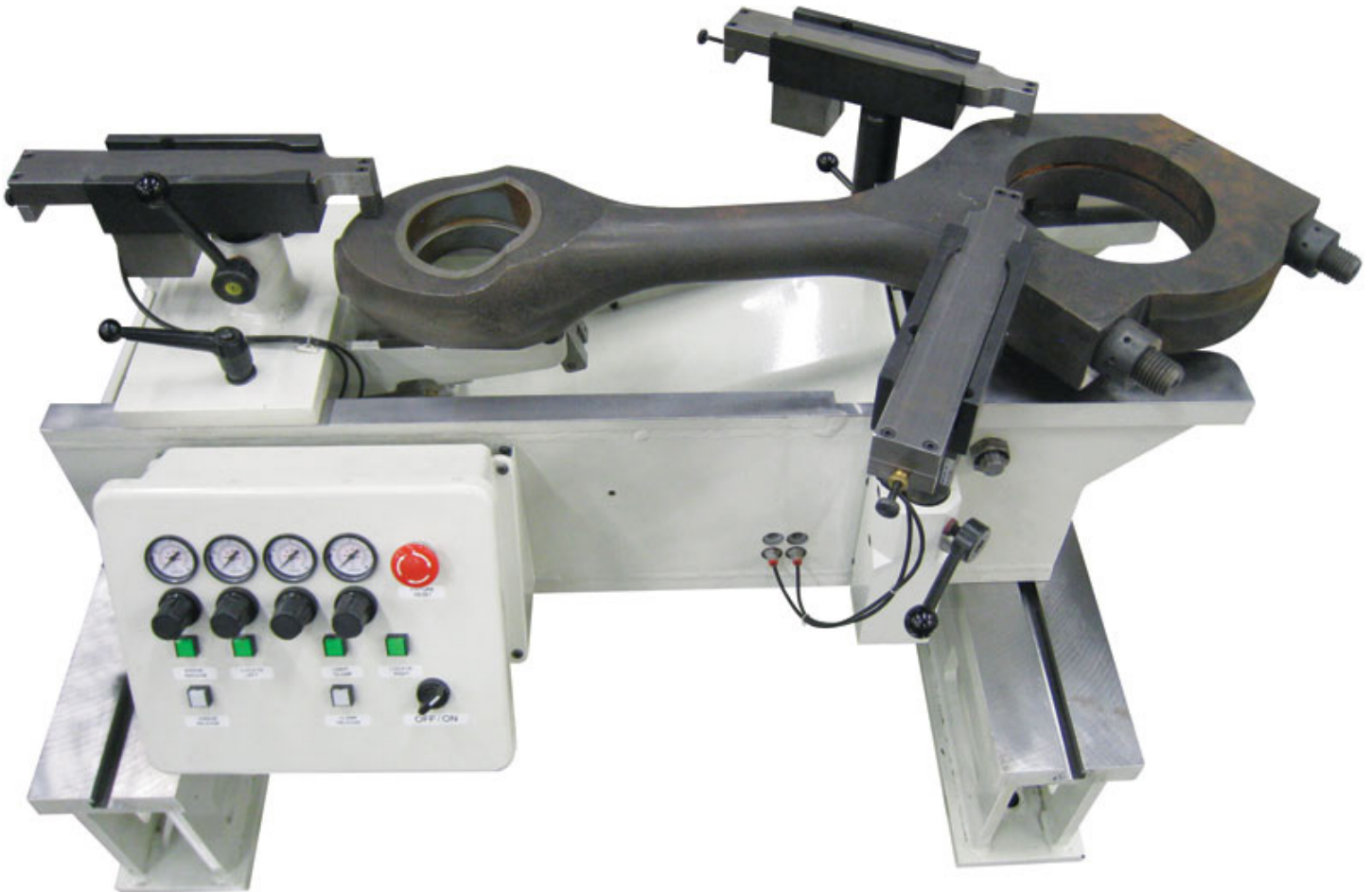
650-3-44R Rottler Precision Connecting Rod Fixturing System

For Connecting Rods Approx 8 - 24" (200 - 600mm) Center to Center Distance - Requires (1) Set of 6370C Parallels



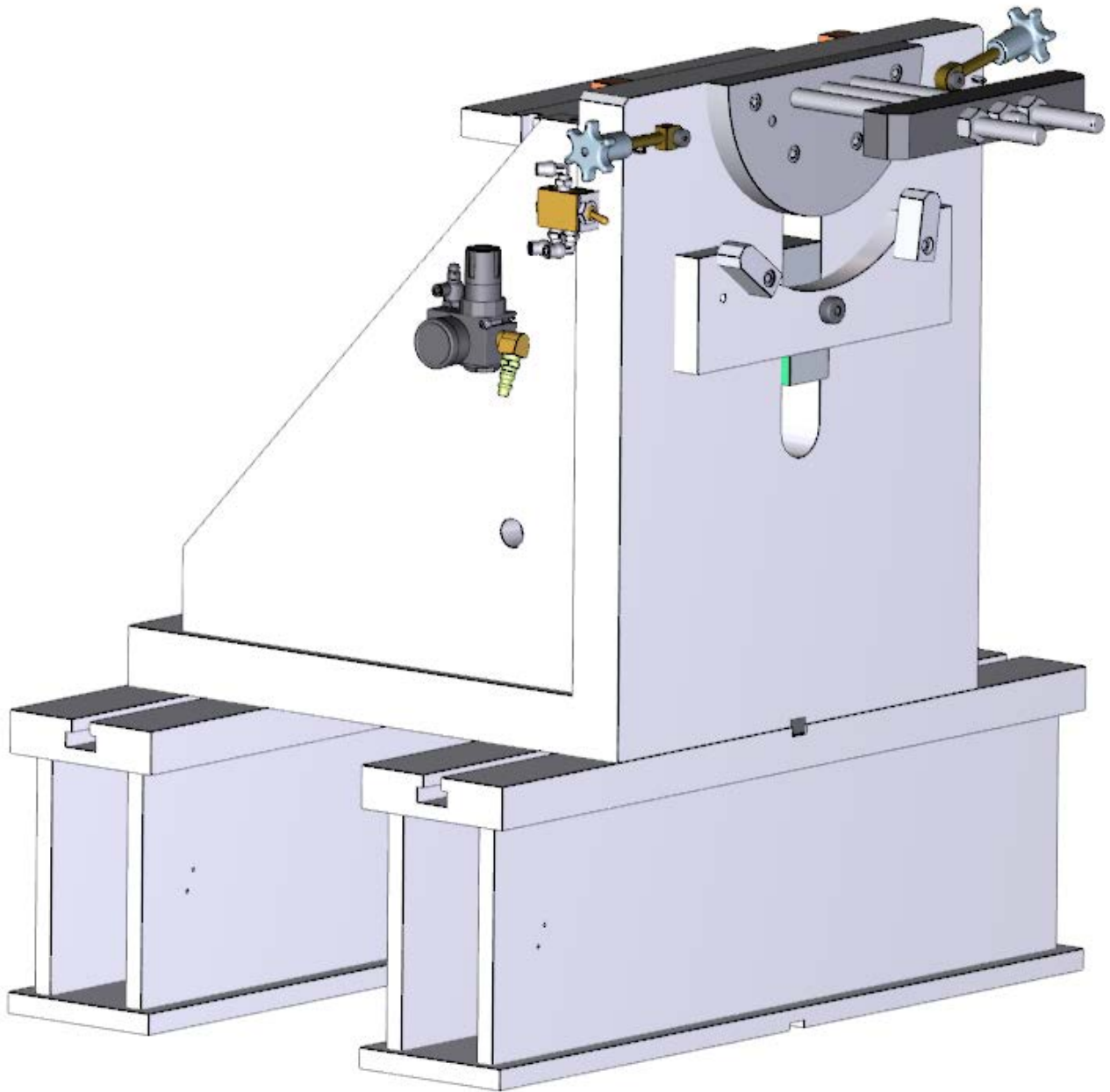
Fixturing & Tooling for Machining Large Engine & Compressor Connecting Rods**650-3-64 Rottler Precision Connecting Rod Fixturing System**

Special Version to Handle Natural Gas Compressor Connecting Rods and Large Engine Connecting Rods Such as Waukesha 7042 and White Superior 825 - Requires (1) Set of 6370C Parallels



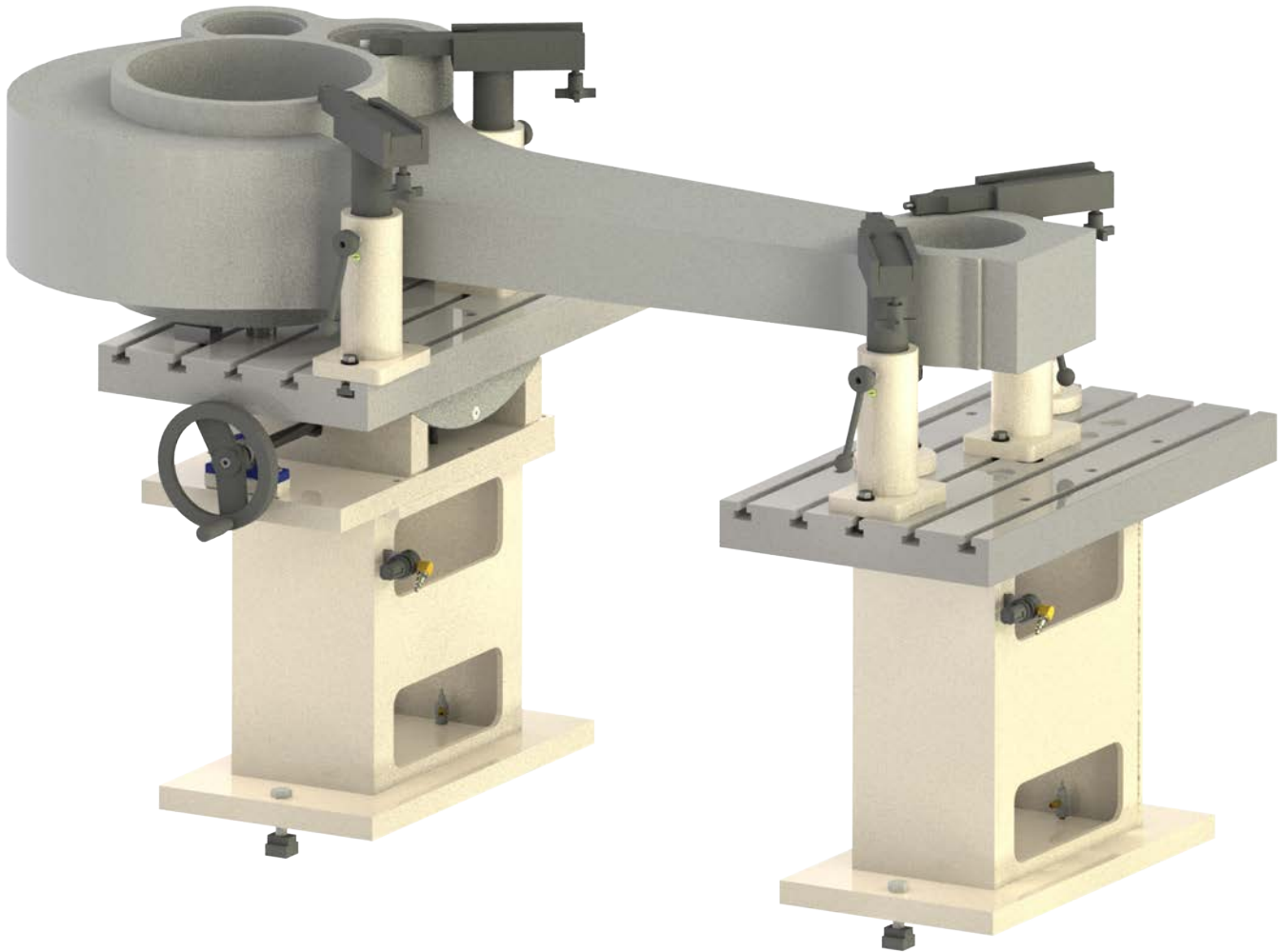
650-3-66 Rottler Precision Compressor Conrod Cap Surfacing Fixture

Requires (1) Set 6370Z Parallels



6870 Rottler Precision Connecting Rod Boring Fixturing System

For extra large and heavy connecting rods such as Ajax integral engine-compressors. Fixture consists of 2 parts mounted on air float supports.



Tooling for Connecting Rod Boring

10118 Blind Hole Cutterhead Assembly

1.5 - 4.2" (38 - 107mm) Diameter X 6.5" (165mm) Length Complete With Tooling and Digital Micrometer



10131 Blind Hole Cutterhead Assembly

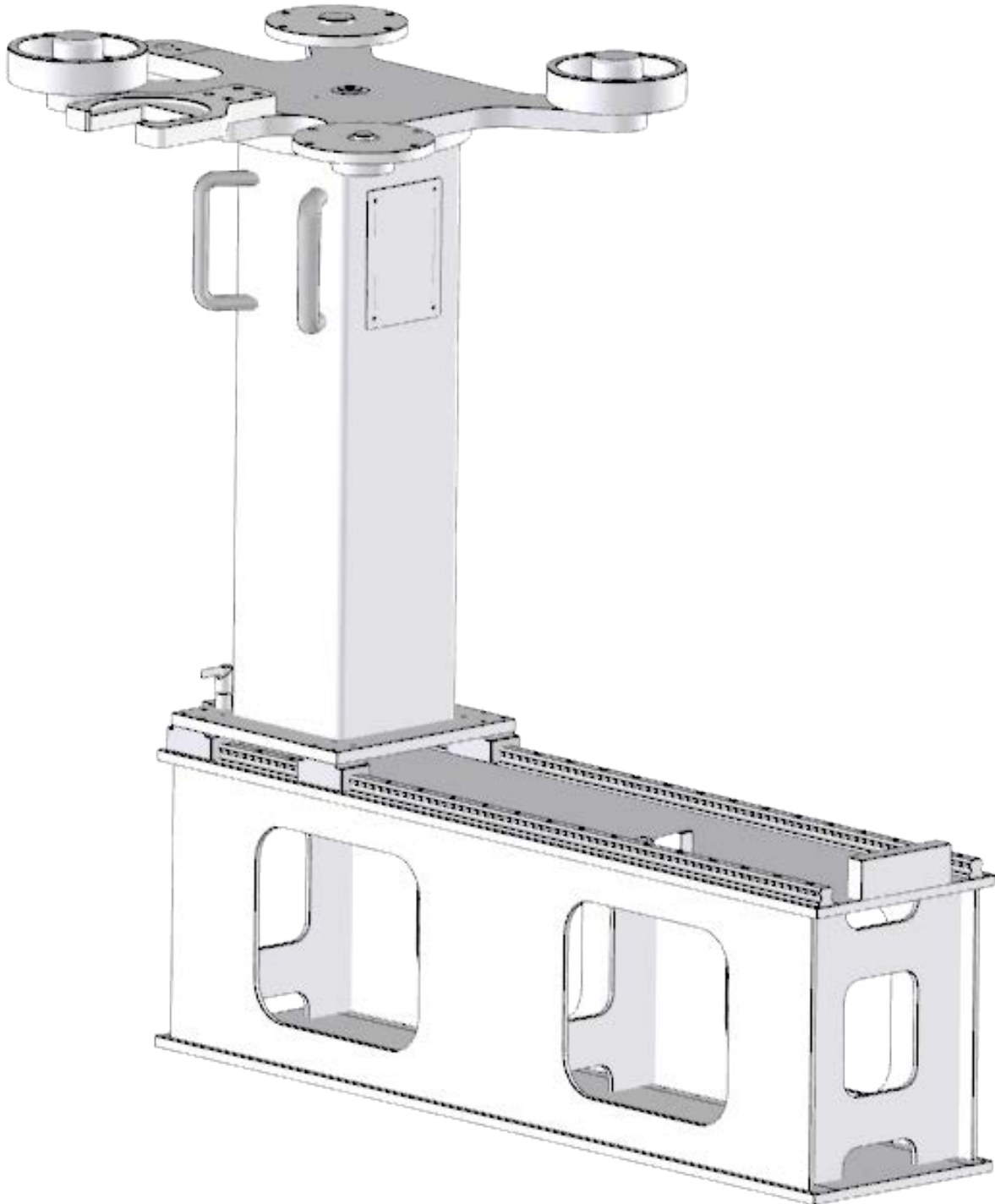
2.9 - 8.0" (74 - 203mm) Diameter X 9.3" (236mm) Length Complete With Tooling and Digital Micrometer



Tool Changing and Storage System for Heavy Tooling

6875A Tool Changing and Storage System

For heavy tooling such as Milling Heads, Flycutters and Right Angle Drives



Suggested Hold Down Anchor System

9203Q Hold down anchor kit for F107/9 machine installation

