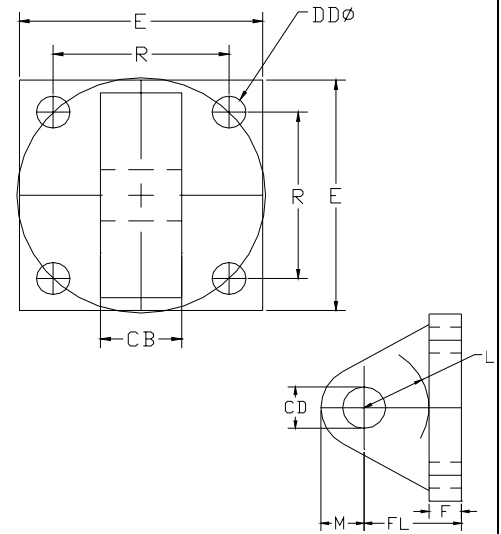


Eye Bracket (High Pressure Hydraulic)

| Part Number | H Series | Dimensions | | | | | | | | |
|-------------|----------|------------|------|------|------|------|------|------|------|------|
| | | CD | CB | DD | E | F | FL | LR | M | R |
| EB050 | 1.50 | 0.50 | 0.75 | 0.41 | 2.50 | 0.38 | 1.13 | 0.75 | 0.50 | 1.63 |
| EB075 | 2.0-2.5 | 0.75 | 1.25 | 0.53 | 3.50 | 0.63 | 1.88 | 1.25 | 0.75 | 2.56 |
| EB100 | 3.25 | 1.00 | 1.50 | 0.66 | 4.50 | 0.75 | 2.25 | 1.50 | 1.00 | 3.25 |
| EB138 | 4.00 | 1.38 | 2.00 | 0.66 | 5.00 | 0.88 | 3.00 | 2.13 | 1.38 | 3.81 |
| EB175 | 5.00 | 1.75 | 2.50 | 0.91 | 6.50 | 0.88 | 3.13 | 2.25 | 1.75 | 4.95 |
| EB200 | 6.00 | 2.00 | 2.50 | 1.06 | 7.50 | 1.00 | 3.50 | 2.50 | 2.00 | 5.75 |
| EB250 | 7.00 | 2.50 | 3.00 | 1.19 | 8.50 | 1.00 | 4.00 | 3.00 | 2.50 | 6.59 |
| EB300 | 8.00 | 3.00 | 3.00 | 1.31 | 9.50 | 1.00 | 4.25 | 3.25 | 3.00 | 7.50 |

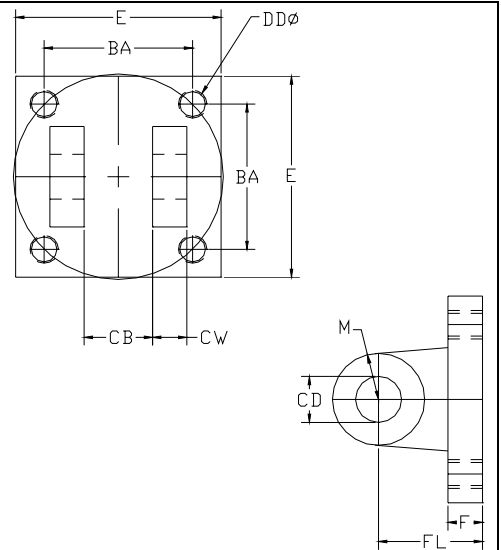


Eye Bracket (Air and Medium Pressure Hydraulic)

| Part Number | A & LH Series | Dimensions | | | | | | | | |
|-------------|---------------|------------|------|------|------|------|------|------|------|------|
| | | CD | CB | DD | E | F | FL | LR | M | R |
| EB050 | 1.5-2.5 | 0.50 | 0.75 | 0.41 | 2.50 | 0.38 | 1.13 | 0.75 | 0.50 | 1.63 |
| EB075 | 3.25-5 | 0.75 | 1.25 | 0.53 | 3.50 | 0.63 | 1.88 | 1.25 | 0.75 | 2.56 |
| EB100 | 6-8 | 1.00 | 1.50 | 0.66 | 4.50 | 0.75 | 2.25 | 1.50 | 1.00 | 3.25 |

Clevis Bracket (High Pressure Hydraulic)

| Part Number | H Series | Dimensions | | | | | | | | |
|-------------|----------|------------|------|------|------|----------|------|------|------|------|
| | | CD | CB | BA | CW | DD | E | F | FL | M |
| CB050 | 1.50 | 0.50 | 0.77 | 1.63 | 0.50 | 3/8-24 | 2.50 | 0.38 | 1.13 | 0.50 |
| CB075 | 2.0-2.5 | 0.75 | 1.27 | 2.56 | 0.63 | 1/2-20 | 3.50 | 0.63 | 1.88 | 0.75 |
| CB100 | 3.25 | 1.00 | 1.52 | 3.25 | 0.75 | 5/8-18 | 4.50 | 0.75 | 2.25 | 1.00 |
| CB138 | 4.00 | 1.38 | 2.03 | 3.81 | 1.00 | 5/8-18 | 5.00 | 0.88 | 3.00 | 1.38 |
| CB175 | 5.00 | 1.75 | 2.53 | 4.94 | 1.25 | 7/8-14 | 6.50 | 0.88 | 3.13 | 1.75 |
| CB200 | 6.00 | 2.00 | 2.53 | 5.75 | 1.25 | 1-14 | 7.50 | 1.00 | 3.50 | 2.00 |
| CB250 | 7.00 | 2.50 | 3.03 | 6.59 | 1.50 | 1 1/8-12 | 8.50 | 1.00 | 4.00 | 2.50 |
| CB300 | 8.00 | 3.00 | 3.03 | 7.50 | 1.50 | 1 1/4-12 | 9.50 | 1.00 | 4.25 | 2.75 |

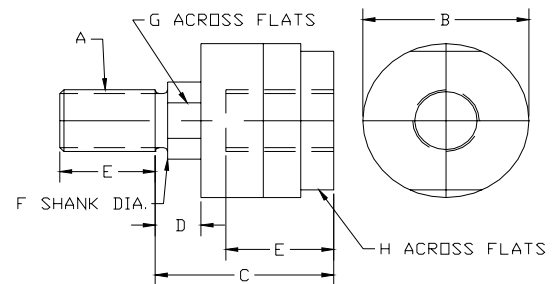


Clevis Bracket (Air and Medium Pressure Hydraulic)

| Part Number | A & LH Series | Dimensions | | | | | | | | |
|-------------|---------------|------------|------|------|------|--------|------|------|------|------|
| | | CD | CB | BA | CW | DD | E | F | FL | M |
| CB050 | 1.5-2.5 | 0.50 | 0.77 | 1.63 | 0.50 | 3/8-24 | 2.50 | 0.38 | 1.13 | 0.50 |
| CB075 | 4-12 | 0.75 | 1.27 | 2.56 | 0.63 | 1/2-20 | 3.50 | 0.63 | 1.88 | 0.75 |
| CB100 | 6-8 | 1.00 | 1.52 | 3.25 | 0.75 | 5/8-18 | 4.50 | 0.75 | 2.25 | 1.00 |

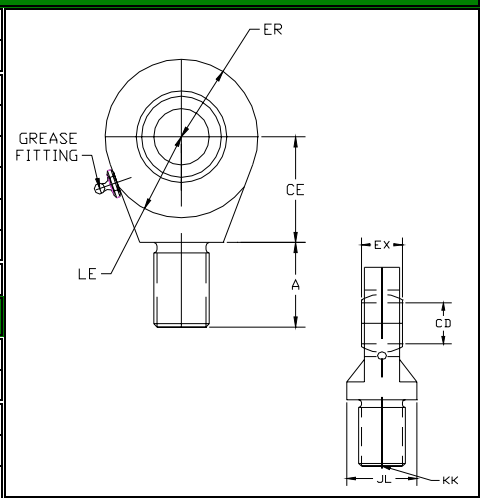
ALIGNMENT COUPLER

| Part Number | DIMENSIONS | | | | | | | |
|-------------|------------|------|------|------|------|------|------|------|
| | A | B | C | D | E | F | G | H |
| AC044 | 7/16-20 | 1.25 | 2.00 | 0.50 | 0.75 | 0.63 | 0.56 | 1.13 |
| AC050 | 1/2-20 | 1.25 | 2.00 | 0.50 | 0.75 | 0.63 | 0.56 | 1.13 |
| AC075 | 3/4-16 | 1.75 | 2.31 | 0.31 | 1.13 | 0.97 | 0.88 | 1.50 |
| AC087 | 7/8-14 | 1.75 | 2.31 | 0.31 | 1.13 | 0.97 | 0.88 | 1.50 |
| AC100 | 1-14 | 2.50 | 2.94 | 0.50 | 1.63 | 1.38 | 1.25 | 2.25 |
| AC125 | 1 1/4-12 | 2.50 | 2.94 | 0.50 | 1.63 | 1.38 | 1.25 | 2.25 |
| AC150 | 1 1/2-12 | 3.25 | 4.38 | 0.81 | 2.25 | 1.75 | 1.50 | 3.00 |
| AC175 | 1 3/4-12 | 3.25 | 4.38 | 0.81 | 2.25 | 1.75 | 1.50 | 3.00 |
| AC187 | 1 7/8-12 | 3.75 | 5.44 | 0.69 | 3.00 | 2.25 | 1.88 | 3.50 |
| AC225 | 2 1/4-12 | 6.75 | 6.38 | 3.25 | 3.50 | 2.75 | 2.38 | 2.88 |
| AC250 | 2 1/2-12 | 7.00 | 6.50 | 4.00 | 3.50 | 3.25 | 2.88 | 3.38 |



SELF-ALIGNING ROD EYE (High Pressure Hydraulic)

| Part Number | H Series | DIMENSIONS | | | | | | | |
|-------------|----------|------------|------|------|------|------|------|------|------|
| | | KK | A | CD | CE | EX | ER | LE | JL |
| SAE044 | 1.50 | 7/16-20 | 0.69 | 0.50 | 0.88 | 0.44 | 0.88 | 0.75 | 0.88 |
| SAE075 | 2.0-2.5 | 3/4-16 | 1.00 | 0.75 | 1.25 | 0.03 | 1.25 | 1.06 | 1.31 |
| SAE100 | 3.25 | 1-14 | 1.50 | 1.00 | 1.88 | 0.88 | 1.38 | 1.44 | 1.50 |
| SAE125 | 4.00 | 1 1/4-12 | 2.00 | 1.38 | 2.13 | 1.19 | 1.81 | 1.88 | 2.00 |
| SAE150 | 5.00 | 1 1/2-12 | 2.13 | 1.75 | 2.50 | 1.53 | 2.19 | 2.13 | 2.25 |
| SAE187 | 6.00 | 1 7/8-12 | 2.88 | 2.00 | 2.75 | 1.75 | 2.63 | 2.50 | 2.75 |

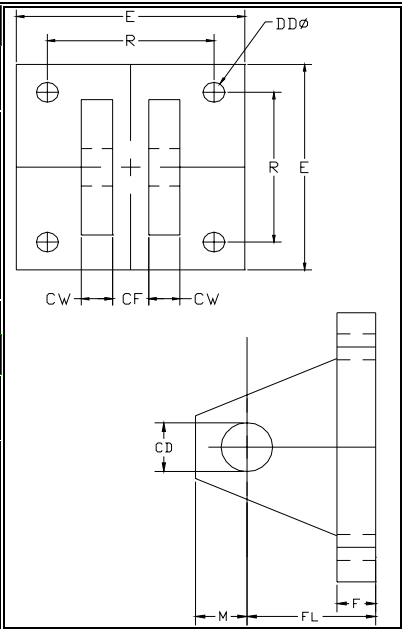


SELF-ALIGNING ROD EYE (Pneumatic and Low Pressure Hydraulic)

| Part Number | A & LH Series | DIMENSIONS | | | | | | | |
|-------------|---------------|------------|------|------|------|------|------|------|------|
| | | KK | A | CD | CE | EX | ER | LE | JL |
| SAE044 | 1.5-2.5 | 7/16-20 | 0.69 | 0.50 | 0.88 | 0.44 | 0.88 | 0.75 | 0.88 |
| SAE075 | 3.25-5 | 3/4-16 | 1.00 | 0.75 | 1.25 | 0.03 | 1.25 | 1.06 | 1.31 |
| SAE100 | 6-8 | 1-14 | 1.50 | 1.00 | 1.88 | 0.88 | 1.38 | 1.44 | 1.50 |

SELF-ALIGNING CLEVIS BRACKET

| Part Number | H Series | DIMENSIONS | | | | | | | | |
|-------------|----------|------------|-------|------|------|------|------|------|------|------|
| | | CD | E | F | M | R | CF | CW | DD | FL |
| SCB050 | 1.50 | 0.50 | 3.00 | 0.50 | 0.50 | 2.05 | 0.44 | 0.50 | 0.41 | 1.50 |
| SCB075 | 2.0-2.5 | 0.75 | 3.75 | 0.62 | 0.88 | 2.76 | 0.66 | 0.62 | 0.53 | 2.00 |
| SCB100 | 3.25 | 1.00 | 5.50 | 0.75 | 1.00 | 4.10 | 0.88 | 0.75 | 0.53 | 2.50 |
| SCB125 | 4.00 | 1.38 | 6.50 | 0.88 | 1.38 | 4.95 | 1.19 | 1.00 | 0.66 | 3.50 |
| SCB150 | 5.00 | 1.75 | 8.50 | 1.25 | 1.75 | 6.58 | 1.53 | 1.25 | 0.91 | 4.50 |
| SCB187 | 6.00 | 2.00 | 10.62 | 1.50 | 2.00 | 7.92 | 1.75 | 1.50 | 0.91 | 5.00 |

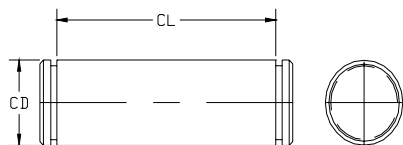


SELF-ALIGNING CLEVIS BRACKET

| Part Number | A & LH Series | DIMENSIONS | | | | | | | | |
|-------------|---------------|------------|-------|------|------|------|------|------|------|------|
| | | CD | E | F | M | R | CF | CW | DD | FL |
| SCB050 | 3-12 | 0.50 | 3.00 | 0.50 | 0.50 | 2.05 | 0.44 | 0.50 | 0.41 | 1.50 |
| SCB075 | 3.25-5 | 0.75 | 3.75 | 0.62 | 0.88 | 2.76 | 0.66 | 0.62 | 0.53 | 2.00 |
| SCB100 | 6-8 | 1.00 | 5.50 | 0.75 | 1.00 | 4.10 | 0.88 | 0.75 | 0.53 | 2.50 |
| SCB125 | 4-12 | 1.38 | 6.50 | 0.88 | 1.38 | 4.95 | 1.19 | 1.00 | 0.66 | 3.50 |
| SCB150 | | 1.75 | 8.50 | 1.25 | 1.75 | 6.58 | 1.53 | 1.25 | 0.91 | 4.50 |
| SCB187 | | 2.00 | 10.62 | 1.50 | 2.00 | 7.92 | 1.75 | 1.50 | 0.91 | 5.00 |

SA PIVOT PINS

| Part Number | H Series | A & LH Series | DIMENSIONS | |
|-------------|----------|---------------|------------|------|
| | | | CD | CL |
| PP050SA | 1.50 | 1.5-2.5 | 0.500 | 1.56 |
| PP075SA | 2.0-2.5 | 3.25-5 | 0.750 | 2.03 |
| PP100SA | 3.25 | 6-8 | 1.000 | 2.50 |
| PP138SA | 4.00 | | 1.374 | 3.31 |
| PP175SA | 5.00 | | 1.750 | 4.22 |
| PP200SA | 6.00 | | 2.000 | 4.94 |



Pivot Pin furnished with (2) retainers.



The JIT Certified Guarantee

We guarantee that all cylinders ordered from this catalog will be built to the exact dimensions specified. All dimensions have been certified to be correct, and thus it is not necessary to request certified drawings

Safety Coupler

Safety Couplers create a stronger connection than a standard threaded rod end and provide closer radial alignment making installation quicker and results in less wear of component parts by allowing for radial misalignment. Some additional Safety Coupler advantages include:

1. Faster close radial alignment important for long cylinder life
2. Less critical rod end to machine attachment
3. Use with any JIT cylinder with 5/8" or larger rod diameter
4. Use with no extra cost JIT Style 4 rod end
5. Faster cylinder installation and removal
6. Better force distribution on push and pull strokes
7. For use with fixed mount cylinders

| Part No. | Rod Dia | Dimensions | | | | | | | | | |
|----------|---------|------------|------|------|-------|-----|------|----|------|------|------|
| | | B | C | D | H | I | J | L | M | N | P |
| SC062 | 0.63 | 0.41 | 1.50 | 0.56 | 45° | 90° | 0.22 | 4 | 1.13 | 0.25 | 0.66 |
| SC100 | 1.00 | 0.75 | 2.00 | 0.88 | 30° | 60° | 0.28 | 6 | 1.50 | 0.38 | 1.06 |
| SC138 | 1.38 | 0.94 | 2.50 | 1.00 | 30° | 60° | 0.34 | 6 | 2.00 | 0.38 | 1.44 |
| SC175 | 1.75 | 1.19 | 3.00 | 1.25 | 22.5° | 45° | 0.34 | 8 | 2.38 | 0.50 | 1.81 |
| SC200 | 2.00 | 1.44 | 3.50 | 1.63 | 15° | 30° | 0.41 | 12 | 2.69 | 0.63 | 2.06 |
| SC250 | 2.50 | 1.88 | 4.00 | 2.88 | 15° | 30° | 0.41 | 12 | 3.19 | 0.75 | 2.63 |
| SC300 | 3.00 | 2.38 | 5.00 | 2.38 | 15° | 30° | 0.53 | 12 | 4.00 | 0.88 | 3.13 |
| SC350 | 3.50 | 2.63 | 5.88 | 2.63 | 15° | 30° | 0.66 | 12 | 4.69 | 1.00 | 3.63 |
| SC400 | 4.00 | 3.13 | 6.38 | 2.63 | 15° | 30° | 0.66 | 12 | 5.19 | 1.00 | 4.13 |
| SC450 | 4.50 | 3.63 | 6.88 | 3.13 | 15° | 30° | 0.66 | 12 | 5.69 | 1.50 | 4.63 |
| SC500 | 5.00 | 4.00 | 7.38 | 3.13 | 15° | 30° | 0.66 | 12 | 6.19 | 1.50 | 5.13 |
| SC550 | 5.50 | 4.50 | 8.25 | 3.88 | 15° | 30° | 0.78 | 12 | 6.88 | 1.88 | 5.63 |

Weld Plate

Also available as a convenient accessory (optional at extra cost) is a Weld Plate to match each Safety Coupler. The Weld Plate provides the perfect answer to customers who prefer to weld a pre-drilled and tapped, properly sized plate to the machine, rather than laying out, drilling and tapping each hole in the machine. The Weld Plate is equipped with an accurately drilled locator pin hole to facilitate fast, close tolerance positioning. Advantages of our Safety Coupler option include:

| Part No. | Size | E | F | G | H | I | K | L | M |
|----------|------|------|------|------|-------|-----|---------|----|------|
| WP062 | 0.63 | 0.50 | 2.00 | 0.25 | 45° | 90° | 10-24 | 4 | 1.13 |
| WP100 | 1.00 | 0.50 | 2.50 | 0.25 | 30° | 60° | 1/4-20 | 6 | 1.50 |
| WP137 | 1.38 | 0.63 | 3.00 | 0.25 | 30° | 60° | 5/16-18 | 6 | 2.00 |
| WP175 | 1.75 | 0.63 | 4.00 | 0.25 | 22.5° | 45° | 5/16-18 | 8 | 2.38 |
| WP200 | 2.00 | 0.75 | 4.00 | 0.38 | 15° | 30° | 3/8-16 | 12 | 2.69 |
| WP250 | 2.50 | 0.75 | 4.50 | 0.38 | 15° | 30° | 3/8-16 | 12 | 3.19 |
| WP300 | 3.00 | 1.00 | 5.50 | 0.38 | 15° | 30° | 1/2-13 | 12 | 4.00 |
| WP350 | 3.50 | 1.00 | 7.00 | 0.38 | 15° | 30° | 5/8-11 | 12 | 4.69 |
| WP400 | 4.00 | 1.00 | 7.00 | 0.38 | 15° | 30° | 5/8-11 | 12 | 5.19 |
| WP450 | 4.50 | 1.00 | 8.00 | 0.38 | 15° | 30° | 5/8-11 | 12 | 5.69 |
| WP500 | 5.00 | 1.00 | 8.00 | 0.38 | 15° | 30° | 5/8-11 | 12 | 6.19 |
| WP550 | 5.50 | 1.25 | 9.00 | 0.38 | 15° | 30° | 3/4-10 | 12 | 6.88 |

SEAL REPLACEMENT

Our gland design allows all rod seals, wipers, 'O' rings, and back-up washers to be easily removed from every standard gland regardless of rod size. Note that Gland Seal Kits have all seals properly loaded into a JIT Cylinders gland.

Polyurethane

Polyurethane seals are standard on H series cylinders.

Nitrile

Nitrile seals can be supplied for any bore size. The recommended operating temperature range is 10 degrees F. (23 degrees C.) to +165 degrees F. (+74 degrees C).

Viton Seals

Viton seals can be supplied for any bore size. Viton is suitable for higher temperature requirements within a range of 10 degrees F. (23 degrees C) to +250 degrees F. (+121 degrees C).

Custom Sealing Solution

JIT Cylinders designs and supplies sealing solutions for the most demanding applications. From exotic operating mediums to extremely high or low temperatures and pressures, we can design and manufacture cylinders that can operate effectively within almost any environment. Contact our engineering department to discuss your unique applications as we strive to supply responsive solutions to solve your application requirements.

High Pressure Hydraulic Seal Kits

| Rod Diameter | Standard | | Viton | |
|--------------|-----------|--------------|-----------|--------------|
| | Gland Kit | Rod Seal Kit | Gland Kit | Rod Seal Kit |
| 0.625 | KHG06 | KHR06 | KHGV06 | KHRV06 |
| 1 | KHG10 | KHR10 | KHGV10 | KHRV10 |
| 1.375 | KHG13 | KHR13 | KHGV13 | KHRV13 |
| 1.75 | KHG17 | KHR17 | KHGV17 | KHRV17 |
| 2 | KHG20 | KHR20 | KHGV20 | KHRV20 |
| 2.5 | KHG25 | KHR25 | KHGV25 | KHRV25 |
| 3 | KHG30 | KHR30 | KHGV30 | KHRV30 |
| 3.5 | KHG35 | KHR35 | KHGV35 | KHRV35 |
| 4 | KHG40 | KHR40 | KHGV40 | KHRV40 |
| 4.5 | KHG45 | KHR45 | KHGV45 | KHRV45 |

| Barrel Bore | Standard | Viton |
|-------------|------------|------------|
| | Piston Kit | Piston Kit |
| 1.5 | KHP15 | KHPV15 |
| 2 | KHP20 | KHPV20 |
| 2.5 | KHP25 | KHPV25 |
| 3.25 | KHP32 | KHPV32 |
| 4 | KHP40 | KHPV40 |
| 5 | KHP50 | KHPV50 |
| 6 | KHP60 | KHPV60 |
| 7 | KHP70 | KHPV70 |
| 8 | KHP80 | KHPV80 |

Contents of Each Seal Kit

| Gland Seal Kit |
|-----------------|
| Gland |
| Rod Seal |
| Rod Wiper |
| Gland O.D. Seal |
| O.D. Backup |

| Rod Seal Kit |
|-----------------|
| Rod Seal |
| Rod Wiper |
| Gland O.D. Seal |
| O.D. Backup |

| Piston Seal Kit |
|------------------|
| Piston Seals (2) |
| Barrel Seals (2) |

Warranty

JIT Cylinders, Inc. warrants every product of its manufacture to be of proper materials and first class workmanship. We agree to repair or replace, F.O.B. factory, but not to remove or install in the field, any perishable soft goods such as seals, which fail within a six-month period after shipment, normal wear accepted. We warrant for one year from date of shipment, all other parts which fail because of defective materials or workmanship. JIT assumes no responsibility for work done or expenses incurred, in the field, pertaining to such repairs or replacements, except upon written authority from our home office. Components not produced by JIT are subject only to the warranty extended to JIT by their respective manufacturer. When orders have been correctly filled, there shall be no returns without JIT's approval. Such returns will be subject to a restocking charge.

Return Goods Authorization (RGA)

All returns to JIT Cylinders must be accompanied with a Return Goods Authorization Number. A Return Goods Authorization Number may be obtained by contacting the plant. JIT Cylinders will inquire into why the return is being made and a number will be assigned at that time. Paperwork will be completed by JIT Cylinders giving details of the return from the information supplied by the customer or distributor. At the time the return is received the RGA number will be matched to the proper paperwork. This allows entry of the return without further questions or delays.

Quality Excellence Policy

We at JIT Cylinders are committed to serving the needs of our customers, as our name implies, Just-In-Time. We are committed to providing products and services which meet application requirements and are engineered for superior performance and reliability. We will achieve this through quality excellence in everything we do. Each task must be performed in conformance to requirements, and systems must be established which assure error-free performance in every area of manufacture. We understand that "quality excellence" depends on the personal performance of each employee. Because of this the entire management team and each member of manufacturing is dedicated and personally involved in the quality improvement process. We are dedicated to a policy of providing quality products and services that fully satisfy our customers' needs. We subscribe to the following quality absolutes:

Quality is defined as 100 percent conformance to requirements.

Our performance goal is to achieve error-free work in all functional areas.

Our system for causing quality is prevention.

We will track our progress in achieving total quality by measuring the price of non-conformance (waste).

Our primary objective will be continuous improvement.

100% Tested and Inspected!

Cylinders are first cycled at low pressure to remove air from the system and checked for proper mechanical action. During this procedure rod extension and stroke are measured. Test pressure is applied to cap and head ports in turn and under static pressure all joints are examined for leakage. Air lines are then fitted to cap and head in turn. The hydraulic fitting is removed from the non-pressurized port and a visual inspection made for air bubbles to indicate any piston seal leakage.

In addition, every cylinder is examined for:

Dimensional accuracy.

Proper unit switch actuation (if applicable).

Visual inspection for freedom of defects.

Proper assembly orientation.

| Mounting Description | NFPA Code | NFPA/JIC CYLINDER MANUFACTURERS SERIES IDENTIFICATION | | | | | | | | | | | |
|-----------------------------|-----------|---|--------|--------|--------|------------|---------|---------|--------|-----------|-------|--------|-------|
| | | JIT Series | Parker | Atlas | Miller | Hydro-Line | Vickers | Sheffer | Ortman | Milwaukee | Hanna | Lynair | |
| PLAIN NO TIE ROD EXTENSION | MXO | A 250 psi | 2A-T | A-NMO | A-50 | R2K | E-24 | A-NX | 7KO | A-11 | A-MXO | A-MXO | |
| | | LH 1500 psi | 3L-T | L-NMO | J-50 | HR2K | F-24 | MH-NX | 7LO | LH-11 | L-MXO | LH-MXO | |
| | | H 3000 psi | 2H-T | H-NMO | H-50 | N2K | TZ-24 | HH-NX | 3THO | H-11 | H-MXO | H-MXO | |
| SIDE TAPPED | MS4 | A 250 psi | 2A-F | A-FS | A-74 | R2B | E-02 | A-SF | 7KH | A-41 | A-MS4 | A-G | |
| | | LH 1500 psi | 3L-F | L-FS | J-74 | HR2B | F-02 | MH-SF | 7LH | LH-41 | L-MS4 | LH-G | |
| | | H 3000 psi | 2H-F | H-FS | H-74 | N2B | TZ-02 | HH-SF | 3THH | H-41 | H-MS4 | H-G | |
| SIDE LUGS | MS2 | A 250 psi | 2A-C | A-SL | A-72 | R2A | E-01 | A-SL | 7KJ | A-42 | A-MS2 | A-A | |
| | | LH 1500 psi | 3L-C | L-SL | J-72 | HR2A | F-01 | MH-SL | 7LJ | LH-42 | L-MS2 | LH-A | |
| | | H 3000 psi | 2H-C | H-SL | H-72 | N2A | TZ-01 | HH-SL | 3THJ | H-42 | H-MS2 | H-A | |
| CENTERLINE LUGS | MS3 | A 250 psi | 2A-E | A-CL | A-73 | R2H | | A-CL | 7KK | A-51 | A-MS3 | A-K | |
| | | LH 1500 psi | 3L-E | L-CL | J-73 | HR2H | | MH-CL | 7LK | LH-51 | L-MS3 | LH-K | |
| | | H 3000 psi | 2H-E | H-CL | H-73 | N2H | TZ-19 | HH-CL | 3THK | H-51 | H-MS3 | H-K | |
| SIDE END LUGS | MS7 | A 250 psi | 2A-G | A-FM2 | A-77 | R2E | E-25 | A-EL | 7KCC | A-43 | A-MS7 | A-J | |
| | | LH 1500 psi | 3L-G | L-FM2 | J-77 | HR2E | F-25 | MH-EL | 7LCC | LH-43 | L-MS7 | LH-J | |
| | | H 3000 psi | 2H-G | H-FM2 | H-77 | N2E | | HH-EL | 3THCC | H-43 | H-MS7 | H-J | |
| HEAD RECTANGULAR FLANGE | MF1 | A 250 psi | 2A-J | A-REF2 | A-61 | R2F | E-07 | A-FF | 7KB | A-31 | A-MF1 | A-C | |
| | | LH 1500 psi | 3L-J | L-REF2 | J-61 | HR2F | F-07 | MH-FF | 7LB | LH-31 | L-MF1 | LH-C | |
| | | H 3000 psi | 2H-J | H-REF2 | H-61 | N2F | TZ-07 | HH-FF | 3THB | H-31 | H-MF1 | H-C | |
| HEAD SQUARE | ME3 | A 250 psi | 2A-JB | A-REF | A-63 | R2J | E-07 | A-FH | 7KQQ | A-21 | A-ME3 | A-C | |
| | | LH 1500 psi | 3L-JB | L-REF | J-63 | HR2J | F-07 | MH-FH | 7LQQ | LH-21 | L-ME3 | LH-C | |
| | | H 3000 psi | 2H-JB | H-REF | H-63 | N2J | TZ-07 | HH-FH | 3THQQ | H-21 | H-ME3 | H-C | |
| CAP RECTANGULAR FLANGE | MF2 | A 250 psi | 2A-H | A-BEF2 | A-62 | R2R | E-12 | A-RF | 7KA | A-32 | A-FM2 | A-D | |
| | | LH 1500 psi | 3L-H | L-BEF2 | J-62 | HR2R | F-12 | MH-RF | 7LA | LH-32 | L-FM2 | LH-D | |
| | | H 3000 psi | 2H-H | H-BEF2 | H-62 | N2R | TZ-12 | HH-RF | 3THA | H-32 | H-FM2 | H-D | |
| CAP SQUARE | ME4 | A 250 psi | 2A-HB | A-BEF | A-64 | R2P | | A-RH | 7KPP | | A-ME4 | A-D | |
| | | LH 1500 psi | 3L-HB | L-BEF | J-64 | HR2P | | MH-RH | 7LPP | | L-ME4 | LH-D | |
| | | H 3000 psi | 2H-HB | H-BEF | H-64 | N2P | | HH-RH | 3THPP | | H-ME4 | H-D | |
| HEAD SQUARE FLANGE | MF5 | A 250 psi | 2A-JB | A-REF1 | | R2J | E-08 | A-FRX | 7KBB | A-21 | A-MF5 | A-P | |
| | | LH 1500 psi | 3L-JB | L-REF1 | J-65 | HR2J | F-08 | MH-FRX | 7LBB | LH-21 | L-MF5 | LH-P | |
| | | H 3000 psi | 2H-JB | H-REF1 | H-65 | N2J | TZ-08 | HH-FRX | 3THBB | H-21 | H-MF5 | H-P | |
| CAP SQUARE FLANGE | MF6 | A 250 psi | 2A-HB | A-BEF1 | | R2S | E-13 | A-RFX | 7KAA | A-22 | A-MF6 | A-R | |
| | | LH 1500 psi | 3L-HB | L-BEF1 | J-66 | HR2S | F-13 | MH-RFX | 7LAA | LH-22 | L-MF6 | LH-R | |
| | | H 3000 psi | 2H-HB | H-BEF1 | H-66 | N2S | TZ-13 | HH-RFX | 3THAA | H-22 | H-MF6 | H-R | |
| BOTH ENDS TIE RODS EXTENDED | MX1 | A 250 psi | 2A-TD | A-NM1 | A-51 | R2L | E-23 | A-BX | 7KL | A-10 | A-MX1 | A-L | |
| | | LH 1500 psi | 3L-TD | L-NM1 | J-51 | HR2L | F-23 | MH-BX | 7LL | LH-10 | L-MX1 | LH-L | |
| | | H 3000 psi | 2H-TD | H-NM1 | H-51 | N2L | TZ-23 | HH-BX | 3THL | H-10 | H-MX1 | H-L | |
| HEAD TIE RODS EXTENDED | MX3 | A 250 psi | 2A-TB | A-NM3 | A-53 | R2M | E-22 | A-FX | 7KM | A-12 | A-MX3 | A-L | |
| | | LH 1500 psi | 3L-TB | L-NM3 | J-53 | HR2M | F-22 | MH-FX | 7LM | LH-12 | L-MX3 | LH-L | |
| | | H 3000 psi | 2H-TB | H-NM3 | H-53 | N2M | TZ-22 | HH-FX | 3THM | H-12 | H-MX3 | H-L | |
| CAP TIE RODS EXTENDED | MX2 | A 250 psi | 2A-TC | A-NM2 | A-52 | R2N | E-21 | A-RX | 7KN | A-13 | A-MX2 | A-L | |
| | | LH 1500 psi | 3L-TC | L-NM2 | J-52 | HR2N | F-21 | MH-RX | 7LN | LH-13 | L-MX2 | LH-L | |
| | | H 3000 psi | 2H-TC | H-NM2 | H-52 | N2N | TZ-21 | HH-RX | 3THN | H-13 | H-MX2 | H-L | |
| HEAD TRUNNION | MT1 | A 250 psi | 2A-D | A-TM1 | A-81 | R2U | E-35 | A-TF | 7KER | A-71 | A-MT1 | A-E | |
| | | LH 1500 psi | 3L-D | L-TM1 | J-81 | HR2U | F-35 | MH-TF | 7LER | LH-71 | L-MT1 | LH-E | |
| | | H 3000 psi | 2H-D | H-TM1 | H-81 | N2U | TZ-35 | HH-TF | 3THER | H-71 | H-MT1 | H-E | |
| CAP TRUNNION | MT2 | A 250 psi | 2A-DB | A-TM2 | A-82 | R2W | E-16 | A-TR | 7KEB | A-72 | A-MT2 | A-F | |
| | | LH 1500 psi | 3L-DB | L-TM2 | J-82 | HR2W | F-16 | MH-TR | 7LEB | LH-72 | L-MT2 | LH-F | |
| | | H 3000 psi | 2H-DB | H-TM2 | H-82 | N2W | TZ-16 | HH-TR | 3THEB | H-72 | H-MT2 | H-F | |
| INTERMEDIATE FIXED TRUNNION | MT4 | A 250 psi | 2A-DD | A-TM3 | | R2TT | E-14 | A-T | 7KE | A-73 | A-MT4 | A-N | |
| | | LH 1500 psi | 3L-DD | L-TM3 | | HR2TT | F-14 | MH-T | 7LE | LH-73 | L-MT4 | LH-N | |
| | | H 3000 psi | 2H-DD | H-TM3 | | N2TT | TZ-14 | HH-T | 3THE | H-73 | H-MT4 | H-N | |
| CAP FIXED CLEVIS | MP1 | A 250 psi | 2A-BB | A-PB2 | A-84 | R2C | E-10 | A-C | 7KG | A-61 | A-MP1 | A-B | |
| | | LH 1500 psi | 3L-BB | L-PB2 | J-84 | HR2C | F-10 | MH-C | 7LG | LH-61 | L-MP1 | LH-B | |
| | | H 3000 psi | 2H-BB | H-PB2 | H-84 | N2C | TZ-10 | HH-C | 3THG | H-61 | H-MP1 | H-B | |
| CAP DETACHABLE CLEVIS | MP2 | A 250 psi | 2A-BC | A-MP2 | A-86 | R2DC | | | | | | A-BR | |
| | | LH 1500 psi | 3L-BC | L-MP2 | J-86 | HR2DC | | | | | | | LH-BR |
| | | H 3000 psi | 2H-BC | H-MP2 | H-86 | N2DC | | | | | | | |
| CAP SELF-ALIGNING EYE | MPU3 | A 250 psi | 2A-SB | A-SA | | | | | 7KS | A-62 | | A-UB | |
| | | LH 1500 psi | 3L-SB | L-SA | | | | | 7LS | LH-62 | | LH-UB | |
| | | H 3000 psi | 2H-SB | H-SA | | | | | 3THS | H-62 | | H-UB | |
| END FOOT MOUNTS | MS1 | A 250 psi | 2A-CB | A-FM1 | | | | A-FB | | | | A-W | |
| | | LH 1500 psi | 3L-CB | L-FM1 | | | | MH-FB | | | | LH-W | |
| | | H 3000 psi | 2H-CB | H-FM1 | | | | HH-FB | | | | H-W | |
| CAP FIXED EYE | MP3 | A 250 psi | | A-PB1 | | | | | | | | A-BX | |
| | | LH 1500 psi | | L-PB1 | | | | | | | | | LH-BX |
| | | H 3000 psi | | H-PB1 | | | | | | | | | H-BX |
| SOLID FLANGE HEAD END | ME5 | A 250 psi | 2A-JB | | A-63 | R2G | | A-FHF | | A-21 | ME3-A | | |
| | | LH 1500 psi | 3L-JB | | J-63 | HR2G | | MH-FHF | | | ME3-L | | |
| | | H 3000 psi | 2H-JJ | H-ME5 | H-67 | N2G | TZ-09 | HH-FHF | | H-35 | MF7-H | H-X | |
| SOLID FLANGE CAP END | ME6 | A 250 psi | 2A-HB | | A-64 | R2P | | A-RHF | | A-32 | ME4-A | | |
| | | LH 1500 psi | 3L-HB | | J-64 | HR2P | | MH-RHF | | | ME4-L | | |
| | | H 3000 psi | 2H-HH | H-ME6 | H-68 | N2P | | HH-RHF | | H-36 | MF9-H | H-T | |

| Maximum Pressure Ratings | | | |
|--------------------------|--------------------|-------------------|---------------------------|
| Bore Size | Heavy Duty Service | Max Shock Service | 3:1 Safety Factor (Yeild) |
| 1.5 | 3,000 | 5,000 | 3,612 |
| 2.0 | 3,000 | 5,000 | 3,085 |
| 2.5 | 3,000 | 5,000 | 3,412 |
| 3.25 | 3,000 | 5,000 | 2,783 |
| 4.0 | 3,000 | 5,000 | 2,842 |
| 5.0 | 3,000 | 5,000 | 2,667 |
| 6.0 | 3,000 | 5,000 | 2,778 |
| 7.0 | 3,000 | 5,000 | 2,760 |
| 8.0 | 3,000 | 5,000 | 2,558 |

| H Series Cylinder Weight Chart | | | | | | | |
|--------------------------------|----------|-------------|------------------------|-----------|----------|-------------|------------------------|
| Bore Size | Rod Dia. | Zero Stroke | Add per Inch of Stroke | Bore Size | Rod Dia. | Zero Stroke | Add per Inch of Stroke |
| 1.5 | 0.625 | 9.0 | 0.50 | 4.0 | 2.5 | 58.0 | 3.2 |
| | 1.0 | 9.3 | 0.60 | 5.0 | 2.0 | 82.0 | 3.4 |
| 2.0 | 1.0 | 13.2 | 0.80 | | 3.5 | 86.0 | 5.2 |
| | 1.375 | 17.1 | 1.00 | 6.00 | 2.50 | 133.0 | 5.2 |
| 2.5 | 1.0 | 19.5 | 1.10 | | 4.0 | 140.0 | 7.3 |
| | 1.75 | 25.5 | 1.50 | 7.0 | 3.0 | 242.0 | 6.7 |
| 3.25 | 1.375 | 41.0 | 1.80 | | 5.0 | 253.0 | 10.3 |
| | 2.0 | 46.0 | 2.20 | 8.0 | 3.5 | 276.0 | 9.0 |
| 4.0 | 1.75 | 53.0 | 2.50 | | 5.5 | 309.0 | 13.0 |

| Output Forces at Specific Input Pressures | | | | | | | | | | | | | | | | | |
|---|---------|-----------|-----------|---|--------|----------|--------|----------|---------|----------|---------|----------|---------|----------|---------|----------|---------|
| Bore | Rod Dia | Push Area | Pull Area | Forces in Pounds at Various Pressures (PSI) | | | | | | | | | | | | | |
| | | | | 500 PSI | | 1000 PSI | | 1500 PSI | | 2000 PSI | | 3000 PSI | | 4000 PSI | | 5000 PSI | |
| | | | | Push | Pull | Push | Pull | Push | Pull | Push | Pull | Push | Pull | Push | Pull | Push | Pull |
| 1.50 | 0.63 | 1.77 | 1.46 | 883 | 730 | 1,767 | 1,460 | 2,650 | 2,190 | 3,534 | 2,920 | 5,301 | 4,380 | 7,068 | 5,840 | 8,835 | 7,300 |
| | 1.00 | | 0.98 | | 491 | | 982 | | 1,473 | | 1,964 | | 2,946 | | 3,928 | | 4,910 |
| 2.00 | 1.00 | 3.14 | 2.36 | 1,570 | 1,180 | 3,140 | 2,360 | 4,710 | 3,540 | 6,280 | 4,720 | 9,420 | 7,080 | 12,560 | 9,440 | 15,700 | 11,800 |
| | 1.38 | | 1.66 | | 830 | | 1,660 | | 2,490 | | 3,320 | | 4,980 | | 6,640 | | 8,300 |
| 2.50 | 1.00 | 4.91 | 4.12 | 2,455 | 2,060 | 4,910 | 4,120 | 7,365 | 6,180 | 9,820 | 8,240 | 14,730 | 12,360 | 19,640 | 16,480 | 24,550 | 20,600 |
| | 1.38 | | 3.43 | | 1,715 | | 3,430 | | 5,145 | | 6,860 | | 10,290 | | 13,720 | | 17,150 |
| | 1.75 | | 2.51 | | 1,255 | | 2,510 | | 3,765 | | 5,020 | | 7,530 | | 10,040 | | 12,550 |
| 3.25 | 1.38 | 8.30 | 6.82 | 4,150 | 3,410 | 8,300 | 6,820 | 12,450 | 10,230 | 16,600 | 13,640 | 24,900 | 20,460 | 33,200 | 27,280 | 41,500 | 34,100 |
| | 1.75 | | 5.90 | | 2,950 | | 5,900 | | 8,850 | | 11,800 | | 17,700 | | 23,600 | | 29,500 |
| | 2.00 | | 5.16 | | 2,580 | | 5,160 | | 7,740 | | 10,320 | | 15,480 | | 20,640 | | 25,800 |
| 4.00 | 1.75 | 12.57 | 10.17 | 6,285 | 5,085 | 12,570 | 10,170 | 18,855 | 15,255 | 25,140 | 20,340 | 37,710 | 30,510 | 50,280 | 40,680 | 62,850 | 50,850 |
| | 2.00 | | 9.43 | | 4,715 | | 9,430 | | 14,145 | | 18,860 | | 28,290 | | 37,720 | | 47,150 |
| | 2.50 | | 7.66 | | 3,830 | | 7,660 | | 11,490 | | 15,320 | | 22,980 | | 30,640 | | 38,300 |
| 5.00 | 2.00 | 19.64 | 16.50 | 9,820 | 8,250 | 19,640 | 16,500 | 28,460 | 24,750 | 39,280 | 33,000 | 58,920 | 49,500 | 78,560 | 66,000 | 98,200 | 82,500 |
| | 2.50 | | 14.73 | | 7,365 | | 14,730 | | 22,095 | | 29,460 | | 44,190 | | 58,920 | | 73,650 |
| | 3.00 | | 12.57 | | 6,285 | | 12,570 | | 18,855 | | 25,140 | | 37,710 | | 50,280 | | 62,850 |
| | 3.50 | | 10.02 | | 5,010 | | 10,020 | | 15,030 | | 20,040 | | 30,060 | | 40,080 | | 50,100 |
| 6.00 | 2.50 | 28.27 | 23.36 | 14,135 | 11,680 | 28,270 | 23,360 | 42,405 | 35,040 | 56,540 | 46,720 | 84,810 | 70,080 | 113,080 | 93,440 | 141,350 | 116,800 |
| | 3.00 | | 21.20 | | 10,600 | | 21,200 | | 31,800 | | 42,400 | | 63,600 | | 84,800 | | 106,000 |
| | 3.50 | | 18.65 | | 9,325 | | 18,650 | | 27,975 | | 37,300 | | 55,950 | | 74,600 | | 93,250 |
| | 4.00 | | 15.70 | | 7,850 | | 15,700 | | 23,550 | | 31,400 | | 47,100 | | 62,800 | | 78,500 |
| 7.00 | 3.00 | 38.49 | 31.42 | 19,245 | 15,710 | 38,490 | 31,420 | 57,735 | 47,130 | 76,980 | 62,840 | 115,470 | 94,260 | 153,960 | 125,680 | 192,450 | 157,100 |
| | 3.50 | | 28.87 | | 14,435 | | 28,870 | | 43,305 | | 57,740 | | 86,610 | | 115,480 | | 144,350 |
| | 4.00 | | 25.92 | | 12,960 | | 25,920 | | 38,880 | | 51,840 | | 77,760 | | 103,680 | | 129,600 |
| | 4.50 | | 22.59 | | 11,295 | | 22,590 | | 33,885 | | 45,180 | | 67,770 | | 90,360 | | 112,950 |
| | 5.00 | | 18.85 | | 9,425 | | 18,850 | | 28,275 | | 37,700 | | 56,550 | | 75,400 | | 94,250 |
| 8.00 | 3.50 | 50.27 | 40.65 | 25,135 | 20,325 | 50,270 | 40,650 | 75,405 | 60,975 | 100,540 | 81,300 | 150,810 | 121,950 | 201,080 | 162,600 | 251,350 | 203,250 |
| | 4.00 | | 37.70 | | 18,850 | | 37,700 | | 56,550 | | 75,400 | | 113,100 | | 150,800 | | 188,500 |
| | 4.50 | | 34.37 | | 17,185 | | 34,370 | | 51,555 | | 68,740 | | 103,110 | | 137,480 | | 171,850 |
| | 5.00 | | 30.63 | | 15,315 | | 30,630 | | 45,945 | | 61,260 | | 91,890 | | 122,520 | | 153,150 |
| | 5.50 | | 26.51 | | 13,255 | | 26,510 | | 39,765 | | 53,020 | | 79,530 | | 106,040 | | 132,550 |
| 10.0 | 4.50 | 78.54 | 62.64 | 39,270 | 31,320 | 78,540 | 62,640 | 117,810 | 93,960 | 157,080 | 125,280 | 235,620 | 187,920 | 314,160 | 250,560 | 392,700 | 313,200 |
| | 5.00 | | 58.90 | | 29,450 | | 58,900 | | 88,350 | | 117,800 | | 176,700 | | 235,600 | | 294,500 |
| | 5.50 | | 54.78 | | 27,390 | | 54,780 | | 82,170 | | 109,560 | | 164,340 | | 219,120 | | 273,900 |
| | 7.00 | | 40.05 | | 20,025 | | 40,050 | | 60,075 | | 80,100 | | 120,150 | | 160,200 | | 200,250 |
| 12.0 | 5.50 | 113.1 | 89.34 | 56,550 | 44,670 | 113,100 | 89,340 | 169,650 | 134,010 | 226,200 | 178,680 | 339,300 | 268,020 | 452,400 | 357,360 | 565,500 | 446,700 |
| | 7.00 | | 74.61 | | 37,305 | | 74,610 | | 111,915 | | 149,220 | | 223,830 | | 298,440 | | 373,050 |
| | 8.00 | | 62.83 | | 31,415 | | 62,835 | | 94,245 | | 125,660 | | 188,490 | | 251,320 | | 314,150 |

With over a century of manufacturing experience, consistent quality delivered on time is our guarantee. Being a 100% employee-owned company enhances the motivation of every JIT employee. Every employee understands their unique vital role toward earning and retaining long term customers.

JIT Cylinders is an employee owned company that does not make decisions based on stockholder value. We make decisions based on what our customer's value. Our goal is not to simply retain customers, we strive to continuously earn our customers by exceeding their expectations in terms of value, service, quality and delivery. Each day we compete for long term customers and are succeeding by nurturing a corporate culture that encourages and motivates our:

- *customer service managers to not answer phones, but service customers*
- *machinists to not 'cut chips', but deliver on-time quality*
- *engineers to not design, but innovate market driven products*
- *sales managers to not sell, but offer economical best practice solutions*

Our goal at JIT Cylinders is to achieve best-practice leadership in all processes. From our paperless manufacturing floor to our instant 24 hour support, we at JIT Cylinders are in business to serve customers and subscribe to the belief that our success will only follow the success of our customers.

Employee participation in quality-oriented teams also contribute to our quality manufacturing. Teams meet regularly to discuss better, faster, leaner and more economical ways to produce products and streamline manufacturing and sales operations. Our customers benefit from an improved product selection that is manufactured more efficiently.

Product quality is further enhanced by our continuing investment in capital equipment. Substantial expenditures have been made for flexible unmanned machining centers, computers on the manufacturing floor, CNC and NC machining centers, advanced material handling equipment, and testing stands.

The combination of dedicated, motivated and skilled employees coupled with state-of-the-art automated equipment and ample manufacturing capacity, results in a competitively priced, high-quality cylinder delivered on-time to customers worldwide.

Leadership in Innovation Unequaled Integrity of Design

In keeping pace with tomorrow, JIT Cylinders Research and Development Division believes that distinguishing itself through innovation is an essential factor for continued success. The objective of each project strives to exceed current and future application requirements.

Substantial investments are made to strengthen JIT Cylinders high-technology systems capabilities. Key initiatives are focused toward combining electronic controls, and new structural materials with environmental friendly mediums to improve productivity, energy savings, operator efficiency and comfort.

A commitment to quality engineering, research, and product development remains our principal focus.

“At JIT (Just-In-Time) Cylinders,

we supply

cylinder solutions for today and tomorrow’s industrial applications. Being 100% employee owned

we work

as a unified team to exceed our customers’ requirements. Through this motivational approach,

we deliver

innovative and responsive cylinder application solutions. At the same time,

we support

your engineering, design and manufacturing teams. Though this approach

we build

our leadership and strengthen our business to ensure

we create

long term partnerships.”