Flow Style Parts

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"I have been using the diamond eductor abrasive jet cutting head (10/30 combination) for 6 months. Since installation, the only parts we’ve changed out are focusing nozzles. The diamond orifice is still providing a very good stream and our focusing nozzles are lasting noticeably longer. We lost track of actual cutting time at around 700 hours. I’m ready to retrofit my other machines."

— Satisfied Customer
Mount Styles

1  Standard Nozzle Assembly
   201101-xx Diamond .Oxx”
   202101-xx Sapphire .Oxx”
   203101-xx Ruby .Oxx”

2  LM-II-L Nozzle As-
   201201-xx Diamond .Oxx”
   202201-xx Sapphire .Oxx”
   203201-xx Ruby .Oxx”

3  LM-II-S Nozzle As-
   201202-xx Diamond .Oxx”
   202202-xx Sapphire .Oxx”
   203202-xx Ruby .Oxx”

4  P-II Step Nozzle Assembly
   201601-xx Diamond .Oxx”
   202601-xx Sapphire .Oxx”
   203601-xx Ruby .Oxx”

5  Bullet Nozzle Assembly
   201801-xx Diamond .Oxx”
   202801-xx Sapphire .Oxx”
   203801-xx Ruby .Oxx”

6  JE Threaded Nozzle Assembly
   201901-xx Diamond .Oxx”
   202901-xx Sapphire .Oxx”
   203901-xx Ruby .Oxx”

ORIFICE TECHNOLOGY

To order, call (PH.) 713.797.0054 or (FAX) 713.797.1014
Every high pressure connection has the potential to produce ultra small metal shavings which may plug a diamond orifice, or damage a sapphire or ruby orifice. If a poor jet stream is encountered, particles in the orifice may be the cause. These particles may be washed away by rinsing under a faucet or utilizing a pair of tweezers to remove the foreign matter.
ABRASIVE NOZZLES

ABRASIVE NOZZLES

Abrasive Nozzle • FL • .281” O.D.

FL30 .030” I.D. 3” Long
FL35 .035” I.D. 3” Long
FL40 .040” I.D. 3” Long
FL 50 .050” I.D. 3” Long

Longer Life Abrasive Nozzle
Roctec 500 • .281” O.D.

100100-40-3-500 .040” I.D. 3” Long

Abrasive Nozzle • JE • .250” O.D.

FL30 .030” I.D. 3” Long
FL40 .040” I.D. 3” Long
FL45 .045” I.D. 3” Long
FL50 .050” I.D. 3” Long

Abrasive Nozzle • OMAX • .315” O.D.

OM30 .030” I.D. 4” Long
OM42 .042” I.D. 4” Long

Abrasive Nozzle • KMT • .371” O.D.

IR30 .030” I.D. .3” Long
IR40 .040” I.D. .3” Long

Abrasive Splash Guard

P/N 62121-1 for .281” FL
P/N 62121-2 for .250” JE
P/N 62121-3 for .371” IR
P/N 62121-4 for .312” OM

ABRASIVE NOZZLES

To order, call (PH.) 713.797.0054 or (FAX) 713.797.1014
REPAIR AND UPGRADE KITS

A - Seal Buttress 100062-1
B - Seal O-Ring 400042-006
C - Poppet Seal 100061-1
D - Poppet 100060-1
E - Poppet Landing 100059-1
F - O-Ring 400043-014
G - Seal Ejection Tool 100104-1

Hydraulic Auto Bleed Down Valve Repair
302008-1

A - Poppet Landing 100084-1
B - Buttress 100081-1
C - Poppet 100083-1
D - Seal Hoop 100085-1
E - Poppet Seal 100082-1

Hydraulic Auto Repair Kit
302001-1

On/Off Valve Repair Kit
302001-1

Hydraulic Seal Kit
Ceramic Plunger/White Seal
Hydraulic Seal Kit HO
302005-1  60K
302005-2  40K

Intensifier Upgrade
302006-1  60K
302006-2  40K

302007-1  60K
302007-2  40K

REPAIR/UPGRADE KITS
Swivel Repair Kit • 1/4”
Single Axis
302010-1

A - Swivel Back-up Ring 100143-1
B - Dynamic Seal Swivel 100142-1 .169”
   (not included in kit) 100142-2 .137”
C - Swivel Hoop Seal 100144-1
D - O-Ring UHP 400042-009

On/Off Valve Ultra II Repair Kit
302001-2

A - Seal Ejection Tool 100104-1
B - Poppet 100152-1
C - Poppet Landing 100059-1
D - Landing O-Ring 400043-014
E - O-Ring 400042-007
F - Poppet Guide 100150-1
G - Buttress Seal 100151-1
H - Poppet Seal 100061-2

Intensifier Hydraulic Seal Kit
302007-3

Hi-Load Piston Seal Kit
302013-1

REPAIR/UPGRADE KITS
To order, call (PH.) 713.797.0054 or (FAX) 713.797.1014
REPAIR/UPGRADE KITS

Check Valve Repair Kit
302003-1  60K & 40K  ESL

A - Poppet Seat 100034-1
B - Inlet Poppet Housing 301009-1
C - Check Valve Spring 400045-1
D - Retaining Screw 100056-1
E - Outlet Poppet 100057-1
F - Inlet Poppet 100058-1
G - O-Ring 400043-125

HP Seal Kit
302004-1  60K (7/8” plunger)
302004-2  40K (1” plunger)

A - HP Seal Buttress (Qty. 2)
  100021-1  60K
  100021-2  40K
B - High Pressure Seal (Qty. 4)
  100053-1  60K
  100053-2  40K
C - Seal Hoop (Qty. 4)
  100054-1  60K
  100054-2  40K
D - UHP O-Ring (4-pack)
  400042-119  60K
  400042-122  40K
E - O-Ring Lubricant
  400034-1

E - Seal Hoop (Qty. 4)
  100054-1  60K
  100054-2  40K

Air Actuator Repair Kit
Hi-Performance
302017-1

Air Actuator Repair Kit
Legacy
302017-2

Check Valve Repair Kit
302003-1  60K & 40K  ESL

A - Poppet Seat 100034-1
B - Inlet Poppet Housing 301009-1
C - Check Valve Spring 400045-1
D - Retaining Screw 100056-1
E - Outlet Poppet 100057-1
F - Inlet Poppet 100058-1
G - O-Ring 400043-125

HP Seal Kit
302004-1  60K (7/8” plunger)
302004-2  40K (1” plunger)

A - HP Seal Buttress (Qty. 2)
  100021-1  60K
  100021-2  40K
B - High Pressure Seal (Qty. 4)
  100053-1  60K
  100053-2  40K
C - Seal Hoop (Qty. 4)
  100054-1  60K
  100054-2  40K
D - UHP O-Ring (4-pack)
  400042-119  60K
  400042-122  40K
E - O-Ring Lubricant
  400034-1

E - Seal Hoop (Qty. 4)
  100054-1  60K
  100054-2  40K
UHP ASSEMBLIES AND COMPONENTS

**ASSEMBLIES/COMPONENTS**

**A - Ceramic Piston Plunger (Qty. 2)**
- 100013-1  60K
- 100013-2  40K

**B - Hydraulic Piston**
- 100010-1  60K
- 100010-2  40K

**C - Plunger Retainer (Qty. 2)**
- 100011-1  60K
- 100011-2  40K

**D - Hi-Load Piston**
- 100176-1  60K
- 100176-2  40K

**60K - 7/8” dia. plunger**
**40K - 1” dia. plunger**

To order, call (PH.) 713.797.0054 or (FAX) 713.797.1014
ASSEMBLIES/COMPONENTS
ASSEMBLIES/COMPONENTS
To order, call (PH.) 713.797.0054 or (FAX) 713.797.1014
“Checking back through my replacement parts and through our history of repairs and consumables, it seems that I still have some of your seals and repair kits on hand. Our bleed down valve was repaired almost 4000 hours ago with your seals. I also recorded the time on a diamond step mount orifice at almost 2000 hours. This is the quality that I like and hope to receive from your parts as I have in the past.

—Bill Green, Diamond Aircraft Industries
<table>
<thead>
<tr>
<th>Description</th>
<th>Model/Part Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydraulic Auto Bleed Down Valve Valve Body</td>
<td>100133-1</td>
</tr>
<tr>
<td>Hydraulic Auto Bleed Down Valve Adapter</td>
<td>100134-1</td>
</tr>
<tr>
<td>Swivel Shaft 1/4” Parallel Axis</td>
<td>100145-1</td>
</tr>
<tr>
<td>Swivel Shaft 1/4” 90 Degree</td>
<td>100146-1</td>
</tr>
<tr>
<td>P-III Mixing Chamber Nut</td>
<td>100149-1</td>
</tr>
<tr>
<td>End Bell</td>
<td></td>
</tr>
<tr>
<td>301001-1-L Left 60K</td>
<td></td>
</tr>
<tr>
<td>301001-1-R Right 60K</td>
<td></td>
</tr>
<tr>
<td>301001-2-L Left 40K</td>
<td></td>
</tr>
<tr>
<td>301001-2-R Right 40K</td>
<td></td>
</tr>
<tr>
<td>Air Actuator Assembly Hi-Performance • Normally Closed</td>
<td>301006-1</td>
</tr>
<tr>
<td>Air Actuator Assembly Hi-Performance • Normally Open</td>
<td>301006-2</td>
</tr>
<tr>
<td>Air Actuator Assembly Legacy • Normally Closed</td>
<td>301006-3</td>
</tr>
<tr>
<td>On/Off Valve Assembly w/ Hi-Performance Nozzle Body</td>
<td>301007-1</td>
</tr>
<tr>
<td>On/Off Valve Assembly w/ Low Mass Nozzle Body</td>
<td>301007-2</td>
</tr>
<tr>
<td>On/Off Valve Assembly w/ P-III Nozzle Body</td>
<td>301007-3</td>
</tr>
<tr>
<td>On/Off Valve Assembly Legacy w/ Hi-Performance Nozzle Body</td>
<td>301007-4</td>
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<tr>
<td>On/Off Valve Assembly Legacy w/ Low Mass Nozzle Body</td>
<td>301007-5</td>
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<tr>
<td>On/Off Valve Assembly Legacy w/ P-III Nozzle Body</td>
<td>301007-6</td>
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</tbody>
</table>

**ASSEMBLIES/COMPONENTS**
To order, call (PH.) 713.797.0054 or (FAX) 713.797.1014
Block and Bleed Valve Assembly 301014-1

Attenuator Assembly 60K 301025-1

Mechanical Pilot Shift Valve Assembly 301018-1

Electrical Pilot Shift Valve Assembly 301018-2

Quick Disconnect Nipple Assembly 301019-1

ASSEMBLIES/COMPONENTS
To order, call (PH.) 713.797.0054 or (FAX) 713.797.1014
A - High Pressure Cylinder 60K 100001-1
A - High Pressure Cylinder 40K 100001-2
B - Hydraulic Cylinder 60K, 40K 100008-1
C - Tie Rod 100017-1
D - End Bell 60K Left 301001-1-L
D - End Bell 60K Right 301001-1-R
D - End Bell 40K Left 301001-2-L
D - End Bell 40K Right 301001-2-R
E - Check Valve Assembly 60K 301002-1
E - Check Valve Assembly 40K 301002-2

F - End Cap Assembly
G - Cable Guide Assembly Left • Side Mount
G - Cable Guide Assembly Right • Side Mount
G - Cable Guide Assembly Left • Top Mount
G - Cable Guide Assembly Right • Top Mount
H - Main Shift Valve
I - (L+H) - Mechanical Pilot
    Shift Valve Assembly
J - Quick Disconnect
    Nipple Assembly
K - Hex Nut, 3/4" (Grade 8)
L - Pilot Valve, Mechanical Shift

Intensifier Assembly
Mechanical Shift 301020-1 60K
Mechanical Shift 301020-2 40K
Electronic Shift 301020-3 60K
Top Mount Mechanical Shift 301020-4 60K

Intensifier Short Block
301003-1 60K
301003-2 40K
301003-3 Hi-Load Piston 60K

ASSEMBLIES/COMPONENTS
“I would like to compliment you on the high quality of your products and spare parts. Especially when it comes to high-pressure components and orifices (jewels), they are simply second to none. Combine this with the excellent customer service we receive every time we place an order, and it says a lot about your organization. Thanks for all your support, we depend on it.

—Norbert Gorgas, Matech USA, Inc.
Manifold • Hydraulic Intensifier • Top Mount  
100055-2

Manifold • Hydraulic Side Mount w/ Relief Valve  
100055-4

Inline Filter Housing  
100063-1

Short-Stop Filter Adapter Body  
100157-1

Short-Stop Filter Adapter Insert  1/4”  
100192-1

Inline Filter Assembly  
301010-1  1/4”
301010-2  3/8”

PN# UP000-06
Yellow Goop Anti Seize 60 oz
PN# UP000-03
Yellow Goop Anti Seize 30 oz
Elbows, tees, and crosses are available for all of the tubing connection sizes. Material is high tensile 316 stainless steel. Standard tubing glands and collars are provided.

<table>
<thead>
<tr>
<th>GLANDS</th>
<th>COLLARS</th>
<th>PLUGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part #</td>
<td>Tube Size</td>
<td>Part #</td>
</tr>
<tr>
<td>P3000</td>
<td>1/4”</td>
<td>P3020</td>
</tr>
<tr>
<td>P3001</td>
<td>3/8”</td>
<td>P3021</td>
</tr>
<tr>
<td>P3002</td>
<td>9/16”</td>
<td>P3022</td>
</tr>
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</table>

**HIGH PRESSURE 90° ELBOW**

<table>
<thead>
<tr>
<th>Pressure</th>
<th>Connections</th>
<th>O.D.</th>
<th>1 3/8”</th>
<th>1 1/2”</th>
<th>7/8”</th>
<th>7/8”</th>
<th>Thickness</th>
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<tbody>
<tr>
<td>P3060</td>
<td>60,000</td>
<td>1/4” O.D.</td>
<td>1 3/8”</td>
<td>1 1/2”</td>
<td>7/8”</td>
<td>7/8”</td>
<td>1”</td>
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<tr>
<td>P3061</td>
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<td>3/8” O.D.</td>
<td>1 3/4”</td>
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<td>1 1/4”</td>
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<td>1”</td>
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<tr>
<td>P3062</td>
<td>60,000</td>
<td>9/16” O.D.</td>
<td>2 5/8”</td>
<td>1 7/8”</td>
<td>1 7/8”</td>
<td>1 1/8”</td>
<td>1 1/2”</td>
</tr>
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</table>

To order, call (PH.) 713.797.0054 or (FAX) 713.797.1014
### HIGH PRESSURE TEE

<table>
<thead>
<tr>
<th>Part #</th>
<th>Pressure</th>
<th>Connections</th>
<th>Diameter</th>
<th>DJ</th>
<th>FK</th>
<th>KJ</th>
<th>KL</th>
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<tbody>
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<td>P3100</td>
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<td>1/4” O.D.</td>
<td>2”</td>
<td>1 3/8”</td>
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<td>3/4”</td>
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<tr>
<td>P3101</td>
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<td>3/8” O.D.</td>
<td>2”</td>
<td>1 9/16”</td>
<td>1”</td>
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<td>P3102</td>
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<td>9/16” O.D.</td>
<td>2 5/8”</td>
<td>2 1/8”</td>
<td>1 5/16”</td>
<td>1 3/8”</td>
<td>1 1/2”</td>
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### 4-WAY COUPLING BLOCK

<table>
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<th>Part #</th>
<th>Pressure</th>
<th>Connections</th>
<th>Diameter</th>
<th>DJ</th>
<th>FK</th>
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<th>KL</th>
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<td>P3080</td>
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<td>1/4” O.D.</td>
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<td>3/4”</td>
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<tr>
<td>P3081</td>
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<td>3/8” O.D.</td>
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<td>2”</td>
<td>1 1/16”</td>
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<td>P3082</td>
<td>60,000</td>
<td>9/16” O.D.</td>
<td>2 3/4”</td>
<td>2 5/8”</td>
<td>1 3/8”</td>
<td>1 5/16”</td>
<td>1 1/2”</td>
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### 60,000 psi HIGH PRESSURE VALVES

### TWO WAY STRAIGHT VALVES

<table>
<thead>
<tr>
<th>Tubing</th>
<th>Part #</th>
<th>Orifice</th>
<th>OD</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>J</th>
<th>K</th>
<th>L</th>
<th>Thickness</th>
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<tr>
<td>1/4”</td>
<td>P3200</td>
<td>1/16”</td>
<td>5 3/16”</td>
<td>2”</td>
<td>-</td>
<td>1”</td>
<td>2 2/16”</td>
<td>1/2”</td>
<td>1 3/8”</td>
<td>7/32”</td>
<td>1”</td>
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<tr>
<td>3/8”</td>
<td>P3201</td>
<td>1/16”</td>
<td>5 3/16”</td>
<td>2”</td>
<td>-</td>
<td>1”</td>
<td>2 13/16”</td>
<td>1/2”</td>
<td>1 3/8”</td>
<td>7/32”</td>
<td>1”</td>
</tr>
<tr>
<td>9/16”</td>
<td>P3202</td>
<td>1/16”</td>
<td>5 5/8”</td>
<td>2 5/8”</td>
<td>-</td>
<td>1 7/16”</td>
<td>2 7/8”</td>
<td>1/2”</td>
<td>1 3/8”</td>
<td>7/32”</td>
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### FITTINGS/ADAPTERS
### THREE WAY VALVES
#### TWO PRESSURE CONNECTIONS

<table>
<thead>
<tr>
<th>Tubing</th>
<th>Part #</th>
<th>Orifice</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>J</th>
<th>K</th>
<th>L</th>
<th>Thickness</th>
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<tr>
<td>1/4&quot;</td>
<td>P3209</td>
<td>1/16&quot;</td>
<td>5 3/16&quot;</td>
<td>2&quot;</td>
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<td>2 7/16&quot;</td>
<td>1/2&quot;</td>
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Fittings/Adapters
To order, call (PH.) 713.797.0054 or (FAX) 713.797.1014
### ADAPTERS

<table>
<thead>
<tr>
<th>Part #</th>
<th>Pressure</th>
<th>Connections/Description</th>
<th>Length</th>
<th>Hex Size</th>
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</thead>
<tbody>
<tr>
<td>P3180</td>
<td>60,000</td>
<td>1/4”-3/8” HP Adapter</td>
<td>1 3/4”</td>
<td>3/4”</td>
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<tr>
<td>P3181</td>
<td>60,000</td>
<td>1/4”-9/16” HP Adapter</td>
<td>2 1/8”</td>
<td>1 1/8”</td>
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<tr>
<td>P3182</td>
<td>60,000</td>
<td>3/8”-1/4” HP Adapter</td>
<td>1 1/2”</td>
<td>1”</td>
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<tr>
<td>P3183</td>
<td>60,000</td>
<td>3/8”-9/16” HP Adapter</td>
<td>1 1/2”</td>
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<td>P3184</td>
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<td>9/16”-1/4” HP Adapter</td>
<td>2 1/8”</td>
<td>1 1/8”</td>
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<tr>
<td>P3185</td>
<td>60,000</td>
<td>9/16”-3/8” HP Adapter</td>
<td>3/4”</td>
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### COUPLINGS

#### HIGH PRESSURE STRAIGHT COUPLINGS

<table>
<thead>
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<th>Part #</th>
<th>Pressure</th>
<th>Connections/Descriptions</th>
<th>Length</th>
<th>Hex Size</th>
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<tbody>
<tr>
<td>P3120</td>
<td>60,000</td>
<td>Coupling 1/4” HP</td>
<td>1 3/4”</td>
<td>1”</td>
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<tr>
<td>P3121</td>
<td>60,000</td>
<td>Coupling 3/8” HP</td>
<td>2”</td>
<td>1”</td>
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<tr>
<td>P3122</td>
<td>60,000</td>
<td>Coupling 9/16”</td>
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#### HIGH PRESSURE BULKHEAD COUPLINGS

<table>
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<th>Connections/Descriptions</th>
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<tbody>
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<td>P3140</td>
<td>60,000</td>
<td>Bulkhead Coupling 1/4” HP</td>
<td>2”</td>
<td>1”</td>
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<tr>
<td>P3141</td>
<td>60,000</td>
<td>Bulkhead Coupling 3/8” HP</td>
<td>2 3/8”</td>
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<tr>
<td>P3142</td>
<td>60,000</td>
<td>Bulkhead Coupling 9/16” HP</td>
<td>2 3/4”</td>
<td>1 7/8”</td>
</tr>
</tbody>
</table>
HIGH PRESSURE TUBING

Tubing is cold drawn, seamless, and is supplied in the 1/8 hard condition (not annealed). Tensile strength is approximately 40% higher than that of annealed tubing. All tubing is manufactured in strict accordance with High Pressure Equipment Company specifications to insure tolerance and bore quality.

<table>
<thead>
<tr>
<th>Tubing Size</th>
<th>Pressure</th>
<th>Connection</th>
<th>Material</th>
<th>Length</th>
<th>Part #</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4” O.D. X .083 I.D.</td>
<td>60,000</td>
<td>1/4” HP</td>
<td>304SS</td>
<td>22’</td>
<td>P3290</td>
</tr>
<tr>
<td>3/8” O.D. X 1/8”I.D.</td>
<td>60,000</td>
<td>3/8”HP</td>
<td>304SS</td>
<td>22’</td>
<td>P3291</td>
</tr>
<tr>
<td>9/16” O.D. X 3/16” I.D.</td>
<td>60,000</td>
<td>9/16”HP</td>
<td>304SS</td>
<td>22’</td>
<td>P3292</td>
</tr>
</tbody>
</table>

NIPPLES

Nipples as shown below are stocked in Types 304 stainless steel. Nipples in lengths other than those shown are supplied upon request. Nipples are not furnished with collars and glands, unless specified at the time of order.

<table>
<thead>
<tr>
<th>1/4” O.D. X .040”I.D.</th>
<th>Length</th>
<th>Part #</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 3/4”</td>
<td>P3305</td>
<td></td>
</tr>
<tr>
<td>6”</td>
<td>P3306</td>
<td></td>
</tr>
<tr>
<td>8”</td>
<td>P3308</td>
<td></td>
</tr>
<tr>
<td>10”</td>
<td>P3310</td>
<td></td>
</tr>
<tr>
<td>12”</td>
<td>P3312</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3/8” O.D. X 1/8”I.D.</th>
<th>Length</th>
<th>Part #</th>
</tr>
</thead>
<tbody>
<tr>
<td>3”</td>
<td>P3313</td>
<td></td>
</tr>
<tr>
<td>6”</td>
<td>P3315</td>
<td></td>
</tr>
<tr>
<td>8”</td>
<td>P3316</td>
<td></td>
</tr>
<tr>
<td>10”</td>
<td>P3317</td>
<td></td>
</tr>
<tr>
<td>12”</td>
<td>P3318</td>
<td></td>
</tr>
</tbody>
</table>

FITTINGS/ADAPTERS

To order, call (PH.) 713.797.0054 or (FAX) 713.797.1014
CONING TOOLS

The coning tool is designed for preparing a “cone” on the ends of Medium, High, and Ultra High Pressure tubing. Included angle of the cone is approximately 57 to 59 degrees. The cutter and collet are interchangeable on all of the assemblies (except 2-HF9 and 2-LF9) to permit changing from one size tubing to the other.

<table>
<thead>
<tr>
<th>Tubing Size</th>
<th>Tooling</th>
<th>Spare Collets</th>
<th>Spare Cutters</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4” O.D. X .083 I.D.</td>
<td>P3259</td>
<td>P3262</td>
<td>P3265</td>
</tr>
<tr>
<td>3/8” O.D. X 1/8” I.D.</td>
<td>P3260</td>
<td>P3263</td>
<td>P3266</td>
</tr>
<tr>
<td>9/16” O.D. X 3/16” I.D.</td>
<td>P3261</td>
<td>P3264</td>
<td>P3267</td>
</tr>
</tbody>
</table>

THREADING TOOLS & DIES

The threading tool is designed for preparing a left-hand thread onto Medium, High, and Ultra High Pressure Tubing ends. The threaded die and guide bushings are interchangeable on all of the assemblies (except 2-MHF2) to permit changing from one size tubing to another.

FITTINGS/ADAPTERS
<table>
<thead>
<tr>
<th>Tubing Size</th>
<th>Threading Tool</th>
<th>Spare Threading Dies</th>
<th>Spare Guide Bushings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4” O.D.</td>
<td>P3250</td>
<td>P3253</td>
<td>P3256</td>
</tr>
<tr>
<td>3/8” O.D.</td>
<td>P3251</td>
<td>P3254</td>
<td>P3257</td>
</tr>
<tr>
<td>9/16” O.D.</td>
<td>P3252</td>
<td>P3255</td>
<td>P3258</td>
</tr>
<tr>
<td>Item Description</td>
<td>Part Number</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------------------------------------------</td>
<td>---------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lubricant • O-Ring • 4oz.</td>
<td>400015-1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coning and Threading Oil CL 60</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>O-Ring Lubricant • 2 Grams</td>
<td>400034-1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lubricant • Food Grade</td>
<td>400034-2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anti Vibration Collet Gland Assembly</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rod Seal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inline Filter Screen • HP (Used in Inline Filter Assy. 1/4” 301010-1)</td>
<td>400052-1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Snap Ring • Internal • Inverted</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cross • HP • 3/8”</td>
<td>400071-2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HP Valve • Two Stem Needle</td>
<td>400073-1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Catcher Assembly SS Plug</td>
<td>400081-6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clamp</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rubber Bumper Abrasive Metering Valve</td>
<td>400094-1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FITTINGS/ADAPTERS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tool ID</td>
<td>Description</td>
<td>Part Number</td>
<td>Specifications</td>
</tr>
<tr>
<td>-----------</td>
<td>-------------------------------------------------------</td>
<td>-------------</td>
<td>----------------</td>
</tr>
<tr>
<td>400029-1</td>
<td>Coning &amp; Threading Oil CL 60</td>
<td>400111-1</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>400029-2</td>
<td>Coning Bit 1/4&quot;</td>
<td>400111-2</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>400029-3</td>
<td>Coning Bit 3/8&quot;</td>
<td>400111-3</td>
<td>9/16&quot;</td>
</tr>
<tr>
<td>400029-4</td>
<td>Coning Bit 9/16&quot;</td>
<td>400112-1</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>400029-5</td>
<td>Coning Tool Collet 1/4&quot;</td>
<td>400112-2</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>400029-6</td>
<td>Coning Tool Collet 3/8&quot;</td>
<td>400112-3</td>
<td>9/16&quot;</td>
</tr>
<tr>
<td>400029-7</td>
<td>Coning Tool Collet 9/16&quot;</td>
<td>400118-1</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>400029-8</td>
<td>Deburring Tool for HP Tubing</td>
<td>400118-2</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>400046-1</td>
<td>HP Coning &amp; Threading Kit</td>
<td>400118-3</td>
<td>9/16&quot;</td>
</tr>
<tr>
<td></td>
<td>Sno-Trik, 1/4&quot;, 3/8&quot; &amp; 9/16&quot; Tubing Sizes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>400046-2</td>
<td>HP Coning Tool - Autoclave</td>
<td>400119-1</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td></td>
<td>Includes 1/4&quot;, 3/8&quot; &amp; 9/16&quot; Collets &amp; Blades</td>
<td>400119-2</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td>400046-3</td>
<td>HP Threading Tool Kit</td>
<td>400120-1</td>
<td>9/16&quot;</td>
</tr>
<tr>
<td></td>
<td>Includes 1/4&quot;, 3/8&quot; &amp; 9/16&quot; Bushings &amp; Dies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>400046-4</td>
<td>Coning &amp; Threading Kit - Autoclave</td>
<td>400121-1</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td></td>
<td>1/4&quot;, 3/8&quot; &amp; 9/16&quot; Tubing Sizes</td>
<td>400121-2</td>
<td>3/8&quot;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>400121-3</td>
<td>9/16&quot;</td>
</tr>
</tbody>
</table>

* Sno-Trik Tool, for 400046-1 only

To order, call (PH.) 713.797.0054 or (FAX) 713.797.1014
The “Short-Stop” High-Pressure Filter is by far the most effective device available for protecting line-borne contaminants from damaging orifice assemblies. Installing our exclusive filter will help reduce orifice-related downtime and boost productivity. Prevent upstream debris generated by normal wear and maintenance from clogging or prematurely destroying your orifice and increase reliability. This highly effective filter blocks contaminants from the most common sources within any HP waterjet system.
<table>
<thead>
<tr>
<th>Component</th>
<th>Catalog No.</th>
<th>Pressure (PSI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydraulic Seal Kit (Ceramic Plunger/White Seal)</td>
<td>302007-1</td>
<td>60K</td>
</tr>
<tr>
<td></td>
<td>302007-2</td>
<td>40K</td>
</tr>
<tr>
<td>Intensifier Hydraulic Seal Kit</td>
<td>302007-3</td>
<td></td>
</tr>
<tr>
<td>Pressure Control Valve (Racine)</td>
<td>400027-1</td>
<td></td>
</tr>
<tr>
<td>Pressure Relief Valve (Parker)</td>
<td>400027-2</td>
<td></td>
</tr>
<tr>
<td>Hydraulic Return Filter • 9x</td>
<td>400035-1</td>
<td></td>
</tr>
<tr>
<td>Filter Element • 20x</td>
<td>400041-1</td>
<td></td>
</tr>
<tr>
<td>Relief Valve Cartridge (Hydraulic Manifold • Bosch)</td>
<td>400057-1</td>
<td></td>
</tr>
<tr>
<td>Flat Plate Heat Exchange</td>
<td>606045-1</td>
<td></td>
</tr>
<tr>
<td>Hydraulic Pressure Gauge 5000 PSI</td>
<td>606050-1</td>
<td></td>
</tr>
</tbody>
</table>

To order, call (PH.) 713.797.0054 or (FAX) 713.797.1014
Universal Minerals Inc. offers three sizes of pressurized abrasive hoppers for the WaterJet Cutting Industry.

6.5 cu.ft. – PN#AB6.5
holds 700 pounds of garnet

20 cu.ft. – PN#AB20
holds 2400 pounds of garnet

40 cu.ft. – PN#AB40
holds 4300 pounds of garnet

Multiple ports available on all sizes.

Manual control
A 1-1/4” blow down for quick tank bleed down.
Manual regulators and controls for simple operation.
(Also available with electronic level sensing and warning devices.)

650 lb. Hopper
Basic hopper for the average job shop.

Two 2-inch Sight Glasses
Two inch sight glass allows you to check the level of the hopper from across the room. One at the mid level and one near the bottom.

Garnet Screen
Keeps strings, pieces of bags, and other larger particles from entering the Hopper.
The UMI Modular bed bricks are fused together instead of being screwed to allow longer surface stability and brick integrity.

- Drains water easily, reduces splashback
- Durable Polypropylene material allows for more cuts, reduces cutting noise and can be recycled
- Design gives an even, flat cutting surface
- Tight tolerance surfaces are great foundation beds for cutting parts from materials like: aluminum, brass, copper, foam plastics, laminates, marble, steel and other materials.

<table>
<thead>
<tr>
<th>Bricks are thermally-bonded</th>
<th>1 pallet – 120 bricks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Can be bolted together</td>
<td>4” x 6” x 24”</td>
</tr>
<tr>
<td></td>
<td>4” x 6” x 48”</td>
</tr>
<tr>
<td>Modular Brick</td>
<td>4” x 6” x 48”</td>
</tr>
</tbody>
</table>

4” x 6” x 24” - PN#WJSM
4” x 6” x 48” - PN#WJLG

To order, call (PH.) 713.797.0054 or (FAX) 713.797.1014
GENERAL INFORMATION

TERMS: NET 30 DAYS

FOB: Houston, Texas

MINIMUM ORDER: APE DOES NOT HAVE A MINIMUM ORDER; THERE IS NO ORDER TOO SMALL FOR US TO HANDLE.

EXPEDITE FEE: APE DOES NOT CHARGE AN EXPEDITE FEE. THIS IS OUR DAILY ROUTINE SERVICE.

SHIPPING: ALL PACKAGES WILL BE SHIPPED DHL OVERNIGHT UNLESS OTHERWISE STATED BY THE CUSTOMER AT THE TIME OF THE ORDER. (US ONLY) FED EX INTERNATIONAL IS USED FOR SHIPMENTS OUTSIDE THE U.S.A.

CUSTOMER SERVICE:
APE will be available to you when you need assistance on any matter, any time. If not reached through the office, then through our cell phones. We understand down time. When the machine isn’t running, then your not making money. We can be reached through any of the numbers below.

Abrasive Products & Equipment
6319 Brookhill Houston, TX 77087

Inside Sales: Gary Birdwell
Phone: 713.797.0054
Fax: 713.797.1014

All parts being shipped domestically will be shipped overnight, unless specified otherwise. Should the part not be in stock at the time of the order, you will be informed of this and delivery schedule at the time of the order. We should have the parts in stock and these parts will be shipped out the same day as long as the order is placed before 3:00 PM.

RETURNING PARTS.

If it is necessary to return parts for any reason, please call our office for all necessary paperwork and return number. U.M.I. will issue the customer a credit for those parts not being replaced once the returned parts have been received and inspected.