Hiltap™ RapidLOK™ Family of Products

For the Toughest High and Low Temperature and Pressure Applications

The Hiltap™ Series features innovative high and low pressure and temperature sealing couplings, connectors and product recovery/pipeline cleaning technologies. For over a decade, Hiltap™ and the RapidLOK® family of products have served global industries, providing safe transfer solutions for some of the most difficult and demanding liquid applications.

Benefits of the Hiltap™ RapidLOK® Family:

- Safely vents residual pressure
- Metal-to-metal wedge seal design for repeated use
- Leak-proof operation
- Operates through wide temperature/pressure ranges
- No variation in pipe diameter for most sizes
- Quality assurance to ISO 9001-2000
- Material traceability exists
- Canadian Registration Numbers (CRN)

This all-purpose, high-performance quick coupling offers a non-restrictive flow with no variation in pipe diameter when required and conditions allow. The reusable sealing components are made of different metals that have their own unique hardness and thermal properties so as to further enhance the seal as temperature changes are encountered. The sleeve retaining ring ensures safe venting at any residual pressure. The Hiltap™ brand offers front line solutions and allows design engineers to specify safe and environmentally responsible connections.
3TL Series – Transfer Loading Safety Quick Coupling

The 3TL Transfer Loading Series is an all purpose high performance quick coupling designed for leak proof sealing through a wide range of temperatures. The design offers a non-restrictive flow with no variation in pipe diameter. The reusable metal-to-metal wedge sealing components further enhance the seal as temperature changes are encountered. The retaining ring ensures safe venting of any residual pressure.

Features & Benefits
- Designed to replace hammer unions and conventional CAM locking couplings
- Repeatedly reusable metal-to-metal wedge seal with secondary enviro O-Ring seal
- Non-restrictive flow characteristics for faster hook-ups
- Unique automatic safety feature vents residual pressure
- Only light torque required when tightening to contain rated pressure
- Designed and tested to ASME B31.3
- Available in 3/4" to 6" sizes
- Materials: 316 stainless steel and carbon steel
- Compact and available in any combination, of threaded, butt welded or socket welded ends
- Variety of sleeve handle options available

2" 3TL - 20 - 11 (Internal NPT threads)

<table>
<thead>
<tr>
<th>Size</th>
<th>Nominal (Inch)</th>
<th>Standard Thread</th>
<th>Material</th>
<th>Order Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.00</td>
<td>1.50</td>
<td>2.00</td>
<td>3.00</td>
<td>4.00</td>
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<tr>
<td>50.8</td>
<td>76.2</td>
<td>95.3</td>
<td>127.0</td>
<td></td>
</tr>
</tbody>
</table>

Note: Other materials, sizes and pressure ratings are available. End caps/Plugs and dust caps are available.

Note: The standard thread is ACME G2 6 TPI

IMPORTANT: OPW products should be used in compliance with applicable federal, state, provincial, and local laws and regulations. Product selection should be based on physical specifications and limitations and compatibility with the environment and materials to be handled. OPW MAKES NO WARRANTY OF FITNESS FOR A PARTICULAR USE. All illustrations and specifications in this literature are based on the latest product information available at the time of publication. OPW reserves the right to make changes at any time in prices, materials, specifications and models and to discontinue models without notice or obligation.

www.opw-es.com
3IU Series High Performance Quality Impact Unions

The Hiltap™ 3IU impact union does what a conventional hammer union does, only better.

OPW’s “impact union” is designed for leak proof operation over a wide range of temperatures and pressures. The reusable sealing components offer a metal-to-metal wedge seal, as well as an additional O-Ring seal, targeting full compliance to the latest environmental laws.

Applications include: next to sensitive electronic equipment, e.g., most flow meters, modular skid “tie-ins,” high pressure gas/oil, meter/production flow production, gas distribution “tie-ins,” high axial load stresses, sour gas, unconventionally high pressures and high erosion/corrosion applications.

Features & Benefits
- Contains fugitive emissions
- Easier installation, skid fabrication and maintenance
- Low profile
- Light weight
- Low impact/torque required to engage
- Repeatedly reusable metal-to-metal wedge seals
- Secondary O-Ring seal
- Available in butt weld end configurations only
- Available in 2", 3" and 4" sizes
- Carbon steel materials

Model: 3IU
Specification Example: 3IU - 20 - 33 (2" IMPACT UNION Both Ends Butt Weld, Carbon Steel)

<table>
<thead>
<tr>
<th>Pipe Size</th>
<th>Approx. Overall Length</th>
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</thead>
<tbody>
<tr>
<td>2&quot;</td>
<td>6.0&quot;</td>
</tr>
<tr>
<td>3&quot;</td>
<td>7.2&quot;</td>
</tr>
<tr>
<td>4&quot;</td>
<td>9.5&quot;</td>
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</tbody>
</table>

3U Series – Medium Pressure and Temperate Quality Unions

The 3U Series is an all-purpose light weight quality union designed for leak proof operation as it cycles through a wide range of temperatures. The design offers a non-restrictive flow with no variation in pipe diameter in most sizes. The reusable metal-to-metal sealing components further enhance the seal as temperature and pressure changes are encountered. The safety ring ensures safe venting of residual pressure.
3U Series – Continued

Features & Benefits
- Contains fugitive emissions
- Designed to replace conventional medium pressure unions/couplings
- Easier installation and maintenance
- Fully interchangeable with each other
- Low profile/light weight
- Reduced chance of galling
- Repeatedly reusable metal-to-metal wedge seal
- Unique automatic safety feature vents residual pressure during uncoupling should residual pressure remain
- Only light torque required when tightening to rated pressure
- Designed and tested to ASME B31.3
- Available in 1/4” to 2” sizes
- Materials: 316 stainless steel and carbon steel
- Compact and available in any combination of threaded, butt welded or socket welded ends

HGJ Ground Joint Utility Union
– Safer Hose Connections

The HGJ series utility union is a high-quality coupling for most steam, water and standard utility applications. The outer scalloped knurled sleeve is ergonomic and made out of a non-galling material, ensuring easy and repeatable connectability.

The HGJ series uses a commercially available O-Ring seal and is fully interchangeable with conventional ground joint unions.

Features and Benefits
- Contains fugitive emissions
- Designed to replace conventional boss-type ground joint style unions/couplings
- Low profile/light weight, easier installation and maintenance
- Reduced chance of galling
- Elastomeric O-Ring seal
- Only light torque required when tightening
- Designed and tested to ASME B31.3
- Available in 3/4” only
- Materials: 316 stainless steel

Ordering Specifications
Note: For other materials, sizes and pressure ratings, consult Engineered Systems. Seal caps/plugs and dust caps are available

HGJ SERIES 07 - 3/4”
FEMALE MALE SST HILTAP DRAWING PACKAGE
HALF HALF SST O-RING
X - None X - Female Half Only Fluorocarbon only
1 - FNPT 1 - FNPT
3 - Socket Weld 3 - Socket Weld
SC - Seal Cap SC - Seal Cap

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LQC Series - “Twister®”
Locking Quick Connect

The Twister® LQC is the next generation of quick couplings designed as an option to replace conventional cam & groove couplings that are used in critical service applications. The Twister® LQC is engineered to be used in conjunction with hoses and loading arms.

Features & Benefits
• Rapid engagement, 1/4 twist on/off
• Low pressure or vacuum locking
• Coupling locks during uncoupling should residual or line pressure be present
• Smooth bore, ideal for pigging applications
• Commercially available O-Ring seals
• Optional snap-in customized handles for tight spots
• Built to B31.3 specifications to ISO 9001-2000 Quality Standards
• Pressure ratings equivalent to ANSI 150/300
• Available in ¾", 1", 2", 3", 4" and 6" nominal sizes
• Materials: 316 stainless steel, cold temperature carbon steel and aluminum
• Surpasses Occupational Health & Safety Section 188 (October 2003)

LQC Railcar
Unloading Adaptor

• Ergonomic connection to railcar
• Features LQC Adaptor for safe, easy connection
• Can be provided with other end connections
415 Series, 425 Series, 450 Series Pipe Connecting: Safety Quick Couplings

The 415/425/490 RapidLOK® Series Connector is an all-purpose lightweight quick coupling designed for leakproof operation at a wide range of temperatures. The metal-to-metal seal further enhances the seal as temperature changes are encountered. The safety ring ensures safe venting of any residual pressure.

**Features**
- The RapidLOK® 415/425/490 series couplings can perform equal to the respective pipe schedules
- Repeatedly reusable metal-to-metal seal with an optional secondary enviro O-Ring seal
- No bolts, or hub clamps for faster hook-ups
- Unique automatic safety feature vents residual pressure
- No special heat treatment of seal rings required
- Only light torque required when tightening to rated pressure
- Compact and available in any combination, of threaded, butt welded or male socket welded ends
- Designed and tested to ASME B31.1 & B31.3
- Available in 3/4” - 2” sizes
- Materials: 316 stainless steel and carbon steel

SaVD™ Lite Gate Valve 390 Series - Safe Vent & Drain Safety Seal Cap/Hose Half

**“Lite” Series Safety Seal Cap ANSI 800 and below**

1. Safe and tight stem seal by means of positive back seat and long life leak proof stuffing box design.
2. The T-head connect of stem and disc assuring easy seating operation.
3. Solid fully guided wedge reducing wear on seating surfaces.
5. Leak proof Body-Bonnet Joint Cavity to eliminate the unwinding of the SS spiral metal.
6. Rolled-in seat to assure tight and effective seating.

**Lite Series Hose Half Assembly 390 Series**

**Features & Benefits**
- The SaVD™ Safety Seal Cap is designed to replace high pressure bull plugs used in venting and draining SAGD steam and heavy oil piping.
- Safety Seal Cap (with chain) can be retightened to seal
- Outer seal and locking threads are located OUTSIDE the wetted surfaces
- Valve mounted couplings halves can be safely rodded, steam cleaned, pressure purged with specially designed and CRN registered adapters.
- NACE materials of construction: Carbon Steel
- Solid Material Wedge, NO overlays
- Available in 3/4”, 1”, 1-1/2” and 2” sizes
- Available with butt weld, MNPT, or seal cap

**415 Series, 425 Series, 450 Series**

**Pipe Connecting: Safety Quick Couplings**

The 415/425/490 RapidLOK® Series Connector is an all-purpose lightweight quick coupling designed for leakproof operation at a wide range of temperatures. The metal-to-metal seal further enhances the seal as temperature changes are encountered. The safety ring ensures safe venting of any residual pressure.

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- No bolts, or hub clamps for faster hook-ups
- Unique automatic safety feature vents residual pressure
- No special heat treatment of seal rings required
- Only light torque required when tightening to rated pressure
- Compact and available in any combination, of threaded, butt welded or male socket welded ends
- Designed and tested to ASME B31.1 & B31.3
- Available in 3/4” - 2” sizes
- Materials: 316 stainless steel and carbon steel

**SaVD™ Lite Gate Valve 390 Series - Safe Vent & Drain Safety Seal Cap/Hose Half**

**“Lite” Series Safety Seal Cap ANSI 800 and below**

1. Safe and tight stem seal by means of positive back seat and long life leak proof stuffing box design.
2. The T-head connect of stem and disc assuring easy seating operation.
3. Solid fully guided wedge reducing wear on seating surfaces.
5. Leak proof Body-Bonnet Joint Cavity to eliminate the unwinding of the SS spiral metal.
6. Rolled-in seat to assure tight and effective seating.

**Lite Series Hose Half Assembly 390 Series**

**Features & Benefits**
- The SaVD™ Safety Seal Cap is designed to replace high pressure bull plugs used in venting and draining SAGD steam and heavy oil piping.
- Safety Seal Cap (with chain) can be retightened to seal
- Outer seal and locking threads are located OUTSIDE the wetted surfaces
- Valve mounted couplings halves can be safely rodded, steam cleaned, pressure purged with specially designed and CRN registered adapters.
- NACE materials of construction: Carbon Steel
- Solid Material Wedge, NO overlays
- Available in 3/4”, 1”, 1-1/2” and 2” sizes
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**415 Series, 425 Series, 450 Series**

**Pipe Connecting: Safety Quick Couplings**

The 415/425/490 RapidLOK® Series Connector is an all-purpose lightweight quick coupling designed for leakproof operation at a wide range of temperatures. The metal-to-metal seal further enhances the seal as temperature changes are encountered. The safety ring ensures safe venting of any residual pressure.

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- No special heat treatment of seal rings required
- Only light torque required when tightening to rated pressure
- Compact and available in any combination, of threaded, butt welded or male socket welded ends
- Designed and tested to ASME B31.1 & B31.3
- Available in 3/4” - 2” sizes
- Materials: 316 stainless steel and carbon steel

**SaVD™ Lite Gate Valve 390 Series - Safe Vent & Drain Safety Seal Cap/Hose Half**

**“Lite” Series Safety Seal Cap ANSI 800 and below**

1. Safe and tight stem seal by means of positive back seat and long life leak proof stuffing box design.
2. The T-head connect of stem and disc assuring easy seating operation.
3. Solid fully guided wedge reducing wear on seating surfaces.
5. Leak proof Body-Bonnet Joint Cavity to eliminate the unwinding of the SS spiral metal.
6. Rolled-in seat to assure tight and effective seating.
**HILITAP™ ORDERING SPECIFICATIONS**

### Ordering Specifications (Complete Coupling, Female Half)

<table>
<thead>
<tr>
<th>Fitting Designation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3TL - 3 pc. Transfer Loading</td>
<td>H3U - 3 pc. Medium Pressure Union</td>
</tr>
<tr>
<td>3IU - 3 pc. Medium Pressure Union</td>
<td>3LB - 3 pc. Lube Blending</td>
</tr>
<tr>
<td>390 - 3 pc. SCH 80 for SAVDL</td>
<td></td>
</tr>
</tbody>
</table>

### Plain End Connection Type
- 1 - Female NPT
- 2 - Male NPT
- 3 - Butt Weld
- 4 - Male Socket Weld
- 5 - Female Socket Weld
- 6 - Female BSP
- 8 - Hose Barb
- SC - Seal Cap

### Plain End Coating
- N - None
- A - Electroless Ni (High Phos)
- Z** - Zinc
- E - Anodized Red
- F - Anodized Blue

### Material
- A - Stainless Steel A479-316/316L (SA)
- D - Carbon Steel A350 Gr. LF2 Cl.1
- H - Aluminum 6061-T6

### Hiltap Drawing Package Code
- 3102 - 1/4" Couplings
- 3103 - 3/8" Coupling
- 3105 - 1/2" Coupling
- 3107 - 3/4" SCH10 Coupling
- 3158 - 3/4" SCH10 to 80 Coupling
- 3001 - 1" SCH10 Coupling
- 3310 - 1" SCH80 Coupling
- 3002 - 1" SCH40 Coupling
- 3015 - 1 1/2" SCH10 Coupling
- 3113 - 1 1/2" 3P SCH80 Coupling
- 3000 - 2" 3TL and 3U SCH40 and 80 Couplings
- 3136 - 2" SCHXXS Impact Union with Hiltap Seal
- 3010 - 3" 3TL and LB SCH40 Couplings
- 2146 - 4" 3LB and 3TL SCH40 Coupling
- 0554 - 4" 3LB SCH10 Coupling
- 0536 - 6" 3TL SCH40 Coupling
- 0058 - 2" SCH160 Impact Union with Hiltap Seal
- 0057 - 2" SCH80 Impact Union with Hiltap Seal
- 0070 - 2" SCH160 Impact Union with Flat Face Seal
- 2034 - 3" SCHXXS Impact Union with Hiltap Seal
- 3189 - 3" SCH80 Impact Union with Hiltap Seal
- 0168 - 4" SCHXXS Impact Union with Hiltap Seal

### Threaded End Style
- X - None (Female Half Only)
- 1 - Female NPT
- 2 - Male NPT
- 3 - Butt Weld
- 4 - Male Socket Weld
- 5 - Female Socket Weld
- 6 - Female BSP
- 8 - Hose Barb
- SP - Seal Plug

### Threaded End Coating
- Blank if Female Half Only
- N - None
- A - Electroless Ni (High Phos)
- Z** - Zinc
- E - Anodized Red
- F - Anodized Blue

### Sleeve Style
- A - Loop Handle Sleeve
- B - Wrench Flats Sleeve
- C - Stick Handle
- D - Paddle Sleeve
- E - Aluminum Loop Handle for 3" Coupling
- F - Lug Sleeve (Star Style)
- IU - Impact Union Style Sleeve for 3TL
- RK - Raised Knurled Sleeve
- BH - Bar Handle Articulating Sleeve
- HX - Hexagonal Sleeve
- SW - Spanner Wrench Sleeve

### Sleeve Coating Code
- N - None
- A* - Electroless Nickle (High Phos)
- Z** - Zinc
- E - Anodized Red
- S - Anodized Clear
- F - Anodized Blue

### Plain End Style
- N - Standard 3"
- S - Sanitary
- 1 - 1 1/2"
- 2 - 2"
- 3 - 2 1/2"
- 4 - 4"

### Threaded End Style
- N - Standard 3"
- S - Sanitary
- 1 - 1 1/2"
- 2 - 2"
- 3 - 2 1/2"
- 4 - 4"

### O-Ring Material
- Blank for None. Only Metal to Metal Seal
- V7 - Fluorocarbon 75D

* All stainless steel sleeves are electroless nickel plated to prevent galling

** Zinc coating standard on all carbon steel products
Ordering Specifications (Male Half Only)

**FITTING DESIGNATION**
HT3 - 3 pc. Union and Transfer Loading
HT3IU - 3 pc. Impact Union Male

**NOMINAL SIZE**
02 - 1/4"
03 - 3/8"
05 - 1/2"
06 - 5/8"
07 - 3/4"
10 - 1"
12 - 1 1/4"
15 - 1 1/2"
20 - 2"
25 - 2 1/2"
30 - 3"
40 - 4"
60 - 6"

**THREADED END STYLE**
X1 - Female NPT
X2 - Male NPT
X3 - Butt Weld
X4 - Male Socket Weld
X5 - Female Socket Weld
X6 - Female BSP
X8 - Hose Barb
SP - Seal Plug

**MATERIAL**
A - Stainless Steel A479-316/316L (SA)
D - Carbon Steel A350 Gr. LF2 Cl.1
NACE
H - Aluminum 6061-T6

**SPECIAL CUSTOMIZED DESIGNATION**
Standard 3"
S - Sanitary
20 - With Special 2" NPT on 3"
25 - With Special 2 1/2" NPT on 3"
BAY - With Special Bayonet

**THREADED END COATING**
Blank if No Coating Required
EN1 - Electroless Nickle Plating (High Phos)
ZNC* - Zinc

**HILTAP DRAWING PACKAGE CODE**
3102 - 1/4" Couplings
3103 - 3/8" Coupling
3105 - 1/2" Coupling
3107 - 3/4" SCH10 Coupling
3158 - 3/4" SCH10 to 80 Coupling
3001 - 1" SCH10 Coupling
3310 - 1" SCH80 Coupling
3002 - 1" SCH40 Coupling
3015 - 1 1/2" SCH10 Coupling
3113 - 1 1/2" 3P SCH80 Coupling
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3136 - 2" SCHXXS Impact Union with Hiltap Seal
3010 - 3" 3TL and LB SCH40 Couplings
2146 - 4" 3LB and 3TL SCH40 Coupling
0554 - 4" 3LB SCH10 Coupling
0536 - 6" 3TL SCH40 Coupling
0058 - 2" SCH160 Impact Union with Hiltap Seal
0057 - 2" SCH80 Impact Union with Hiltap Seal
0070 - 2" SCH160 Impact Union with Flat Face Seal
2034 - 3" SCHXXS Impact Union with Hiltap Seal
3189 - 3" SCH80 Impact Union with Hiltap Seal

* Zinc coating standard on all carbon steel products
Ordering Specifications (Complete Coupling, Female Half)

**LQC - 30 - 1 N 1 N - A - 3124 - A N - H - V7**

**FITTING DESIGNATION**
LQC - Locking Quick Connect

**NOMINAL SIZE**
- 10 - 1"
- 20 - 2"
- 30 - 3"
- 40 - 4"
- 60 - 6"

**PLAIN END CONNECTION TYPE**
- 1 - Female NPT
- 3 - Butt Weld
- 5 - Female Socket Weld
- SC - Seal Cap

**PLAIN END COATING**
- N - None
- A - Electroless Ni (High Phos)
- Z* - Zinc
- E - Anodized Red
- F - Anodized Blue

**MALE END CONNECTION TYPE**
- X - None (Female Half Only)
- 1 - Female NPT
- 3 - Butt Weld
- 5 - Female Socket Weld
- SP - Seal Plug

**MALE END COATING**
- Blank if Female Half Only
- N - None
- A - Electroless Ni (High Phos)
- Z* - Zinc
- E - Anodized Red
- F - Anodized Blue

**MATERIAL**
- A - Stainless Steel A479-316/316L (SA)
- D - Carbon Steel A350 Gr. LF2 Cl.1 NACE
- H - Aluminum 6061-T6

**SLEEVE STYLE**
- A - Standard Wagon Wheel Sleeve with Plunger
- HND - Wagon Wheel with Crank Handle Sleeve
- LH - Loop Handle Sleeve (No Standard)

**SLEEVE COATING CODE**
- N - None
- A - Electroless Ni (High Phos)
- Z* - Zinc
- E - Anodized Red
- S - Anodized Clear
- F - Anodized Blue

**SLEEVE MATERIAL IF DIFFERENT FROM WETTED PARTS**
- A - Stainless Steel A479-316/316L (SA)
- D - Carbon Steel A350 Gr. LF2 Cl.1 NACE
- H - Aluminum 6061-T6

**HILTAP DRAWING PACKAGE CODE**
- 3124 - 1", 2", 3", 4" Couplings
- 3122 - 6" Coupling
- 3109 - 4" LQC Closure for PIG Launcher
- 3098 - 2" and 3" LQC Closure for PIG Launcher
- 3095 - 2" LQC Closure for PIG Launcher
- 3216 - 3" LQC Closure for PIG Launcher
- 3075 - 6" LQC Closure for PIG Launcher

**O-RING MATERIAL**
V7 - Fluorocarbon 75D

* Zinc coating standard on all carbon steel products
### Ordering Specifications (Male Half Only)

Consult factory for ordering specifications.

**HTLQC - 30 - X1 - D - 3124 - 25 - ZNC**

**Fitting Designation**
- HTLQC - Locking Quick Connect

**Nominal Size**
- 10 - 1"
- 20 - 2"
- 30 - 3"
- 40 - 4"
- 60 - 6"

**Male End Connection Type**
- X1 - Female NPT
- X3 - Butt Weld
- X5 - Female Socket Weld
- SP - Seal Plug

**Material**
- A - Stainless Steel A479-316/316L (SA)
- D - Carbon Steel A350 Gr. LF2 Cl.1
- NACE
- H - Aluminum 6061-T6

**Special Customized Designation**
- Standard
- S - Sanitary
- HO - Tapper Down Connection
- 25 - With Special 2 1/2" NPT on 3"

**Threaded End Coating**
- Blank if no coating required
- EN1 - Electroless Nickle Plating (High Phos)
- ZNC* - Zinc
- IP4 - IPC System 4

**Hiltap Drawing Package Code**
- 3124 - 1", 2", 3", 4" Couplings
- 3122 - 6" Coupling
- 3109 - 4" LQC Closure for PIG Launcher
- 3098 - 2" and 3" LQC Closure for PIG Launcher
- 3095 - 2" LQC Closure for PIG Launcher
- 3216 - 3" LQC Closure for PIG Launcher
- 3075 - 6" LQC Closure for PIG Launcher

* Zinc coating standard on all carbon steel products