

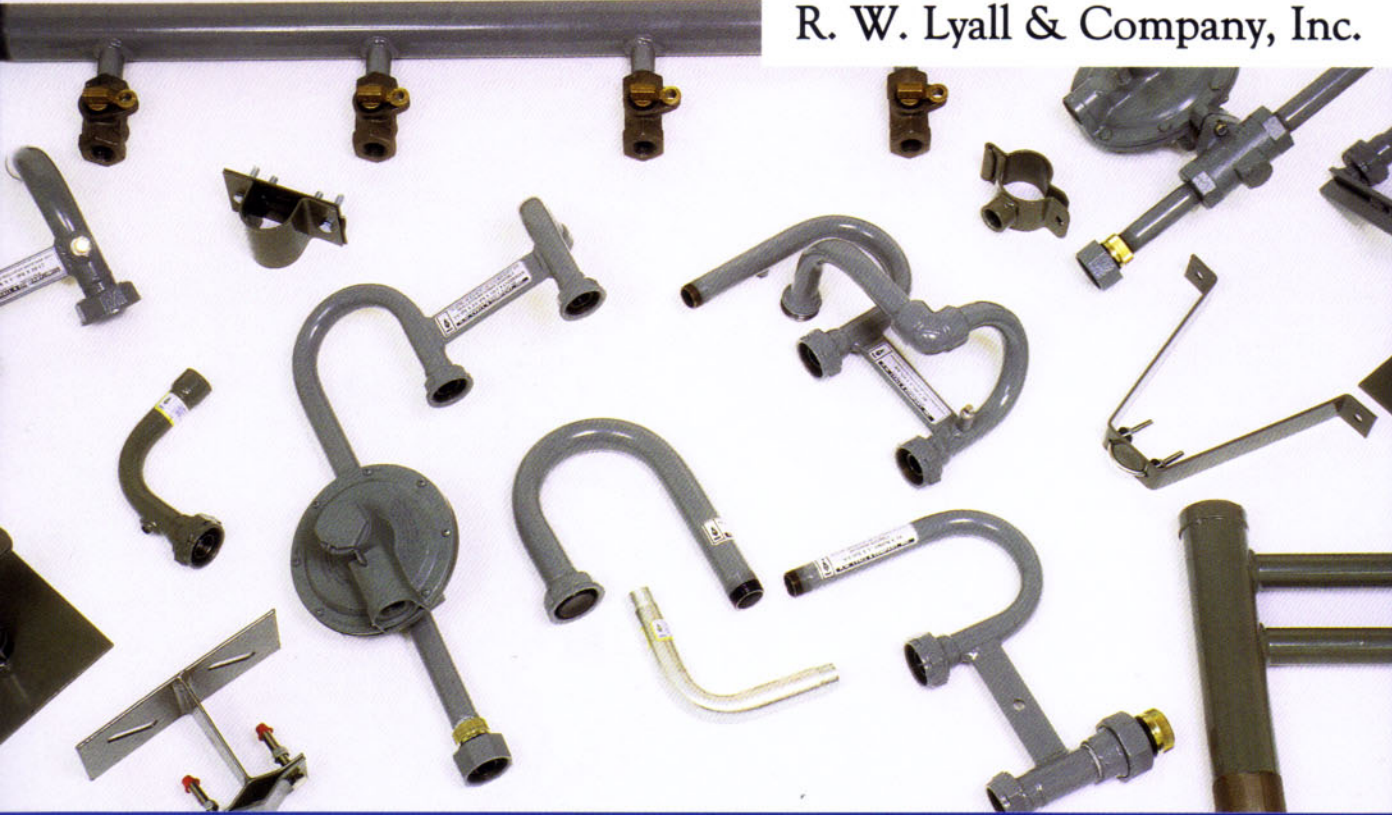


STEEL

LYCO®

FABRICATION

R. W. Lyall & Company, Inc.



CUSTOMER BENEFITS

- **LYCO®** steel fabrication products will significantly lower your field installation costs by reducing labor and materials for field pipe cutting, welding, threading, pressure testing, and painting.
- **LYCO®** steel fabrication products are available in custom configurations, sizes, and options allowing for easy and practical applications.
- All **LYCO®** gas carrying fabricated products are 100% factory pressure tested, quality inspected, and either meet or exceed all industry specifications.
- All **LYCO®** steel fabricated products are manufactured in a high volume, high quality production process using state-of-the-art manufacturing equipment such as automatic welders, custom built automated test equipment, and environmentally controlled electrostatic polyester coating systems.

ADVANCED FEATURES

■ PROTECTIVE COATING SYSTEMS:

Specialized coating processes are used for corrosion protection in above ground applications:

• Polyester Coating Process

LYCO® Polyester based powder coatings offer excellent weather and UV resistance, high mechanical properties, and a very smooth finish with excellent coverage. This is an exceptional coating for above ground applications for aesthetic, atmospheric, and corrosion resistant benefits.

• LYCOPro-Finish™ Coating Process

This application consists of an Aluminum anodic flame spray & Urethane over coating and withstands the most abrasive and corrosive environments, such as salt spray (fog). This optional treatment can be applied to above ground exposed threaded joints as added protection against severe environmental conditions.

METER BARS,

ELBOWS & LOOPS

LYCO®



ADVANTAGES:

- **LYCO®** all welded, pre-bent Meter Bars, Elbows, and Loops greatly enhance the appearance of the finished meter installation, and will save your company the high costs of field meter set construction by:
 - Reducing the number of components for purchase, inventory, and distribution to the field.
 - Reducing field labor costs with fewer threaded joints to assemble, prep., and torque.
 - Reducing or eliminating maintenance costs associated with rust and corrosion repair of external metal surfaces by the extra protection provided from an electrostatically applied polyester coating.
- **LYCO®** Meter Bars, Elbows, and Loops are factory assembled, and 100% pressure tested at 100 PSIG. By reducing the number of threaded joints there are no field rejections or repairs.
- **LYCO®** Loops, Elbows, and Meter Bars are designed and built to your meter dimensions and size specifications allowing for quick and easy field installations.

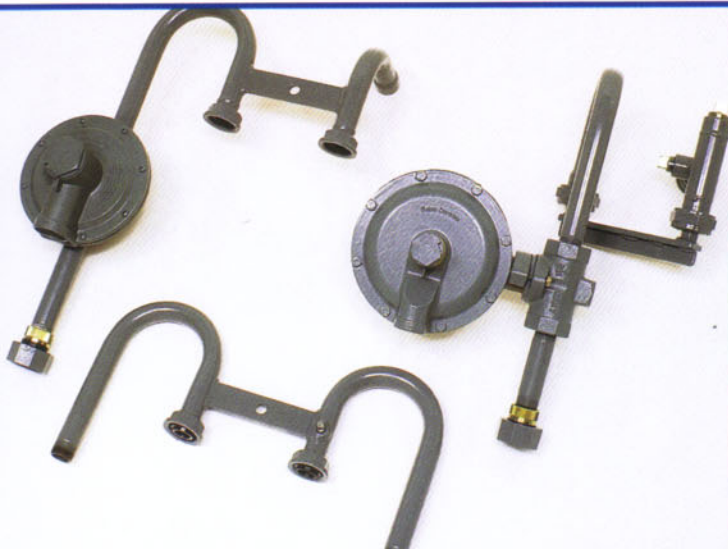


LYCO® Meter Bar shown with pre-installed LYCOSAVER® By-Pass Valve

OPTIONS:

- Your company's specified swivel sizes and unions can be pre-assembled in Lyall's quality controlled manufacturing operation.
- Factory installed and tested, **LYCOSAVER®** by-pass valves reduce the costs associated with future retrofitting of by-pass valves, and provide additional safety and ease-of-use benefits over conventional by-pass methods.
- **LYCO®** Meter Bars can be pre-assembled with your specified regulators and **LYCO®** polyester fusion coated extension nipples.

Reg. Patent No. 5,501,331



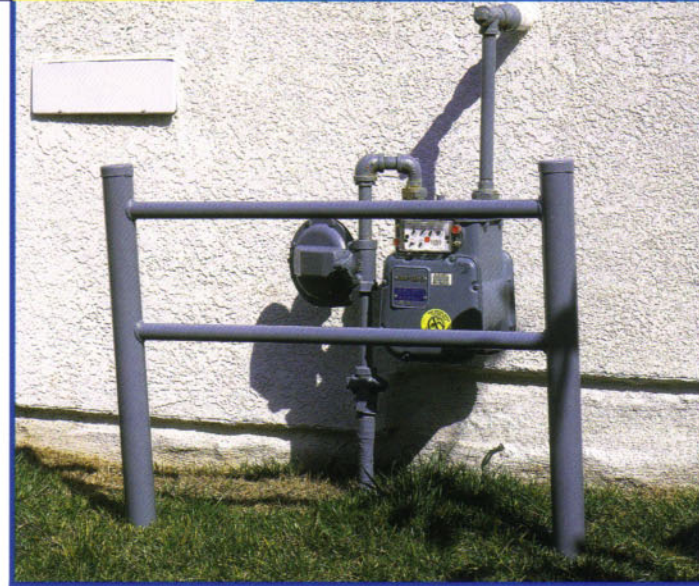
BARRIER

POSTS & RAILS

LYCO®

INDUSTRIAL GUARD POST

Medium duty steel pipe guard barriers used to protect commercial/industrial meter sets and/or regulator stations from vehicular traffic. The above ground portion of the guard post is coated with a minimum of 2.5 mils polyester fusion coating.



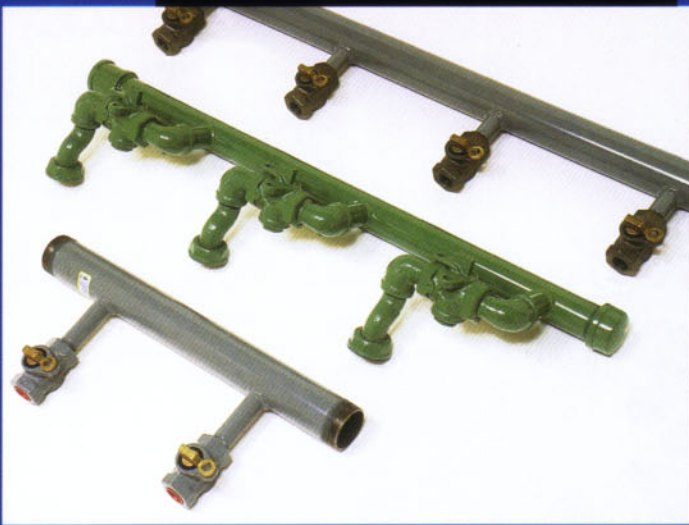
RESIDENTIAL GUARD RAIL

Light duty fabricated steel pipe guard rails used to protect meter sets and/or regulator stations from vehicular traffic. The above ground portion of the guard rail is coated with a minimum of 2.5 mils polyester fusion coating.

METER

MANIFOLDS

LYCO®



ADVANTAGES:

- The all welded, polyester fusion coated **LYCO®** Meter Manifolds are designed to provide safe, reliable, and easy to install multi-port applications.
- Header sizes from 3/4" IPS through 4" IPS.
- Available with 2 to 20 threaded outlets, with outlet sizes ranging from 1/2" IPS to 2" IPS.

OPTIONS:

- Available with factory assembled and pressure tested 3/4" x 3/4" FPT **LYCO®** Meter Stops, or with your specified meter stop pre-installed.
- Choice of threaded, ready for welding, or welded butt caps on header ends.
- Lockable, polyester fusion coated **LYCO®** Meter Manifold & **LYCO®** Meter Riser support brackets.

Manifold and Riser Brackets



SPECIFICATIONS

STEEL SPECIFICATIONS

Meets or exceeds **ASTM A53 Sch 40 or 80** (if specified)
ASTM A513, ASTM A108, ASTM A36, and ASTM 500.

WELDING SPECIFICATIONS

Meets or exceeds **API 1104.**

PRESSURE TEST SPECIFICATIONS

All LYCO® Meter Bars, Elbows, Loops, and Meter Manifolds are
100% Leak Tested @ 100 PSIG.

COATING SPECIFICATION AND TESTING

LYCO® Polyester Coating:

Color •• **Meter Grey (ASA #49)**

Coating thickness •• **2.5 to 3.5 mils**

Gloss according to Gardner 60° ASTM D 523 •• **55-70**

Cross hatch adhesion ASTM 3359 method B •• **pass 100%**

Mandel bending test ASTM D 522 •• **5/32 in. (4mm)**

Cupping ISO 1520 •• **1/4 in. (7mm)**

Impression hardness according to Buchholz ISO 2815 •• **95**

Impact test ASTM D 2794-90 1/10 in Distortion •• **up to 160in/lbs**

Pencil hardness ASTM D3363 •• **2H (min.)**

Drill mill test •• **OK**

Salt Spray resistance test ASTM B 117-90 •• **1500 hour test, max.**

Undercutting 1/16 in. (1mm).

Humidity resistance ASTM D 2247-87 •• **1500 hour test, max. blisters 1/16 in. (1mm).**

LYCOPro-Finish™

Coating thickness •• **3 to 6 mils**

TESTING - ALUMINUM SPRAY

(See results from American Welding Society 19 year report publication - 1974).

TESTING - ALUMINUM RICH URETHANE OVER COATING (SEALER)

Salt Spray (fog) ASTM B117 •• **1500 hour test, no rust.**

Humidity ASTM D3359 •• **1500 hour test, no rust.**

Adhesion ASTM D4541 •• **> 1000 PSI pull (X3 avg.).**

Abrasion ASTM D4060 •• **< 75mg loss after 1K cycles.**

Ext. Exposure •• **No blistering, cracking, softening or delamination of film after 5 years.**

TESTING - COMPLETE COATING PROCESS

Salt Spray (fog) ASTM B117 •• **>2800 hour test, no rust, nodular corrosion or discoloration.** (Test conducted by RWL & Co. Labs)

RWL
PRODUCT:

**LYCO® STEEL
FABRICATION**



Standard Sizes and Styles

Meter Bars, Elbows, and Loops

Standard Steel Sizes: 3/4", 1", and 1-1/4" IPS.

Attached Meter Swivels: Sprag 1A, 10L, 20L, and 30 light.

Optional LYCO® Meter Stops: 3/4" FPT.

Barrier Post

Standard Size: 4-1/2" O.D. x .165 Wall, HRPO Steel Pipe,
5-1/2 feet tall.

Guard Rail

Standard Size: Two 2" Sch. 40 Posts x 42". 33" horizontal support.
Double 1" IPS Sch. 40 rails, stamped pipe plugs welded to top.

Meter Manifolds

Header Sizes: 3/4", 1", 1-1/4", 1-1/2", 2", and 4" IPS.

Outlet sizes: 1/2", 3/4", 1", 1-1/4", 1-1/2", and 2" NPT.

Optional LYCO® Meter Stops: 3/4" FPT.

For additional size, style, or technical information, please contact your R. W. Lyall & Company Sales or Customer Service Representative.

Other exclusive products manufactured by R. W. Lyall & Company, Inc.

LYCO® Anodeless Meter Risers

LYCOSAVER® Bypass Valves

LYCO® Excess Flow Devices

LYCO® Polyethylene Ball Valves

LYCOFAST® PE Service Assemblies



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