



Gas Connectors & Accessories

Advance Engineering Corporation

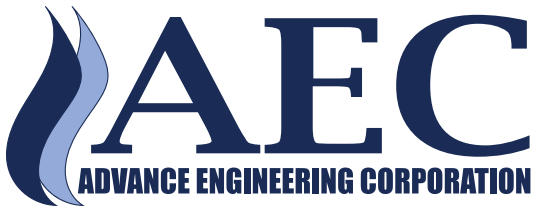
Superior Quality

Superior Service

Superior Selection



www.hubbell.com

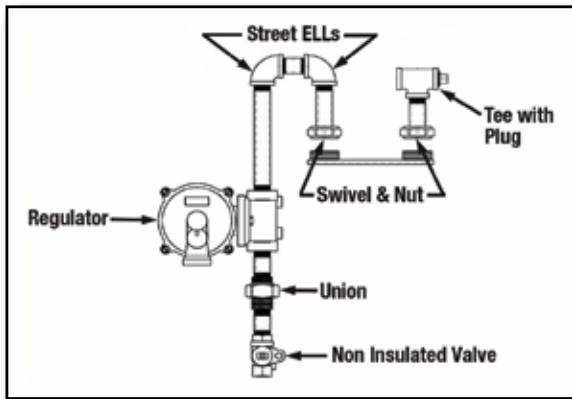


Advance Engineering Corporation a division of Hubbell Gas Connectors & Accessories is a national leader in providing the gas utility industry and other related markets with fabricated meter sets and piping. Our 75 plus years of experience and 130,000 square feet of manufacturing and storage makes us one of the largest in the industries we service. Together with our sister company Perfect Pipe and Supply, our turnkey operations provides the gas utility industry with fabrications starting in the residential 250 Class arena and going up to gate station fabrication. We have a complete line of fabricated bypass sets for all diaphragm and rotary meter configurations. We complement this process with support brackets and a complete powder coating system that will minimize expensive field maintenance programs.

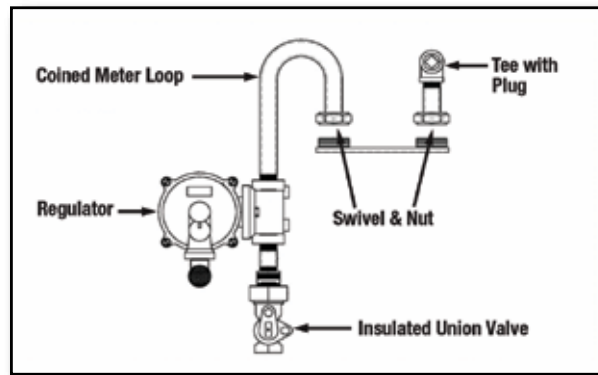


Meter Ells/Loops

The first generation of prefabricated meter sets was based on “stick building” the residential meter sets using fittings and nipples. However, AEC improved the quality and reduced meter set costs by developing methods of bending pipe and later coining pipe. AEC is a complete manufacturer of bending and coining. We can handle pipe sizes from 1/4” to 2” and coining from size 5LT to #5 Sprague. This range and manipulation of pipe requires unique machines, materials, and tooling. Our 2nd generation eliminated connections and reduced assembly time. This set us apart as we continued our quest to be the largest and most universal above ground metal fabricator in the gas utility industry and enabling us to better serve our customers.



1st Generation



2nd Generation with Coined Meter Loop

Coined Meter Ells/Loops

Insulated/Non-Insulated/Double 90 Degree Insulated/Double 90 Degree Non-Insulated



Hydraulics



Coining



Bending



Threading

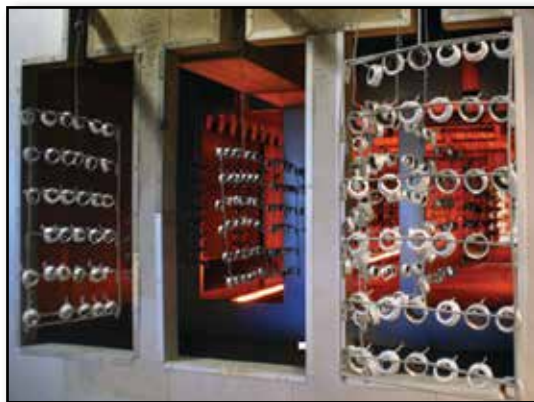


Coating Options

“Protect Your Investment”

AEC has invested in extensive research and development for over a decade to find the right coating solutions for our customers. We have tested and retested both independently and with outside agencies to find the best solutions. AEC has applied total cost of ownership to our process in order to justify the cost of different types of coatings based on the environment our customers operate in. We have made the equipment expenditures to have a state of the art coating system. Over 35,000 square feet of our Elgin plant is dedicated to the coating process. We have procedures and testing in place to ensure that we maintain the highest quality of surface preparation and application in the industry. We pull samples weekly from our own production facility to test our systems in our testing lab.

- State of the Art Coating Systems
- Extensive Research and Development
- Tested and Retested
- Total Cost of Ownership
- Coatings for every environment
- State of the art Coating System
- 35,000 Square Feet dedicated to the coating process
- Procedures and testing to ensure high quality coatings
- EPA lifetime license as a result of our low VOC's



Ask yourself a question, is it worth some extra cost up front to save hundreds down the line. If the answer is yes, then contact us so we can find the correct or the best options available for your environment. Do not let corrosion take over your system as there are cost efficient ways to protect it.



Coating Options with Testing Requirements

Coating Options	Coating Description	Minimum Hours Tested per ASTM B117*
1	Two Part Epoxy Primer with a Gray Enamel Top Coat	1000
1A	Zinc Chromate Plating added to Option 1	1500
2	Powder Coating	1000
2A	Zinc Plating added to Option 2	2000
3	Two Part Epoxy Primer with Urethane Top Coat	1500
3A	Zinc Chromate Plating added to Option 3	2000
4	Zinc Plating, Powder Coating, Zinc Rich Treatment, Two Part Epoxy Primer and Urethane Top Coat	2500
5	Stainless Steel Sets Available for High Corrosion Areas	

*ASTM B117: Parts that are painted with no plating will undergo a continuous spray corrosion test lasting minimum of 1000 hours, which stimulates exterior exposure in coastal environment. Chamber conditions are 38°C and continuous fogging with 6.5 to 7.2 pH, 5% by weight, solution of sodium chloride (NaCl). Parts that are painted with zinc plating will be tested for 2000 hours.

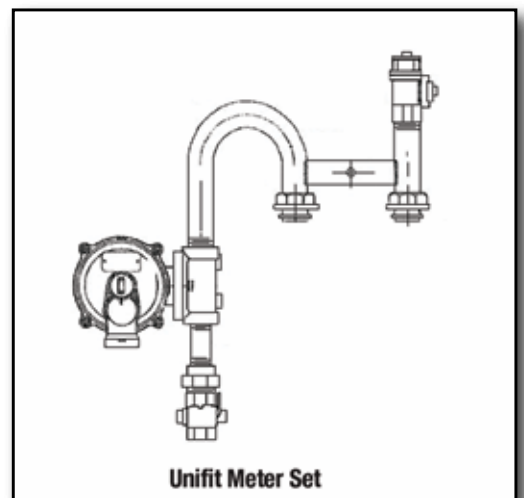
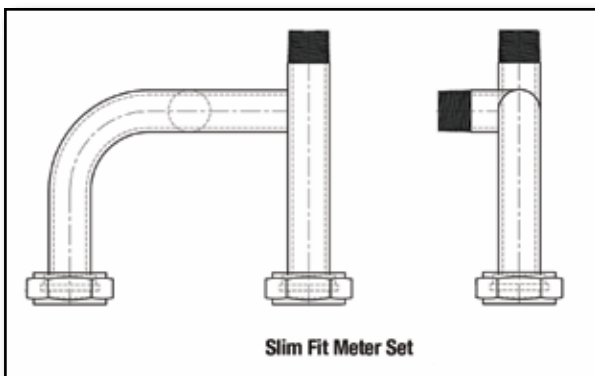
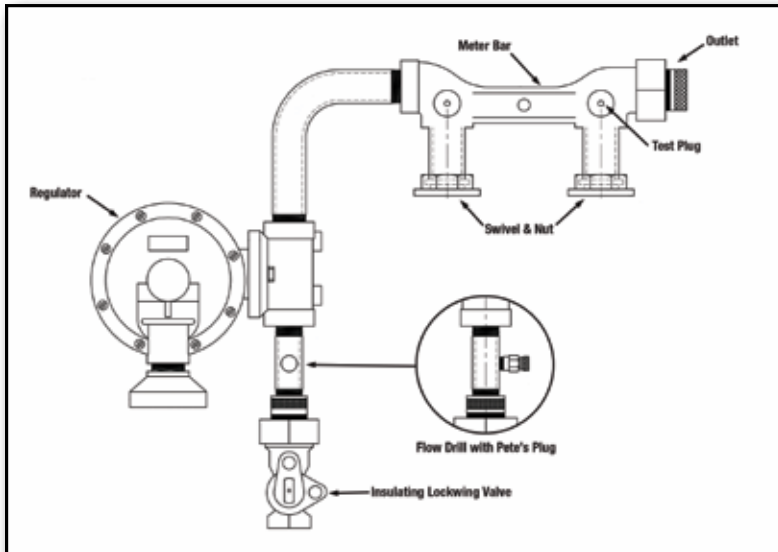
Product Lines Coating Options

Product Lines	Coating Options							
	1	1A	2	2A	3	3A	4	5
Meter Loops					X			
Coined Meter Loops	X	X	X	X	X			
Residential Prefabricated Meter Sets	X	X	X	X	X			
Commercial Meter Sets	X	X	X	X	X			
Rotary Meter Sets	X	X	X	X	X	X	X	
Support Brackets and Pipe Supports					X			

Residential Meter Sets

AEC is a leader in residential prefabricated meter sets. We have many design options which include but not limited to meter bar, unifit and slim fit configurations. With our tooling and equipment we can manufacture all types of prefabricated standardized and customized residential 200/250 class meter sets. We will work with your approved sources as well as our own to come up with the perfect prefab set that works for you and provides you the long term consistency that is needed for long term cost control. AEC follows a consistent total cost of ownership process from design to field installation that allows for short term and long term savings.

- 200/250 Class Prefabricated
- Meter Bar Style/Unifit/Slim Fit
- Electronic Testing
- Design Options
- Consistency
- Customize
- Long Term Cost Control
- Available in stainless steel for high corrosive environments

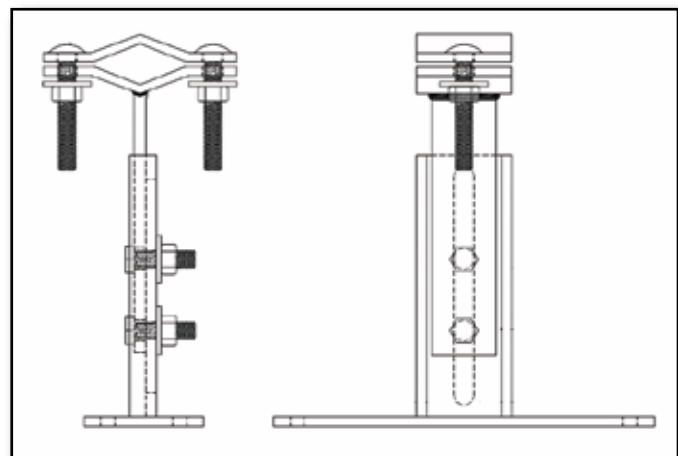
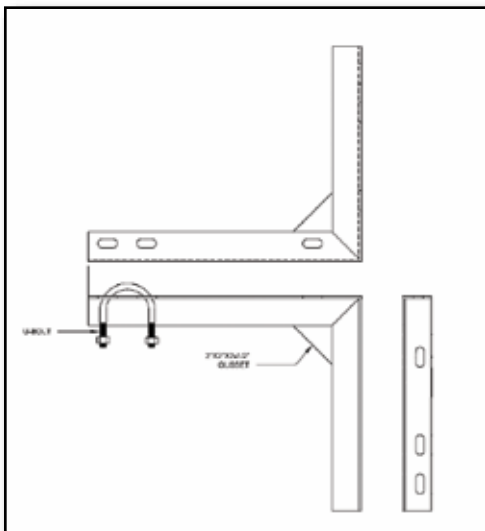
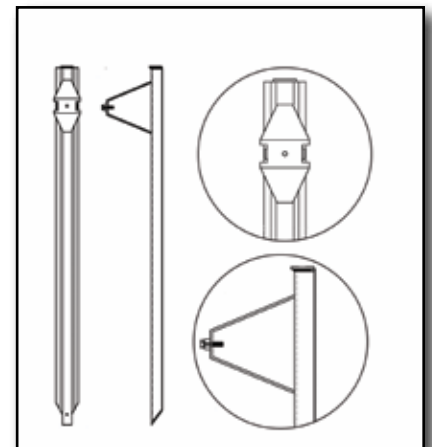
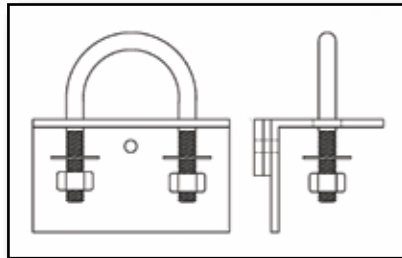


Our design teams are ready to start working with your team.

Support Brackets/Pipe Supports

Advance Engineering Corporation does not only manufacture gas flow products but we also carry and have the capabilities of supporting the field installation with brackets, posts and pipe stands. We have over one thousand different designs for as well as custom projects. Our metal fabrication department comes with CNC capabilities, break press, punch press, drilling tapping and welding.

- Industrial
- Commercial
- Free Standing
- Fixed & Adjustable
- Angle
- Post, Foundation Style & Siding
- Riser

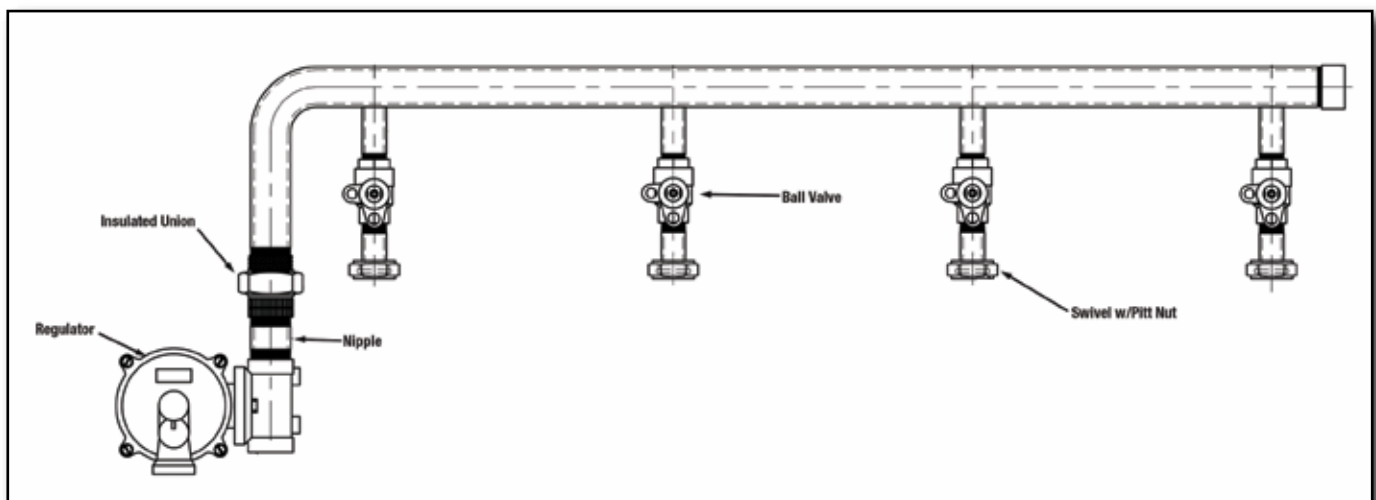
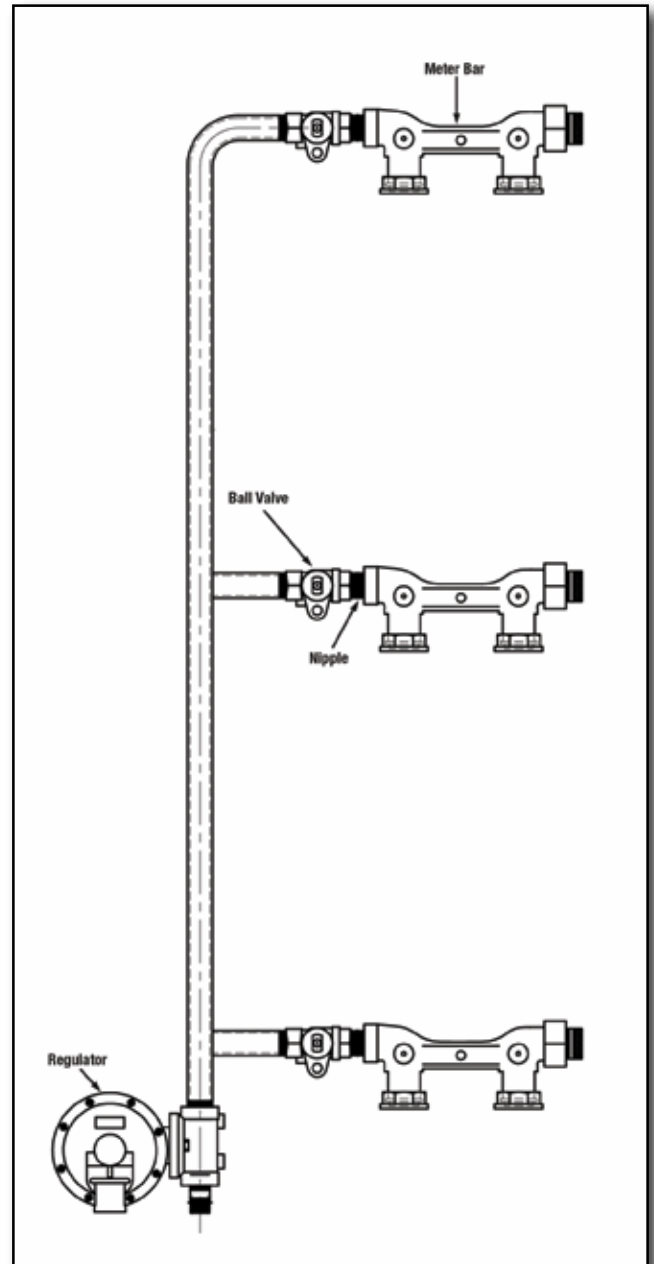
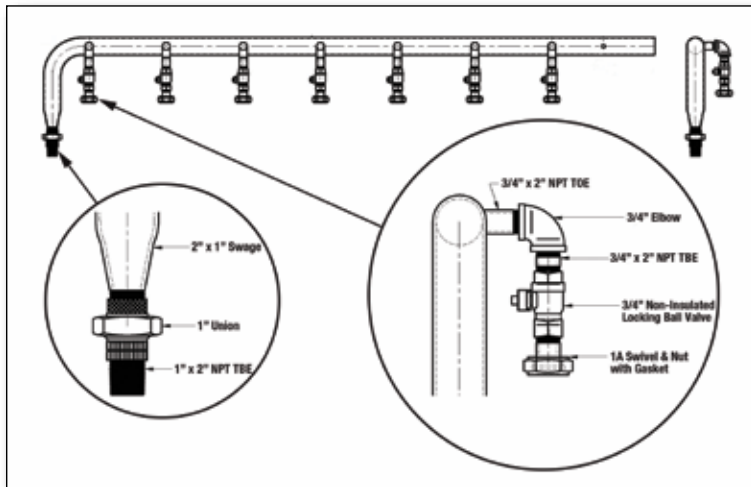


Manifolds

Multi-Unit Residential/Commercial

We offer a variety of multi meter manifold options. From straight sticks to completely assembled turnkey solutions. Many customers choose to have standard split 2, 3, 4 and even 8 meter manifolds readily available on their shelves as a complete assembly where they can couple the units together if needed and others ask us to build to order. In either case, AEC is available to provide a solution for all applications. As always, we recommend but do not insist on a complete assembly that is tested and factory coated for complete corrosion control. We would like to see in all cases whether it be a single residential, single commercial or a multiple manifold situation to minimize the field attachment. We are always looking to provide these concepts for field installation.

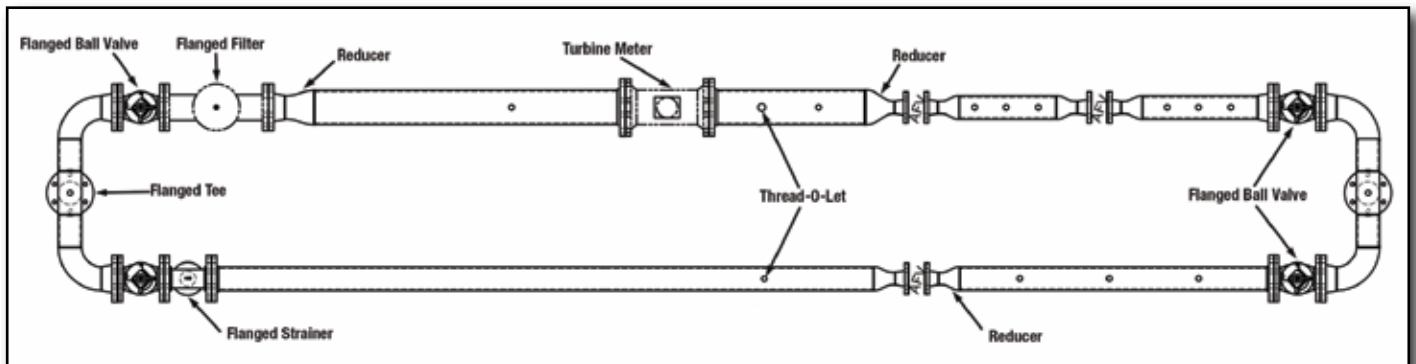
- Custom Built To Your Specification
- Bent/Straight/Multiple Levels
- Bubble Tested at 100 PSI
- Close Tolerance Threads (ANPT) For Better Sealing
- Tested and Factory Coated for Corrosion Control
- Complete Turn Key Assembly



Regulator/Gate Stations

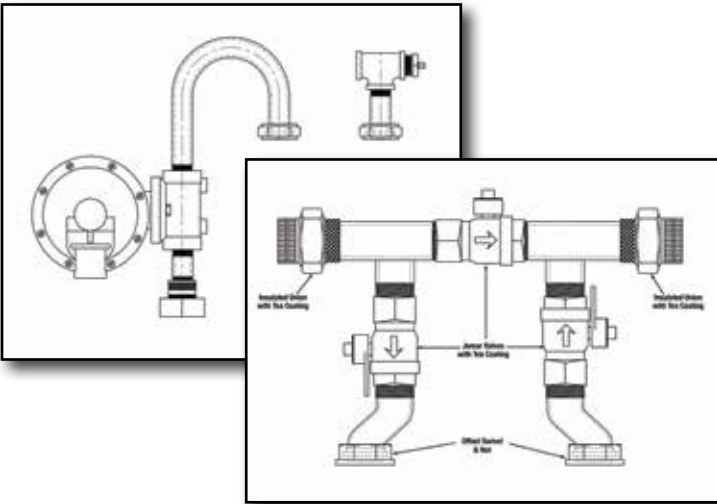
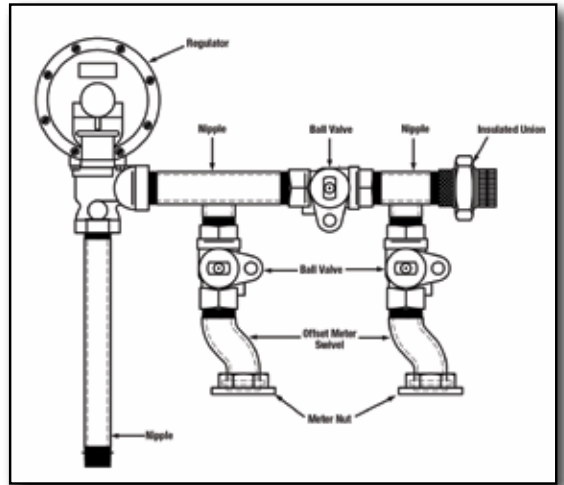
AEC has the capability of building gate and regulator stations for its customers. Whether it is a standard design or customized project, our teams can work with the utility to fabricate the station or field assembly. We can also provide the turnkey units shipped in on skids which allows you to plug and play. We have the capabilities of pressurizing to any amount or x-ray each weld individually. AEC can also provide x-ray shots of each weld on a CD that is lot controlled to the project.

- Custom Fabrication
- Turnkey Units
- Custom Packaging
- Pressurizing & X-Ray Capabilities

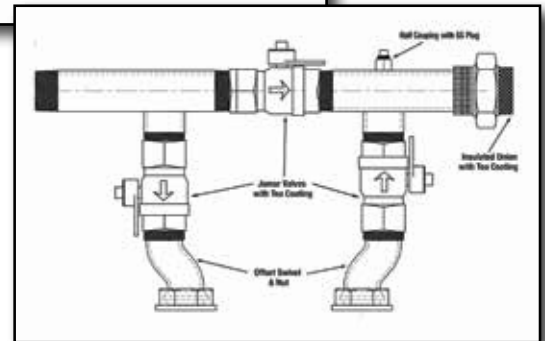
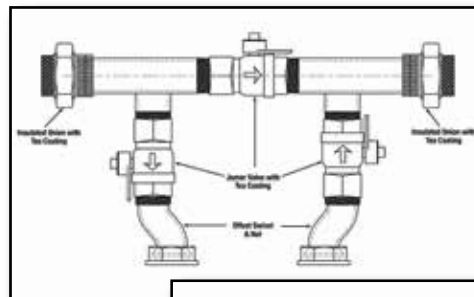


Commercial Prefabricated Meter Sets

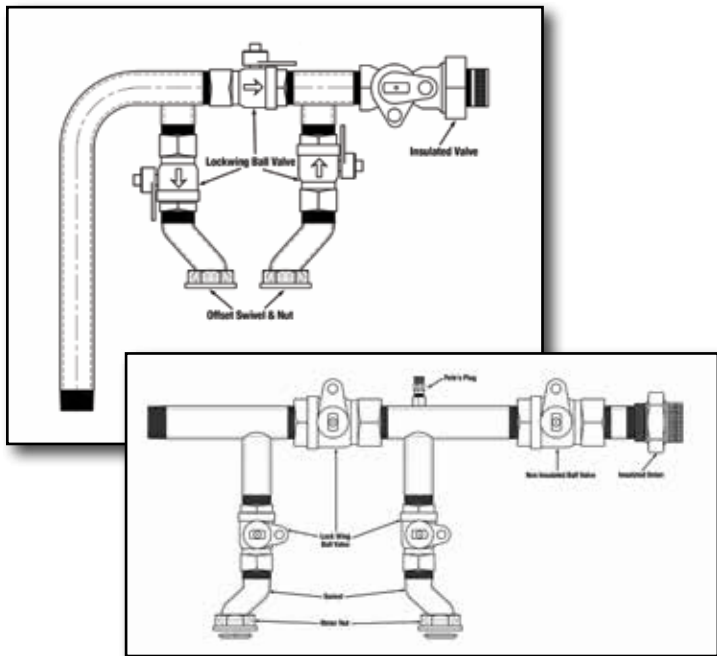
AEC can provide standardization to the utilities throughout their diaphragm meter range. We can fabricate loops, coining, and bypasses from a 200 class meter all the way up to a 1000 class meter with the largest connection of 2" #5 Sprague. We are the only fabricator who has developed this range of sophistication, equipment and tooling in the market place. Let's not only develop standardization for the residential class but also standardize and look at total cost of ownership throughout your system. Know your system by standardization across all diaphragm meter designs and conform today to bring you closer to compliance with DIMP.



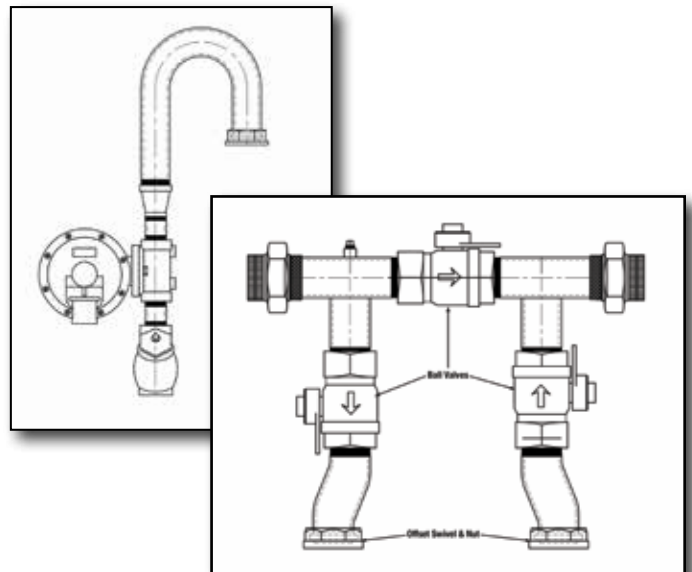
400 Class Prefabricated - Single and Bypass



600 Class Prefabricated - Single and Bypass



800 Class Prefabricated - Single and Bypass



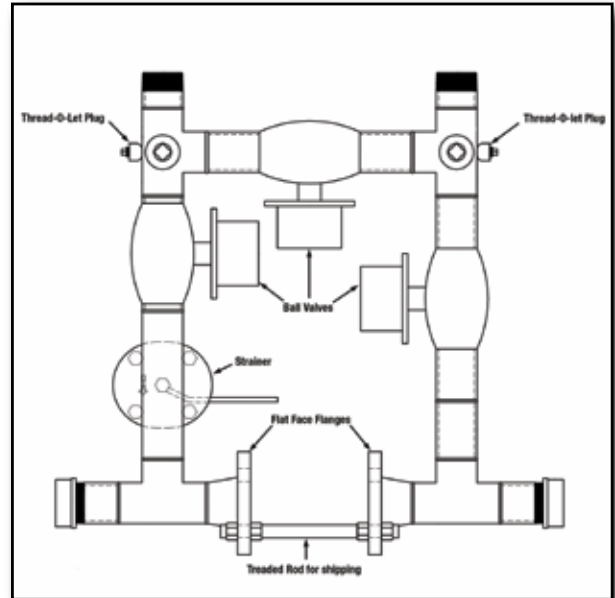
1000 Class Prefabricated - Single and Bypass



Rotary/Turbine Meter Sets

Rotary

We have a full line of rotary meter set products. Regardless of the size or piping requirements, our certified welding personnel can provide the solution. Together with product managers and CAD staff, we can design, fabricate and test these units. AEC has the capabilities of testing the units to any specified pressures as well as offering x-ray technology if required. We have a variety of products available as a standard design but will work with our customers to customize a specification for their needs. All welders are API 1104 Certified through a destructive test as well as x-ray. AEC can meet your needs whether vertical, horizontal, welded or assembled.



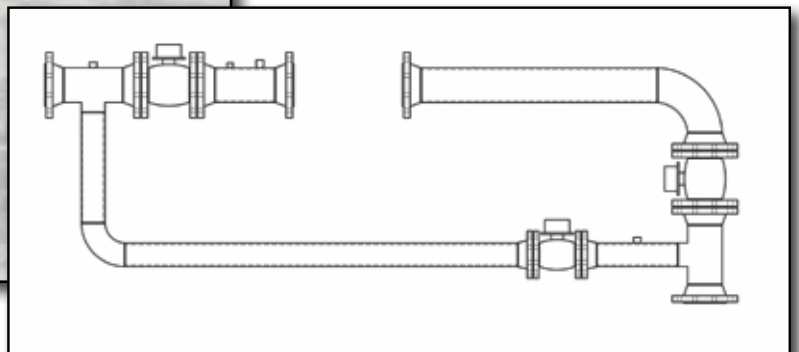
- Customized To Your Specifications
- Build to Order

Turbine

If looking for a standard or customized turbine meter set, AEC is the place to go. We can build to order one of our standard sets or we can have our product managers work with Engineering to design the unit that works for you. Once again all of our welders are API 1104 Certified with destructive and x-ray testing.



- Pressure Testing
- X-Ray Testing



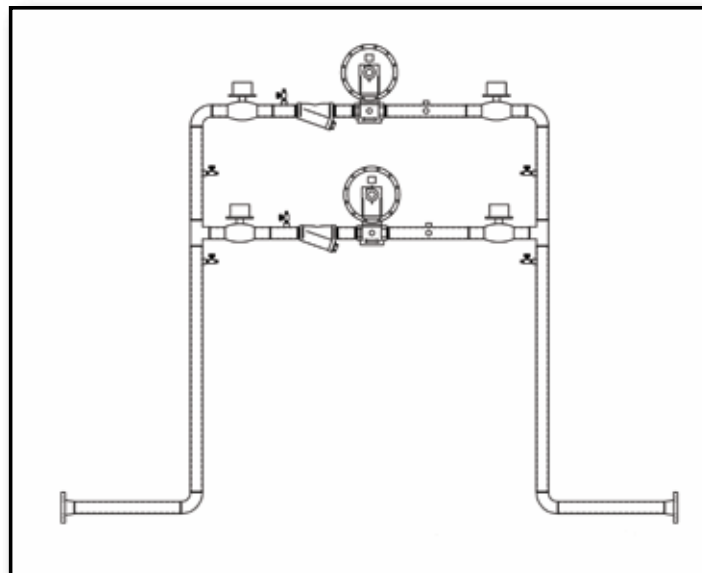
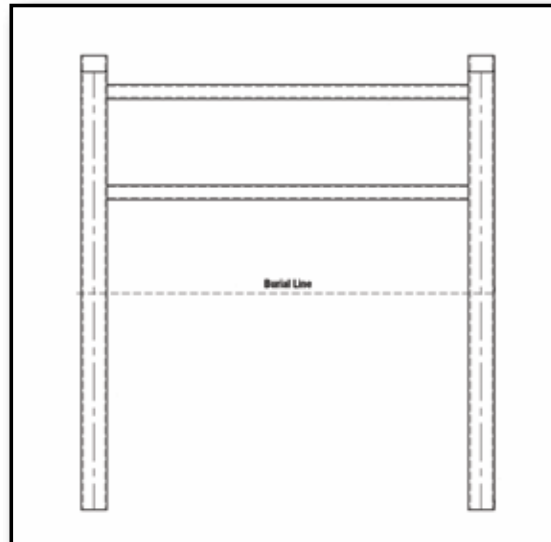
Additional Products

Advance Engineering Corporation owns its own pipe nipple manufacturing company, Perfect Pipe & Supply Corporation. We offer high quality and competitive pipe nipple and swage nipple products. We specialize in exceptional quality threaded pipe!

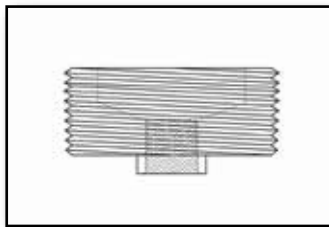
- Steel, Stainless, Brass and Aluminum materials
- Available in standard and extra heavy steel
- Threading 1/8" thru 4" pipe and up to 21' lengths
- Close tolerance ANPT (CTT) on Pipe Nipples
- Available with Standard, Zinc, Epoxy and Wet Applied Enamel Finishes



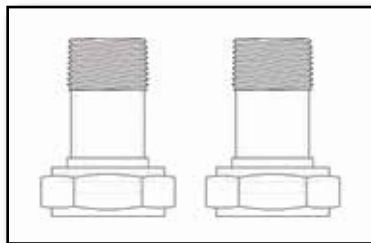
Bollards/Meter Guards - Protect your meter set in the field with fabricated bollard/meter guards. We provide standard sizes or customized to your needs.



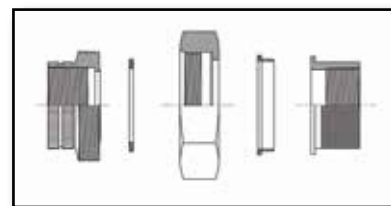
Farm Tap Assemblies- Welded or Assembled



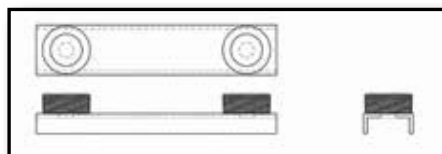
Test Adapters



**Meter Nuts & Swivels,
Blind Swivels**



ANPT Insulated Unions 3/4" - 2"



Meter Templates

Meter Gaskets and Swivel

Part No.	Part	Gasket			Swivels		
		O.D. (in)	I.D. (in)	Width (in)	Pilot Dia.	Flange Dia.	Pilot Length
PF1000-20	20LT	1.614	1.24	0.0945	1/312	1.687	0.188
PF1010-1	10LT	1.273	.0965	0.0945	1	1.312	0.156
PF1020-1	30LT	1.938	1.424	0.128	1.5	1.906	0.25
PF1100-1	45LT	2.122	1.701	0.0945	1.703	2.125	0.25
PF1101-1	#3 & #4	2.102	1.508	0.0945	1.5	2.218	0.188
PF1200-1	1A/OEMCO	1.376	0.933	0.0945	1	1.468	0.188
PF5903-1	#5	3.189	2.311	0.0945	2.312	3.25	0.25

Rubber P.F. Gasket, Hardness Shore 'A' 50 5, Tensile Strength (Kg CM-2) 122, Ultimate Elongation Break (%) 550

Additional Services

- Stocking Options
- CAD Drawings
- Build To Order
- QC Procedures & Processes
- Field Training
- Forecasting
- Design & Project Management Development
- Key Project Manager Contact Available 24/7
- B117 Testing Capabilities
- Shared Cost Partnership Programs
- Excellent Quality & Service
- Competitive Pricing

Other Products from HGCA

Hubbell Gas Connectors & Accessories, headquartered in Tulsa, Oklahoma with locations California, Wisconsin and Illinois. We engineer and manufacture, with a commitment to providing our customers the highest quality products at the best value.

For gas distribution, Hubbell Gas Connectors & Accessories (HGCA) supplies a full line of specialty products, offering turnkey solutions for main-to-meter connections. No other single manufacturer can offer the variety of fittings that HGCA provides. Whether you need to connect PE to PE, PE to PVC, PE to Steel, PE to Copper or Steel to Steel, chances are HGCA has one to do the job. HGCA is an ISO 9001 certified company. Our products meet or exceed all ASTM and D.O.T. requirements and make safe, reliable and economical connections.

Continental Industries, headquartered in Tulsa, Oklahoma since 1958 – with manufacturing facilities in both Tulsa and Broken Arrow. We are committed to providing our customers with the highest quality products at the best value.

Our commitment to quality is evident in every step of our business processes. Renowned for our design and development of technologically advanced products, we provide our customers with reliable, cost-effective solutions to their “main to meter” service line installation, repair, or renewal projects.



The GasBreaker Brand has served the natural gas industry since 1970. In 1974, GasBreaker EFVs became the premier Excess Flow Valves used on gas service lines to protect homes and businesses. Since their introduction millions of GasBreaker EFVs have been sold (More than 5 times as many valves as all US competitors combined) and installed worldwide, providing tens of billions of field service hours. Today the GasBreaker Excess Flow Valve is known as “The EFV of Choice.”



As one of the most trusted names in gas pipeline components manufacturing since 1973, the Lyall Corporation has an undisputed reputation for quality. The Lyall mission is to consistently manufacture the safest, most reliable and installer-friendly gas pipeline products available. From midstream to local distribution and all points between, Lyall keeps the gas industries moving.





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