Engineered Value
We tailor our category-leading fabrication to suit the exact needs of your application. Taylor Forge is dedicated to engineering value into every project we touch.

- High Quality Designs lead to High Quality Products
- Industry Recognized Process Guarantees
- Metallurgical Excellence
- Welding Technology is our Science
- Fluid Dynamic Flow analysis and Structural Design

Engineered Products Line

Fabricated Assemblies
- Scraper traps, launch/receivers (utilizing extruded outlets or fabricated from pipe and fittings)
- Pulsation bottles (extruded per DOT/B31.8 or ASME stamped)
- Slug catcher assemblies (modularized shipments or field assembled manifolds)
- Drip assemblies
- Valve settings

Shell & Tube Heat Exchangers
- HTRI thermal ratings
- RCS mechanical design
- TEMA design and construction
- ASME Code U and U stamped
- 4” to 120” diameter shells

Pressure Vessels
- ASME code U, U2, S and R stamped
- Vortex separators
- Vortex scrubbers
- Slug catchers
- Contactors and absorbers

Extruded Outlet Headers
- Single and multiple outlet headers (run size 12” and larger, outlet size 2” and larger)
- Flow tees
- Meter header assemblies
- After-cooler manifold assemblies
- Pipeline and station piping components
- Extruded headers per MSS-SP-75

Skidded Packages
- Launcher/receiver skids
  - Onshore
  - Manual or automated launching systems
- Valve and manifold skids
- High pressure meter skids
- Fuel Gas Skids

Weld Fittings
- Capi (16” to 42”)
- Reducers (concentric or eccentric, 10” and larger)
- High yield forged and machined fittings
  - Yield strength up to 80 ksi
  - Compliant with NACE MR0175/ISO 15156-2, Region 3, up to 75 ksi

Miscellaneous Information
- ISO 9001:2008 certified
- Weld overlay (316L/625)
- High yield forged and machined fittings
  - Yield strength up to 80 ksi
  - Compliant with NACE MR0175/ISO 15156-2, Region 3, up to 75 ksi

Partial material list:
- Carbon steel
- High strength low alloy
- Stainless steel
- Duplex and super duplex
- 1-1/4 Cr, 2-1/4 Cr
- Nickel alloys

World Headquarters:
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Please contact us for quotations at: engineered@tfes.com
Engineered Solutions

Starting with a collaborative, consultative approach, we work to understand the unique needs of a project in order to deliver the best solutions.

- **Integrity in Design**
  We have developed industry leading best practices that provide our customers with extremely safe and reliable solutions and products.

- **Achieving Optimal Solutions Through Collaboration**
  Early in the design phase, our staff of professional engineers work directly with our customers to evaluate all options and ultimately provide the most optimal solution for their needs.

- **Creativity in Design**
  In an industry with great history and standardization, we provide a fresh and innovative approach to traditional products.

- **Engineered 3-D Modeling & Flow Analysis**
  Engineers and designers working together for the most efficient, reliably designed end product.

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**Fatigue analysis model.**
**Vortex Tube Bundle CFD test model.**
**Vortex Cluster CFD test model.**
**Slug Catcher test model.**

**A:** Fatigue analysis model.
**B:** Vortex Tube Bundle CFD test model.
**C:** Vortex Cluster CFD test model.
**D:** Slug Catcher test model.

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**Scraper Traps**

Scraper traps, or pig launchers and receivers, have been fabricated from 6” line size up to 80” and pressures up to 15,000 psi.

With the application of extruded outlet connections, a safe, low stress fabricated assembly provides peace of mind to owners and extended operational life. Quick opening closures of any style or manufacture can be included. Modularization of an entire pigging package can also be provided.

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**Shell & Tube Heat Exchangers**

Our new 53,000 sqft. state-of-the-art fabrication facility focuses on process and heat transfer packages. Our exclusive In-House Thermal Design and Engineering team will design to the latest requirements including HTRI, TEMA “R”, “C”, and “B”, as well as, ASME and API standards.

Our heat exchangers, condensers, reboilers, and evaporators will be fabricated to the highest level of quality standards for our customers peace of mind.

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**High Strength Material Technology**

Over the years Taylor Forge has been an innovator in the development of advanced grade forging materials for use in critical, high pressure applications requiring high strength, excellent toughness, good weldability, and sour service compliance aimed at maximizing value for our customers.

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**Gas Processing Equipment**

We put the operators interests and needs first in our packaged gas processing units. The result is a highly efficient, easily maintained and operated package. Applications include dehydration, sweetening, fuel gas, vapor recovery, and membranes.

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**Pressure Vessels**

Taylor Forge has supplied pressure vessels into many different applications for over 70 years. With ASME U, U2, R and S stamps, we have been an experienced and influential leader in all the energy and industrial markets.
Engineered Value

We take our category-leading fabrication to suit the exact needs of your application. Taylor Forge is dedicated to engineering value into every project we touch.

- High Quality Designs lead to High Quality Products
  It all starts with collaboration, planning, design details and implementation at the highest engineered level.
- Industry Recognized Process Guarantees
  Because of our designs and deliveries, we are the industry recognized leader.
- Metallurgical Excellence
  Our expertise in metallurgy and welding has been crafted and engineered for over 100 years.
- Welding Technology is our Science
  We are the most advanced welding experts in our field. We perform R&D, certified testing, and have qualified over 1,000 welding procedures.
- Fluid Dynamic Flow analysis and Structural Design
  We invest in the best software and personnel to understand, test and provide design excellence.

Fabricated Assemblies
- Scraper traps, launch/receivers (utilizing extruded outlets or fabricated from pipe and fittings)
- Pulsation bottles (extruded or fabricated per DOT/31.8 or ASME stamped)
- Slug catcher assemblies (modularized shipments or field assembled manifolds)
- Drip assemblies
- Valve settings

Shell & Tube Heat Exchangers
- HTRI thermal ratings
- RCS mechanical design
- TEMA design and construction
- ASME Code U and S stamped
- 4” to 12” diameter shells

Pressure Vessels
- ASME code U, U2, S and R stamped
- Vortex separators
- Vortex scrubbers
- Slug catchers
- Contactors and absorbers

Extruded Outlet Headers
- Single and multiphase outlet headers (run sizes 12” and larger, outlet size 2” and larger)
- Flow tees
- Meter header assemblies
- After-cooler manifold assemblies
- Pipeline and station piping components
- Extruded headers per MSS-SP-75

Skidded Packages
- Launch/receiver skids
- Onshore:
  - Manual or automated launching systems
- Offshore:
  - Valve and manifold skids
  - High pressure meter skids
  - Fuel Gas Skids

Weld Fittings
- Caps (16” to 42”)
- Reducers (concentric or eccentric, 10” and larger)
- High yield forged and machined fittings
  - Yield strength up to 80 ksi
  - Compliant with NACE MR0175/ISO 15156-2, Region 3, up to 70 ksi

Miscellaneous Information
- ISO 9001:2008 certified
- Weld overlay (316L/625)
- Yield strength up to 80 ksi
- Compliant with NACE MR0175/ISO 15156-2, Region 3, up to 70 ksi
- Yields:
  - Carbon steel
  - High strength low alloy
  - Stainless steel
  - Duplex and super duplex
  - 1-1/4 Cr, 2-1/4 Cr, 9 Cr
  - Nickel alloys

ISO 9001:2008 certified
Weld overlay (316L/625)
Yield strength up to 80 ksi
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Yields:
- Carbon steel
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- Duplex and super duplex
- 1-1/4 Cr, 2-1/4 Cr, 9 Cr
- Nickel alloys
Engineered Solutions

Starting with a collaborative, consultative approach, we work to understand the unique needs of a project in order to deliver the best solution.

- Integrity in Design
  We have developed industry leading best practices that provide our customers with extremely safe and reliable solutions and products.

- Achieving Optimal Solutions Through Collaboration
  Early in the design phase, our staff of professional engineers work closely with our customers to evaluate all options and ultimately provide the most optimal solution for their needs.

- Creativity in Design
  In an industry with great history and standardization, we provide a fresh and innovative approach to traditional products.

- Engineered 3-D Modeling & Flow Analysis
  Engineers and designers working together for the most efficient, reliably designed end product.

Scraper Traps
Scraper traps, or pig launchers and receivers, have been fabricated from 6” line size up to 80” and pressures up to 15,000 psi. With the application of extruded outlet connections, a safe, low stress fabricated assembly provides peace of mind to owners and extended operational life. Quick opening closures of any style or manufacture can be included.

Shell & Tube Heat Exchangers
Our new 53,000 sqft. state-of-the-art fabrication facility focuses on process and heat transfer packages. Our exclusive In-House Thermal Design and Engineering team will design to the latest requirements including HTRI, TEMA “R”, “C”, and “B”, as well as, API 660 standards. Our heat exchangers, condensers, reboilers, and evaporators will be fabricated to the highest level of quality standards for our customers peace of mind.

High Strength Material Technology
Over the years Taylor Forge has been an innovator in the development of advanced grade forging materials for use in critical, high pressure applications requiring high strength, excellent toughness, good weldability, and sour service compliance aimed at maximizing value for our customers.

Gas Processing Equipment
We put the operators interests and needs first in our packaged gas processing units. The result is a highly efficient, easily maintained and operated package. Applications include dehydration, sweetening, fuel gas, vapor recovery, and membranes.

Pressure Vessels
Taylor Forge has supplied pressure vessels into many different applications for over 70 years. With ASME U, U2, R and S stamps, we have been an experienced and influential leader in all the energy and industrial markets.

Slug Catchers
We efficiently engineer 2 phase or 3 phase separation ahead of your processing facility. The proper design of this critical piece of equipment can impact the rest of the facility. By designing for slugging and transient slugs to arrive at full gas flow, we work with you to ensure the best facility performance with the use of our equipment.

Vessel Type Slug Catchers
The economical choice up to approximately 1000 bbls (165 cu m) of liquid storage. Typically installed without process internals in slugging applications. Inlets can be supplied designed to ASME Sec VIII Div 1 or 2.

Pipe Type Slug Catchers
Also called “Harp Type”, or “Finger Type”. Very flexible design with almost unlimited capacity potential. Units have been installed over 4800’s of gas flow and over 100,000 bbls (16,000 cu m) of liquid storage. Plate swell limitations can be optimized. Turkey neck including insulation is available.

Vortex Technology Separation
By utilizing our unique Vortex Technology separation elements, very high separation efficiency can be achieved (down to 1 micron particles). Using this technology can result in vessel size and weight reductions up to 30%. It can also be retrofitted into existing separators where gas flows need to be increased or operating pressures have dropped.

Pipe Type Slug Catcher with Vortex Tube brickwork. Catering to our customers specific needs, Taylor Forge has advanced our design traps to provide the highest flow capacities and most efficient designs. Our legacy high temperature and vacuum designs add to our capabilities.

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Slug Catchers

We efficiently engineer 2-phase or 3-phase separation ahead of your processing facility. The proper design of this critical piece of equipment can impact the rest of the facility. By designing for long and frequent slugs to arrive at full gas flow, we work with you to ensure the best facility performance with the use of our equipment.

**Vessel Type Slug Catchers**

The economical choice up to approximately 1000 bbls (165 cu m) of liquid storage. Typically installed without process internals in slugging applications. Inlets can be supplied designed to ASME Sec VIII Div 1 or 2.

**Pipe Type Slug Catchers**

Also called “Harp Type”, or “Finger Type”. Very flexible design with almost unlimited capacity potential. Units have been installed over 4 BSCF of gas flow and over 50,000 bbls (8,000 cu m) of liquid storage. Plot space limitations can be optimized. Turn-key scope including installation is available.

Vortex Technology Separation

By utilizing our unique Vortex Technology separation elements, very high separation efficiency can be achieved (down to 1 micron particles). Using this technology can result in vessel size and weight reductions up to 30%. It can also be retrofitted into existing separators where gas flows need to be increased or operating pressure has dropped.

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- Pulsation bottles (extruded per DOT/BS1.8 or ASME stamped)
- Slug catcher assemblies (modularized shipments or field assembled manifolds)
- Drip assemblies
- Valve settings

Shell & Tube Heat Exchangers
- HTRI thermal ratings
- RCS mechanical design
- TEMA design and construction
- ASME Code U and U stamped
- 4” to 120” diameter shells

Pressure Vessels
- ASME code U, U2, S and R stamped
- Vortex separators
- Vortex scrubbers
- Slug catchers
- Contactors and absorbers

Extruded Outlet Headers
- Single and multiple outlet headers (run size 12” and larger, outlet size 2” and larger)
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