

# **TF** TAYLOR FORGE

ENGINEERED SYSTEMS



## Scraper Traps

From a basic body to a skid-mounted, fully-automated unit, Taylor Forge can meet your exact requirements.

## Our Commitment

Taylor Forge Engineered Systems produces a range of special products and systems for the gas transmission industry. From a manufacturing and fabricating foundation based on extruded branch connections, we engineer, fabricate and oversee the installation of systems for pigging, metering, two or three-phase separation and storage, and compressor pulsation control. Our engineered approach to manufacturing results in products and systems which combine the essential elements of safety, quality, durability and economy.

## Scraper Trap Features

A leader in scraper trap technology and fabrication, Taylor Forge is one of the foremost suppliers of scraper traps, also known as launcher and receiver traps or pig traps, throughout the world.

### Construction

Scraper traps are normally located at compressor stations and at terminal points of the pipeline. During construction, temporary scraper traps can be located at convenient intervals in order to clean construction debris from the new pipeline. Scraper traps can be designed to accommodate scraper pigs, sphere pigs, "smart" pigs, or any combination of the three.

### Components

Traps can be supplied to any degree of packaging and fabrication required. Components of the trap, such as the barrels and reducers can be manufactured from rolled and welded plate, seamless pipe or from forged materials. Branch outlets for kicker and balance lines are typically designed with

integrally die-formed extrusions. All barrel openings are either beveled or flanged and are shipped ready for final installation.

### Closures

Our traps can be supplied with any type of specified closure, from screwed, to clamp ring, to locking ring. We provide a range of designs from manually operated to fully automated. We supply any major manufacturer's closure upon request.

### Extruded Headers

Traps can experience fatigue stresses due to their pressure cycles. The application of extruded outlets for the major operational connections results in a low stress joint configuration in a highly stressed area. All fabrication welds can be radiographed for quality assurance.



Scraper Trap Using Extruded & Swedged Fitting

### High Pressure Applications

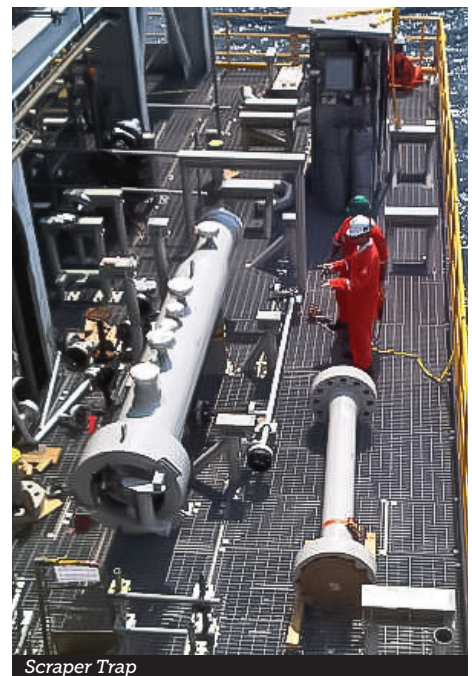
Traps can be designed and fabricated for design pressures from ANSI 300 class ratings up to and including 20,000 psi. New technology has allowed producers to go into deepwater



Scraper Trap



Automated Trap



Scraper Trap



regions to find gas and oil. Taylor Forge's design, fabrication and material technologies have allowed us to keep up with this ever-evolving market. We have the capability to hydrostatically test assemblies to 50,000 psi.

### Skid-Mounted Systems

Many offshore and some onshore applications require complete pigging packages, fully fabricated and automated, ready to install on a platform or at the job site. Taylor Forge has the capabilities and experience to provide fully-operational packages, skid-mounted with automated valves and instruments for most any application.

### Metallurgical Expertise

With the expansion of deep water applications, higher design and operating pressures have pushed the industry to higher strength materials. Taylor Forge is a leader in the gas transmission industry in developing new high strength, low alloy steels which meet all the metallurgical requirements of ductility, chemistry, cleanliness and weldability at yield strengths up to 80,000 SMYS. We stock high strength materials that can meet NACE standard. We have the ability to fabricate traps and skid assemblies from a variety of alloy materials for other applications, including austenitic and duplex stainless steels, and alloys.

### Engineering Design

A fully capable, degreed engineering staff can provide all the design disciplines necessary to complete scraper trap skid packages like structural design, pipe stress analysis and instrumentation logic.

### Code Experience

Taylor Forge is widely experienced in a variety of codes, but not limited to, B31.8, CSA-Z662, B31.3, B31.3 Chapter IX and AS-2885.

### Optional Features & Accessory Equipment

- Baskets
- Bi-directional trap systems
- Pig signals (manual or automatic, remote or local)
- Handling davits (with manual or electric hoist)
- Saddle supports
- Pig launching systems (manual or automatic)
- Inclined, declined or vertical construction
- Pig storage
- All controls, drives and instrumentation
- Liquid handling systems



*Technical information for scraper traps may be requested by email: [engineered@tfes.com](mailto:engineered@tfes.com), or by phone: 1-913-294-5331.*

# **TF** TAYLOR FORGE

## ENGINEERED SYSTEMS

### Engineered Products Line



*Slug Catchers*



*Scraper Traps*



*Pressure Vessels*



*Shell & Tube  
Heat Exchangers*



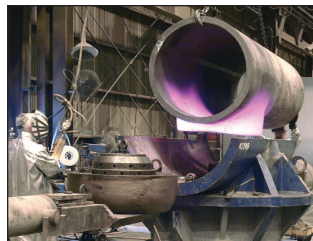
*Cooler Header*



*Vortex Technology  
Separation*



*High Pressure Gas  
Storage Vessels  
for the Aerospace Industry*



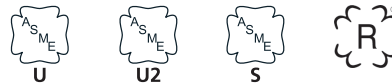
*Extruded Outlets  
& Headers*

### About Taylor Forge

Taylor Forge is a global pressure equipment fabricator, headquartered in Eastern Kansas, providing high quality engineered products to a variety of industries including oil and gas, chemical, power, nuclear, aerospace and defense. In business for over 115 years, Taylor Forge takes pride in its specialized process design, thorough mechanical design and unique fabrication capabilities.

### Certifications

ASME U, U2, S and National Board R



### Commitment to Quality

In addition to our ASME & National Board Certifications, Taylor Forge – Paola, KS is ISO 9001 Certified.

### World Headquarters:

208 N. Iron Street  
Paola, KS 66071  
(913) 294-5331  
www.tfes.com

Please contact us for quotations at: [engineered@tfes.com](mailto:engineered@tfes.com)