



Superior Energy Systems



Superior Energy Systems MIDSTREAM AND INDUSTRIAL EQUIPMENT

Superior Design. Superior Quality. Superior Service. Why would you settle for anything less?

For more than 40 years we've brought together engineering, manufacturing, construction and safety expertise to focus on operational excellence. We provide the best in turnkey oil and gas systems, infrastructure solutions as well as safety and compliance training. We have engineered, procured and constructed (EPC) more bulk plants and trans-shipment terminals than any other company in the United States. In addition, we design, engineer, construct and service vaporizers, mixers, rail towers, metering and odorant skids and standby fuel systems.

We are in the unique position to handle your entire project from start to finish — from planning and installing to service and maintenance. High-quality materials, customization, superior craftsmanship and responsive project management go into every job.

TESTIMONIALS

"This is the fourth terminal we have constructed with Superior and we couldn't be happier with their efforts. Their hyper focus on engineering quality and design, as well as exceptional customer service, sets them apart. When it comes to terminal construction, they have the ability to do it all, seamlessly."

Andy Ronald

VP of Supply & Logistics Development, Crestwood Services

"We have purchased multiple transloaders from Superior, allowing us to move more product to more customers, across our network. Their units are portable, easy to move and reliable and their customer support is unparalleled in this industry."

Jeff Bechtel

Regional Operations Manager, Transflo

"Superior continues to be our go-to vendor in midstream construction and terminal development. From the initial drawings to startup and commissioning, their attention to detail surpasses the competition. Their customer support team consistently exceeds our expectations and our terminals effectively maximize their rail offloading and truck loading capabilities."

Liz Woods

Rail Terminals Manager, CHS, Inc.

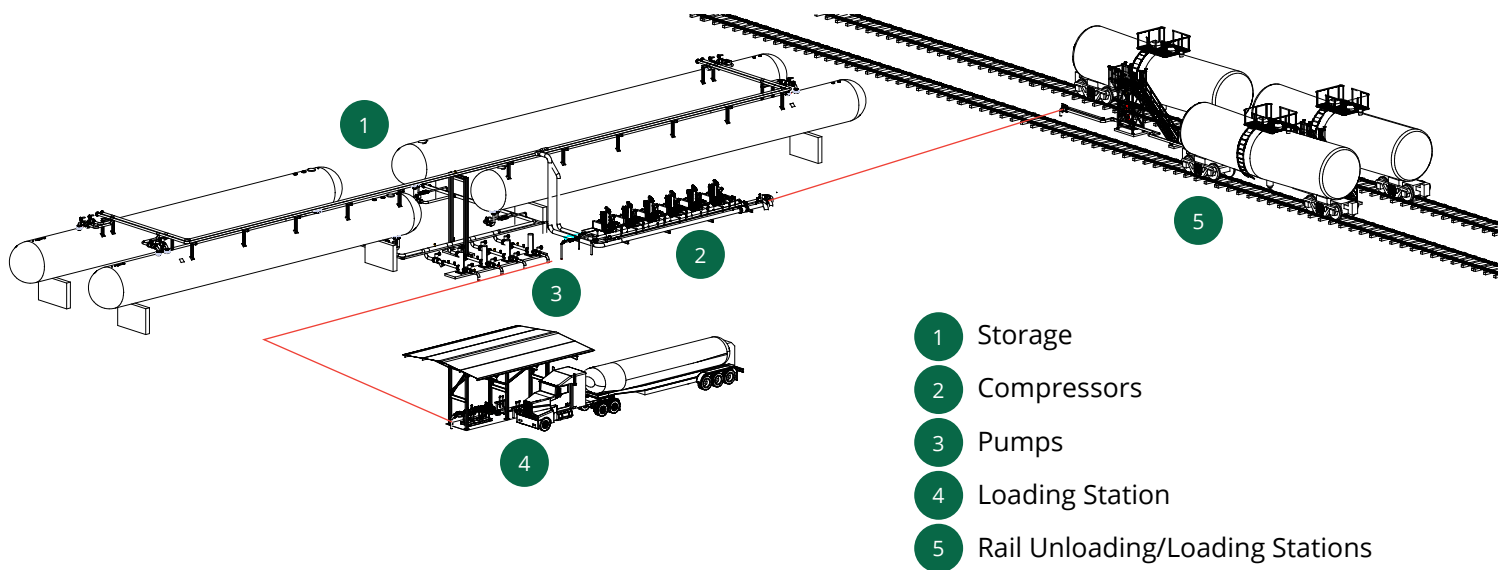


Terminals

We strategically engineer and construct fully automated, secure and safe pipeline, rail and barge terminals that play a crucial role in efficiently delivering propane and natural gas liquids (NGL) to strategic markets.

In addition to providing all necessary equipment for your project, Superior Energy Systems is able to provide turnkey project management and construction oversight, serving as the general contractor for the entire build. Regardless of the size, we have the knowledge and experience as well as technical expertise to oversee all efforts in the design, engineering, permitting, construction, startup and commissioning phases. Superior will make sure the entire job is completed – on time and on budget – every time.





1 Storage (Tanks and Cavern)

As a design/build contractor, we have the ability to supply both new and used tanks of varying sizes - 12,000 to multiple 120,000 gallon tanks - for above ground, underground and mounded installations. In addition, we can provide custom modifications including openings, installation and alteration of manways. We also design precast custom foundations for seismic and soil conditions, arrange transportation and rigging.





2 Compressors

High efficiency reciprocating compressor systems give customers the ability to unload a full rail car in under one hour. The compressors can be manually operated or designed to be fully automated.



3 Pumps

SES terminals utilize high-speed centrifugal turbine pumps that allow loading a fuel transport in under 17 minutes, at 625 gallons per minute, at 125 PSID.

Piping

In-house pipe welding and fabrication; piping designed and built to ASME B31.3 and NFPA 58 specifications.





4 Loading Station (loading rack and metering skids)

Single or dual sided, pre-fabricated metering skid that can be newly installed or added to your current loading configuration. The station can be as simple as a bill of lading (BOL) ticket meter or tie into a terminal management system. The terminal management system can track fuel, customers, drivers, truck information, etc.



5 Rail Unloading/Loading Stations

Single or multiple rail stations, individual tower(s) or continuous catwalk platforms with multiple rail stations to increase efficiency. OSHA guards and railings for safety, as well as retractable loading arms to prevent injury are all included.



Terminal Options

Heaters/Dryers

Propane naturally absorbs moisture under certain conditions. The heater and dryer work together to heat the propane to a specific temperature; it is then passed through a dryer medium and becomes usable dry gas.

Odorant (Mercaptan) Skid

Odorant skids provide the ability to inject specific quantities of ethyl mercaptan into non-odorized propane. We manufacture skid mounted odorant injection systems with or without product containment structure. The controlled metering system provides a documented record of the amount of odorant added, per code requirements, to a given quantity of propane.

Fire suppression systems

Available to meet local authority having jurisdiction requirements.





Transloaders/ Portable Rail Towers

Our transloaders are engineered to meet U.S. Department of Transportation (DOT) requirements and are code-compliant to NFPA 58 and NFPA 70. All units feature remote pneumatic/electronic shutdown, pull-away protection for both rail and truck, leak-free breakaway protection, quick evacuation connections and remote emergency shutdowns. Whether you need a quick, on-site installation or a long-term solution, our transloaders can be easily set up anytime and anywhere. At a fuel transfer rate of up to 10,000 gallons in 30 to 40 minutes, they are efficient and dependable.



ScaleTec: Automatic Scale Shut Off

ScaleTec is a universal, electronic, auto-shutoff scale system that adds automatic filling and stop control to new and existing beam scales, replacing outdated pneumatic systems. The innovative system is equipped with a fiber optic transmitter and receiver; the scale arm breaks a light beam when the desired cylinder weight is reached and stops the flow of propane to the cylinder, preventing overfills. ScaleTec can be attached to the scale or located on a separate stand. It is user friendly, affordable and increases your propane bottle-filling efficiency.



Retail Bulk Plants

We custom-design new or upgraded retail bulk plant facilities to your specific requirements. Upgraded facilities allow for increased storage, additional rail towers, addition of cylinder fill capabilities, greater pumping capacities and compliance to current codes. Turnkey relocation of existing facilities is available and includes transport of all tanks and equipment as well as engineering, permitting and construction.

Equipment Parts and Used Tanks

We maintain a full inventory of spare parts used in the fabrication of midstream and industrial facilities. Spare parts lists and engineering assistance is also available. We also stock new and used tanks from 500 to 90,000 gallons.



Propane Vaporizers

A propane vaporizer receives liquid propane from a storage facility to produce propane vapor for use in gas burning equipment such as boilers, heater or furnaces at the required capacity. Offered in both stand-by or utility, our safe and dependable water bath vaporizers are customized to meet all of your stand-by or utility requirements. We also service existing propane vaporizers, keeping your unit operating safely and reliably.



Cold Weather Butane Offloading

Temperatures below 30 degrees restrict the ability to unload butane from railcars. Our butane offloading system utilizes a water bath vaporizer and high efficiency vapor compressors to allow the offloading of butane at extremely cold temperatures.

Standby Propane System

In instances of a natural gas curtailment or complete shut-down of service to a facility, a stand-by propane system offers the customer an alternate fuel supply to natural gas, allowing them to maintain a fully functional operation. Generally consisting of a vaporizer, mixer and storage tank, this equipment allows propane to virtually match the characteristics of natural gas and eliminates the need to replace any burners, regulators or equipment inside of the building.



Utility Peak Shaving Plant

Utility peak shaving uses undiluted propane or a propane/air mixture to augment natural gas, eliminating periodic peaks in the consumption of natural gas. The equipment used for a peak shaving plant in industrial facilities is identical to that used for a stand-by plant, but with the addition of control equipment to limit the consumption of natural gas. A controller in the natural gas line manages the flow of natural gas to a predetermined maximum consumption and propane is used to make up the difference between the controlled flow and the actual plant consumption.



Primary Fuel Systems

Primary fuel systems are created to handle energy requirements for facilities or community systems lacking natural gas access. Our engineers will develop a site survey and help you determine the amount of storage, storage location, adequate pressure requirements and additional details required to accommodate your new facility. We can also work with your local and state governing bodies and address any public forum to educate the community on propane safety.

Butane Blending

We provide blending systems to enhance gasoline Reid Vapor Pressure (RVP), a common measure of the volatility of gasoline. These systems include storage of butane, pumping, metering and blending equipment to meet OSHA and ASTM standards. Butane is readily available and normally a lower cost alternative than other compounds used to control Reid vapor pressure. The SES blending system provides precise controlled blending at the producer and distributor locations. The blending controls at the truck loading station provide butane additive at the ratio required for desired RVP levels.



Superior Energy Systems



13660 Station Road
Columbia Station, OH 44028
440.236.6009

marketing@superiornrg.com

superiornrg.com