Calbrite™

THE LEADER IN STAINLESS STEEL CONDUIT SYSTEMS

For Food & Beverage Facilities

Corrosion Resistant

Durable

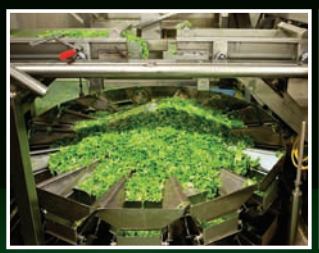
Lowest Cost Of Ownership

Easy To Install

No Special Tools

2012 Product Catalog





A division of CALPIPE INDUSTRIES™ Incorporated

calbrite.com

Broadest Selection. Better Response. Best Performance.

Headquartered in Hammond, IN, Calbrite™ is the leading name in stainless steel conduit systems for harsh and corrosive environments. We provide the largest stainless steel conduit systems offering in the industry, with over 2,800 SKUs manufactured to strict guidelines set forth by UL and NEMA. Many of our products are ARRA-compliant.

Calbrite supports its customers throughout the US and Canada from three manufacturing and distribution centers in the U.S. Calbrite is committed to providing quality products with the shortest lead times, combined with friendly, personal, and reliable service. If you have a need for a unique product, or need a product converted to stainless steel, we can work with you to develop custom products quickly and at a competitive price.

Our quality assurance program complies with industry standards established by Underwriters Laboratories (UL), ANSI, and NEMA.

UL listings:

- Approval file number for stainless rigid conduit, nipples, elbows and couplings is E230584 (ANSI / UL6A)
- Approval file number for stainless conduit bodies is E307133 (ANSI / UL 514A)
- Approval file number for stainless steel locknuts is E308159 (ANSI / UL 514B)

Many of our products are produced to NEMA 4X standards, which ensures protection against corrosion, wind-blown dust and rain, splashing water, hose-directed water and damage from external ice formation in outdoor or indoor environments.

Calbrite stainless steel durability, cost-effectiveness, and design flexibility makes it the preferred choice for a range of applications and industries.

Food and Beverage

Our stainless steel conduit, fittings, and applicable accessories are ideal for food and beverage processing applications due to stainless steel's ability to stand up to the often acidic content of wash-down chemicals commonly used in these environments. Cleaning agents and chemical disinfectants can quickly corrode other equipment, promoting bacterial growth and enabling food contamination. Stainless steel is a safer, more hygienic choice in these applications as it provides resistance to pitting and stress corrosion cracking, and is easily sterilized to prevent bacteria growth.

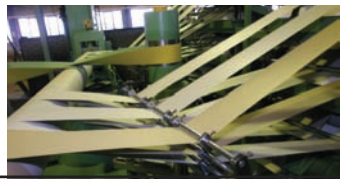
- There are typically three constants and requirements when working with food or beverage processing work stations and equipment: extremely easy to clean, corrosion and damage resistance, and easy to sanitize. Cleanliness and hygiene are critical in these environments, and stainless steel has proven to have a wide range of preferred qualities in comparison to traditional conduit systems used, such as galvanized, aluminum and PVC Coated.
- The smooth, polished surface of Calbrite's stainless conduit and fittings not only promote cleanliness, but also greatly reduce the risk of corrosion.

Pharmaceutical, Petrochemical, and Chemical Industries

Stainless steel resists corrosion in aqueous, gaseous and high-temperature environments, maintains its mechanical properties in all temperatures and its long-term value attribute allows for substantial cost savings. In these applications, use of acidic, toxic and flammable chemical combinations can rapidly deteriorate traditional conduit systems.

Stainless steel's corrosion-resistance, weld ability, strength, ductility, fabrication versatility and composition stability can significantly guard against product contamination. It is also important that the surfaces of the conduit and fittings are smooth, easy to maintain and clean, to minimize microbial contamination, reduce corrosion and prevent the adherence of particulates to the surfaces of the equipment and product.

Systems for Harsh Environments



Pulp & Paper

In pulp and paper applications, stainless steel is used extensively because of its good mechanical properties and its resistance to liquor used in the process. These benefits will become even more of a priority as pulp mills move into the realm of bio-refineries.

Stainless steel's properties prevent contamination of the end product and are resistant to process corrosion. Although the process is mostly standard at all mills, there can be small mill-to-mill differences that may affect levels of corrosion. Stainless steel is able to withstand these differences in a stable, uniform manner that makes it the most reliable choice for these applications.

Some of the more common applications for stainless steel conduit in the pulp and paper industry include:

- Batch and continuous digesters
- Brown stock washers
- Black liquor equipment and tanks and recovery circuits
- Bleach plant
- Lime kiln (for high temperature properties)
- Air and water pollution control equipment
- Waste paper recycling
- Stock preparation equipment
- Paper machines including suction rolls

Water and Waste Water

In recent years, the use of stainless steel in water and wastewater treatment plants (WWTP) has grown significantly, as type 304 and 316 grades are increasingly utilized as standard materials of construction due to superior performance and cost-saving factors. A WWTP is a complex, sophisticated system with a high-level of standards for the entire plant, including technical installations. The materials needed to construct a WWTP must be able to withstand the wide range of corrosive conditions.

For a clean, environmentally safe and cost-effective plant, there is no better material than stainless steel. Stainless steel will improve efficiency, reduce maintenance, and in many cases, provide the most cost-effective solution.

Benefits to this industry include:

- Corrosion resistance to a wide range of waters, chemicals, such as Hydrogen Sulphide (H2S)
- A protective layer forms naturally on all stainless steels because of the inclusion of chromium. Even if damaged and oxygen is present, the invisible passive layer self-heals and protects the steel from corrosion, ensuring a long life
- Stainless steel is not harmful to people during its production or use, recycling and ultimate disposal
- Good strength and ductility
- Ease of fabrication
- Lightweight and easy to transport
- Availability in a wide range of product forms
- Durability
- Fully recyclable

Architecture, Building & Construction

Stainless steel is the foremost material choice in building projects primarily for its aesthetic and performance reasons. While the non-corrosive material provides an impressive looking finish that requires no maintenance as well as design flexibility, the durability provides strength and is resistant to fire and water damage, making it a practical choice for public and industrial structures.

Power Plants, Energy & Power Generation

Whether the form of energy production is nuclear, fossil or renewable, safety, long-term value and efficiency are the utmost concerns for energy and power generation companies with the nuclear power industry requiring absolute reliability. These characteristics are provided by high quality stainless steel.

Stainless steel is now extensively used in the power generation industry to combat corrosion, particularly at elevated temperatures. In particular, type 304 & 316 stainless are used for high temperature, strength and oxidation resistance in fossil fuelled power plants.

The nuclear power industry also uses large quantities of stainless, often specified for both power generation and radiation containment. Steam and gas turbines also use stainless because of its corrosion-resistant and heat-resistant qualities.

Stainless Steel in Harsh Environments

Non-corrosive. Durable. UL-approved.

Stainless steel is the highest quality, most durable, easiest to install, UL-approved conduit material available. Corrosion damages equipment, which results in downtime and expensive maintenance and repairs. That's why stainless steel conduit systems, designed for harsh environments, are the material of choice for a wide range of industries.

- Corrosion-resistance. Both 304 and 316 stainless steel alloys provide excellent resistance to corrosives, at extreme temperatures and in most industrial environments. When scratched, stainless steel's exposed metal "self-heals", oxidizing over the abrasion to protect against further corrosion.
- Longevity. The durability of a stainless steel conduit system, frequently in excess of 50 years, reduces the need for costly maintenance or replacement needs, providing long-term protection for your facility and optimizing your equipment investment.
- Lowest total cost of ownership. For many applications, stainless steel has the lowest maintenance cost and the lowest total lifecycle cost of any other UL-approved conduit material. This is due to the durability of stainless steel. It will outlast other materials, require little, if any, maintenance, and is easy to install (contractors only need their standard tools).
- Environmentally-friendly. Stainless steel retains structural and anti-corrosive properties in temperatures ranging from cryogenic to hundreds of degrees and does not burn and emit dangerous smoke and carcinogens. Additionally, stainless steel is recyclable.
- Easy to install. Calbrite stainless steel conduit and fittings do not require installers to use special tools or labor-intensive procedures for installation, and stainless is in full NEC compliance for all facilities.

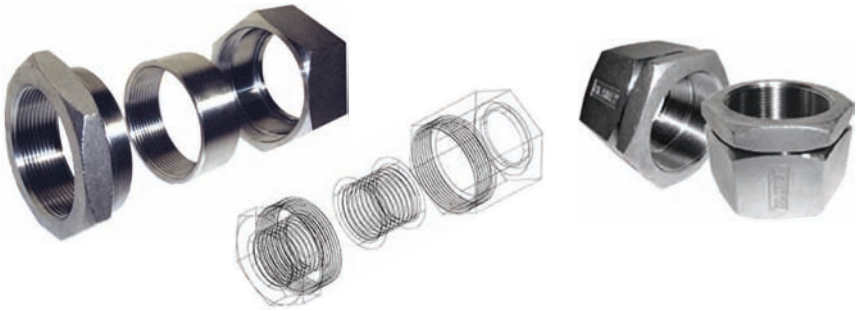
The Calbrite Difference

Known for our custom machining and fabrication capabilities and developing products that meet specific customer requirements, we take pride in being able to listen and understand our customers' special requests and quickly respond with solutions designed to meet their needs. With manufacturing and distribution centers in Indiana, California and Florida, we have established a customer-centric product development process that enables us to react and respond to custom requirements with the shortest lead times in the industry.

If you don't find the exact part you are looking for in our product catalog, call us (800-536-2248) and we'll develop a special solution for you…fast.

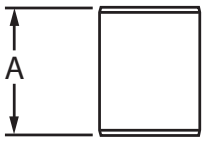
3-PIECE STAINLESS STEEL COUPLINGS (Union) (Type 316SS)

3-Piece Couplings			
Trade Size	**Metric Size**	**Wt. (lbs)**	**Part Number**
½"	16	0.44	S605003U00
¾"	21	0.58	S607003U00
1"	27	0.94	S610003U00
1-¼"	35	1.25	S612003U00
1-½"	41	1.47	S615003U00
2"	53	2.27	S620003U00



STAINLESS STEEL COUPLINGS (Type 316SS)

Standard Couplings				
Trade Size	**Metric Size**	**Wt. (lbs)**	**A**	**Part Number**
½"	16	0.17	1.570"	S60500CP00
¾"	21	0.29	1.630"	S60700CP00
1"	27	0.34	2.000"	S61000CP00
1-¼"	35	0.51	2.050"	S61200CP00
1-½"	41	0.61	2.063"	S61500CP00
2"	53	0.90	2.125"	S62000CP00
2-½"	63	1.87	3.190"	S62500CP00
3"	78	1.93	3.250"	S63000CP00
4"	103	3.97	3.540"	S64000CP00



STAINLESS STEEL GROUNDING HUBS (Type 316SS)

Grounding Hubs	
Trade Size	**Part Number**
½"	S60500LTV2
¾"	S60700LTV2
1"	S61000LTV2
1-¼"	S61200LTV2
1-½"	S61500LTV2
2"	S62000LTV2
2-½"	S62500LTV2
3"	S63000LTV2
4"	S64000LTV2

STAINLESS STEEL LINE TERMINATOR HUBS (Type 316SS)

LT Hubs								
Trade Size	**Metric**	**Wt. (lbs)**	**A**	**B**	**a**	**T1**	**T2**	**Part Number**
½"	16	0.19	1.580"	1.625"	0.625"	1.040"	0.770"	S60500LT00
¾"	21	0.25	1.525"	1.875"	0.625"	1.280"	0.980"	S60700LT00
1"	27	0.45	1.830"	2.125"	0.650"	1.600"	1.240"	S61000LT00
1-¼"	35	0.67	2.050"	2.500"	0.850"	1.970"	1.580"	S61200LT00
1-½"	41	0.72	2.070"	2.625"	0.870"	2.210"	1.820"	S61500LT00
2"	53	1.08	2.100"	3.125"	0.800"	2.750"	2.300"	S62000LT00
2-½"	63	1.91	2.250"	3.625"	0.850"	3.310"	2.730"	S62500LT00
3"	78	2.43	2.880"	4.375"	0.930"	3.880"	3.350"	S63000LT00
4"	103	4.09	3.180"	5.500"	1.060"	5.000"	4.340"	S64000LT00