

Future Proof Flange Technology

The CTS Flange Advantage



Available in both Insulated EPDM and Copper Coated, CTS Flanges guarantee 100% electrolysis protection above and below ground.

CTS Flange is proud to be a supplier of high quality flange products for major industrial, commercial and mechanical plumbing projects across the USA for over 50 years. CTS are the trusted partner in high profile projects including data centers with sensitive non-disclosure agreements.

CTS Flanges are and always have been Lead Free and certified to comply with NSF requirements. CTS easy installation saves time and saves money, and incurs no extra costs such as dielectric insulators, making CTS the leader in its field. Applications include all butterfly and flanged gate valve installations, along with pumps, boilers, chillers and back-flow devices.

CTS is the leader in its field. Don't risk it, use CTS Flange.

- Completely Lead Free, complies with NSF Requirements
- No Cracking or Warping due to Overheating or Cooling too Rapidly
- Easy Installation, Heating & Cooling Time Reduced
- Save Money on Gases, Solder and Dielectric Insulators
- Choice of EPDM Insulated or Copper Coated Flange



Certified to NSF/ANSI/CAN 61 & 372



Standard Flange



Copper Coated Flange



Press Fit Flange



Rolled Groove Flange



CTS EPDM Insulated Flanges

CTS EPDM Flanges are an innovative, labor saving and inexpensive method of making anti-electrolysis steel flange connections whenever using copper tube.

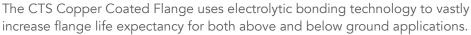
The CTS EPDM Flange is a fully floating flange which uses a copper fitting brazed/soldered directly to the copper tube, backed by a fully floating powder coated steel flange fitted with an EPDM insulator. The integral insulator allows the CTS flange to offer 100% protection against electrolysis by separating the two dissimilar metals.

- EPDM Insulator guarantees 100% Electrolysis
 Protection above and below ground
- No dielectric insulators needed
- Lower installation cost
- Temperature range from -66°F to 272°F
- Available in 1½" through to 8" Solder 125/150lb and 300lb
- Available 2" through 4" Press Fit 125/150lb and 300lb
- Available 2" through 6" Rolled Groove 125/150lb and 300lb



CTS Copper Coated Flanges

The CTS Copper Coated Flange Copper to Copper bonding eliminates the risk of electrolysis and increases flange durability with no insulator required.



The process ensures a long lasting molecular bond between the copper layer and the steel flange, eliminating the need to use an EPDM insulator for the flange insert.

- No EPDM required copper on copper eliminates the risk of electrolysis occurring between insert and flange
- Ideal for harsh environments, either in ground or exposed to aggressive atmospheric conditions
- Suitable for water, gas, steam and other high pressure copper applications both above and below ground
- 150lb rating, sizes $1\frac{1}{2}$ " 6"
- Copper component manufactured to ASME 16.22
- Backing flange manufactured to ASTM B16.5





Suits Extreme Environments with No Insulator Required

125/150lb Standard Flange



Size	Code	Working Pressure	Flange Material	Insert Material	Weight
1.5"	BF015	450 PSI	Powder Coated Steel	Copper	3.7lb
2"	BF002	450 PSI	Powder Coated Steel	Copper	4.4lb
2.5"	BF025	450 PSI	Powder Coated Steel	Copper	6.2lb
3″	BF003	450 PSI	Powder Coated Steel	Copper	7.0lb
4"	BF004	450 PSI	Powder Coated Steel	Copper	11.0lb
5"	BF005	450 PSI	Powder Coated Steel	Copper	14.2lb
6"	BF006	450 PSI	Powder Coated Steel	Copper	19.0lb
8″	BF008	450 PSI	Powder Coated Steel	Copper	30.1lb

300lb Standard Flange



Size	Code	Working Pressure	Flange Material	Insert Material	Weight
1.5"	WBG3015	450 PSI	Powder Coated Steel	Copper	5.1lb
2"	WBG3020	450 PSI	Powder Coated Steel	Copper	6.0lb
2.5"	WBG3025	450 PSI	Powder Coated Steel	Copper	8.8lb
3″	WBG3030	450 PSI	Powder Coated Steel	Copper	11.6lb
4"	WBG3040	450 PSI	Powder Coated Steel	Copper	19.4lb
5"	WBG3050	450 PSI	Powder Coated Steel	Copper	24.6lb
6"	WBG3060	450 PSI	Powder Coated Steel	Copper	32.8lb
8″	WBG3080	450 PSI	Powder Coated Steel	Copper	53.9lb

Press Fit Flanges

125/150lb Press Fit Flange



Size	Code	Working Pressure	Flange Material	Insert Material	Weight
2"	SF002	450 PSI	Powder Coated Steel	Copper	5.0lb
2.5"	SF025	450 PSI	Powder Coated Steel	Copper	7.2lb
3"	SF003	450 PSI	Powder Coated Steel	Copper	8.2lb
4"	SF004	450 PSI	Powder Coated Steel	Copper	12.6lb

300lb Press Fit Flange



Size	Code	Working Pressure	Flange Material	Insert Material	Weight
2"	SFLW3020	450 PSI	Powder Coated Steel	Copper	6.5lb
2.5"	SFLW3025	450 PSI	Powder Coated Steel	Copper	10.3lb
3"	SFLW3030	450 PSI	Powder Coated Steel	Copper	13.1lb
4"	SFLW3040	450 PSI	Powder Coated Steel	Copper	23.3lb



125/150lb Rolled Groove Flange



Size	Code	Working Pressure	Flange Material	Insert Material	Weight
2"	WRG1020	450 PSI	Powder Coated Steel	Copper	4.4lb
2.5"	WRG1025	450 PSI	Powder Coated Steel	Copper	6.2lb
3″	WRG1003	450 PSI	Powder Coated Steel	Copper	7.0lb
4"	WRG1004	450 PSI	Powder Coated Steel	Copper	11.0lb
5″	WRG1005	450 PSI	Powder Coated Steel	Copper	14.3lb
6"	WRG1006	450 PSI	Powder Coated Steel	Copper	19.0lb

300lb Rolled Groove Flange



Size	Code	Working Pressure	Flange Material	Insert Material	Weight
2"	WRG3020	450 PSI	Powder Coated Steel	Copper	6.0lb
2.5"	WRG3025	450 PSI	Powder Coated Steel	Copper	8.8lb
3"	WRG3030	450 PSI	Powder Coated Steel	Copper	11.6lb
4"	WRG3040	450 PSI	Powder Coated Steel	Copper	19.4lb
5"	WRG3050	450 PSI	Powder Coated Steel	Copper	24.6lb
6"	WRG3060	450 PSI	Powder Coated Steel	Copper	32.8lb

125/150lb Black Steel Rolled Groove Flange



Size	Code	Working Pressure	Flange Material	Insert Material	Weight
2"	BSRG002	450 PSI	Plate Steel	NA	5.3lb
2.5"	BSRG025	450 PSI	Plate Steel	NA	7.6lb
3"	BSRG003	450 PSI	Plate Steel	NA	8.8lb
4"	BSRG004	450 PSI	Plate Steel	NA	15.0lb
5"	BSRG005	450 PSI	Plate Steel	NA	18.7lb
6"	BSRG006	450 PSI	Plate Steel	NA	24.2lb
8″	BSRG008	450 PSI	Plate Steel	NA	35.6lb
10"	BSRG010	450 PSI	Plate Steel	NA	54.4lb



125/150lb Copper Coated Standard Flange



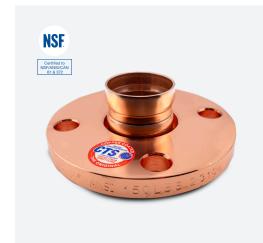
Size	Code	Working Pressure	Flange Material	Insert Material	Weight
1.5"	CC015	450 PSI	Copper Coated Steel	Copper	3.7lb
2"	CC002	450 PSI	Copper Coated Steel	Copper	4.4lb
2.5""	CC025	450 PSI	Copper Coated Steel	Copper	6.2lb
3"	CC003	450 PSI	Copper Coated Steel	Copper	7.0lb
4"	CC004	450 PSI	Copper Coated Steel	Copper	11.0lb
5"	CC005	450 PSI	Copper Coated Steel	Copper	14.2lb
6"	CC006	450 PSI	Copper Coated Steel	Copper	19.0lb

125/150lb Copper Coated Press Fit Flange



Size	Code	Working Pressure	Flange Material	Insert Material	Weight
2"	CCSF002	450 PSI	Copper Coated Steel	Copper	6.1lb
2.5"	CCSF025	450 PSI	Copper Coated Steel	Copper	8.2lb
3"	CCSF003	450 PSI	Copper Coated Steel	Copper	8.7lb
4"	CCSF004	450 PSI	Copper Coated Steel	Copper	14.8lb

125/150lb Copper Coated Rolled Groove Flange



Siz	e	Code	Working Pressure	Flange Material	Insert Material	Weight
2"	,	CCRG002	450 PSI	Copper Coated Steel	Copper	4.2lb
2.5	"	CCRG025	450 PSI	Copper Coated Steel	Copper	5.4lb
3"	,	CCRG003	450 PSI	Copper Coated Steel	Copper	8.0lb
4"	,	CCRG004	450 PSI	Copper Coated Steel	Copper	12.0lb
5"	,	CCRG005	450 PSI	Copper Coated Steel	Copper	15.1lb
6"	,	CCRG006	450 PSI	Copper Coated Steel	Copper	19.7lb



Typical Applications

CTS Flanges are used in a variety of applications for industrial, commercial, mechanical and residential developments, including high profile projects such as data centers with sensitive non-disclosure agreements. The time saving advantage of a CTS Flange installation increases job profitability and saves the cost of materials such as gas and solder.

Typical time savings of between 20-30 minutes per valve can be achieved. On an installation where 30-40 plus flanges are required time savings in excess of 10-15 hours can be achieved. Benefits to the customer include longer life span and significantly lower maintenance costs due to electrolysis protection.





Copper Coated 150lb flange to butterfly valve



Copper Coated out of equipment to Y strainer



Copper Coated flange to check valve



High Pressure mains water supply to main generator



High pressure heavy gauge 150lb divertor valve



Main fire suction pump using stainless braided flex connectors with 150lb flanges

Flange Installation Process

The CTS Flange Adapter saves time and money on the construction site. Being very easy and quick to install the fitting provides 100% protection against electrolysis and in addition to saving labor costs also saves on consumables - gas, flux, etc. CTS Flanges can be installed by brazing/soldering or by using the Press Fit method with a crimping tool.



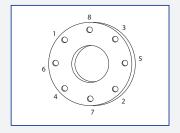
Place CTS Flange over tube



Braze/Solder the CTS Flange adaptor



Install a suitable isolating gasket between adapter and equipment. Rotate CTS Flange to align bolt holes and tighten



Install Notes:

Complete installation in correct torque tightening sequence.

The steel flange should be 15" from the heat source to eliminate any chance of burning the rubber electrolysis insulator.



Use the simple, quick Press Fit method

