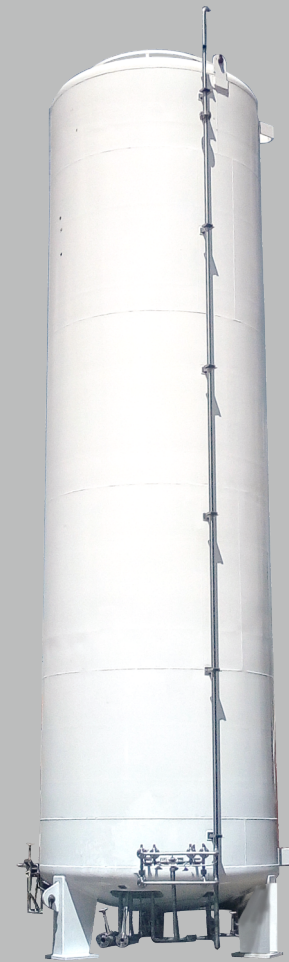


Tanques Criogénicos Verticales para Gas Natural Líquido

Vertical Cryogenic Tanks for Liquid Natural Gas



ARCOSA
TANK



CAPACIDAD / CAPACITY

DIMENSIONES EXTERIORES / OUTSIDE DIMENSIONS

| Modelo Type | Volumen Total Gross Capacity | | Volumen Neto Net Capacity | | Diámetro Exterior Outside Diameter | | Altura Total Overall Height | | Peso Vacío Empty Weight | |
|-------------|------------------------------|--------------|---------------------------|--------------|------------------------------------|---------|-----------------------------|---------|-------------------------|--------|
| | Gal / Gall | Lts / Liters | Gal / Gall | Lts / Liters | Pulg / In | mm / mm | Pulg / In | mm / mm | Lbs/Pounds | Kg /Kg |
| 1500 | 1,612 | 6,101 | 1,531 | 5,796 | 74.5 | 1,892 | 194 | 4,928 | 7,597 | 3,446 |
| 3000 | 3,200 | 12,112 | 3,040 | 11,506 | 96 | 2,438 | 206 | 5,232 | 11,852 | 5,376 |
| 6000 | 6,015 | 22,767 | 5,774 | 21,856 | 96 | 2,438 | 331 | 8,407 | 18,349 | 8,323 |
| 9000 | 9,385 | 35,522 | 9,010 | 34,101 | 124 | 3,150 | 326 | 8,280 | 25,113 | 11,391 |
| 11000 | 11,391 | 43,115 | 10,935 | 41,390 | 124 | 3,150 | 380 | 9,652 | 28,784 | 13,056 |
| 13000 | 13,499 | 51,094 | 13,094 | 49,561 | 124 | 3,150 | 436 | 11,074 | 32,699 | 14,832 |
| 15000 | 15,601 | 59,050 | 15,133 | 57,278 | 124 | 3,150 | 494 | 12,548 | 39,011 | 17,695 |

MAWP = 250 PSI 17.58 Kg/cm² AS STANDARD*
MDMT = -320 °F -195.6 °C

Arcosa Industrias de México, S. de R.L. de C.V.
Monte Pelvoux 111 Piso 7 Col. Lomas de Chapultepec, C.P. 11000 México, D.F.
Tel: (52)-(55) 5201-7000 / LADA SIN COSTO: 01-800-715-93-45
www.tatsa.com.mx

Características Generales

General Specifications

CODIGO DE DISEÑO

Tanque interno diseñado de acuerdo a Código ASME Sección VIII, Div.1, Última Edición, y al Apéndice 44 "Cold stretching", Estampa "U".

Tanque Exterior diseñado de acuerdo a CGA-341, última edición (tanque no estampado).

MATERIALES

Tanque Interior : Acero Inoxidable, SA-240-T304.
 Tubería Interior : Acero inoxidable, SA-312-304.
 Tanque Exterior : Acero al carbón, SA-36 / SA-285 C.
 Soportes : Acero al carbón, SA-36.
 Orejas de Izaje : Acero al carbón, SA-36.
 Tubería Exterior : Tubería de acero inoxidable, SA-312-304.
 Válvulas : Acero inoxidable.
 Regulador de presión : Bronce.
 Elevo de presión : Vaporizador de tubo aletado de aluminio / interior acero inoxidable.

SISTEMA DE AISLAMIENTO

Super Aislamiento y vacío en espacio anular.

* Se ofrece como estándar tanque interno a una MAWP de 250 psi.

DESIGN CODE

Inner Vessel designed according ASME Code Sección VIII, Div. 1 latest Edition, and Appendix 44 "Cold stretching", "U" Stamp

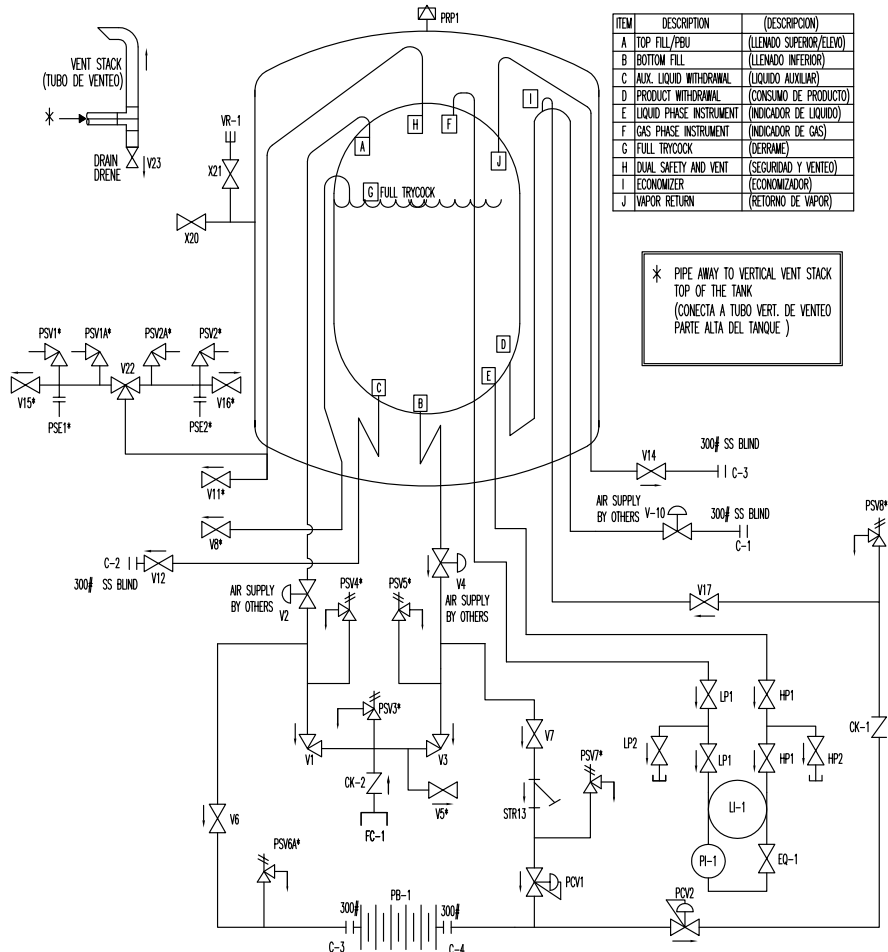
Outer jacket designed according CGA-341 Pamphlet, latest edition (outer jacket non stamped)

MATERIALS

Inner Vessel : Stainless steel, SA-240-T304.
 Inner Pipe : Stainless steel, SA-312-304.
 Outer Jacket : Carbón Steel, SA-36 / SA-285 C.
 Supports : Carbon Steel, SA-36.
 Lifting Lug : Carbon Steel, SA-36.
 External Piping : Stainless Steel, SA-312-304.
 Valves : Stainless steel.
 Pressure Regulator : Bronze.
 Pressure Build-Up : Vaporizer, aluminium Finned pipe.

INSULATION SYSTEM

Multi-layer Insulation, and full vacuum.



| ITEM | DESCRIPTION | (DESCRIPCION) |
|------|-------------------------|--------------------------|
| A | TOP FILL/PBU | (LLENADO SUPERIOR/ELEVO) |
| B | BOTTOM FILL | (LLENADO INFERIOR) |
| C | AUX. LIQUID WITHDRAWAL | (LIQUIDO AUXILIAR) |
| D | PRODUCT WITHDRAWAL | (CONSUMO DE PRODUCTO) |
| E | LIQUID PHASE INSTRUMENT | (INDICADOR DE LIQUIDO) |
| F | GAS PHASE INSTRUMENT | (INDICADOR DE GAS) |
| G | FULL TRYCOCK | (DERRAME) |
| H | DUAL SAFETY AND VENT | (SEGURIDAD Y VENTEO) |
| I | ECONOMIZER | (ECONOMIZADOR) |
| J | VAPOR RETURN | (RETORNO DE VAPOR) |

* PIPE AWAY TO VERTICAL VENT STACK TOP OF THE TANK (CONECTA A TUBO VERT. DE VENTEO PARTE ALTA DEL TANQUE)

Última revisión: México, D.F. 5 de Marzo del 2019.

Last Revision: Mexico, D.F. March 5th 2019.

| ITEM | DESCRIPTION | QTY | SERVICE |
|----------|--|-----|---|
| C-1 | LIQUID WITHDRAWAL CONNECTION 300 FLANGE | 01 | BLIND FLANGED, LIQUID WITHDRAWAL |
| C-2 | AUXILIAR LIQUID WITHDRAWAL CONNECTION 300 FLANGE | 01 | BLIND FLANGED, AUX LIQUID WITHDRAWAL |
| C-3 | VAPOR RETURN CONNECTION, 300 FLANGE | 01 | BLIND FLANGED VAPOR RETURN CONNECTION |
| CK-1 | CHECK VALVE | 01 | ECONOMIZER LINE CHECK VALVE |
| CK-2 | CHECK VALVE | 01 | FILL CONNECTION |
| EQ-1 | NEEDLE VALVE | 01 | CONTENT GAUGE ISOLATION VALVE |
| FC-1 | 3-1/4" ACME THREAD, MALE, FILL CONN BRASS, W/TEFLON GASKET | 01 | FILL CONNECTION |
| HP-1/2 | NEEDLE VALVE | 03 | LIQUID CONTENT GAUGE ISOLATION VALVE |
| LP-1/2 | NEEDLE VALVE | 03 | VAPOR CONTENT GAUGE ISOLATION VALVE |
| LP-1/2 | NEEDLE VALVE | 03 | VAPOR CONTENT GAUGE ISOLATION VALVE |
| U-1 | DIFFERENTIAL PRESSURE LEVEL INDICATOR | 01 | LEVEL INDICATOR 6" DIAM. FACE |
| PI-1 | PRESSURE INDICATOR 2" FACE, 1/4" NPT | 01 | PRESSURE INDICATOR |
| PB-1 | ATMOSPHERIC PRESSURE BUILDING VAPORIZER, SS TUBING-LINED | 01 | PRESSURE BUILD UP |
| PSE1 | RUPTURE DISK, SET 375 PSI AT 68°F | 01 | INNER VESSEL RUPTURE DISK |
| PSE2 | RUPTURE DISK, SET 375 PSI AT 68°F | 01 | INNER VESSEL RUPTURE DISK |
| PSV1/2 | PRESSURE RELIEF VALVE, | 02 | INNER VESSEL PRESSURE RELIEF, PRIMARY |
| PSV1A/2A | PRESSURE RELIEF VALVE, | 02 | INNER VESSEL PRESSURE RELIEF, SECONDARY |
| PCV1 | PRESSURE REGULATOR, ACME TYPE B | 01 | PB LINE, PRESSURE REGULATOR |
| PCV2 | BACK PRESSURE REGULATOR, ACME TYPE FR | 01 | ECONOMIZER LINE BACK PRESSURE REGULATOR |
| PCV3 | THERMAL EXPANSION RELIEF VALVE | 01 | FILL THERMAL RELIEF VALVE |
| PCV4 | THERMAL EXPANSION RELIEF VALVE | 01 | TOP FILL THERMAL RELIEF VALVE |
| PCV5 | THERMAL EXPANSION RELIEF VALVE | 01 | BOTTOM FILL THERMAL RELIEF VALVE |
| PCV6A | THERMAL EXPANSION RELIEF VALVE | 01 | PB THERMAL RELIEF VALVE |
| PCV7 | THERMAL EXPANSION RELIEF VALVE | 01 | PB REGULATOR THERMAL RELIEF VALVE |
| PCV8 | THERMAL EXPANSION RELIEF VALVE | 01 | ECONOMIZER THERMAL RELIEF VALVE |
| STR13 | STRAINER TYPE "Y" | 01 | PRESSURE BUILDING STRAINER |
| V1 | GLOBE VALVE ANGLE TYPE | 01 | TOP FILL VALVE |
| V2 | BALL VALVE, W/ PNEUMATIC ACTUATOR, NC | 01 | TOP FILL EMERGENCY SHUT-OFF VALVE |
| V3 | GLOBE VALVE ANGLE TYPE | 01 | BOTTOM FILL VALVE |
| V4 | BALL VALVE, W/ PNEUMATIC ACTUATOR, NC | 01 | BOTTOM FILL EMERGENCY SHUT-OFF VALVE |
| V5 | GLOBE VALVE | 01 | FILL LINE PURGE VALVE |
| V6 | GLOBE VALVE | 01 | PRESSURE BUILD OUT ISOLATION VALVE |
| V7 | GLOBE VALVE | 01 | PRESSURE BUILD IN ISOLATION VALVE |
| V8 | GLOBE VALVE | 01 | FULL TRYCOCK |
| V10 | BALL VALVE, W/ PNEUMATIC ACTUATOR, NC | 01 | VAPOR RECOVERY EMERGENCY SHUT-OFF |
| V11 | GLOBE VALVE | 01 | TANK BLOWDOWN VALVE |
| V12 | GLOBE VALVE | 01 | AUXILIAR LIQUID VALVE |
| V14 | GLOBE VALVE | 01 | PUMP VAPOR RETURN VALVE |
| V15 | NEEDLE VALVE | 01 | RELIEF LINE PURGE VALVE |
| V16 | NEEDLE VALVE | 01 | RELIEF LINE PURGE VALVE |
| V17 | GLOBE VALVE | 01 | ECONOMIZER ISOLATION VALVE |
| V22 | DIVERTER VALVE | 01 | DUAL SAFETY |
| V23 | LOW-POINT CONDENSATION DRAIN VALVE | 01 | DRAIN CONDENSATION, FNPT |
| X20 | DIAPHRAGM VALVE, 1 1/2" NPS, ITT DIA-FLO, 2402-M-903-VAC | 01 | VACUUM PUMP OUT VALVE |
| X21 | BELLOWS GLOBE VALVE, 1/8" NPS, HOME, MOD. 4551 F2B | 01 | VACUUM PROBE ISOLATION VALVE |
| VR-1 | VACUUM PROBE, TELEDYNE, MOD. DV-GR | 01 | VACUUM PROBE |
| PRP1 | RELIEF DEVICE | 01 | VACUUM JACKET RELIEF DEVICE |