

Busan Main Tourist Zone



BUYOUNG CST CO., LTD.



BU YOUNG CST BROCHURE

Since established in 1999, Bu Young CST Co., Ltd. Has specialized in manufacture of high-pressure gas storage tanks and vaporizers. Then, we're expanding business scope into high-value products including tank lorries and cryogenic storage tanks.

www.bycst.com



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GREETINGS

Since established BUYOUNG Machinery in 1999, BUYOUNG CST Co., Ltd. has specialized in manufacture of high-pressure gas storage tanks and vaporizers. We are expanding business scope into high-value products including tank lorries and cryogenic storage tanks.

We are one of the world's leading manufacturers supplying high-pressure gas storage tanks and are recognized as a top technological company especially in the field of cryogenic storage tanks.

We have devoted our efforts into development of liquefied gas, vaporizing equipment, cryogenic globe valve, differential pressure digital level meter, liquefied-gas vaporizer using cooling water by waste heating and apparatus for preventing liquid from leaking of electric heating-hot water-type vaporizer. Approved for ISO 9001, certification of technical innovation SME(INNO-BIZ), Venture Enterprise, etc., we not only improve credibility of our products through systematic quality control but also based on our quality system for supplementary services, we concentrate all our competencies in producing cryogenic storage tanks and diversifying high pressure gas related products.

■ BUYOUNG CST CO., LTD. CEO CHOI, DONG JOON



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- CRYOGENIC TANK LORRY
- ATMOSPHERIC VAPORIZER
- ELECTROTHERMAL HOT WATER CARBURETOR VAPORIZER
- DIFFERENTIAL PRESSURE DIGITAL LEVEL METER
- CRYOGENIC GLOBE VALVE



HISTORY

2000.01. Registered as a manufacturer of high-pressure gas equipment

2000.07. Utility model registration : A apparatus for preventing liquid from leaking of electric heating-hot water-type vaporizer

2001.01. Registered a patent for practical new designs of liquefied gas using waste heat coolant

2001.09. Registered as Venture Enterprise

2002.08. Acquired ISO 9001 certification for quality management system

2002.09. Registered a patent for practical new designs of sound attenuator for gas exhaust
Registered a patent for practical new designs of vacuum valve devices of vacuum tanks

2002.12. Registered a utility model for practical new designs of Cryogenic storage tanks

2005.03. Registered a patent for practical new designs of Cryogenic storage tanks

2006.10. Acquired a certification of technical innovation SME (INNO-BIZ)

2006.12. Acquired a certification of mechanical parts & materials industry leading company in Busan

2007.06. Awarded as an excellent SME by Busan and Ulsan Small and Medium Business Administration

2007.06. Changed the company name to BUYOUNG CST CO., LTD.

2007.07. Registered Gas Facility Execution Business (Class 1)

2010.04. Acquired ASME “U” & “S” STAMP

2010.11. Acquired a certification of R&D dept.

2012.04. Acquired a Certificate of NEW EXCELLENT TECHNOLOGY (NET)

2013.05. Acquired a certification of Clean Factory (CLEAN)

Registered a program – Digital level meter (BY-LM-2), Registered a patent – Liquid remaining amount measuring device

2013.08. Registered a patent for extra low temperature globe valve

2013.10. Awarded the wright of monthly by The Minister ministry of Employment and Labor

2013.11. New Technology and National Development National Merit Award – The Minister of Industry and Trade

2014.05. Certified Risk assessment excellent work place

2014.08. Constituted Korean Master hand (Gas)

2014.12. Certified Promising Export Firm

2015.03. CE Certification – Globe valve

2015.07. Awarded the Excellent Entrepreneur of Busan Prize by the Mayor of Busan

2015.09. Awarded the Meritorious Man of Vocational Competency Development Industrial Citation by the President of Korea

2015.12. Designated SME of Human Resources Development

2016.04. Designated Korea National Ppuri(root-technology) Industry (Core Root-technology: Welding Technology of Plant Core Materials)

2017.01. Acquire BV certification

2017.06. Awarded a great prize for safety culture 2017

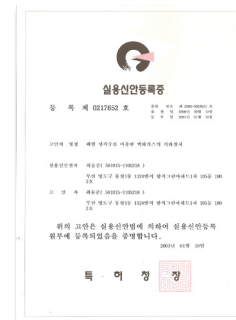
2017.09. Awarded the Prime Minister's commendation of Innovative technology fair by Ministry of Public Administration and Security

2019.03. Registered a patent of A device for producing hydrogen-alkali-reduced water

CERTIFICATION



Utility model
(Liquid leakage prevention device)



Utility model
(Vaporizer)



Utility model
(Sound attenuator)



Utility model
(Vacuum valve device)



Patent
(Cryogenic vessel)



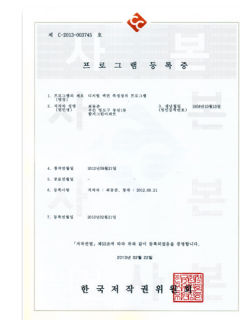
Patent
(Liquid remaining amount measuring device)



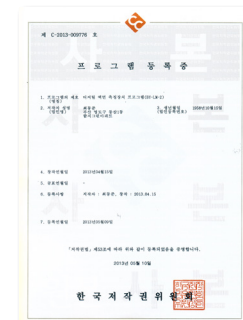
Patent
(Extra low temperature globe valve)



Design registration
(Digital measuring device)



Program Registration
(Differential Pressure Digital Level Meter-1)



Program Registration
(Differential Pressure Digital Level Meter-1)



Certification
(Quality management system (ISO 9001))



Certification (CE)



Certification
(ASME U STAMP)



Certification
(The National Board)



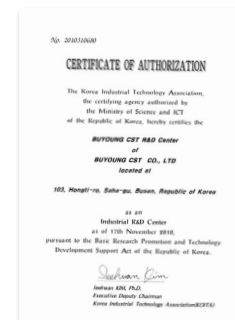
NET (New Excellent Technology)



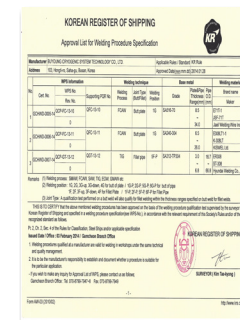
Certification
(ABS)



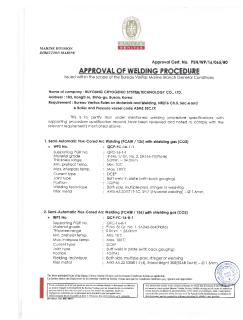
Certification
(DNV)



Certification
(Research Institute)



Certification
(KR)



Certification
(BV)

PRODUCTS

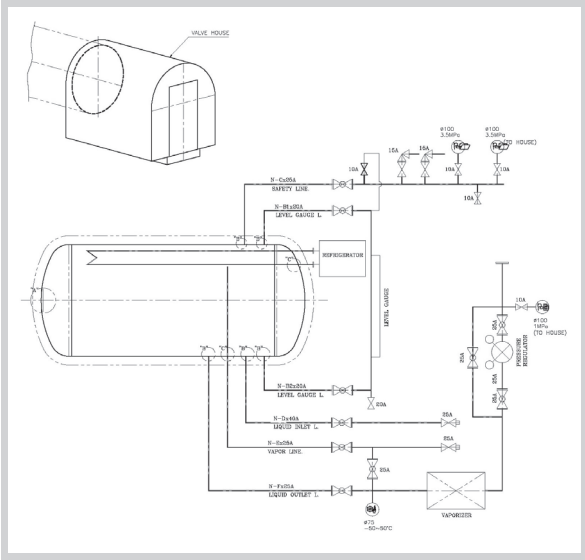
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L-CO₂ Storage Tank (Horizontal Type)

Design Pressure 2.3MPa	Height 2,150 ~ 3,175mm
Volume Capacity 4.9 ~ 50TON	Material A516 -70
Diameter 1,500 ~ 3,500mm	Standard / Certificate KGSC, ASME " U "



Product drawing



Capacity (ton)	Internal Volume (liter)	Diameter (mm)	Height (mm)	Pressure [Mpa]	Material (internal)	Material (outer)	Safety Transfomer
4.9	5339	1600	2058	2.3	A516-70	13/14	15A x 2EA
10	10788	1920	3010	2.3	A516-70	16/16	20A x 2EA
15	16179	1920	4948	2.3	A516-70	16/16	20A x 2EA
20	21570	1920	6734	2.3	A516-70	16/16	20A x 2EA
25	26964	2200	6284	2.3	A516-70	18/19	25A x 2EA
30	32365	2250	7314	2.3	A516-70	18/19	25A x 2EA
50	53925	2400	11044	2.3	A516-70	19/20	25A x 2EA

No	Size	Service
A	378Φ	MANHOLE
B1	20A	GAUGE
B2	20A	GAUGE
C	25A	SAFETY LINE
D	40A	INLET
E	25A	VAPOR
F	25A	LIQUID OUTLET

PRODUCTS

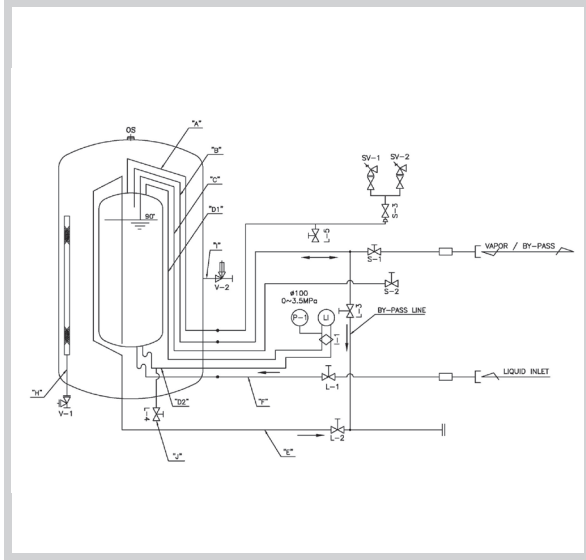
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L-CO₂ Storage Tank (Vertical Type)

Design Pressure 2.3MPa	Height 4,490 ~ 14,761mm
Volume Capacity 4.9 ~ 50TON	Material A516 -70 [internal] / SS400 [outer]
Diameter 1,500 ~ 3500mm	Standard / Certificate KGSC, ASME " U "



Product drawing



Capacity (ton)	Internal Volume (liter)	Diameter (mm)	Height (mm)	Pressure [Mpa]	Material (internal)	Material (outer)	Safety Transfomer
4.9	5339	1600	2058	2.3	A516-70	13/14	15A x 2EA
10	10788	1920	3010	2.3	A516-70	16/16	20A x 2EA
15	16179	1920	4948	2.3	A516-70	16/16	20A x 2EA
20	21570	1920	6734	2.3	A516-70	16/16	20A x 2EA
25	26964	2200	6284	2.3	A516-70	18/19	25A x 2EA
30	32365	2250	7314	2.3	A516-70	18/19	25A x 2EA
50	53925	2400	11044	2.3	A516-70	19/20	25A x 2EA

No	Size	Service
A	378Φ	MANHOLE
B1	20A	GAUGE
B2	20A	GAUGE
C	25A	SAFETY LINE
D	40A	INLET
E	25A	VAPOR
F	25A	LIQUID OUTLET

PRODUCTS

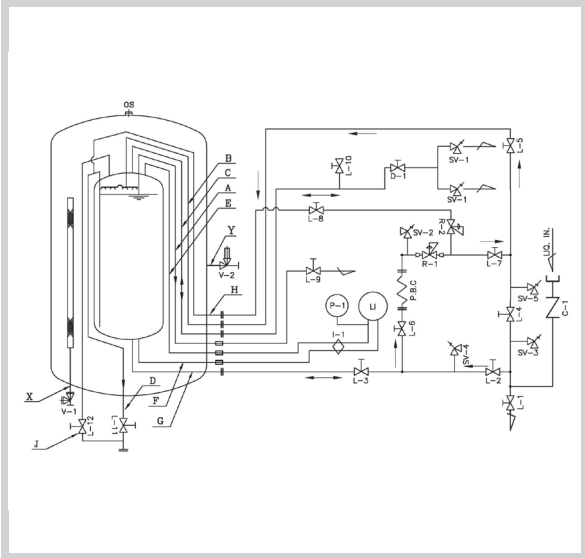
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CRYOGENIC STORAGE TANK L-CO₂ L-N₂ L-Ar etc.



Design Pressure	Height
1 ~ 3.2MPa	5,428 ~ 12,808mm
Volume Capacity	Material
4.8 ~ 50m ³	A240-304, SUS304[internal] / SS440 [outer]
Diameter	Standard / Certificate
1,250 ~ 3,500mm	KGSC, ASME " U "

Product drawing



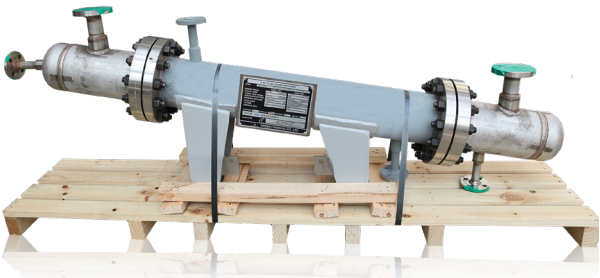
Capacity (ton)	Internal Volume (liter)	Diameter (mm)	Height (mm)	Pressure (Mpa)	Material (internal)	Safety Transfomer
4.8	4776	1250	3475	1 ~ 3.2	A240-304	15A x 2EA
6.8	6720	1600	2809	1 ~ 3.2	A240-304	20A x 2EA
10	10000	1700	3838	1 ~ 3.2	A240-304	20A x 2EA
15	15000	1920	4541	1 ~ 3.2	A240-304	20A x 2EA
20	19398	1920	6268	1 ~ 3.2	A240-304	25A x 2EA
30	30000	2170	7388	1 ~ 3.2	A240-304	25A x 2EA
50	50000	2800	7186	1 ~ 3.2	A240-304	25A x 2EA

No	Size	Service
A	10A	OVER FLOW
B	40A	TOP FILLING
C	25A	SAFETY R.LINE
D	25A	LIQUID OUTLET L.P
E	8A	UPPER LEVEL G.CONN.L
F	8A	BOTTOM LEVEL G. CONN.L
G	40A	BOTTOM FILLING LINE
H	15A	ECONOMIZING L.
X	25A	VACUUMIZING LINE
Y	8A	PROBE
J	20A	VAPOR OUT LINE(SPACE)

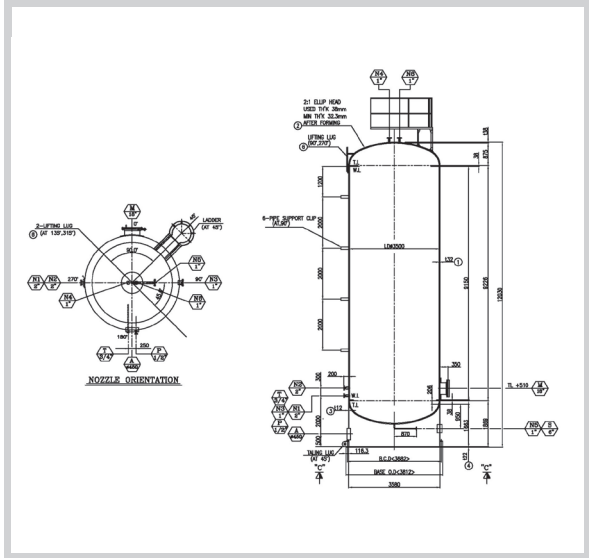
PRODUCTS

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PRESSURE VESSEL



Product drawing



Capacity (m ²)	Internal Volume (liter)	Diameter (mm)	Height (mm)	Pressure (Mpa)	Material (internal)	Safety Transfomer
50	49990	2500	11000	2.5 ~ 3.2	A516-70	25A x 2EA
75	74998	3000	11000	3.2	A516-70	25A x 2EA
100	100000	3500	120000	3.2	A516-70	25A x 2EA

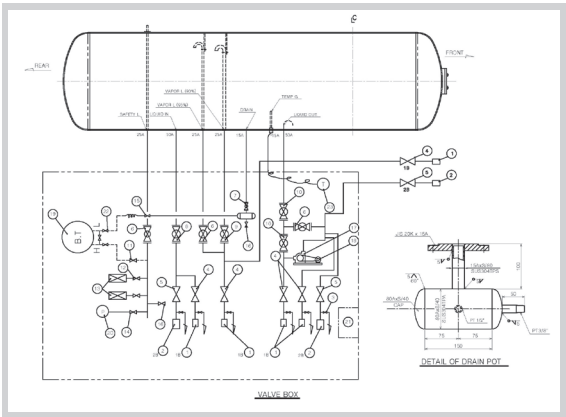
No	Size	Service
M	18"	MANHOLE
N1	2"	GAS INLET
N2	2"	GAS OUTLET
N3	1"	VENT HOLE
N4	1"	SAFETY R. V/V CONN.
N5	1"	DRAIN
N6	1"	VENT HOLE
A	ø450	ACCESS HOLE
S	6"	SLEEVE OPENING
P	1/2"	PRESS. GAUGE
T	3/4"	TEMP. GAUGE

PRODUCTS

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L-CO₂ TANK LORRY

Product drawing



Design Pressure
2.3MPa

Volume Capacity
11.5 ~ 18.5TON

Diameter
1,600 ~ 1,750mm

Height
1,809 ~ 2,076mm

Material
SLA360

Standard / Certificate
KGSC, ASME " U "



Capacity (ton)	Internal Volume (liter)	Diameter (mm)	Height (mm)	Pressure (MPa)	Material (internal)	Material (outer)	Safety Transfomer
11.5	12405	1600	5560	2.3	SLA360	13/14	25A x 2EA
14.5	15632	1610	7066	2.3	SLA360	13/14	25A x 2EA
18.5	20020	1750	7740	2.3	SLA360	13/14	25A x 2EA

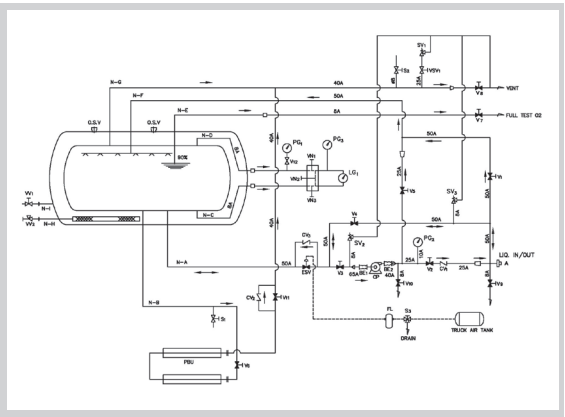
No	Size	Service
SLA360	378Φ	MANHOLE
SLA360	25A	LEVEL LINE
SLA360	50A	INLET
SLA360	25A	VAPOR LINE
SLA360	50A	LIQUID OUTLET
SLA360	25A	LEVEL LINE
SLA360	20A	DRAIN
SLA360	15A	TEMP. GAUGE

PRODUCTS

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CRYOGENIC TANK LORRY

Product drawing



Design Pressure
0.6MPa

Volume Capacity
10 ~ 18m³

Diameter
1,600 ~ 1,750mm

Height
6,730 ~ 9,192mm

Material
A240-304

Standard / Certificate
KGSC, ASME " U "



Volume (m ³)	Diameter (mm)	Length	Pressure (MPa)	Material (internal)	Safety Transfomer
10	1600	6730	0.6	A240-304	25A x 2EA
13	1510	9048	0.6	A240-304	25A x 2EA
14.6	1630	8823	0.6	A240-304	25A x 2EA
16	1750	8485	0.6	A240-304	25A x 2EA
18	1750	9192	0.6	A240-304	25A x 2EA

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VAPORIZER
L-N₂ L-O₂ L-Ar / L-CO₂



Design Pressure
1.0 ~ 15MPa

Volume Capacity [Nm³/hr]
100 ~ 1000Nm³/hr

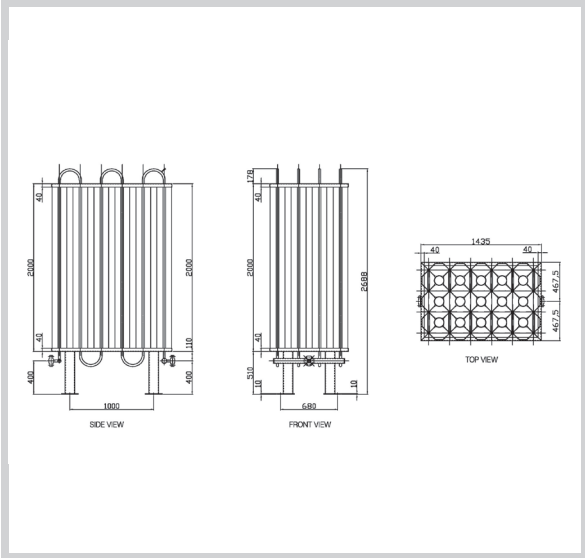
Material
A6063S-T5

Design Pressure
1.0 ~ 15MPa

Volume Capacity [kg/hr]
100 ~ 1000kg/hr

Material
A6063S-T5

Product drawing



L-N₂ L-O₂ L-Ar

Capacity (Nm ³ /hr)	Pressure [MPa]	Temperature [°C]	Material (internal)
100	2.0	-10	A6063S-T5
200	2.0	-10	A6063S-T5
300	2.0	-10	A6063S-T5
500	2.0	-10	A6063S-T5
700	2.0	-10	A6063S-T5
1000	2.0	-10	A6063S-T5

L-CO₂

Capacity (Nm ³ /hr)	Pressure [MPa]	Temperature [°C]	Material (internal)
100	2.3	-10	A6063S-T5
200	2.3	-10	A6063S-T5
300	2.3	-10	A6063S-T5
500	2.3	-10	A6063S-T5
700	2.3	-10	A6063S-T5
1000	2.3	-10	A6063S-T5

PRODUCTS

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VAPORIZER
ELECTRO THERMAL HOT WATER CARBURETOR

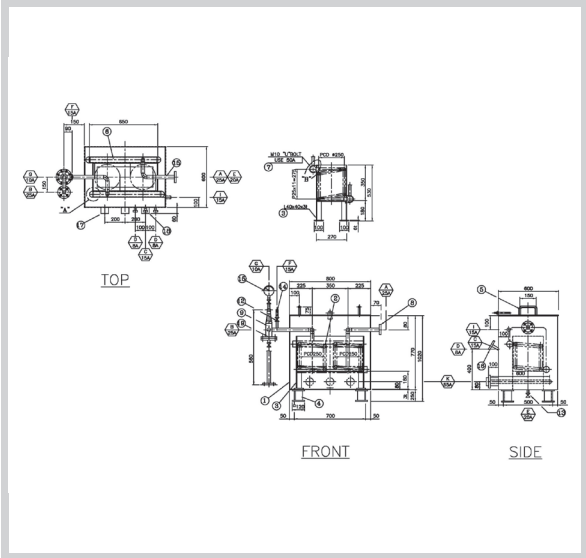


Design Pressure
1.0 ~ 15MPa

Volume Capacity
100 ~ 1,000kg/hr

Material
A240-304

Product drawing



Capacity (ton)	Internal Volume (liter)	Diameter (mm)	Height (mm)	Pressure [MPa]	Material (internal)	Material (outer)	Safety Transformer
150	-	-	-	-	SUS304	SUS304	15A
300	-	-	-	-	SUS304	SUS304	15A
500	-	-	-	-	SUS304	SUS304	15A
700	-	-	-	-	SUS304	SUS304	15A
1000	-	-	-	-	SUS304	SUS304	15A
1500	-	-	-	-	SUS304	SUS304	15A
2000	-	-	-	-	SUS304	SUS304	15A
2500	-	-	-	-	SUS304	SUS304	15A

PRODUCTS

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DIFFERANTIAL PRESSURE DIGITAL LEVEL METER



- Model : BY-LM-2
- Media Criteria : L-CO₂, L-N₂, L-O₂, L-Ar
- Column Height : 0 ~ 20,000
- Operating Pressure : 0 ~ 3.5MPa
- Material Temperature Range : -196 ° C ~ 40 ° C
- Voltage : 220Volt [Battery : 12Volt]
- Size : 200 x 150 x 100mm
- LCD Size : 115 x 65mm
- Connection : DIN 43650
- Communication : 485 CABLE, WIFI
- Printing Method : Serial Thermal Transfer printing

Feature Description & Usage
Display remaining gas(%), volume of pressure difference(liter) and mass(kg) in liquefied gas storage tank.

Features & Function

- 01 By Hours, minutes and seconds units, displays measuring liquid usage status.
- 02 When the liquid remaining of the Storage Tank is less than 10%, The alarm sound provides information that you can setting the liquid supply time.
- 03 Communication functions of storage tank liquid usage and real-time monitoring and the output from a PC, the existing on-site verification process is not required
- 04 Use the usual 220volt electric, in case of power outage, the built-in battery can take advantage of battery is charging. In addition, Built-in battery operated and available for Tank lorry using the car battery.
- 05 Portable thermal transfer printer can use the output value measuring of Storage Tank and Tank lorry without visiting a long measuring place directly by the output as a receipt.

Quality certification details

- 01 Patent registration (Liquid remaining amount measuring device)
- 02 Patent registration (Method and apparatus for measuring liquid level of cryogenic liquefied gas storage tank using differential pressure)
- 03 Program registration (Differential Pressure Digital Level Meter program)
- 04 Program registration (Differential Pressure Digital Level Meter program[BY-LM-2])
- 05 Design Application (Digital Measuring Device)

PRODUCTS

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LONG STEM BRONZE, SHORT STEM BRONZE, LONG STEM SUS



- Primary Material of Construction : Bronze, Sus
- Valve Size : 10A ~ 50A [3/8" ~ 2"]
- Design Pressure : 1.0 ~ 4.0MPa
- Design Temperature : -270 ° C ~ 75 ° C
- Packing Material : PCTFE
- Bonnet Type : Square Flange Type
- Media Criteria : L-CO₂, L-N₂, L-O₂, L-Ar, LNG, L-C₂H₄, H₂, He
- End Connection : Socket Welding
- Connection : DIN 43650
- Standard : NET (New Excellent Technology) EC (EC Type-Examination Certificate)



Usage & Application Features & Function Quality certification details

- | | | |
|--|--|--|
| <ul style="list-style-type: none">• Valves for piping of LNG ship storage tanks• Valves for piping of experimental cryogenic liquefied gas• Valves for piping of industrial storage tank | <ul style="list-style-type: none">• Easy to store in liquefied gas for long time, and high efficiency insulation function.• Leakage and freeze protection even when fluid flows from very high pressure to very low temperature | <ul style="list-style-type: none">• NET (New Excellent Technology) Certification• Patent registration (Extra low temperature globe valve) |
|--|--|--|