# **ISGEC Ton Containers**



Safety through Design. Safety through Quality.













# Australia Bangladesh

## **ISGEC Ton Containers**

### Safety through Design. Safety through Quality.

China

Columbia

Cambodia

Cyprus

O India

Indonesia

. . . Iraq

Jordan

Kenya

Kuwait

Malta

Mauritius

Nepal Nigeria

Oman

Peru

Philippines

Qatar

Saudi Arabia

Singapore

Sri Lanka

Syria

Thailand

Turkey

UAE

Uganda

USA

Vietnam

Yemen

Zambia

Zimbabwe

ISGEC is an ISO 9001:2000 approved company having ASME 'U2', 'U' & 'S' certifications as well as the National Board of USA 'R' & 'NB' certifications. We have been manufacturing & supplying Ton Containers for Chlorine & other liquefiable gases and Pressure Vessels for over 40 years.

ISGEC has supplied around 70,000 Containers and 3000 Pressure Vessels to 36 countries.

Proof of our performance internationally is the repeat orders we have received from the USA, China, Japan, Malaysia, Philippines, Oman, Qatar, Saudi Arabia, Kuwait and Thailand.



Mercury Adsorber Vessel, 157 mm thick, weighing 130 MT and ASME 'U2' Stamped, supplied to Petroleum Development, Oman.

ISGEC offers alternate models of Containers to suit the requirement of different customers. However, one thing that is common to each model is our uncompromising focus on Safety.

#### Safety through 100% X-Ray:



At ISGEC, we use the Fusion Welding process for all joints. This method enables us to establish the quality of the welded joints by 100% X-Ray of all main joints, including the Head to Shell Joint.

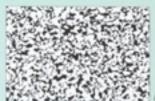


Such X-Rays further prove that all welds are sound

#### Safety through Quality Material:

ISGEC Containers are made from Boiler Quality Steel Plates having the following material properties:

Ultimate Tensile Strength: 415-550 MPa Yield Strength: 220 MPa



Microstructure



### Safety through Approval & Inspection:

The design of ISGEC Containers has been approved by Lloyd's Register.

ISGEC Containers are **inspected** at 15 stages of manufacture by **Lloyd's Register**.

Each ISGEC Container comes with a **Lloyd's test certificate** which is provided to the customer without any extra cost. Certification by other inspection agencies can also be provided.



#### Options:

ISGEC manufactures Containers that are tailor-made to Customer's requirements so as to make them compatible with existing filling and emptying stations, lifting arrangements and safety kits.

The modification includes:

- Removable Dip Pipes
- Rolling Hoops
- Additional Fusible Plugs
- Valves mounted on hand hole cover
- Zinc Coating on External Surface
- Variety of Paints

#### • Other ISGEC Container Models:



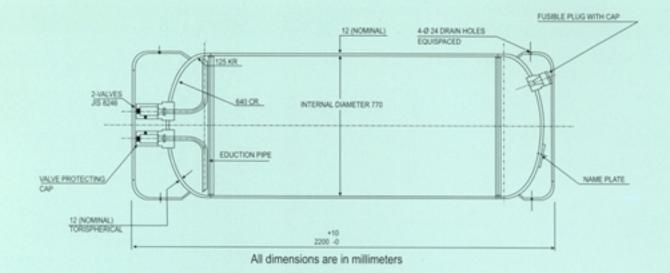
MODEL - A



MODEL - D



MODEL - E



#### Sketch of a 1000 Kg capacity Model 'B' ISGEC Chlorine Container

#### **Specifications**

Design Code	:	BS -1500 Part 1 or ASME Sec.VIII Div.1
Design Pressure	:	19.9 Kgf/cm² (g) (283 PSIG)
Design Temperature	:	65 deg. C (149 deg. F)
Material of Construction for Heads & Shells	:	SA 516 Grade 60 or SA 285 Grade C or equivalent
Corrosion Allowance	:	1.5 mm (minimum)
Longitudinal Shell Joint & Head to Shell Joint	:	Fusion Welded
Radiography	:	100% of all Butt Welded Joints
Post Weld Heat Treatment	:	Yes
Hydraulic Test Pressure	:	38.8 Kgf/cm <sup>2</sup> (g) for SA 516 Grade 60
Cleaning	1	By Grit Blasting
Painting	:	Golden Yellow
Design Approval	:	(a) Lloyd's Register
		(b) Chief Controller of Explosives (India)
Inspection	:	Lloyd's Register
Tare Weight	:	675 Kgs (Approx.) (1488 lbs)
Water Capacity	:	840 Kgs (Approx.) (1852 lbs)
Chlorine Capacity		1000 Kgs (Approx.) (2205 lbs

#### Standard Accessories

- . Two Brass Valves conforming to JIS-8246 specifications
- Two Valve Protection Caps of SA-106 Gr.B or equivalent material
- Three Brass Fusible Plugs conforming to JIS-8246 specifications
- Three Fusible Plug Protection Caps of SA-106 Gr.B or equivalent material

#### **Optional Accessories**

 Valves, Couplings and Fusible Plugs conforming to 3/4"NGT CL 1 of ANSI B-57.1 or BS 341 Part 1 (1 inch)

#### **Containers for Liquefiable Gases**

ISGEC manufactures Containers for the transportation and storage of the following liquefiable gases:

- · Ammonia
- · Chlorine
- · Dimethylamine
- · Ethyl Chloride
- · Ethylene Oxide
- Freon
- Hydrogen Fluoride

- Methyl Bromide
- · Methyl Chloride
- · Monomethylamine
- · Sulphur Dioxide
- Trimethylamine
- · Vinyl Chloride



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