TrueTech Freshwater pressure sets are specially designed to meet customer specifications or delivered as standard units, our pressure sets are available in a wide range of flows and

pressures



TrueTech Fresh Water Pressure set is designed for compactness and ease of use. For better durability under the different usage, our fresh water pressure set is made of 304L stainless steel and our sanitary water Pressure set is made of 316L or 316Ti stainless steel, with one or multiple pumps.

For added quality assurance, the pressurised tank used in the system meets the various IACS members' class certification

TrueTech Fresh Water Pressure Units are designed to fulfill the request for fresh water or sea water on board of sea-going vessels and offshore rigs.

#### **STANDARD FEATURES**

- ASTM 304L Stainless steel tank
- ASME Pressure Relief Valve
- 4 125 PSI Working Pressure
- Hand-Hole Sediment Cleanout
- Pressure- Gauges
- 🜲 🛛 Water Level Gauge
- Pressostats For Pressure Control
- Two Pump In Parallel, One In Operation And Another One In Stand-By
- Liquid: Suitable For Sea Water Or Fresh Water Below 50 C degree
- 👃 🛛 Drain Valve
- Air Charge Valve
- Accessory: All Necessary Connection Pipes, Elbows, Flanges And Valves

#### **OPTIONAL FEATURES**

- ASTM 316L Stainless steel tank
- 👃 UV Sterilization Unit
- Manway (500-Liter and larger capacity- models only)
- 4 150 Psi Or 160 Psi Working Pressure
- Double Pressostats For Pressure Control

#### Warranty

3-Year limited tank warranty-

See Commercial Warranty Certificate for - complete information **Packing:** Special wooden case for international export.

**Production time:** Usually in 20 to 30 days.



## TrueTech Energy TT - FWPS Series

Freash Water & Sea Water Pressure Set 100 to 2,000 Liters Capacities Vertical & Horizontal Types

#### **ADVANCED FEATURES**

- **4** 200 OR 240 PSI WORKING PRESSURE
- INTEGRATED CONTROL FUNCTION AND ALARM OPTIONS ACCORDING TO CLIENT'S SPECIFICATIONS

100 % Right Product for Your Systems

- **ISOLATION VALVES (RELIABLE BALL VALVES)**
- **SPECIAL SHOCK AND VIBRATION ISOLATORS**
- **DUBLEX TANK**
- **4** MARINE TYPE CABLE GROUP
- **4** DECK STABILIZER SPECIAL MOUNTING FOOT
- **HALLOGEN FREE CABLES AND CABLE CHANNELS**
- **4** DISINFECTIVE AND PREVENTIVE SYSTEM FOR LEGIONELLA BACTERIA



# For additional information please call the factory with the following:

- Required gallons per hour recovery needed
- Temperature rise needed
- Single or Double-Wall Coil
- **4** If steam is the energy source, the steam pressure?
- ↓ If boiler water is the energy source, the water temperature?



Factory FWPSrostatic And

## PLACE OF USAGE

MARINE

- ♣ Vessels
- 4 Mega Yachts
- ♣ Tugboats
- Cruise Vessels
- Offshore Oil Plants
- ♣ Applications for Millitary Purpose
  - Patrol Boats
  - Reinforcement Boats
  - ♣ Amphibian Vessel Group
  - Cost Guard Boats
  - Rapid Reaction Boats
  - Sailing School Ships
  - Salvage Ships
  - Replenishment Vessels
  - ✤ Cost Guard Rescue Boats











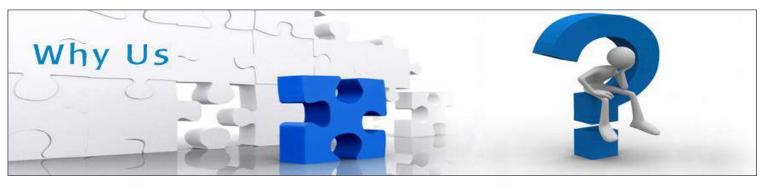










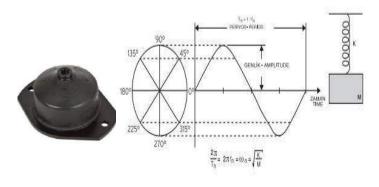


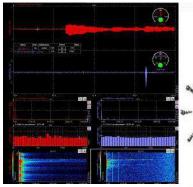


Vibration and shock analysis (on request )



Acoustic analysis (on request )









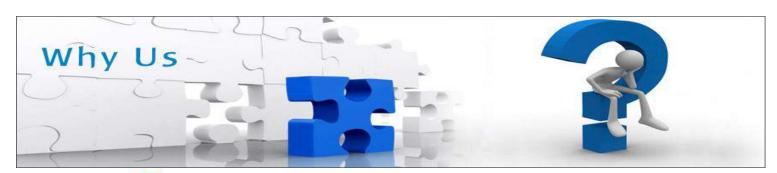
Project Management

Each Project , we will assign a Project Managerand sales person to Follow the whole process from quotation to after- sale













Marine Projects



## **BUREU VERITAS**



**DNVGL** 





## LIOYD'S REGISTER



## **AMERICAN BUREAU OF SHIPPING**

RINA







## **RUSSIAN MARITIME REGISTER OF SHIPPING**



### **INDIAN REGISTER OF SHIPPING**



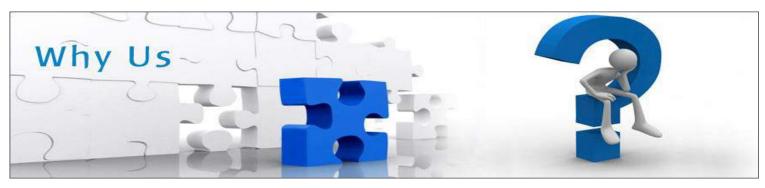


### **CHINA CLASSIFICATION SOCIETY**



### NIPPON KAIJI KYOKAI



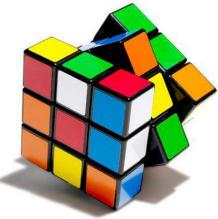




INDUSTRIAL PROJECTS

PRESSURE VESSEL MANUFACTURING AND DESIGN CODES

MERKBLATT PRESSURE VESSELS DESIGN CODE **AD 2000 ASME** BOILER AND PRESSURE VESSEL CODE (SEC. VIII DIV.1 & 2 SECTION VIII, SECTION VIII) EN 13445 SERIES UNFIRED PRESSURE VESSELS CODE EN 13458 SERIES PRESSURE VESSELS CODE TEMA THE TUBULAR EXCHANGER MANUFACTURERS ASSOCIATION CODAP FRENCH CODE FOR CONSTRUCTION OF UNFIRED PRESSURE VESSEL SPECIFICATION FOR UNFIRED, FUSION WELDED PRESSURE VESSELS PD 5500 STANDARD FOR ELECTRIC BOOSTER AND COMMERCIAL STORAGE TANK WATER HEATER UL 1453 **UL 174** STANDARD FOR HOUSEHOLD ELECTRIC STORAGE TANK WATER HEATERS



#### STORAGE TANK MANUFACTURING AND DESIGN CODES

API 650 DESIGN AND CONSTRUCTION OF WELDED STEEL TANKS

**API 620**DESIGN AND CONSTRUCTION OF LARGE WELDED LOW PRESSURE STORAGE TANKS

**AWWA D100** WELDED CARBON STEEL TANKS FOR WATER STORAGE

**EN 14015** SPECIFICATION FOR THE DESIGN AND MANUFACTURE OF SITE BUILT, VERTICAL, CYLINDRICAL, FLAT-BOTTOMED, ABOVE GROUND, WELDED, STEEL TANKS FOR THE STORAGEOF LIQUIDS AT AMBIENT TEMPERATURE AND ABOVE



### **UNLIMITED PRODUCT OPTIONS**



### **OPTIONS**

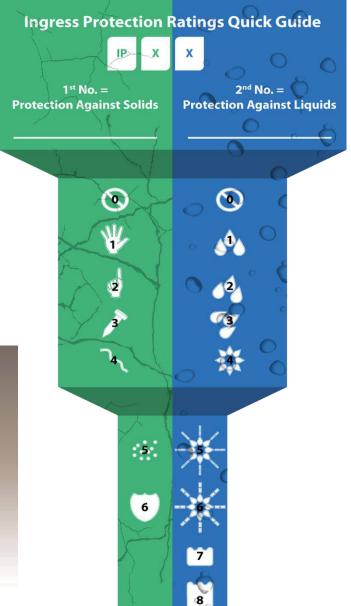
The **protection** of enclosures against ingress of dirt or against the ingress of water is defined in **IEC529** (BSEN60529 : 1991). Conversely, an enclosure which protects equipment against ingress of particles will also protect a person from potential hazards within that enclosure, and this degree of protection is also defined as a standard.

#### **PROTECTION DEGREE OPTIONS**

IEC TYPE	NEMA/UL TYPE
IP 23 (TrueTech Standard) NEMA 1	
IP 30	NEMA 2
IP32	NEMA 3
IP44	<b>NEMA 12</b>
IP55	<b>NEMA 12</b>
IP64	NEMA 3
IP65	<b>NEMA 13</b>
IP66	NEMA 4X,4
IP67	NEMA 6

IP68 IP69K







## UNLIMITED PRODUCT OPTIONS

## **MATERIAL OPTIONS FOR**

### **INNER TANK, OUTER JACKET, COMMENT PANEL**

### **HEATING ELEMENTS, ALL PIPE & CONNECTIONS**

- **4** ASTM 304 ,
  - EN 1.4301, UNS S30400 AUSTENITIC EN 1.4306, UNS S30453 AUSTENITIC

- EN 1.4401, UNS S31600 AUSTENITIC EN 1.4404, UNS S31603 AUSTENITIC
- **4** ASTM 316Ti EN 1.4571, UNS S31635 AUSTENITIC
- **ASTM 430**, EN 1.4016, UNS S43000 FERRITIC
- 🖊 ASTM 439 ( 430 Ti) , EN 1.4510 , UNS S43900 FERRITIC
- ♣ ASTM 2205 EN 1.4462, UNS S31803 / S32205 FERRITIC AUSTENITIC ( DUBLEX )
- ↓ CuNi 90/10 (UNS C70600) COPPER-NICKEL ALLOYS

MARINE ENGINEERING STRUCTURES MANLY AS PIPING FOR SEAWATER HANDLING AND HEAT EXCHANGERS IN THE SHIPBUILDING, OFFSHORE, POWER, AND DESALINATION INDUSTRIES.

CuNiFe CUNIFE COPPER-NICKEL-IRON ALLOYS

CORROSION RESISTANT CONNECTORS FOR SEAWATER SYSTEMS SEAWATER SYSTEMS IMPOSE SPECIAL REQUIREMENTS FOR THE CONNECTORS USED. CUNIFE PRODUCTS, LONG-TERM, SHOW A CONSIDERABLY HIGHER DURABILITY THAN OTHER MATERIALS.

Other special grades under ASTM or UNS designation could be supplied under special request. Please contact us for further details.





**4** ASTM 304L,

- **4** ASTM 316,
- **ASTM 316L**,

#### **SMART MANUFACTURING SYSTEM**

#### **PROJECT BASED CUSTOM PRODUCTION & DESIGN**

Our Flexible, Secure And Efficient Production Processes Offers High Quality Products, Satisfied Customers, Sensible Costs, Reduced Maintenance Costs, Long Service Life, Easy Installation & Commissioning And Short Lead Times

1 GALLON ( 3.8 LITERS ) – 5.000 GALLON (18.925 LITERS ) STORAGE CAPACITY

0.8KW -1600 KW ELECTRICAL POWER

120V-127V-220V-240V-380V-400V-480V-600V-690V VOLTAGE

VOLT FREE OUTPUT CONTACTS FOR BMS

4 BAR ( 58 PSI ) - 20 BAR ( 290 PSI ) WORKING – DESIGN PRESSURE

50HZ-60HZ FREQUENCY

VERTICAL OR HORIZINTAL INSTALLATION

MECHANICAL, DIGITAL, PLC AND PID CONTROL SYSTEMS

IP23 – IP69K PROTECTION DEGREE (SPECIAL CONTROL PANELS)

PROJECT BASED CERTIFICATION

PROJECT BASED MATERIAL OPTIONS

SPECIAL DESIGN AND CALCUATION ACCORDING TO INTERNATIONAL PRESSURE VESSEL CODES AND MATERIAL STANDARDS

SPECIAL DOCUMENTATION AND QUALITY SYSTEM (MILITARY AND NAVY PROJECTS)

We are at hand to answer all your questions in regards to your specific applications. Please contact TrueTech Energy and we will be happy to help.





#### STEP 1 USING PLACE

#### **STEP II DESIGN**

EN = EN PRESSURE VESSEL CODE

AS = **ASME** BOILER AND PRESSURE VESSEL

UL = **UL** ELECTRIC BOOSTER AND COMMERCIAL STORAGE TANK WATER HEATER

#### **STEP 1II** CONTROLLER TYPE

MC = MECHANICAL DG = DIGITAL

PL = PLC

SS = SOLID STATE

**STEP IV STORAGE CAPACITY** 

STEP V KW

#### **STEP VI** VOLTAGE . PHASE . FREQUENCY

#### STEP VII MATERIAL

- G = GALVANIZE COATING
- SS 304 = 304 QUALITY STAINLESS STEEL
- SS 304L = 304L QUALITY STAINLESS STEEL
- SS 316 = 316 QUALITY STAINLESS STEEL
- SS 316L = 316L QUALITY STAINLESS STEEL
- SS 316Ti = 316Ti QUALITY STAINLESS STEEL
- SS CNF = CuNiFe COPPER-NICKEL-IRON ALLOYS
- SS CN = CuNi 90/10 COPPER NICKEL ALLOYS
- SS DX = DUBLEX

## **System Descriptions**

TrueTech Fresh Water Units are specially designed for the offshore and marine applications .

Special designed fresh water pressure sets consist of all necessary equipment for fresh and hot water supply, such as ;

- **1.** WATER HEATERS
- 2. HYDROPHORES
- 3. HYDROPHORE PUMPS

(TWO PUMP IN PARALLEL, ONE IN OPERATION AND ANOTHER ONE IN STAND-BY )

- 4. FILTERS FOR VARIOUS APPLICATIONS
- 5. RE CIRCULATION PUMPS FOR WATER CIRCULATION

(TWO PUMP IN PARALLEL, ONE IN OPERATION AND ANOTHER ONE IN STAND-BY )

- 6. UV-STERILIZER,
- 7. SPECIAL CONTROL PANEL

(INTEGRATED CONTROL FUNCTION AND ALARM OPTIONS ACCORDING TO CLIENT'S SPECIFICATIONS)

- 8. PRESSOSTATS FOR PRESSURE CONTROL
- 9. SPECIAL HANDLING CHASSIS

Accessory : All Necessary Connection Pipes, Elbows, Flanges And Valves , Inlet/Outlet Connections , Drain Valve , Air Charge Valve , Name Plate



#### TrueTech Energy TT - FWPS Series

Freash Water & Sea Water Pressure Set 100 to 2,000 Liters Capacities Vertical & Horizontal Types





# **Product and Technical Support**

# **TrueTech Energy**

Although out of sight, the Truetech heater keeps on working, 24/7, year after year

Imes Sanayi Sitesi A Blok 103 sok. NO:32/B Umraniye , ISTANBUL / TURKEY

 Tel (Sales)
 : 00902164993466

 Fax
 : 00902164993468

 Email
 : info@truetech.com.tr

 Web
 : www.truetech.com.tr

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- Production
- Research & Development | Quality Management
- Purchase
- IT



