



**TMC<sup>®</sup>**  
**TAEYANG MECHATRONICS Co., Ltd.**  
**|주| 태양기전**

**[www.worldtmc.com](http://www.worldtmc.com)**

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# I . 会社紹介

## 1. 概要



会社名	(株) 太陽機電 TAEYANG MECHATRONICS Co., Ltd.			代表	朴 石 培 SUK BAE PARK
所在地	釜山市 江西区 智士洞 1179-13 (本社 & 工場)			Phone	+82 51 974 0561
				Email	sales@worldtmc.com
				Web Site	www.worldtmc.com
敷地面積	3,303 m <sup>2</sup> (1,000坪)			建坪	2,114 m <sup>2</sup> (640坪)
創立日	1996. 03. 04	従業員	30人	主要製品	船用 Pneumatic/Electric 制御装置

## 2. 会社理念

私たちは  
誠実と創意に基づいて  
明るい未来と人間尊重を志向する  
超一流企業になるために  
情熱を持って責任を果たす。

**"Always Moving, Always Best ...TMC<sup>®</sup>"**

### 3. 主要沿革

#### 2011 ~ 現在

- ◆ 2021 01 人材育成中小企業 選定 - 中小ベンチャー企業部  
青年親和強小企業 選定 - 雇用労働部
- ◆ 2019 02 造船海洋機資材優秀企業 認定  
一韓国造船海洋機資材工業共同組合
- ◆ 2018 01 強小企業選定 - 雇用労働部
- ◆ 2016 06 輸出有望中小企業 選定 - 中小企業庁
- ◆ 2013 09 GWP(Great Work Place) 企業選定
- ◆ 2011 01 ISO 14001 認証

#### 2001 ~ 2010

- ◆ 2009 11 Single PPM 品質認証 - 船舶エンジン制御装備部門
- ◆ 2007 02 地域先導企業選定 - 釜山市
- ◆ 2006 02 技術革新型中小企業 (INNO-BIZ)選定 - 中小企業庁  
12 戦略産業先導企業選定 - 釜山市
- ◆ 2004 11 GL船級承認 - German船級協会
- ◆ 2002 11 CLEAN事業場認定 - 産業安全公団

#### 1996 ~ 2000

- ◆ 1999 05 ABS船級承認 - America船級協会
- ◆ 1998 05 有望先進技術企業選定 - 中小企業庁  
12 ISO 9001認証
- ◆ 1997 02 21C先導企業選定 - 中小企業庁  
03 技術研究所新設
- ◆ 1996 03 太陽機電創立(船舶エンジン制御装備生産開始)

## 4. 受賞歴

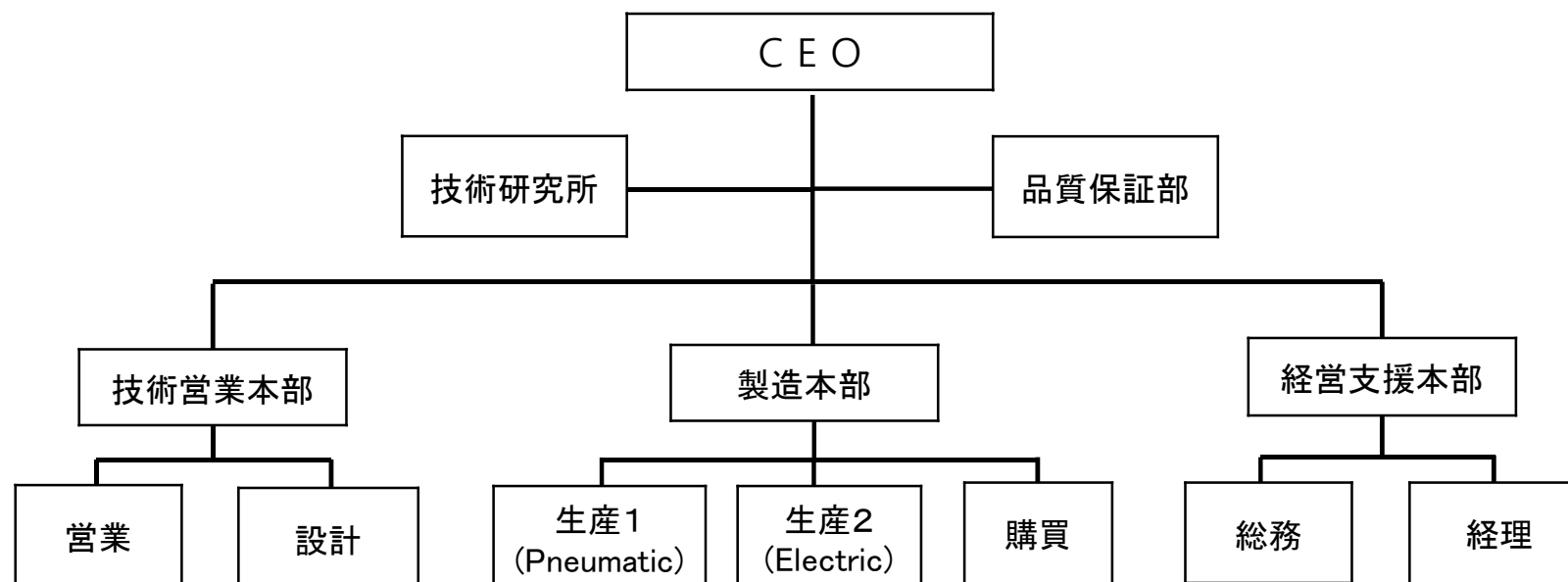
- ❖ 2019 05 : 大統領表彰
- ❖ 2017 12 : 100万ドル輸出の塔 受賞－韓国貿易協会
- ❖ 2016 05 : 優秀中小企業 表彰－釜山市
- ❖ 2014 07 : 優秀中小企業 表彰－中小企業中央会
- ❖ 2012 04 : Single PPM 品質革新－国家産業褒章
- ❖ 2011 04 : Single PPM 品質革新－国務総理賞
- ❖ 2005 07 : 優秀中小企業人 大賞－釜山市
- ❖ 2003 04 : 優秀中小企業 表彰－科学技術部長官

## 5. 主要顧客





## 6. 組織図



区分	技 術 職 (8)			技 能 職 (11)		事 務 職 (9)			合 計
	設 計	技 術	品 証	生産 1	生産 2	営 業	購 買	支 援	
男	3	2	3	4	7	6	0	1	26
女	0	0	0	0	0	2	1	1	4
計	3	2	3	4	7	8	1	2	30

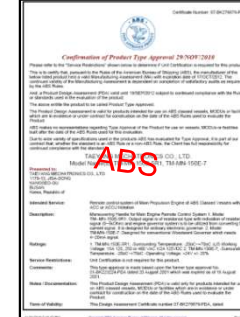
## 7. 品質認証及び船級証書保有現況

品質  
認証

ISO 9001 :2015	2016. 01
ISO 14001	2011. 01

船級  
認証

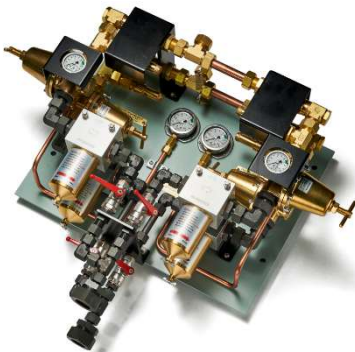
LR	6
KR	1
ABS	2
DNV	2



## Ⅱ. 製品紹介

# 1. Pneumatic Control Systems

- Pneumatic Maneuvering System for MAN Engine (ME Engine)



Press. Reducing Unit  
(ME-C / ME-B)



PMS Unit (ME-B)



Air Supply unit (ME)



MSV Panel (ME-C)



Emergency Console (ME-B)



MSV Unit (ME-B)



PT&PS Sensor unit (ME / MC )  
(Sensor Maker : Danfoss)

# 1. Pneumatic Control Systems

- Pneumatic Maneuvering System for MITSUI E&S (ME-C & ME-B)



PANEL-1 (ME-C / ME-B)



STARTING PANEL (ME-C)

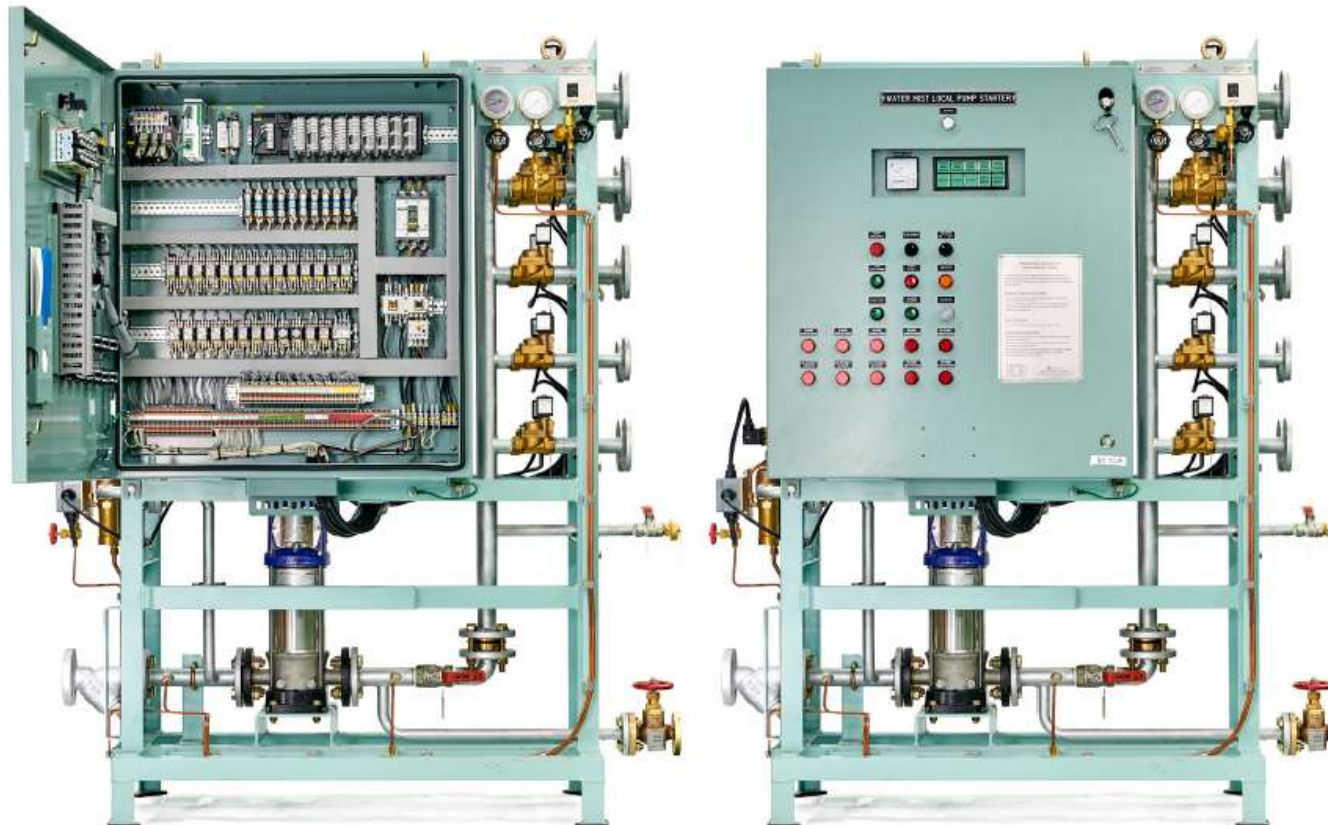


UNIT BOX (ME-B)



## 2. Electric Control Systems

### - 消火装備 System



Water Mist Local Pump Starter Panel

## 2. Electric Control Systems

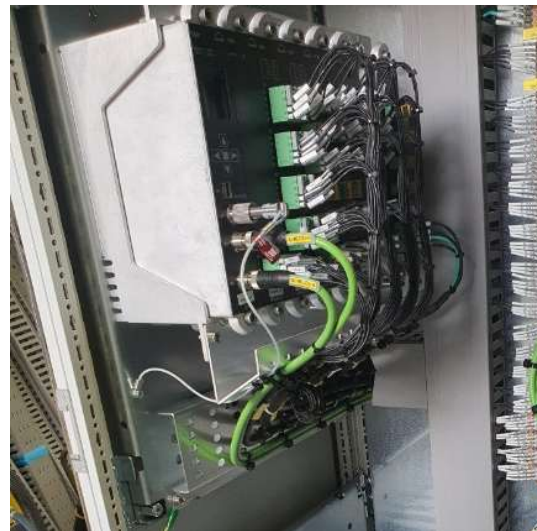
- Engine Control Cabinet for Triton [ECC1/ECC2]



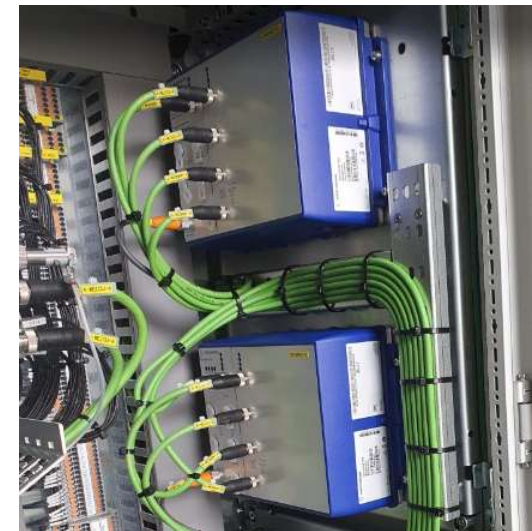
## 2. Electric Control Systems

- Engine Interface Control Cabinet for Triton [EICC]

 Hanwha Engine



[ Triton ]



[ Ethernet Switch ]



## 2. Electric Control Systems

### - Vibration Monitoring System [VMS]

SKF



## 2. Electric Control Systems

### - Maneuvering Handle



TM-MN-150E-5R1

- 1) Working Temp.  
: -20 ~ 70°C
- 2) Operating Voltage  
: DC24V
- 3) Output  
: 0~5KΩ / 4~20mA



TM-MN-150E-5R1N

- 1) Working Temp.  
: -20 ~ 70°C
- 2) Operating Voltage  
: DC24V
- 3) Output  
: 0~5KΩ



TM-MN-150E-7N

- 1) Working Temp.  
: -20 ~ 70°C
- 2) Operating Voltage  
: DC24V
- 3) Output  
: 4 ~ 20mA



TM-MN-TB-1

- 1) Working Temp.  
: -20 ~ 70°C
- 2) Operating Voltage  
: DC24V
- 3) Output  
: 0 ~ 10V DC

## 4. PNEUMATIC VALVE

- 3/2 Way Solenoid valve for Starting Air Valve (ME Eng. Ver.10.5/9.6~)



1) 60~95ME Type  
(32S 31 04 00 0)



2) 50ME Type  
(32S 31 05 00 0)



 <b>DECLARATION OF CONFORMITY</b>																					
<p>■ MANUFACTURER          : Ws. Taeyang Mechatronics Co., Ltd.          40, Gwahaksandan 2-ro 3beon-gil, Gangseo-gu, Busan 46742          REPUBLIC OF KOREA</p> <p>■ Product : 3/2 Way Solenoid Valve          ■ Model/Type : 32S3104000,          ■ Tested Standard : EN 61010-1          EN 61010-2</p> <p style="text-align: right;">Page 1 of 2          Certificate No: 18212046741A          Issue Date: 29/01/2021          Expiry Date: 28/01/2026</p>																					
 <b>2014/35/EU LOW</b> <b>Type Approval Certificate</b>																					
<p>We hereby declare that the above ma          Voltage Directive 2014/35/EU for ele          documentation is retained under the promi</p> <p>■ NOTIFIED BODY : TÜV SÜD Pro</p> <p>This is to certify that the undetected product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.</p> <table border="1"> <tr> <td><b>Manufacturer</b></td> <td>TAEYANG MECHATRONICS CO., LTD.</td> </tr> <tr> <td><b>Address</b></td> <td>40 Gwahaksandan 2-ro 3beon-gil, Gangseo-gu, Busan, 46742, Republic of Korea</td> </tr> <tr> <td><b>Type</b></td> <td>Control Valve</td> </tr> <tr> <td><b>Description</b></td> <td>3/2 Way Solenoid Valve</td> </tr> <tr> <td><b>Trade Name</b></td> <td>32S3104000, 32S3105000</td> </tr> <tr> <td><b>Application</b></td> <td>Marine and offshore applications for use in environmental category ENV 4 in the "General Power Distribution Zones" as defined in LR Type Approval System Specification No. 1-March2018</td> </tr> <tr> <td><b>Specified Standard</b></td> <td>Manufacturer's Specification(TMC-4-03-01)</td> </tr> <tr> <td><b>Ratings</b></td> <td>DC 24V, 10 to 32 bar(32S3104000 model), 05 to 32 bar (32S3105000 model)</td> </tr> <tr> <td><b>Additional Tests</b></td> <td>Degrees of protection (IP56, IEC 60529:2013)</td> </tr> <tr> <td><b>Other Conditions</b></td> <td>Type approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations. If the specified standards are amended during the validity of this certificate, the product is to be re-approved prior to it being supplied to vessels to which the amended standards apply. (In case of applications other than marine) The application of the type approval certificate will be limited to the relevant scope of the specified standard and acceptance thereof by the local authorities.</td> </tr> </table> <p style="text-align: right;">   <b>Gyoung-Hwan Lee</b>          Digital &amp; Control Team Leader to Lloyd's Register Asia          A member of the Lloyd's Register group       </p> <p>         71 Litchurch Street, London, EC3M 4BS, United Kingdom          Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or for any other reason, unless that person has agreed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.       </p>		<b>Manufacturer</b>	TAEYANG MECHATRONICS CO., LTD.	<b>Address</b>	40 Gwahaksandan 2-ro 3beon-gil, Gangseo-gu, Busan, 46742, Republic of Korea	<b>Type</b>	Control Valve	<b>Description</b>	3/2 Way Solenoid Valve	<b>Trade Name</b>	32S3104000, 32S3105000	<b>Application</b>	Marine and offshore applications for use in environmental category ENV 4 in the "General Power Distribution Zones" as defined in LR Type Approval System Specification No. 1-March2018	<b>Specified Standard</b>	Manufacturer's Specification(TMC-4-03-01)	<b>Ratings</b>	DC 24V, 10 to 32 bar(32S3104000 model), 05 to 32 bar (32S3105000 model)	<b>Additional Tests</b>	Degrees of protection (IP56, IEC 60529:2013)	<b>Other Conditions</b>	Type approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations. If the specified standards are amended during the validity of this certificate, the product is to be re-approved prior to it being supplied to vessels to which the amended standards apply. (In case of applications other than marine) The application of the type approval certificate will be limited to the relevant scope of the specified standard and acceptance thereof by the local authorities.
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## 4. PNEUMATIC VALVE

- 3/2 Way Solenoid valve ( WinGD Engine )



**1) x52 Type**  
(32S 31 06 00 0)



**2) x62 and above Type**  
(32S 31 07 00 0)



**CE**  
EU Declaration of Conformity

Test Report Ref. No. N2211R-0034  
Product 3/2way solenoid valve  
Model 32S3106000  
Additional model 32S3107000  
Manufacturer TAEYANG MECHATRONICS Co., Ltd.  
40 Gwahaksan-dan 2-ro 3beon-gil, Gangseo-gu, Busan, 40742, Republic of Korea

We hereby declare, that all major EMC in Electromagnetic Compatibility Directives (2014/53/EU) member states of the EEC Commission. This is in effect when manufactured according to the product.

Conform to the following product.

**Type Approval Certificate**

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

**Manufacturer** TAEYANG MECHATRONICS CO., LTD.  
**Address** 40 Gwahaksan-dan 2-ro 3beon-gil, Gangseo-gu, Busan, 40742, Republic of Korea  
**Type** Control Valve  
**Description** 3/2 Way Solenoid valve  
**Trade Name** 32S3106000, 32S3107000  
**Application** Marine and offshore applications for use in environmental category EN14 in the "General Power Distribution Zones" as defined in UK Type Approval System Specification No.1, December 2021.  
**Specified Standard** Manufacturer's Specification  
**Rating** DC 24V, 65 to 32 bar  
**Additional Tests** Degrees of protection (IP54, IEC60529:2012)

**Other Conditions**

1. Type approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations.
2. If the specified standards are amended during the validity of this certificate, the product is to be re-approved prior to it being supplied to vessels to which the amended standards apply.
3. In case of application other than marine, the application of the type approval certificate will be limited to the relevant scope of the specified standard and acceptance thereof by the local authorities.

*J.C. Park*  
Jung Choon Park  
Senior Specialist to Lloyd's Register Asia  
A member of the Lloyd's Register group

71 Finchley Road, London, EC2H 4EL, United Kingdom

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7500 23

## 5. Agency

*Danfoss*



 明陽電機株式会社  
MEIYO ELECTRIC Co., Ltd.





## TMC Dream 奉仕団



□ 2011. 11 ... “T M C DREAM 奉仕団” 発足

- 基金助成 (3) = 1(社員)+ 2(会社)  
: 社員の出す基金の2倍を会社が出す
- 四半期ごとにボランティア活動実施  
(体の不自由な子どものための保護所の支援)



ご清聴ありがとうございました。

**TAEYANG MECHATRONICS CO.,LTD**

ON THE FOUNDATION HONESTY AND CREATIVITY.  
WE HAVE PASSIONS AND RESPONSIBILITY TO ACHIEVE THE WORLD BEST COMPANY  
THAT SEEKS A BRIGHT FUTURE AND RESPECT FOR HUMAN LIFE AND RIGHTS

**TMC**

2011.11.11