Advanced Quality! Components and Materials Specialized Company!

0

# HAEWON



# GREETINGS

Haewon Group (President Soo-Yeol, Kim) is specialized in components and materials to manufacture 5 main components of vessel engine and components of land-based construction largely.

We have leading-edge technology, achieving recognition of all special material components for vessel engine from German MAN which receives credit for global standard in vessel and developmental engine areas.

In particular, S20CrMoVS, S30MnH and S42Cr1 which are special materials used in next generation engine developed by request of MAN receive a favorable evaluation as the best engine material rather than famous manufacturing countries such as Japan and Italy.

Our main trading partners are usually main vessel engine components manufacturers such as Doosan Engine, STX Heavy Industries, Co., Ltd., Hitachi, Mitsui, CMD and etc. And we have facilities to assure the quality of components for vessel engine. In case of Doosan Engine delivery, the fraction defective was ZER0%, which is our strongest point of high quality.

Besides, a chrome plating technology of Haewon Group named as SOO-YEOL PPS is outstanding to drag attentions. This technology is also approved by MAN and the result plated by S00-YEOL PPS is assured by Man, which shows high competitive power for quality. Chrome-plated product by SOO-YEOL PPS has less wear than general products 2~3 times. Consequently, it can reduce time and budget to replace components and now it is widely used in basic construction equipment of land plant.

Now Haewon Group is expanding business area and capabilities into material industry across the industrial apparatus such as DRILL BIT, HAMMER BIT, RING BIT and etc. which form the foundation of offshore plant and land plant based on existing stable businesses.





# **OHAEWON**

Advanced Quality! Components and Materials Specialized Company!



HAEWON\_3



# Quality Management Philosophy

1. Management Innovation

2. Quality First Style

4\_HAEWON

3. Customer Satisfaction Maximization



# **CERTIFICATION**





ABS

# High Quality is Our Company Objective



**Piston in Stock** 



**Piston Rod** 





**Piston Crown** 



# **PRODUCT**

- Piston in Stock
- Piston Rod
- Piston Crown
- Piston Skirt
- Connecting Rod



**Piston Skirt** 

**Connecting Rod** 

HAEWON

# **Even Small Parts are Important-We can Help with These Too.**



**Air Cylinder** (Reversing, Lifting, Linkage, Distributor)



P-max(VIT) Actuator



Sealing Ring & O-Ring (NBR, VITON, Silicon)



## PRODUCT

- Air Cylinder (Reversing, Lifting, Linkage, Distributor)
- P-max(VIT) Actuator
- Sealing Ring & O-Ring (NBR, VITON, Silicon)
- Mounting Tool (MAN B&W 26~98MC)



Mounting Tool (MAN B&W 26~98MC)

HAEWON\_9



# **MAJOR EQUIPMENT(PRESS)**

# **SHIP ENGINE EQUIPMENT**

# **3000TON PRESS**







INGOT



### **8000TON PRESS**

10\_HAEWON







**PISTON ROD** 













**CROSS HEAD** 

# **CONNECTING ROD**



HAEWON\_11

# **High Quality Plating Performance INDUSTRY EQUIPMENT**

5 0 0

HAMMER BIT



**DRILL BIT** 

**RING BIT** 

69

29



BIT



SPINDLE

# **MOLD FORGING PRODUCTION PROCESS AND EQUIPMENT**

### Production process

Heating ingot ► Upsetting & cogging ► Cutting & discard ► Reheating ► Mold forging



### Production scene of mold forging – Heating after mold forging scene





K98MC-C P/C

S70MC-C C/C



DRILL PIPE





ETC







12\_HAEWON



RTF-50 C/C

RT96 C/C

Stern Tube & Cylinder liner **Repair or Rebuild Project** with High Quality Plating Performance!

**New & Reconditioned Parts** with Quick Delivery!





# **Best Solution for Marine diesel Engines.**

### **O HAEWON Industries co.**

74, Hasinjungang-ro 3beonga-gil, Saha-gu, Busan, Korea TEL : 82-51-831-4600(#1) FAX : 82-51-831-4336

### O HAEWON Special Forging co., ltd

16, Gimhae-daero 1099beon-gil, Hallim-myeon, Gimhae-si, Gyeongsangnam-do, Korea TEL : 82-55-343-2355 FAX : 82-55-343-2366

### O HAEWON Machinery&Engineering co., ltd

87-37, Myeongdong-ro, Hallim-myeon, Gimhae-si, Gyeongsangnam-do, Korea TEL : 82-55-345-8717 FAX : 82-55-345-8720

### O HAEWON P&G

16, Noksansandan 261-ro 31beon-gil, Gangseo-gu, Busan, Korea TEL : 82-51-831-4184 FAX : 82-51-831-4186

### • WESTSEA co., Itd

74, Hasinjungang-ro 3beonga-gil, Saha-gu, Busan, Korea TEL : 82-51-831-4600(#2) FAX : 82-51-831-4334