Hudong Heavy Machinery Co., Ltd

Company introduction

Wang Yong (王永)
HHM-CMD Marketing and Sales Center
4th June, 2015
Contents

Company overview and Outlook

New technology research and development
HHM Position in CSSC
Marketing position in China

Market share of China

- HHM (include CMD): 70%
- Others in China: 30%
Leader of the industry in China

The overseas market share is 19%

Output: First in China Parallel second in the world

Marketing position in the world

Output/ten thousand horse power

- HHM
- DMD
- YMD
- Doosan
- HHI
The HHM including CMD have totally delivered more than 2400 engines.
The two stroke engine output

Engine delivery

- Set
- Horse Power (ten thousand)


Horse Power Values: 103, 150, 173, 211, 197, 270, 410, 567
Main products (Marine power equipment)

- Low speed diesel
- Medium speed diesel
- Power system integration

MAN Engine  WARTSILA Engine
Main products (Whole-set equipment)

- Nuclear emergency generating -sets
- Shield machine
- Large structure and casting parts
- The gas turbine components
Full life maintenance for engine

Spare parts
- • Spare parts and service

Training
- • Technology training center

Inspection
- • Calibration & Testing center

Global TechService (GTS)
Global service stations

HHM Global TechService distribution
## The basic situation of the company

<table>
<thead>
<tr>
<th>Registered capital</th>
<th>2.85 billion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Floor space</td>
<td>970 thousands square meters</td>
</tr>
<tr>
<td>Staff</td>
<td>3441</td>
</tr>
<tr>
<td>Manufacturing capacity</td>
<td>5 million HP/year low speed marine diesel engine 50 sets/year medium speed marine diesel engine</td>
</tr>
<tr>
<td>Service network stations</td>
<td>6 domestic and 5 overseas service stations</td>
</tr>
</tbody>
</table>
The HHM family introduction

- **China Shipbuilding Power Engineering Institute Co., Ltd (CSPI)** 49%
- **CSSC-MES Diesel Co., Ltd (CMD)** 51%
- **Shanghai Hulin heavy industry Co., Ltd** 84.7%
- **Global Techservice (GTS)** 100%
- **Others (2)**
Development Strategy

➢ To be the topping marine power in the world
➢ Integration of R & D, manufacturing and service
➢ Business structure of moderate, related and multiple development

CSSC Power Section

- R&D
- Marketing and Sales
- Basic insurance
- Service
- Manufacturing
Two stroke diesel manufacturing

- CMP <50 cm (Bore)
- CMD >60 cm (Bore)
- HHM 50~60 cm (Bore)

CMP -- China Marine Power Co., Ltd.
The innovation is the engine for development

Company overview and Outlook

New technology research and development
### Development of new technology

<table>
<thead>
<tr>
<th>Product</th>
<th>Designer</th>
<th>Maker</th>
<th>Test place</th>
<th>Situation</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCR</td>
<td>WCH, MDT, HHM</td>
<td>HHM</td>
<td>CMD</td>
<td>5RT-FLEX58DT, on ship</td>
</tr>
<tr>
<td>EGR</td>
<td>MDT</td>
<td>CMD</td>
<td>CMD</td>
<td>Able to supply</td>
</tr>
<tr>
<td>GI engine</td>
<td>MDT</td>
<td>HHM/CMD</td>
<td>CMD</td>
<td>6S50MEC-GI, on order</td>
</tr>
<tr>
<td>DF engine</td>
<td>WCH</td>
<td>HHM/CMD</td>
<td>CMD</td>
<td>Able to supply</td>
</tr>
<tr>
<td>FGSS(GI)</td>
<td>MDT&amp;HHM</td>
<td>HHM</td>
<td>CMD</td>
<td>Able to supply</td>
</tr>
<tr>
<td>FGSS(DF)</td>
<td>HHM</td>
<td>HHM</td>
<td>CMD</td>
<td>Able to supply</td>
</tr>
</tbody>
</table>
CSSC-MES diesel Co., Ltd

Established in 2006

China State Shipbuilding Corporation (15%)
Country: China

Hudong Heavy Machinery Co., Ltd (51%) in 2006. Now is CSSC Holdings.
Country: China

Mitsui Engineering & Shipbuilding Co., Ltd. (34%)
Country: Japan
CMD factory

650 ton lifting crane. Can assemble and test the biggest engine in the world.
No.1 SCR shop test success in China

Ship: 22100 DWT M.P.V
Engine: 5RT-FLEX58T-D
Class society: LR
Time: January of 2015
Location: CMD

Success!
Gas engine and FGSS

ME-GI

W-DF

ME-GI

W-DF

FGSS
If you have any question or any interested topic for our engine and new products:

- Tier III solution -- EGR, SCR
- Gas engine -- ME-GI & W-DF
- FGSS for gas engine
- WHR system

please don’t hesitate to contact us.

王永 Wang Yong
Marketing Manager
HHM-CMD Marketing & Sales Center.

Mail: yong1.wang@shcmd.com.cn
Tel: +86 21 60897057
Fax: +86 21 60897055