



HAE WON SPECIAL FORGING CO.,LTD



#1155, MyungDong-Ri, HanLim-Myun, GimHae-City, GyungNam, Korea

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HAE WON



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HAE WON

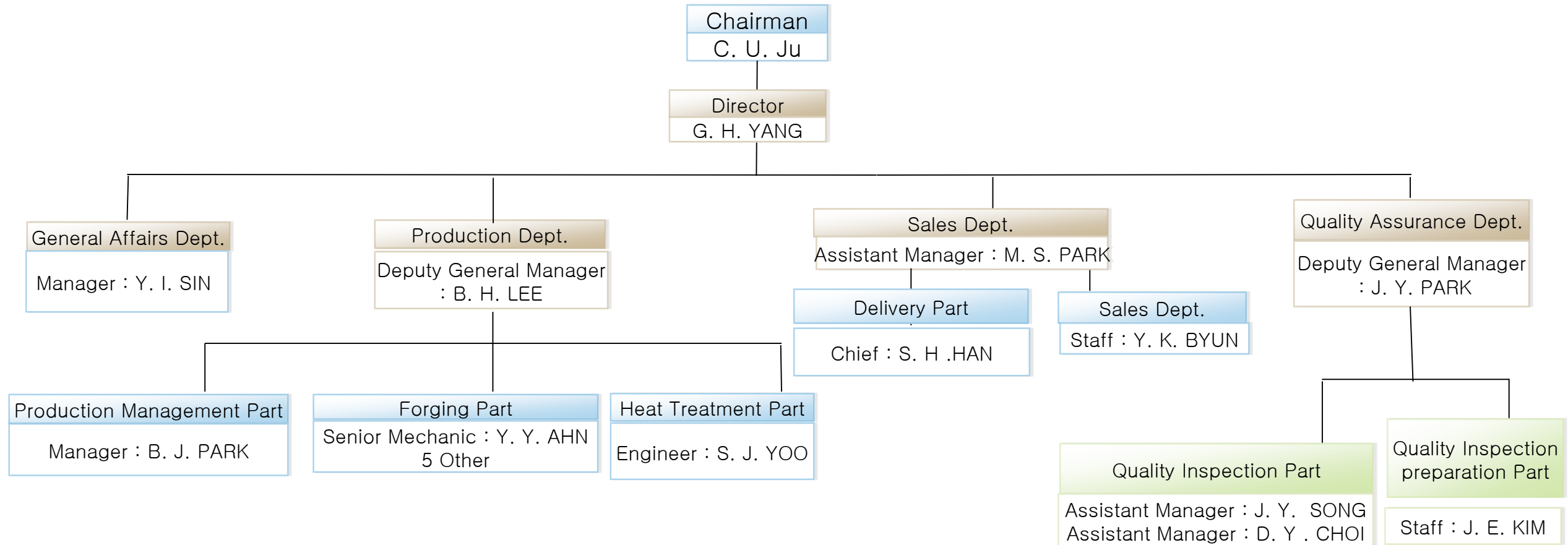
1. History

- 2004.12 Established of D.C.M Co.,Ltd
- 2005.11 3,000ton press operation
- 2005.12 Start of production (P/C, C/C)
- 2006.02 Change of company name from D.C.M co.,ltd to Haewon Special Forging co.,ltd
- 2006.04 8000 ton press operation
- 2006.04 Certification of ISO 9001:2000
- 2006.05 Work approval of class ABS, NK
- 2006.06 Work approval of class RINA, KR
- 2006.07 Work approval of class LR, DNV
- 2006.09 Work approval of class BV, CCS
- 2006.10 Work approval of class GL
- 2006.12 Approved manufacturing plate of DOOSAN ENGINE's engine product by forging
- 2007.05 Approved manufacturing plant of MAN DIESEL & TURBO
- 2007.07 Approved manufacturing p/rod(S30H, S30Mn) of MAN spec
- 2009.09 KR KQA(Quality assurance) sistem is certified
- 2010.04 ISO9001:2008 certification is renewed
- 2010.07 Approved new material S30MnH for p/rod of MAN spec
- 2011.05 Approved new material S42Cr1 for p/rod of MAN spec.
- 2012.05 Approved new material S20CrMoVS for P/C, C/C of MAN spec.



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2. Organization Chart





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3. FACTORY VIEWS

- LOCATION : #1155, MyungDong-Ri, HanLim-Myun, GimHae-City, GyungNam, Korea
- TOTAL AREA : 4,900평(16,198m²)





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4. PRODUCTION FACILITIES LIST

NO	MACHINE NAME	SIZE	Q'TY	DATE	MAKER
1	FORGING PRESS	8,000 TON	1ST	2005	HSB
2	FORGING PRESS	3,000 TON	1ST	2005	HSB
3	HEATING FURNACE	120 TON	1ST	2005	DAIKYO ENG
4	HEATING FURNACE	60 TON	3ST	2005	DAIKYO ENG
5	HEATING TREATMENT FURNACE	100 TON	1ST	2005	DAIKYO ENG
6	HEATING TREATMENT FURNACE	60 TON	2ST	2005	DAIKYO ENG, 한중로텍
7	CRANE	50 TON	1ST	2005	BANDO
8	CRANE	35 TON	1ST	2006	BANDO
9	CRANE	10 TON	1ST	2007	BANDO
10	MANIPULATOR	27.5 MT	1ST	2005	HSB
11	FORKLIFT	36 TON	1ST	2005	CAT
12	FORKLIFT	16 TON	1ST	2014	현대
13	FORKLIFT	15 TON	1ST	2006	DOOSAN
14	FORKLIFT	7 TON	1ST	1999	DOOSAN
15	INGOT CHARGER	18 TON	1ST	2005	DEC
16	QUENCHING BATCH	200 TON	1ST	2005	HAE WON
17	GAS CUTTER		1ST	2005	C.EN.C
18	EMISSION SPECTROMETER	36 CHANNEL	1ST	2005	SHIMADZU
19	UNIVERSAL TESTER	100 TON	1ST	2005	DAEK YUNG TECH
20	BAND SAW	ST1510	1ST	2007	TENRI
21	BAND SAW	ST8010	1ST	2007	DAITO
22	IMPACT TESTER	500 JOULE	1ST	2005	TESTMATE
23	BRINELL HARDNESS	3000 Kg	1ST	2005	DAEK YUNG TECH
24	HARDNESS TESTER		1ST	2005	MITUTOYO
25	HARDNESS TESTER		2ST	2015	PROCEQ
26	RADIATION PYROMETER	800~3000℃	1ST	2005	CHINO
27	PROFILE PROJECTOR	X5~X100	1ST	2005	NIKON
28	BLOCK GAUGE		1ST	2005	DOALL



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4-1. MAJOR EQUIPMENT (PRESS)

➤ 3000TON PRESS



➤ 8000TON PRESS





➤ MAN B&W TYPE ENG'

- Major trading partners ◀
- DOOSAN ENGINE CO.,LTD
 - STX Heavy Industries
 - HAEWON MACH. & ENG'G CO.,LTD
 - MES, HZ D&E, MHI

ITEM	ENG' TYPE										TOTAL
	26MC	35MC	42MC	46MC	50MC	60MC	70MC	80MC	90MC	98MC	
C/C	25	121	163	1,057	1,086	661	687	137	249	9	4,195
P/C	567	2,359	1,576	535	6,114	4,248	2,291	1,565	1,335	683	21,273
P/R	11	188	186	104	1,530	1,132	626	118	267	110	4,272
X/H	1	37	3	45	808	773	420	46	231	120	2,484
C/ROD	-	75	172	-	124	338	78	-	-	-	787
TOTAL	579	2,659	1,937	684	8,576	6,491	3,415	1,729	1,833	913	28,816

➤ WARTSILA TYPE ENG'

ITEM	ENG' TYPE									TOTAL
	RT35	RT48	RT50	RT58	RT62	RT72	RT76	RT84	RT96	
C/C	7	-	86	2	73	13	-	39	117	337
P/H	39	138	452	61	441	31	48	264	280	1,754
P/R	7	5	136	19	178	9	30	46	86	516
X/H	6	-	94	24	56	1	4	55	86	326
C/ROD	6	-	65	-	-	-	-	-	-	71
TOTAL	58	143	747	104	675	41	82	365	452	2,667



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5-1. SHIP ENGINE EQUIPMENT PART-1

➤ INGOT



➤ P/C & C/C



➤ PISTON ROD



➤ CROSS HEAD



➤ CONNECTING ROD





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5-2. INDUSTRY EQUIPMENT PART-1

➤ **ROUND BAR**



➤ **SQUARE BAR**



➤ **BIT**



➤ **SPINDLE**



➤ **SHAFT**



➤ **ETC.**





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6. MOLD FORGING PRODUCTION PROCESS AND EQUIPMENT

1) Production process

➤ ① Heating ingot → ② Upsetting & cogging → ③ Cutting & discard → ④ Reheating → ⑤ Mold forging



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



K98MC-C P/C



S70MC-C C/C



RTF-50 C/C



RT96 C/C



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7. QUALITY ASSURANCE

1) Classification'S Cert.



➤ ABS



➤ BV



➤ DNV.GL



➤ RINA



➤ KR



➤ LR



➤ NK



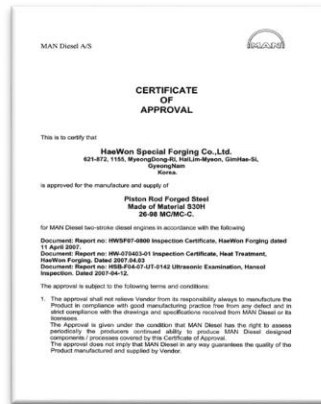
➤ CCS



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7. QUALITY ASSURANCE

2) MAN Diesel & Turbo Certification



➤ S30H P/ROD



➤ S30Mn P/ROD



➤ S30MnH P/ROD



➤ S42Cr1 P/ROD



➤ S17MoS P/CROWN



➤ S20CrMoVS P/CROWN



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7. QUALITY ASSURANCE

3) Test Equipment



< Quality Management Philosophy >

1. Pride
2. Passion
3. Possible



➤ ISO 9001:2015 Quality Certificates