





www.kunhwamc.com

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COMPANY PROFILE

Overview

(주)건화는 조선·해양 블록 제작 전문 기업으로 생산부지 396,039m², 생산능력 240,000 TON/년, 절단·조립·의장·도장·탑재에 이르는 일관생산시스템을 갖추고 있습니다. 고객의 눈높이에 맞는 차별화 된 제품을 공급하기 위해 끊임없이 혁신하여 지속적인 성장을 추구해 나가고 있습니다.

Kunhwa was established in 2000 and is now one of the largest block manufacturing factory in Korea. Kunhwa has developed an integrated production system from Cutting to Pre-Erection, with a production site of 396,039m² and the capacity to produce 240,000 ton/year. We will strive to pursue continuous improvements to ensure customers' growth and future developments.

회사명 Company Name (주)건화

Kunhwa Co., Ltd.

경상남도 거제시 연초면 연하해안로 841-54

Address

Telephone

841-54, Yeonhahaean-ro, Yeoncho-myeon, Geoje-si, Gyeongsangnam-do, Korea

+82 55, 639, 5300



Business Philosophy

Knowledge management is the foundation of our company in which we communicate in a harmonious environment to bring transformation that drives innovation, impacting the world.



Symbol



하나된 마음으로 세상을 밝히다.

Shining a light in the world, together in unity.

건화의 심볼마크는 하나의 광원으로 세상을 밝히는 태양처럼 소통과 화합을 통한 하나된 마음으로 세상을 조용히 변화시키는 건화의 혁신 의지를 상징합니다.

Kunhwa's logo symbolizes our will to always innovate and unobtrusively bring better changes to the world through a unified approach, as the logo itself resembles the sun lighting up the world as our one light source.

HISTORY

㈜건화가 걸어온 길은 Global No.1 대한민국 조선역사와 함께 해왔습니다. 이제 글로벌 리더의 동반자로서 혁신의 새 역사를 열어갑니다.

Kunhwa's journey shares the history of South Korea's dominance as the global leader in the shipbuilding industry. In today's current market, we are witnessing a new chapter in history of innovation, leading the global economy.

> 2008 09 대우조선해양㈜ 그린파트너쉽 환경경영 우수협력사 선정

> > DSME Green Partnership Excellence Award

2009 04 ISO 14001 획득

Obtained ISO 14001

(Environmental Management System Certificate)

2011 10 ㈜건화로 사명 변경

Establishment of Kunhwa through reorganization

2012 03 거제 모사일반산업단지 승인

Industrial Complex approved by city of Geoje

2000 08 임천공업㈜ 법인 설립 Established Imcheon

2001 01 대우조선해양㈜ 업체 등록 Supplier of DSME

> 10 GL 공장승인 GL Factory Approval

12 대우조선해양㈜ 우수업체 선정 Selected as Preferred Supplier by DSME

2002 04 ISO 9001 획득

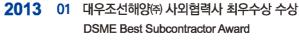
Obtained ISO 9001(Quality Management System Certificate)

05 대우조선해양㈜ 협력사 혁신활동 우수상 **DSME Subcontractor Innovation Award**

2018 05 World Class 300 프로젝트 기업 선정 Selected as a World Class 300 Company in Korea

2019 01 대우조선해양㈜ 사외협력사 최우수상 수상 **DSME Best Subcontractor Award**

> **03** 600TON 골리앗크레인 증축 600 ton Goliath Crane Expansion



11 OHSAS 18001 획득

Obtained OHSAS 18001(Acquisition Health and Safety Management System Certification)

2014 01 공장 증축(조립, 도장, 옥외작업장) Site Expansion (Assembly, Painting, Shelter)

2015 01 LPG Tank Insulation Shop 신축 Construction of Insulation Shelter for LPG Tank

















COMPETITIVENESS

공장면적 | Manufacturing Site

Total Area	177,246m²
Cutting · Assembly Shop	83,806m ²
Outfitting Shelter	29,954m ²
Painting Shop	28,724m²
Pre-Erection Area	29,900m ²
LPG Tank Insulation Shop	4,862m²

생산능력 | Production Capacity

Steel Cutting · Fabrication	240,000 ton/year
Block Assembly	216,000 ton/year
Outfitting	216,000 ton/year
Painting	192,000 ton/year
Pre-Erection	264,000 ton/year

주요시설 | Facilities

Goliath Crane	600ton, 500ton
Transporter	9대 (850ton 외)

TOTAL AREA 396,039 m² [약 12만평]





COMPETITIVENESS

1 절단·가공 I Cutting & Fabrication

- · 절단·가공 3개동 운영 [25m(W) x 148m(L) x 15m(H)]
- · Plasma Cutter 8대, CNC Gas Cutter 2대
- · 절단 후 소조립 JIT 공급 체계 구축
- 3 Shops in operation [25m(W) x 148m(L) x 15m(H)]
- · 8 Plasma Cutters, 2 CNC Gas Cutters
- Completion of a JIT Supply System(Sub-Assembly after Cutting)















7 탑재 | Pre-Erection

- · 600 ton 및 500 ton Goliath Crane 각 1기
- · MEGA P.E. 전문화
- 14EA MEGA P.E. BLOCK 동시 작업
- 대형 선박 및 해양 플랜트 최적화
- 1 600 ton Goliath Crane, 1 500 ton Goliath Crane
- Specialization of MEGA Pre-Erection
- Can work on 14EA MEGA P.E. Blocks simultaneously
- Optimized for large vessels & offshore plants

2 소조립 | Sub-Assembly

- · 소조립 4개동 운영 [25m(W) x 148m(L) x 18m(H)]
- 20 ton Overhead Crane 67
- · 생산 능력 향상을 위한 Tact 시스템 구축
- 4 Shops in operation [25m(W) x 148m(L) x 18m(H)]
- · 6 20 ton Overhead Cranes
- · Formation of a Tact System for improved production capacity

③ 중조립 I Mid-Assembly

- · 중조립 2개동 운영 [32m(W) x 360m(L) x 17m(H)]
- 120 ton Overhead Crane 27
- 공정별 전문화 생산 시스템 구축 - 판계(주판+LONGL) - 평중조 - 곡중조
- 2 Shops in operation [32m(W) x 360m(L) x 17m(H)]
- · 2 120 ton Overhead Cranes
- · Establishment of specialized production system for each process
- Panel Flat Midassembly Curved Midassembly

4 대조립 I Grand-Assembly

- · 대조립 3개동 운영 [42m(W) x 305m(L) x 17m(H)]
- · 150 ton Overhead Crane 각 동별 2기
- 3차원 조립 전문화 공장 운영
- 대형 선수/선미 곡블록 전문
- 300 ton급 초대형 조립 생산 능력 확보
- 3 Shops in operation [42m(W) x 305m(L) x 17m(H)]
- · 2 150 ton Overhead Cranes for each shop
- Operation of 3D Assembly Specialized shop
- Specialized in Large Fore/After + Curved Blocks
- Successfully secured production capability for huge sized block (300 ton)

5 의장 | Outfitting

- · 옥외 Shelter 24개동 운영 [47m(W) x 630m(L) x 19m(H)]
- 2.8–5 ton Overhead Crane 477
- 의장 품질 고급화 및 전천후 생산 구축
- 48EA BLOCK 동시 의장 작업
- 의장 작업 옥내화율 100%
- · 24 Outdoor Shelters in operation [47m(W) x 630m(L) x 19m(H)]
- 47 2.8~5 ton Overhead Cranes
- · Enhanced outfitting quality + Establishment of all weather manufacturing system
- Simultaneous operation of 48EA Block outfitting - 100% Indoorization of outfitting work









- · MEGA BLOCK을 위한 전처리 및 도장 Shop 보유
- 전처리Shop 2개동 운영 [42m(W) x 62m(L) x 19m(H)] (국내 유일 1회 11,300m² 전처리 작업 가능)
- 도장Shop 9개동 운영 [42m(W) x 62m(L) x 19m(H)]
- 전처리+도장 일체화 시스템 운영
- · Pre-Blasting and Painting shops for MEGA Block
- 2 Pre-Blasting shops in operation [42m(W) x 62m(L) x 19m(H)] (The only one in Korea that blast 11,300m² at once)
- 9 Painting shops in operation [42m(W) x 62m(L) x 19m(H)]
- · Integration of pre-blasting + painting system

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MAJOR PRODUCTION

Container Ship















LNG, LPG Carrier







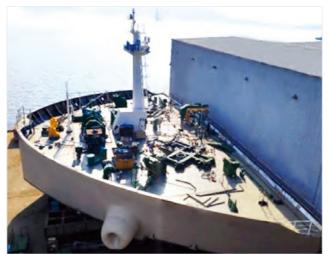




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MAJOR PRODUCTION

VLCC













Offshore Plant

















PERFORMANCE

LNGC

ALPHA GAS ALPHA GAS 173,400 CBM LNG CARRIER BW BW MEGI 93,400 CBM LNG FSRU **SEA TANKERS** SEA TANKERS 173,400 CBM LNG CARRIER BP BP 173,400 CBM LNG CARRIER **DYNAGAS** YAMAL ARC7 172,410 CBM LNG CARRIER YAMAL YAMAL TEEKAY 173,400 CBM LNG CARRIER YAMAL YAMAL ARC7 172,600 CBM LNG CARRIER **MARAN GAS** MARAN 173,400CBM LNG CARRIER **MARAN GAS** MARAN 159,800 CBM LNG CARRIER E.ON MOL E.ON MOL 180,000 CBM LNG CARRIER TEEKAY TEEKAY MEGI 173.400 CBM LNG CARRIER TEEKAY YAMAL ARC7 172,410 CBM LNG CARRIER **CHANDRIS** CHANDRIS 173,400 CBM LNG CARRIER **KOREA LINE** KOREA LINE 174.000 CBM LNG CARRIER **HYUNDAI LNG** HYUNDAI 174,000 CBM LNG CARRIER MOL YAMAL ARC7 172,410 CBM LNG CARRIER CARDIFF CARDIFF 159,800 CBM LNG CARRIER **EXCELERATE** EXCELERATE 173,400 CBM LNG RV/FSRU

LPGC

BW MARITIME SHANDONG SHIPPING SEAQUEST

SM KLC

BW 84,000 CBM LPG CARRIER SHANDONG 84,000 CBM LPG CARRIER DORIAN 84,000 CBM LPG CARRIER

SM KLC 300,000 DWT VLCC

VLCC

PANTHEON PANTHEON TANKERS 300,000 DWT VLCC HUNTER APOLLO 300,000 DWT VLCC HUNTER HARTREE PARTNERS 300,000 DWT VLCC HMM HMM 300,000 DWT VLCC **AEOLOS** AEOLOS 318,000 DWT VLCC MARAN MARAN 318,000 DWT CRUDE OIL TANKER **MARAN** MARAN 319,000 DWT CRUDE OIL TANKER MARAN 156,000 DWT CRUDE OIL TANKER **MARAN** DHT 318,000 DWT CRUDE OIL TANKER DHT **FRONTLINE** FRONTLINE 300,000 DWT CRUDE OIL TANKER **AWILCO** AWILCO 300,000 DWT CRUDE OIL TANKER **SONANGOL** SONANGOL 156,000 DWT OIL TANKER **CAPITAL** CAPITAL 300,000 DWT OIL TANKER **SCORPIO** SCORPIO 300,000 DWT CRUDE OIL TANKER **CHANDRIS** CHANDRIS 112,800 DWT PRODUCT CARRIER **KOTC** KOTC 317,300 DWT CRUDE OIL TANKER AET AET 319,600 DWT CRUDE OIL TANKER **ALMI TANKERS** ALMI 157,430 DWT CRUDE OIL TANKER

CONTAINER SHIP

HMM HMM 23,270 TEU CONTAINER SHIP HMM HMM 13,100 TEU CONTAINER SHIP MSC SM LINE 14,000 TEU CONTAINER SHIP **MSC** PEGASUS 19,170 TEU CONTAINER SHIP MSC OLYMPIC 18,400 TEU CONTAINER SHIP **MAERSK LINE** MAERSK LINE 19,630 TEU CONTAINER SHIP **ZODIAC ZODIAC 10,000 TEU CONTAINER SHIP HAMBURG SUD** HAMBURG SUD 10,600 TEU CONTAINER SHIP A.P MOLLER A.P MOLLER MAERSK 19,630 TEU CONTAINER SHIP A.P MOLLER A.P MOLLER MAERSK 18,270 TEU CONTAINER SHIP A.P MOLLER A.P MOLLER 8,700 TEU CONTAINER SHIP SFL SFL 8,700 TEU CONTAINER SHIP NOL 10,700 TEU CONTAINER SHIP NOL **CMA CGM** CMA CGM 16.000 TEU CONTAINER SHIP

OFFSHORE PLANT

INPEX INPEX ICHTHTS FPSO **SEADRILL** NORTHERN DRILLING DRILLSHIP **SEADRILL** SEADRILL DRILLSHIP **SEADRILL** GVA 7500 SEMI-DRILLING RIG **CHEVRON** MAFUMEIRA SUL FIXED (MSP) **CHEVRON** WHEATSTONE PLATFORM **CHEVRON** BIG FOOT E-TLP **CHEVRON** TOMBUA LANDANA DPP

STATOILSTATOIL GINA KROG TOPSIDE EPCHSTATOILEQUINOR MARINER TOPSIDE EPCTRANSOCEANTRANSOCEAN DRILLSHIP

MAERSK DRILLING CJ70 JACK-UP RIG

SONANGOL SONANGOL DRILLSHIP

SONGA OFFSHORE CATEGORY D-SEMI RIG

SONGACAT.D DRILL SEMI-RIGTDDTDD GRS DRILLSHIP

VANTAGE COBALT EXPLORER DRILLSHIP

PETRONAS

ATWOOD

ATWOOD DRILLSHIP

ODFJELL

ODFJELL-□ DRILLING RIG

ODFJELL

GVA 7500 DP SEMI-RIG

ALLSEAS

PETER SCHELTE

TOTAL E&P

PETROSERV

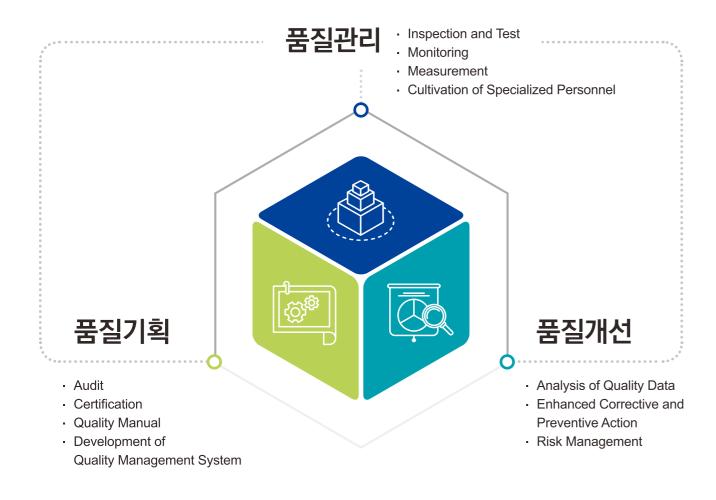
GVA 7500 SEMI-RIG

MACHANIA

QUALITY MANAGEMENT

완벽한 품질경영으로 고객만족을 넘은 고객감동을 실현하다

Achieving customer satisfaction beyond expectation by striving perfection in quality management









I DNV-GL CERT I LR CERT ISO 9001

HSE MANAGEMENT

무재해를 향한 기본과 원칙에 인간존중의 가치를 담다

Creating an accident-free environment through basic fundamentals, principles, and a culture of respect



HSE 경영방침

- PSM 제도 운영
- 체험 중심의 안전 교육
- 안전 관리 시스템 구축
- · PSM System Operation
- · Interactive Safety Education
- · Safety Management System



HEALTH

• 작업 환경 개선 활동

- 건강 증진 프로그램 운영
- 산업 안전 보건 공생 협력 강화
- Work Environment Improvements
- · Health Benefit Program
- Strengthening occupational safety and health standards



SAFETY

ENVIRONMENT



- 환경 경영 체계 정착 • Eco-Friendly 작업장 조성 · 지역사회 환경개선 활동
 - · Establishment of Environmental Management System
 - Eco-Friendly Workshop
 - · Community Environmental Improvement Activities



ISO 14001 OHSAS 18001

KUNHWA KUNHWA CO LID

CORE BUSINESS

자원 재활용 사업부 Resource Recycling Division

40년 역사의 시작, 건화기업

1974년 고철사업으로 시작된 ㈜건화기업은 자원 재활용분야를 선도하는 기업으로 성장하였습니다. 사회적 책임과 역할을 다하기 위해 환경 지속성 을 추구하며 나아가 자원 순환경제 발전에 기여하고 있습니다.

주요 취급 풍목

SS400, SM490, HARDOX 등 철판 스크랩



The beginning of a 40 year history, Kunhwa Enterprise

The company was founded in 1974 as a scrap metal recycling business and has grown into a leading company in the field of recycling of resources. In order to fulfill our social responsibilities and roles, we pursue environmental sustainability through our dedication to resource recycling and economic development.

Main Item

Steel Scrap of SS400, SM490, HARDOX, etc.



주소 | 경상남도 창원시 성산구 창곡로 179-23 Tel. +82 55. 264. 2080

건설기계 사업부

Construction & Forestry Equipment Division

㈜건화 창원공장

1993년 설립한 건화기업과 건화 기계공업이 2008년 통합되어 ㈜건화 창원공장으로 재편되었습니다. 현재 미국, 캐나다, 뉴질랜드, 일본 등의 글로벌 기업과 협력하고 있으며, 정부와 공동으로 건화 기술 교육원을 운영하여 우수한 인력을 양성하고 일자리 창출에 기여하고 있습니다.

주요 생산품

건설기계 부품: 굴삭기, 휠로더, 크레인, 지게차 등의 제관 부품 산림장비 부품: 벌목 및 수확용 장비의 제관 부품

Kunhwa-Changwon Factory

The company, which was established in 1993, was reorganized into the Changwon Factory in 2008 and is currently working together with global companies in US, Canada, New Zealand, and Japan. In cooperation with the government, we have created the Technical Education Center, in which we foster and develop skilled workers and contribute to increased job opportunities.

Main Products

Construction Equipment Parts: Fabrication Parts for Excavator,
Wheel Loader, Crane, Forklift, etc.
Forestry Equipment Parts: Fabrication Parts for Feller Buncher, Harvester, etc.







주소 | 경상남도 창원시 마산합포구 진북면 산단1길 129 Tel. +82 55. 264. 2080 Fax. +82 55. 240. 9299

조선 · 해양 사업부 Shipbuilding & Offshore Plant Division



건화공업(주)

1999년 설립한 건화공업(취)는 생산부지 296.849㎡, 초대형 블록 생산을 위한 최적화된 설비를 보유하고 있습니다. 1996년 선수, 선미 블록의 성공적 납품을 시작으로 2001년 국내 최초 기가 블록을 초도 출하하였습니다. 철저한 품질관리와 기술혁신을 바탕으로 국내 블록 제작 공장의 선도적 위치를 차지하고 있으며, 대형 조선소의 전략적 협력 동반자로서 조선의 새 역사를 만들어 나가고 있습니다.

주요 생산품

상선 : 선수, 중앙, 선미 블록 [Mega/Giga Block] 해양 플랜트 : Topside Module, Column, Pontoon

Kunhwa Industries

Established in 1999, Kunhwa Industries resides in a location with total area dimension of 296.849 \mbox{m}^2 , equipped with facilities capable of Giga Block. Since the successful delivery of the Fore and Stern block in 1996, the first Giga Block was shipped for the first time in Korea in 2001. Based on thorough quality control and technological innovation, we are part of a new chapter in history, as we have obtained a leading position in domestic block manufacturing factory and a key strategic partner for shipbuilding companies.

Main Products

Commercial Ship: Fore, Mid, Stern Block [Mega/Giga Block]
Offshore Plant: Topside Module, Column, Pontoon







주소 I 경상남도 거제시 사등면 성포로 303 Tel. +82 55. 680. 5600 Fax. +82 55. 680. 5780



철에 혼을 담는 기업, 건화 화합의 힘으로 글로벌 시장에 나아가다.

차가운 철이 뜨거운 열정과 만났을 때, 비로소 그 강인함이 가치를 지닙니다. 강철의 가치를 발휘하는 뜨거운 혼 그 중심에 건화인이 있습니다.

Breathing Life into Steel, Kunhwa Taking one step further through the power of harmony

When the lifeless steel is combined with our passion, we know that the catalyst effect unleashes an enormous amount of energy and potential. We the people of Kunhwa will always be at the center of this transformation, as we all witness the power released within.

