Lifting and Moving Technology
SEHO ENGINEERING

PROJECT WORK REPORT

MUMBAI TRANS HARBOUR LINK PROJECT

Marine & Installation Work Design, Analysis

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MUMBAI TRANS HARBOUR LINK PROJECT PACKAGE 2

뭄바이 해상교 프로젝트

뭄바이 해상교 프로젝트(MTHL Project)는 인도 본토 나바쉐바(Nhava Sheva) 지역과 뭄바이섬 남부 세리(Sewri) 지역을 잇는 22㎞짜리 해상교를 건설하는 사업입니다. 인도 뭄바이 대도시 개발청(MMRDA)이 발주한 국책사업으로 총 예상 공사비는 1780억 루피(27억 6000만달러)이며 완공시 인도에서 가장 긴 다리가 됩니다. 이 공사는 총 3개 구간으로 나뉘는데 대우건설이 타타그룹의 건설부문 자회사인「타타 프로젝트 리미티드」와 함께 2번 구간을 수주하였고, 당사는 2번 구간 교량의 운송, 설치 설계 전반을 담당하였습니다.

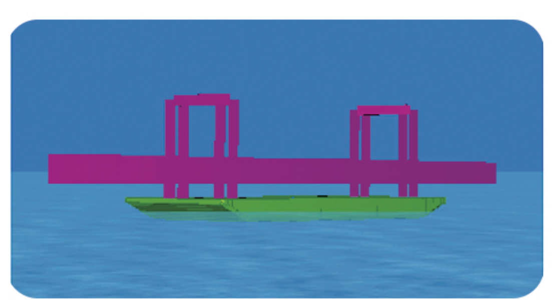
프로젝트 수행기간

2019년 10월 ~ 2023년 04월

용역 범위

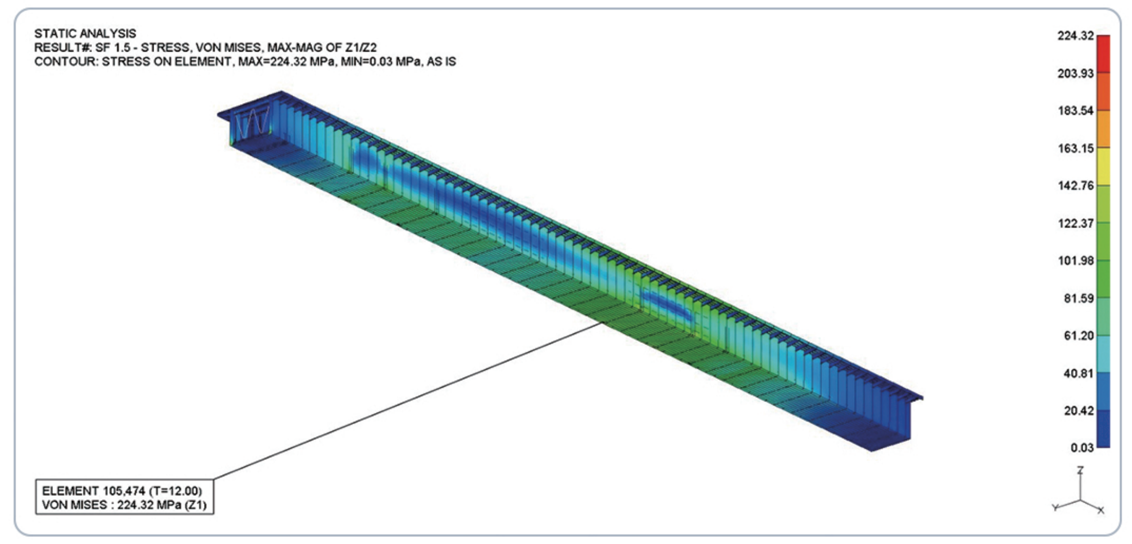
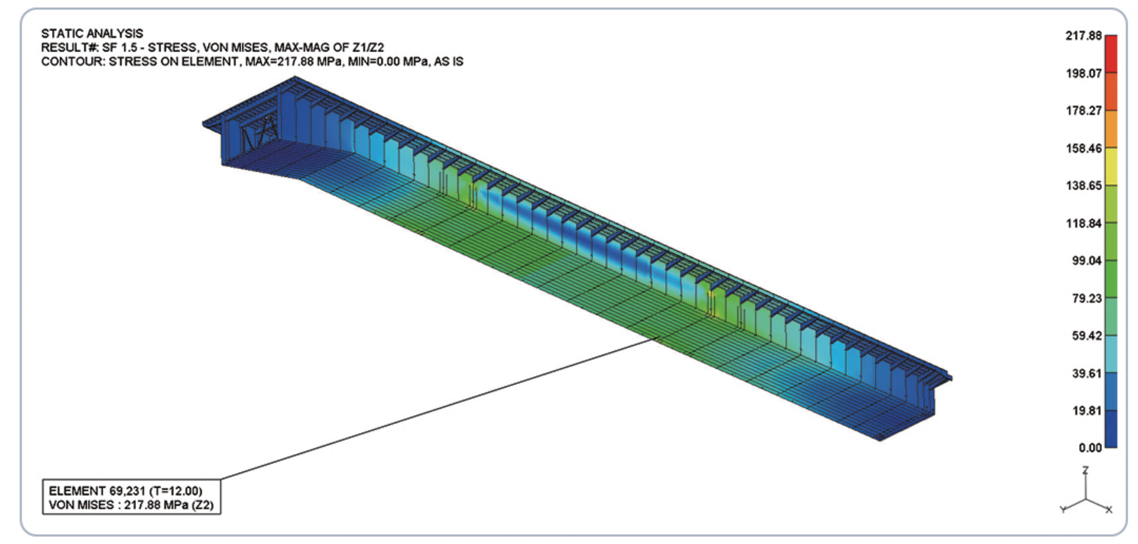
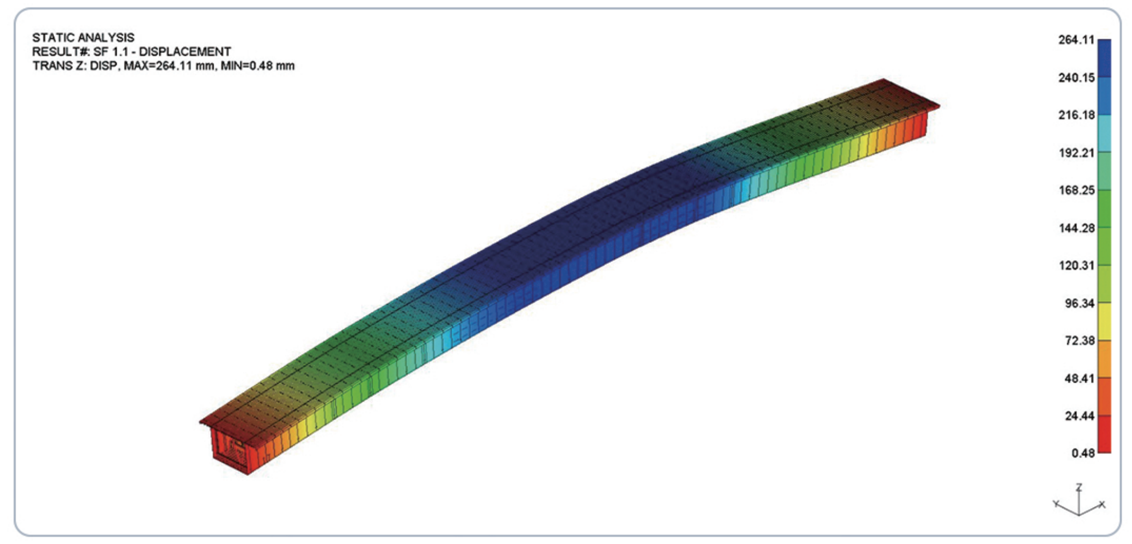
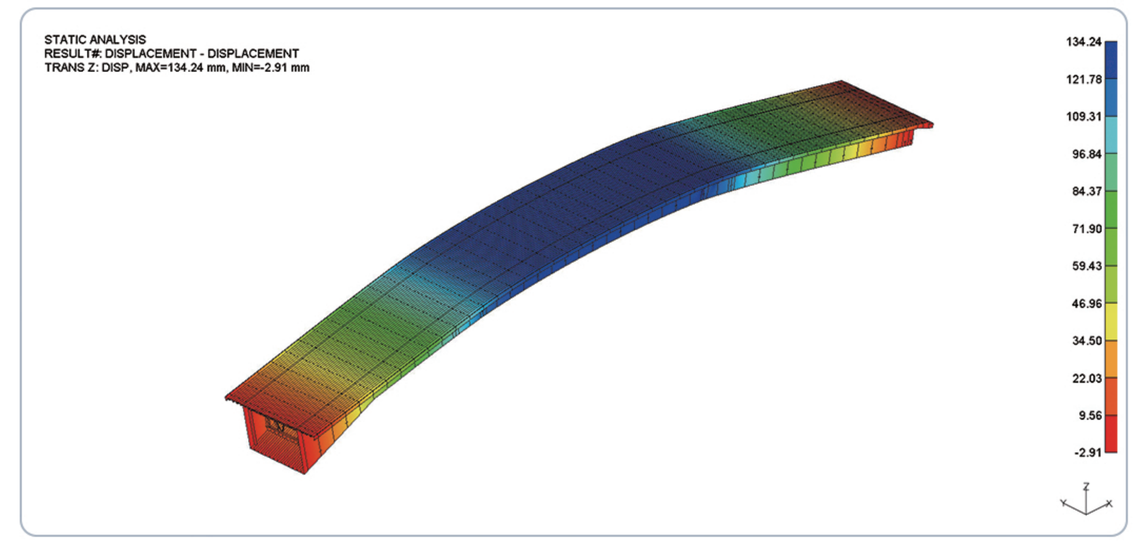
1) 기본 가설 공법에 대한 보완 및 개정 검토
2) 설계 조건 및 작업 조건, 환경 조건 검토
3) 운송 및 가설을 위한 장비 선정 검토
4) SPMT Transportation Plan
5) Loading Ramp-way Design
6) Barge Mooring/Ballast Plan
7) Barge Strength Check
8) Barge Deck Grillage Design
9) Sea-Transportation / Block Installation Motion Analysis
10) Sea-Fastening Design
11) Barge Stability Check
12) Barge Towing Plan
13) Barge Mooring Plan for Block Installation
14) Girder Block Lifting Plan (Mega Jack System)
15) Girder Strength & Deflection Check
16) Girder Local Strength Check
17) Local Reinforcement Design
18) Barge Ballast Plan for Block Lifting
19) Barge Dynamic Analysis by MOSES
20) 고급 인력 해외 파견 기술지원 및 업무 대응



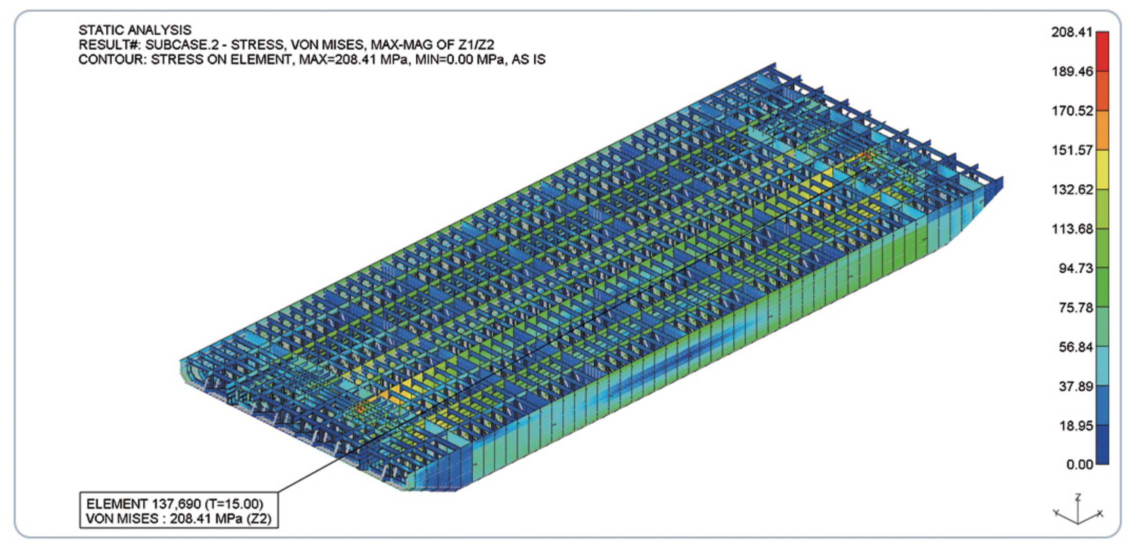
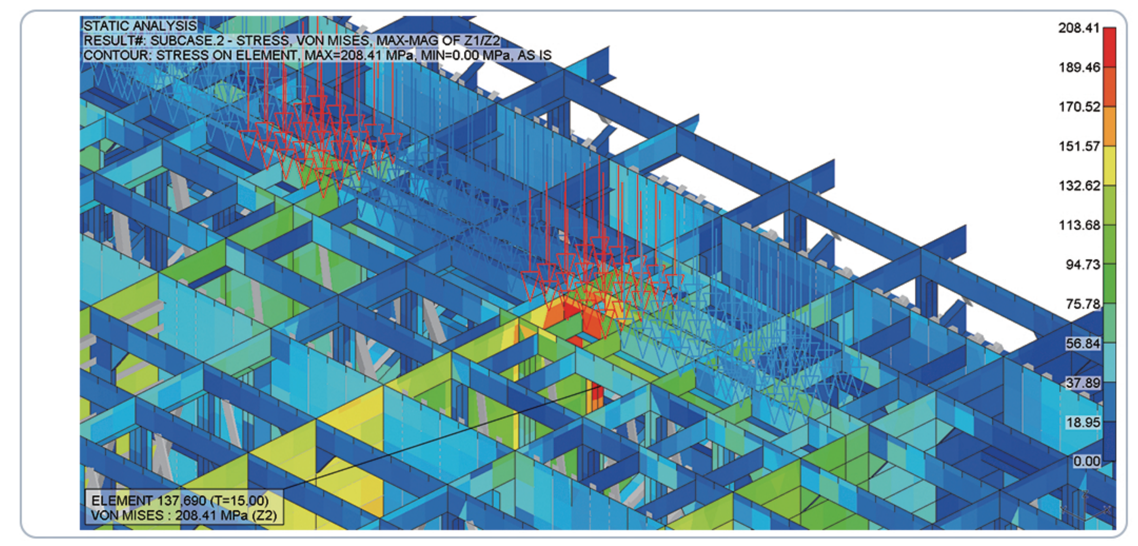



Structural Analysis

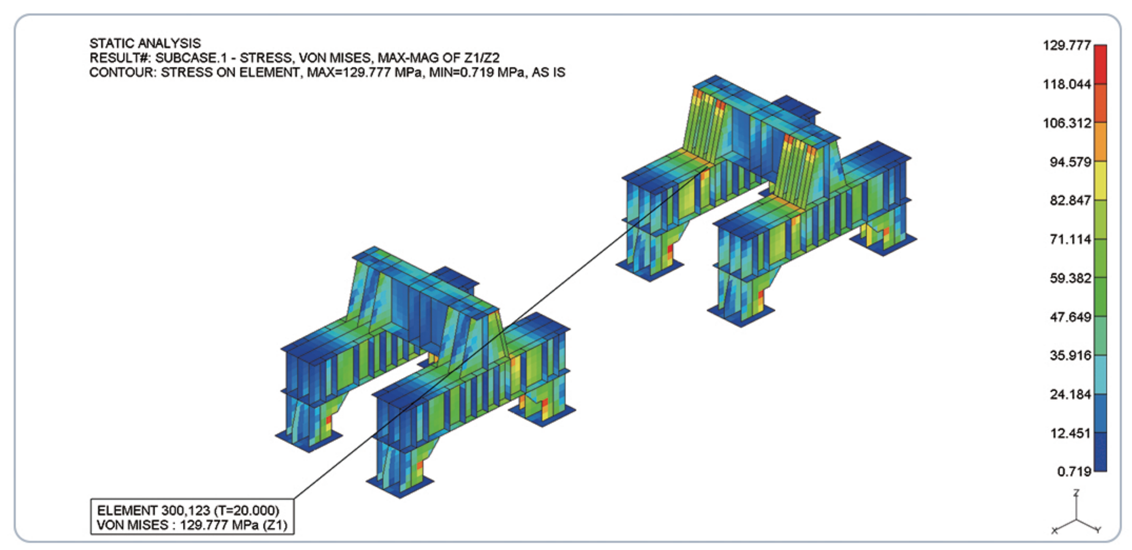
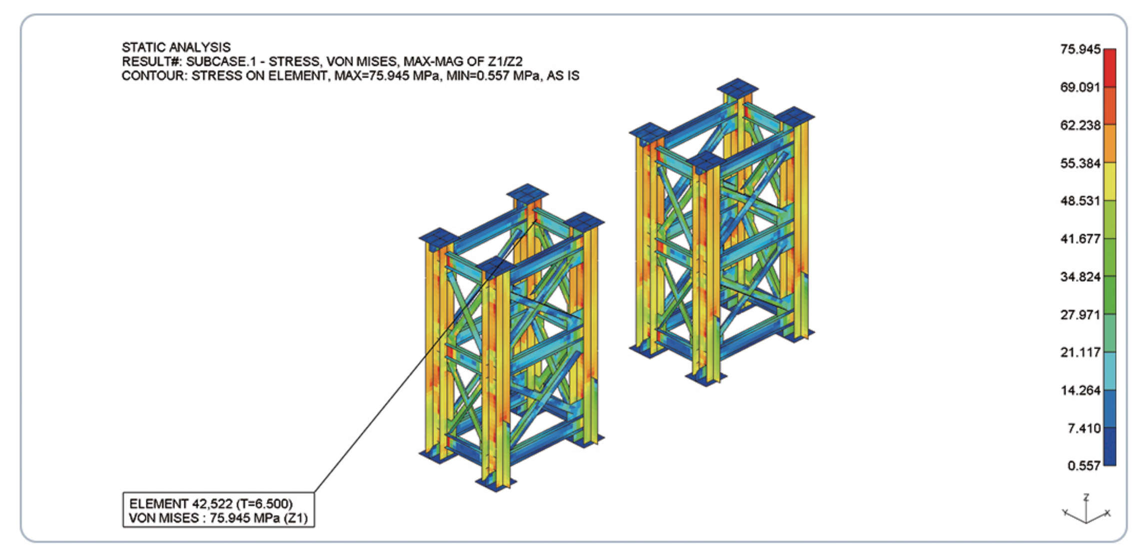
● 교량 구조 강도 평가

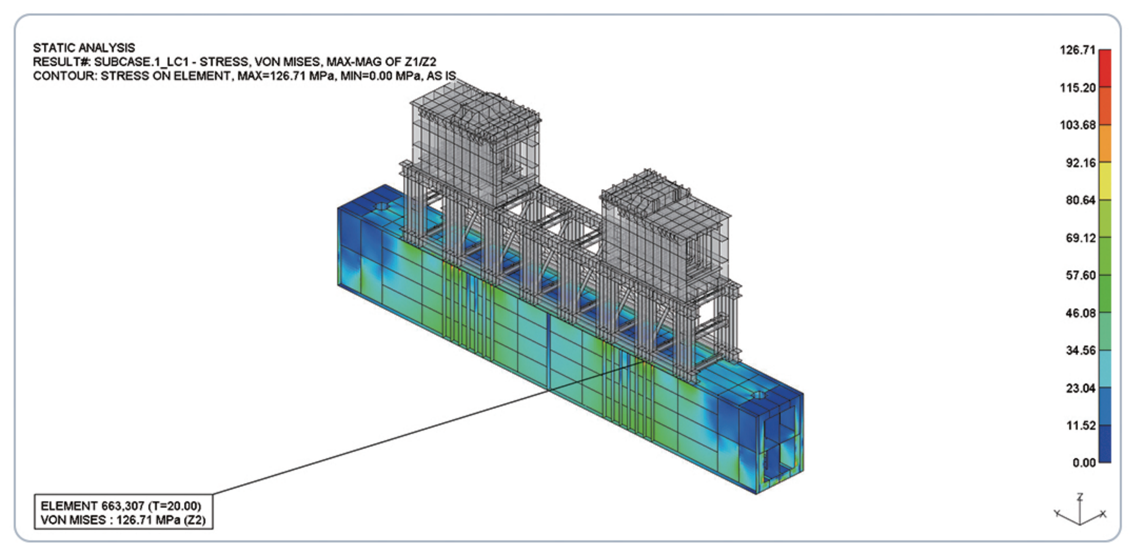
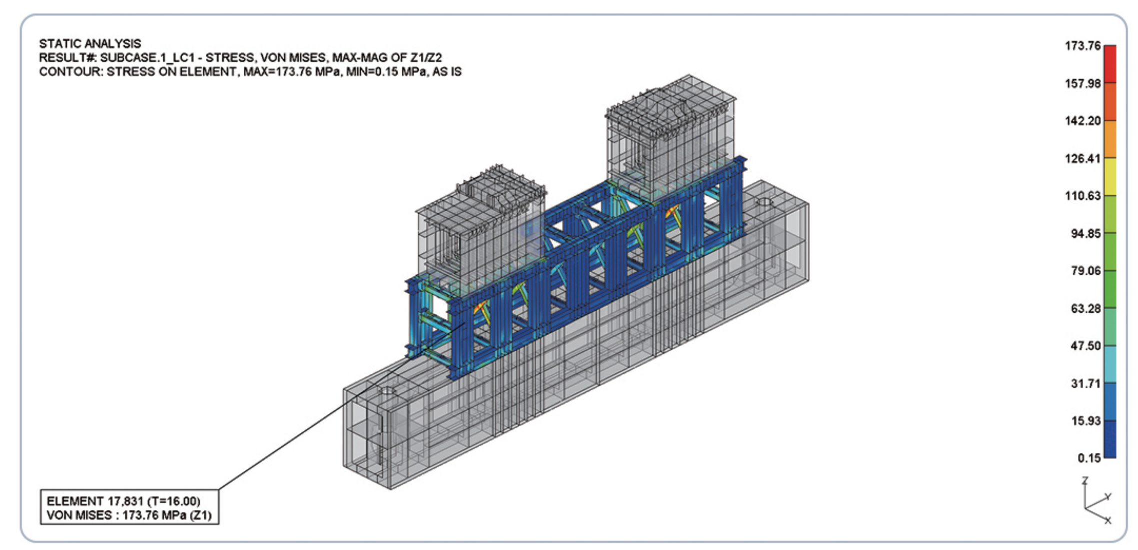
● Barge Deck 구조 강도 평가

● Lifting Tower 구조 강도 평가

● Lifting Device 구조 강도 평가

뭄바이 해상교 프로젝트 현장

MUMBAI TRANS HARBOUR LINK PROJECT PACKAGE 2

2019.10 - 2023.04

세호엔지니어링(주)은
뭄바이 해상교 프로젝트에서
2번 구간 교량의 운송, 설치 설계 전반을 담당하였습니다.

Work Performance Records for the last 3-years

No.	Project Name	Company / Contractor	Duration	Remarks
14	ITER - VS - Coil in Situ Winding Work - Staging & Prototype Design	IO / Yujin MS	2022~2023	On-going
13	Vacuum Insulated Pipe Design & Analysis	DuckCheun	2022~2023	On-going
12	Artificial Structure for Display	Government / GSI	2023	On-going
11	HD-10,000 F/C Mooring Design & Analysis	SK Ocean Plant	2023	On-going
10	Consulting of Method Statement for FOWT	SK Ecoplant	2022	Finish
9	Design of Special Lifter for Ship's Propulsion	Zvezda / DH Ent	2021~2023	Finish
8	Barossa FPSO - Structural Analysis	BWO / FG Ind.	2021~2022	Finish
7	Mumbai Trans Harbour Link Project - Marine Work & Installation Analysis	Daewoo TATA / DWST	2021~2023	Finish
6	Cable Protection System(CPS) Design Analysis	DWNT / Panduite	2022	Finish
5	ITER - Bracing Tools Manufacturing Design	IO / Yujin MS	2022	Finish
4	Lifting Work Procedure for Floating Crane	Kumyong	2022	Finish
3	Vibration Analysis for SCR	WK Industry	2021	Finish
2	Power System Design of Air Boat	Government / KUMHA	2021~2022	Finish
1	Development of Mine Laying System Design	Government / KUMHA	2020~2022	Finish

Software & Tools

ANSYS
Structural Analysis

ENGYS
Applications by Industry
CFD & Optimisation

Orca3D
Orca3D
Marine Design for
Rhinoceros

OrcaFlex
Dynamic Analysis Software
for Offshore Marine Systems

SACS
Structure Analysis
Computer System for
Offshore Plant

PATRAN & FEA2007
Hull and General
Structural Analysis
Program

Rhino
Geometric
Modeling

MIDAS-NFX
Structural Analysis
& Civil Engineering

MOSES
Multi-Operational Structural
Engineering Simulator,
Motion & Stability Analysis

OPTI-MOOR
Mooring Analysis

NASTRAN
Analysis Solver

AUTO-CAD
2D & 3D Drawing

3D MAX
3D Drawing

IN-HOUSE SOFTWARE
Ballasting Calculation,
Towing Calculation,
Lug Calculation,
Welding Calculation and Etc.

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