MEGALINE INTRODUCTION

Heavy Marine Transport

MEGALINE

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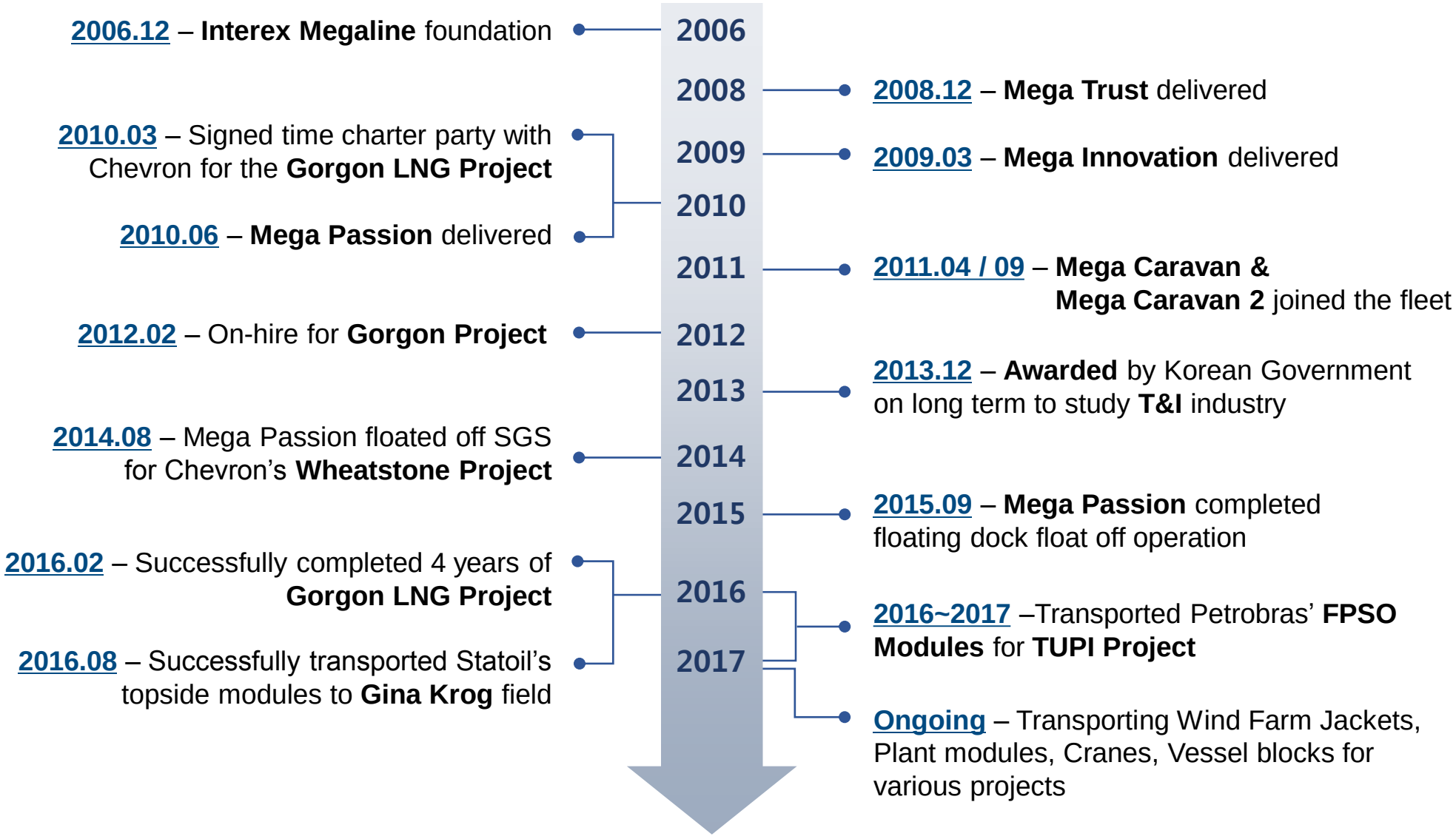
MEGALINE

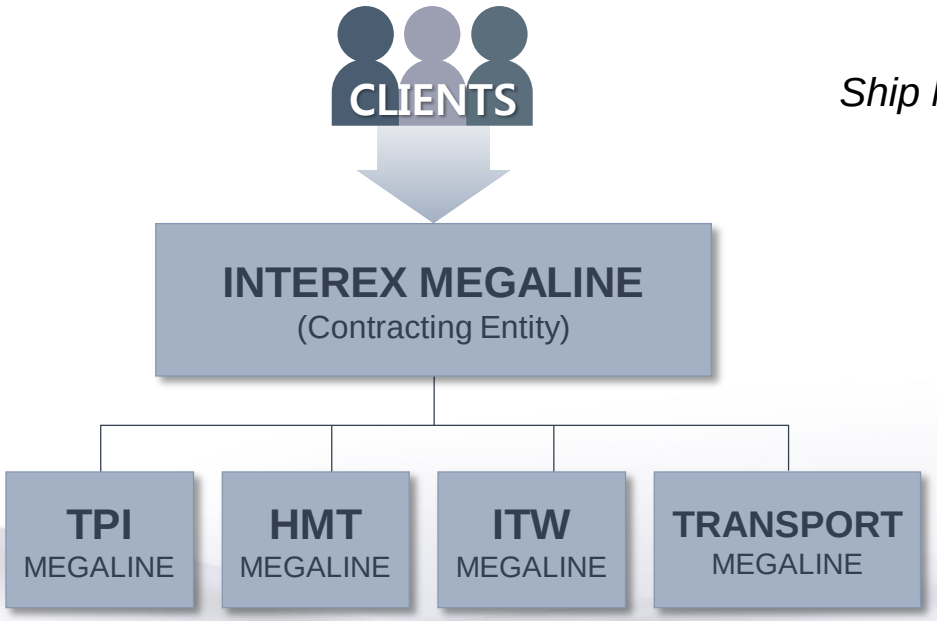
COMPANY HISTORY & MAJOR MILESTONES



MEGALINE

MANAGEMENT STRUCTURE

- 5 MEGALINE Affiliates are under **similar ownership** & controlled by the **same major shareholders**
- **INTEREX MEGALINE** is the contracting entity & representative for all other MEGALINE affiliates.



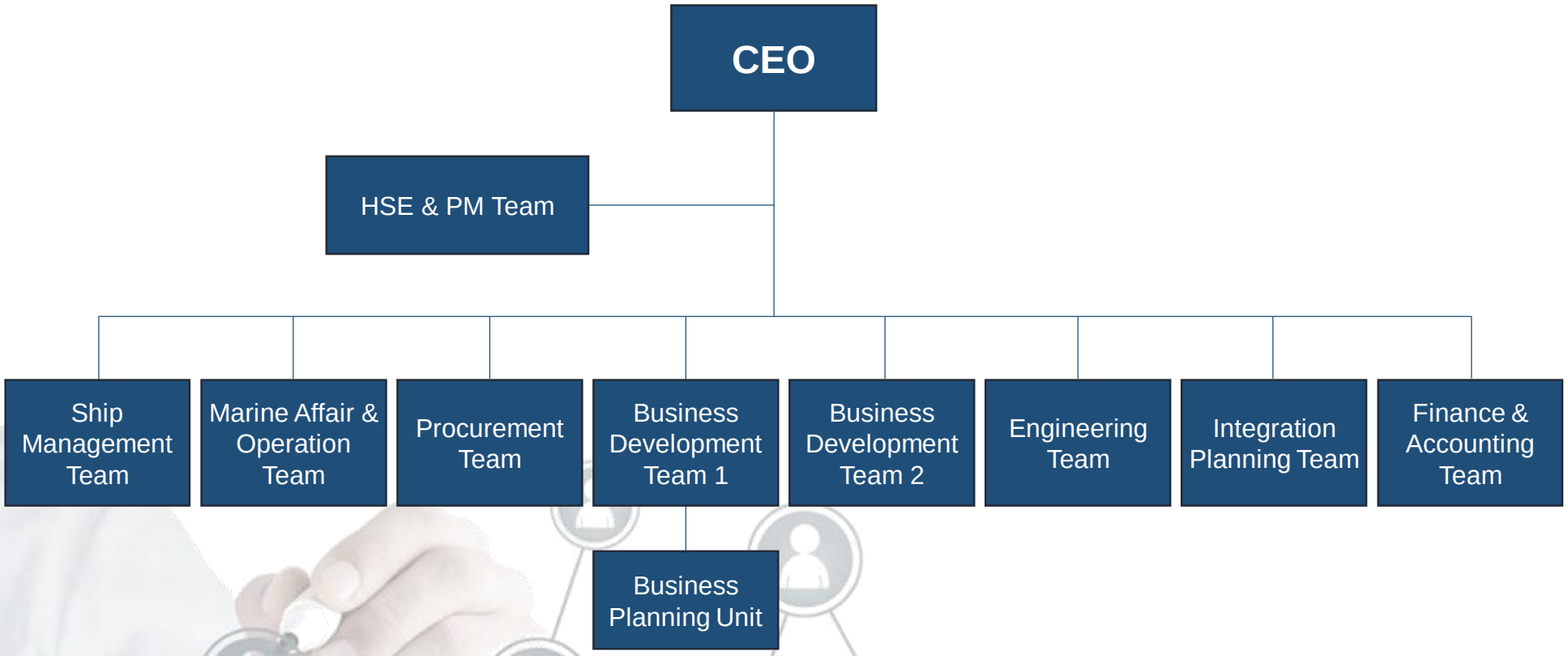
Integrated Ship Management Company →

Megaline Affiliates →

COMPANY	VESSEL
INTEREX	*MEGA TRUST*
TPI	*MEGA PASSION*
HMT	*MEGA CARAVAN*
ITW	*MEGA CARAVAN 2*
TRANSPORT	*MEGA INNOVATION*

MEGALINE

ORGANIZATION CHART



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SERVICE FIELD

Heavy Marine Transport

Project Management

Transport Engineering

Vessel & Crew Management

HSEQ Management

Logistics Management

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PROJECT LOG

Project name / Cargo type	Client	Weight per shipment	Period
MEGA PASSION			
Ring & multi-ring blocks for various ship's owners	DSME	8,000 ~ 15,000mt	2010~Cont.
SHI vessel hull blocks	SHI	11,165mt	2013
Wheatstone project - Steel Gravity Structure	HEEREMA	36,000mt	2014
Floating dock	KCTC	7,300mt	2015
HHIC half ship	HHIC	13,100mt	2016
HHIC half ship	HHIC	15,903mt	2017
MEGA CARAVAN			
Ship pre-erected blocks	SHI	7,371 ~ 7,620mt	2011
Gorgon project / module, PAR, PAU, GTG	CHEVRON	2,500 ~ 9,000mt	2012~2016
Gina Krog project / MSF	STATOIL	16,001mt	2016
TUPI project P-75 / 4 FPSO modules	QGI	5,000mt	2016
TUPI project P-77 / 4 FPSO modules	QGI	5,000mt	2017
East Anglia wind farm flat packs 1st shipment	LAMPRELL	11,000mt	2017
East Anglia wind farm flat packs 2nd shipment	LAMPRELL	11,000mt	2017
MEGA CARAVAN 2			
Ship pre-erected blocks	SHI	4,500 ~ 7,800mt	2011
Gorgon project / module, PAR, PAU	CHEVRON	2,500 ~ 9,000mt	2012~2016
Gina Krog project / PM, UM, flareBoom	STATOIL	7,995mt	2016
2 STS cranes, 4 RMG cranes	BEICHEN	3,600mt	2016~2017
Bene Plant Modules 1st shipment	DEUGRO	5,123mt	2017
Bene Plant Modules 2nd shipment	DEUGRO	5,123mt	2017

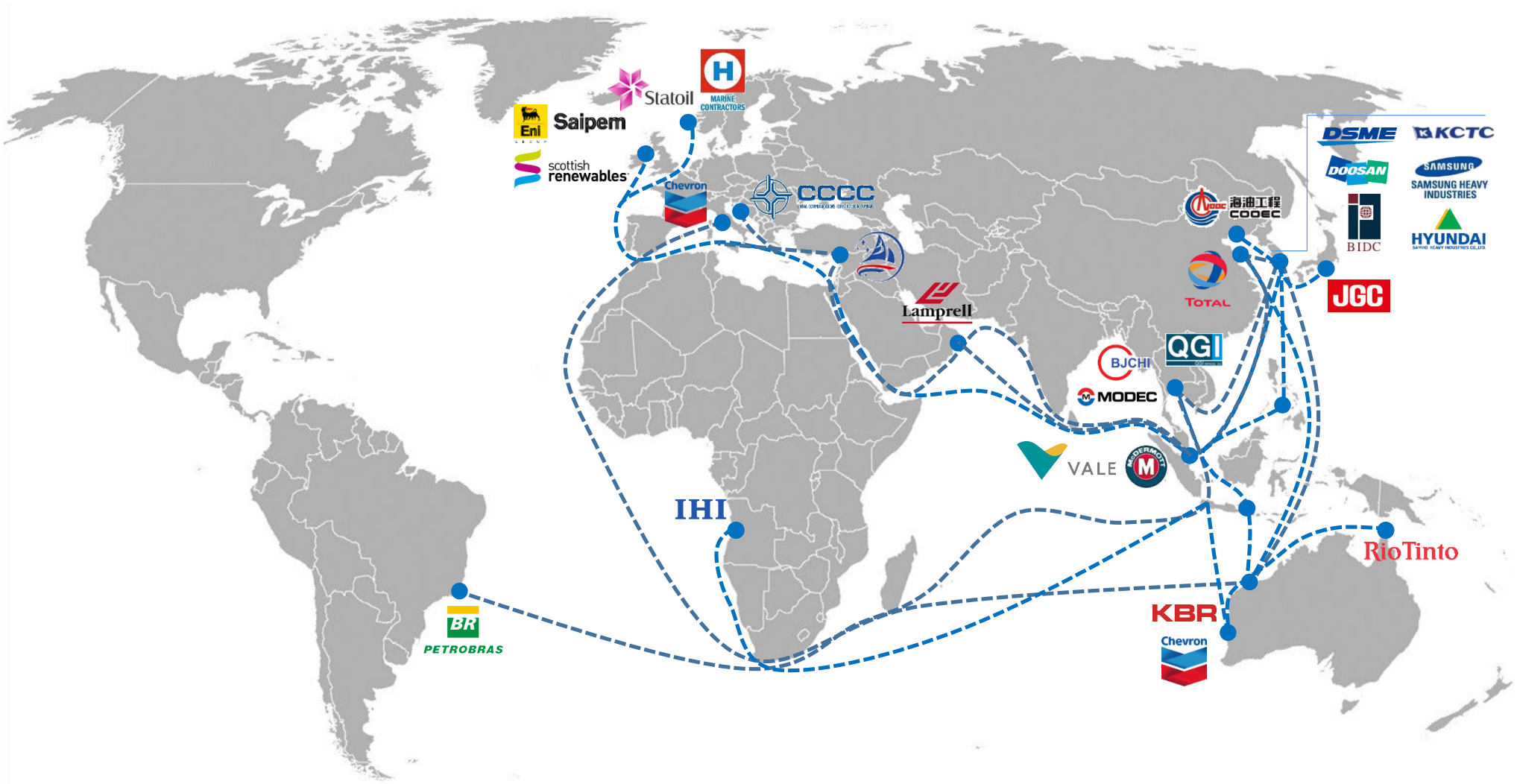
PROJECT LOG

Project name / Cargo type	Client	Weight per shipment	Period
MEGA TRUST			
Ship pre-erected blocks	DSME	5,575 ~ 8,972mt	2011
Gorgon project / module, PAR, PAU	CHEVRON	1,000 ~ 5,000mt	2012~2016
TUPI project P-66 / 4 FPSO modules	PETROBRAS	5,000mt	2016
TUPI project P-69 / 4 FPSO modules	BJC	5,000mt	2016
TUPI project P-70 / 4 FPSO modules	COOEC	5,000mt	2017
Master Marine leg extensions & suction caissons	LAMRPELL	12,400mt	2017
Fully assembled unloader	CCCC	3,000mt	2017
MEGA INNOVATION			
Gantry crane	KCTC	5,000mt	2009
7 x Jib cranes	HSHI	6,000mt	2009
Offshore modules & loose items	MODEC	3,166mt	2010
1 x fully erected grab unloader	ESPIRIT	2,500mt	2010
Grab bucket unloader	IHI	2,500mt	2010
Manifold	DOOSAN	-	2010
2 x RMQC, 6 x RTGC	DOOSAN	6,000mt	2011
Flare tower	TOTAL	2,413mt	2012
3 x unloaders	VALE	8,500mt	2013
Ship pre-erected blocks	DSME	-	2009~Cont.
Ship pre-erected blocks	HHIC	-	2015~2016

CLIENTS

MEGALINE

GLOBAL CLIENTS



MEGALINE

MAJOR PROJECT EXPERIENCE

- **Gorgon LNG Project**

Client:	Chevron Australia
Duration:	2012 ~ 2016
From:	Fab Yards in Asia/Italy
To:	Barrow Island, Australia
Cargo:	Modules, PAU/PARs, GTGs
Weight:	2,500 - 10,726 mt

- ✓ Largest project for Megaline (Total 47 shipments)
- ✓ Total charter period – 4 years for 3 vessels
  - Mega Caravan & Mega Caravan 2
  - Mega Trust
- ✓ Engineering preparation
  - Motion analysis
  - Voyage transportation manual
  - Stowage plan, Voyage plan
  - Ballast plan load-out/in
  - Mooring plan load-out/in & seafastening

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MAJOR PROJECT EXPERIENCE

- **Gorgon LNG Project**

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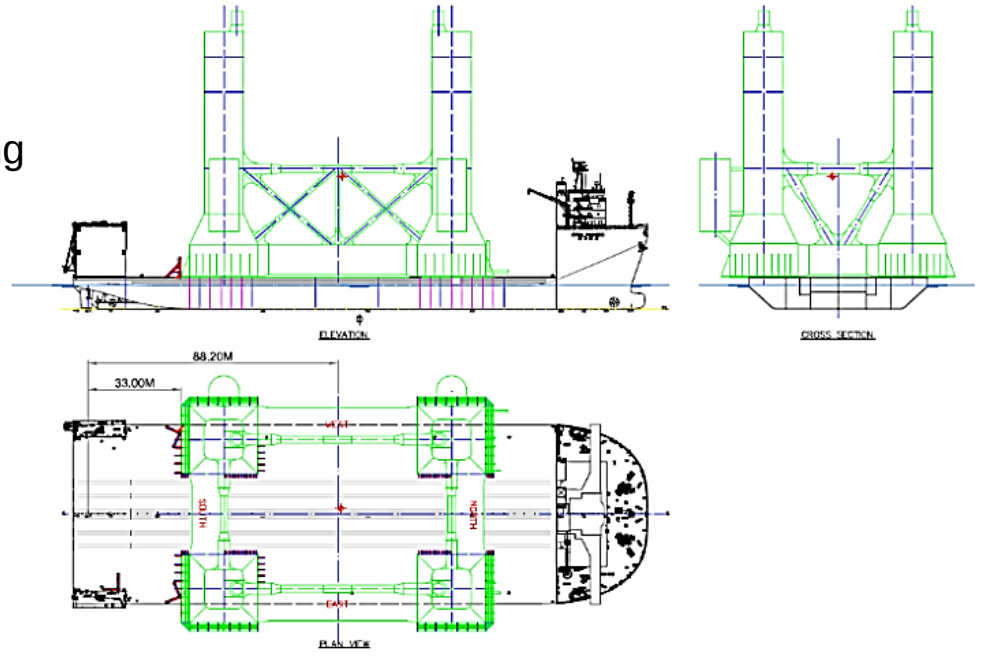
MAJOR PROJECT EXPERIENCE

- **Wheatstone Project**

Client:	Chevron Australia
Duration:	Aug. 2014
From:	Okpo, South Korea
To:	Wheatstone Field, Australia
Cargo:	Steel Gravity Structure
Weight:	36,000 mt

- ✓ Largest cargo for Megaline (36,000mt)
- ✓ Vessel reinforcement scope
  - Additional engineering for deck strengthening
  - Subcontract management and installation
  - Supervision
- ✓ Grillage design scope & execution (fishbone cribbing)
- ✓ Submerged to maximum 23.7m during submersion trial



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MAJOR PROJECT EXPERIENCE

- **Wheatstone Project**

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MAJOR PROJECT EXPERIENCE

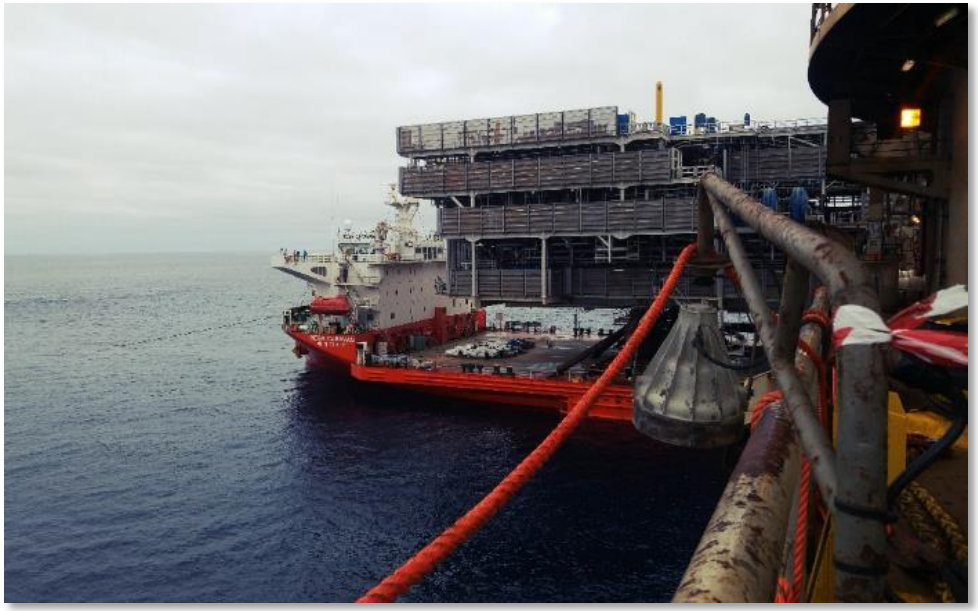
- **Gina Krog Project**

Client:	Statoil
Duration:	Jun. ~ Oct. 2016
From:	Okpo, South Korea
To:	Offshore, Northern Sea
Cargo:	Topside Module
Weight:	1st shipment: 7,860 mt
	2nd shipment: 12,207 mt

- ✓ Transport of topside modules from Korea to the Northern Sea
- ✓ Loading method: skid-on, roll on, lift-on
- ✓ Discharging method: lift off
- ✓ **1st shipment:** process module, utility module, flare boom
- ✓ **2nd shipment:** main supporting frame

MAJOR PROJECT EXPERIENCE

- **Gina Krog Project**



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MAJOR PROJECT EXPERIENCE

- **TUPI FPSO Project**

Client:	Petrobras
Duration:	2016 ~ 2017
From:	Sattahip, Thailand
To:	Angra Dos Reis, Brazil
	Dalian, China
Cargo:	FPSO Modules
Weight:	Each Shipment: 5,000 mt

- ✓ 3 Shipments – transportation of 12 FPSO modules
  - 2 shipments to Brazil
  - 1 shipment to China
- ✓ Each shipment : 4 FPSO modules 5,000mt
- ✓ Load-out – roll on operation
- ✓ Load-in – roll off operation

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MAJOR PROJECT EXPERIENCE

- **TUPI FPSO Project**

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PROJECT MANAGEMENT

- **Strength**

Project-oriented thinking

Megaline values the **success of the projects** as a top priority. We work with our clients during the project execution phase with a **flexible mindset** and a **cooperative attitude**

Quick response

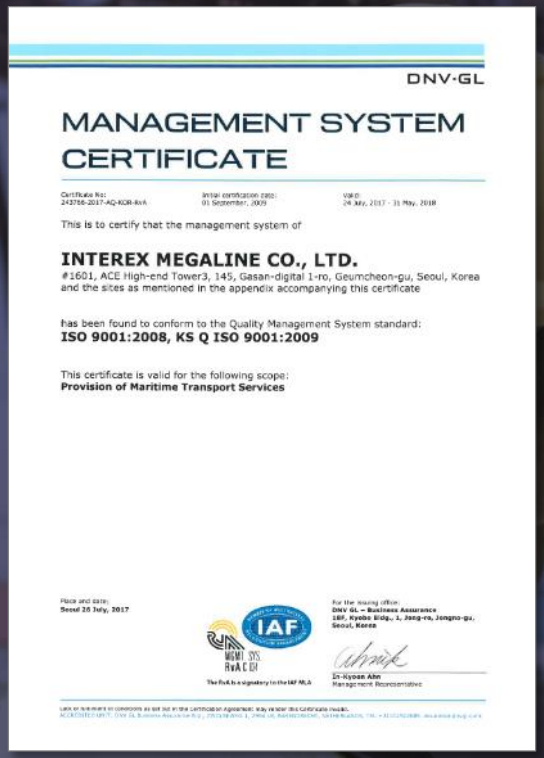
Once the project initiates, a project specific TFT with qualified personnel will execute the project and **respond promptly** to our client's requests that occur during execution.

Safe & On-time strategy

Megaline follows the emergency response for the **safety of cargo and vessel**. We ensure to achieve with on-schedule strategy so that the project is executed **without any delay**.

HSEQ / AWARDS

- Megaline vessels are registered to **OVID** (Offshore Vessel Inspection Database)
- Megaline **Management System** is approved and certified by the DNV GL for
  - ISO 9001:2008 – Quality Management System
  - ISO 14001:2004 – Environment Management System
  - OHSAS 18001:2007 – OHSAS (Occupational Health Safety Assessment Series) management system


DNV·GL

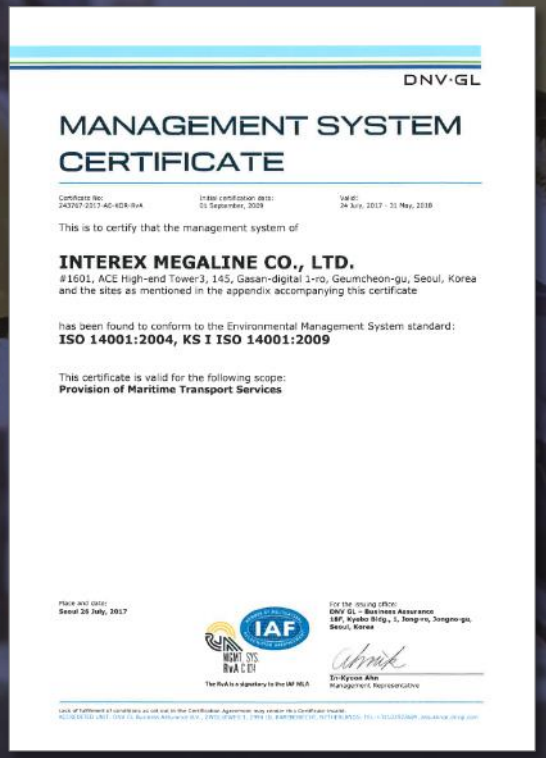
MANAGEMENT SYSTEM CERTIFICATE

This is to certify that the management system of

INTEREX MEGALINE CO., LTD.
#1601, ACE High-end Tower3, 145, Gasan-digital 1-ro, Geumcheon-gu, Seoul, Korea and the sites as mentioned in the appendix accompanying this certificate

has been found to conform to the Quality Management System standard:
ISO 9001:2008, KS Q ISO 9001:2009

This certificate is valid for the following scope:
Provision of Maritime Transport Services


DNV·GL

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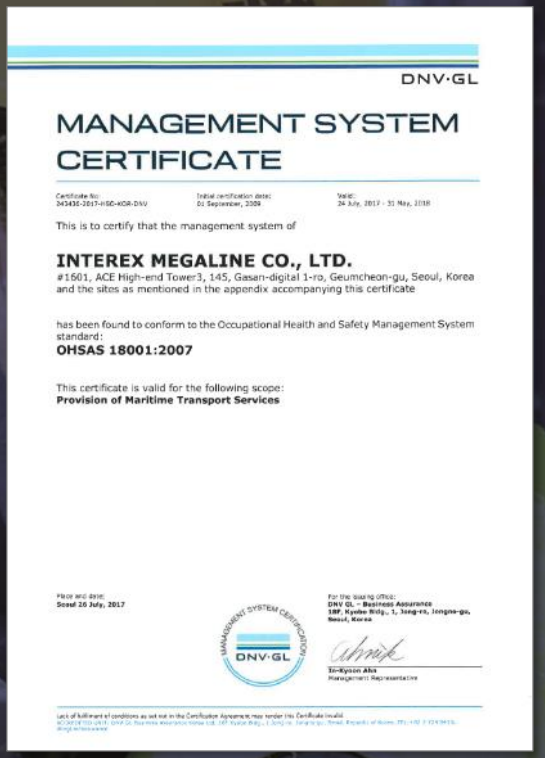
has been found to conform to the Environmental Management System standard:
ISO 14001:2004, KS I ISO 14001:2009

This certificate is valid for the following scope:
Provision of Maritime Transport Services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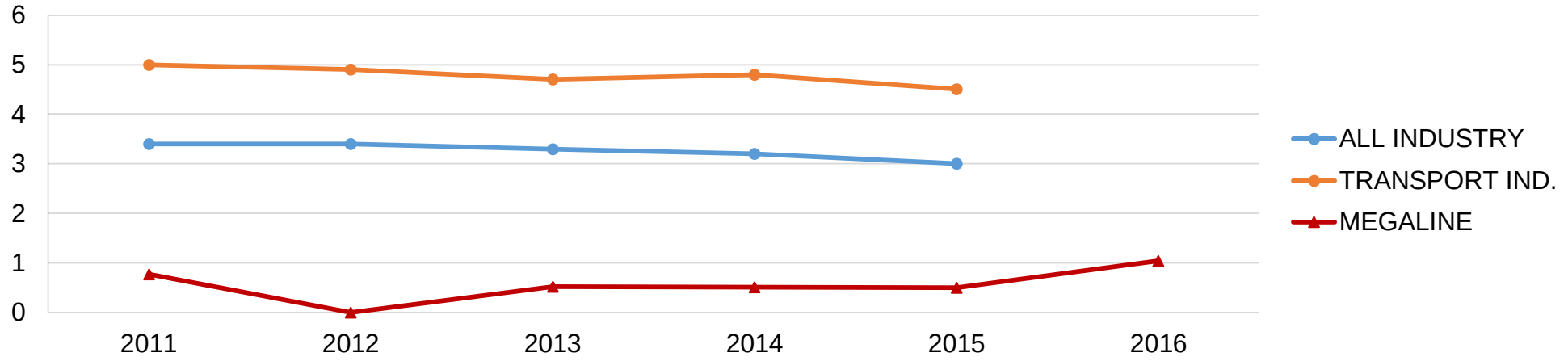
has been found to conform to the Occupational Health and Safety Management System standard:
OHSAS 18001:2007

This certificate is valid for the following scope:
Provision of Maritime Transport Services

HSEQ / AWARDS

- Total Recordable Incidents Rate (Against US_OSHA)

TRI (Total Recordable Incidents): The sum of injuries resulting in fatalities, permanent total disabilities, lost workday cases, restricted work cases and medical treatment cases, but excluding first aid cases.



*** HSE PERFORMANCE STATISTICS _ based 200,000 hours**

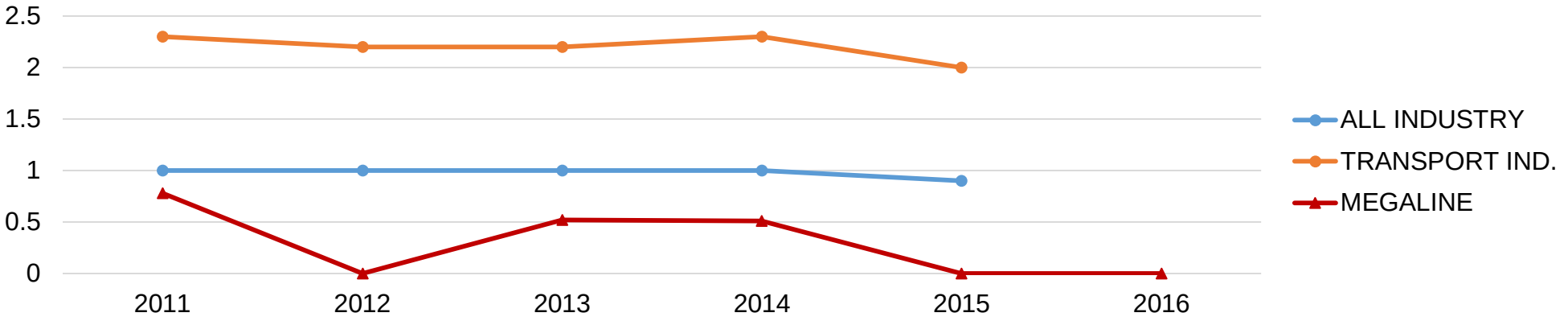
Total Recordable Incidents Rate		2011	2012	2013	2014	2015	2016
ALL INDUSTRY (US)	**TRIR**	**3.4**	**3.4**	**3.3**	**3.2**	**3.0**	
TRANSPORT IND. (US)	**TRIR**	**5.0**	**4.9**	**4.7**	**4.8**	**4.5**	
MEGALINE	FAT/PTD	0	0	0	0	0	0
	LWC	1	0	1	1	0	0
	RWC	0	0	0	0	0	1
	MTC	0	0	0	0	1	1
	TRIR	**0.78**	**0**	**0.52**	**0.51**	**0.5**	**1.05**
	WORKED HOUR	**255,000**	**257,000**	**385,000**	**391,000**	**399,500**	**378,750**

MEGALINE

HSEQ / AWARDS

- Lost Time Incidents Rate

LTI (Lost Time Incidents): A work-related incident (injury or illness) to an employee in which a physician or licensed health care professional recommends days away from work due to the incident.



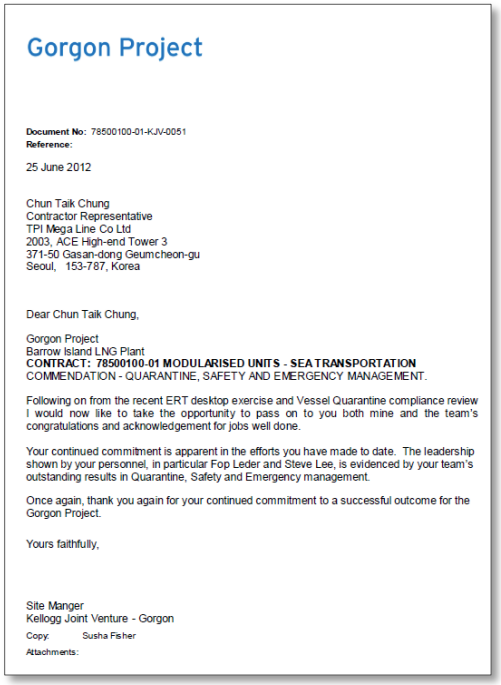
*** HSE PERFORMANCE STATISTICS based 200,000 hours**

Lost Time Incidents Rate		2011	2012	2013	2014	2015	2016
ALL INDUSTRY (US)	**LTIR**	**1.0**	**1.0**	**1.0**	**1.0**	**0.9**	
TRANSPORT IND. (US)	**LTIR**	**2.3**	**2.2**	**2.2**	**2.3**	**2.0**	
MEGALINE	FAT/PTD	0	0	0	0	0	0
	LWC	1	0	1	1	0	0
	LTIR	**0.78**	**0**	**0.52**	**0.51**	**0**	**0**
	WORKED HOUR	**255,000**	**257,000**	**385,000**	**391,000**	**399,500**	**378,750**

MEGALINE

HSEQ / Awards

- Received **Commendation letter** & **Quarantine award** for Gorgon project
- **Export award** of thirty million dollars export tower by the president of Republic of Korea
- Awarded best company for **Safety management and PSC control** by Korean Register of shipping
- Awarded best company for **Maritime safety** by Korean ministry of oceans and fisheries



Gorgon Project

Document No: 78500100-01-KJV-0051
Reference:

25 June 2012

Chun Taik Chung
Contractor Representative
TPI Mega Line Co Ltd
2003, ACE High-end Tower 3
371-50 Gasan-dong Geumcheon-gu
Seoul, 153-787, Korea

Dear Chun Taik Chung,

Gorgon Project
Barrow Island LNG Plant
CONTRACT: 78500100-01 MODULARISED UNITS - SEA TRANSPORTATION
COMMENDATION - QUARANTINE, SAFETY AND EMERGENCY MANAGEMENT.

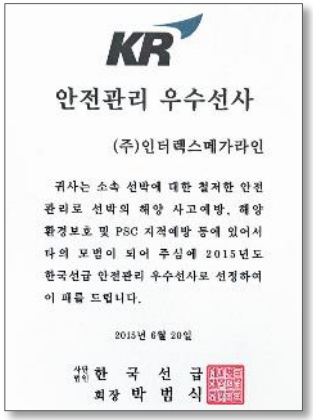
Following on from the recent ERT desktop exercise and Vessel Quarantine compliance review I would now like to take the opportunity to pass on to you both mine and the team's congratulations and acknowledgement for jobs well done.

Your continued commitment is apparent in the efforts you have made to date. The leadership shown by your personnel, in particular Fop Leder and Steve Lee, is evidenced by your team's outstanding results in Quarantine, Safety and Emergency management.

Once again, thank you again for your continued commitment to a successful outcome for the Gorgon Project.

Yours faithfully,

Site Manger
Kellogg Joint Venture - Gorgon
Copy: Susha Fisher
Attachments:



MEGALINE

FLEET INTRODUCTION

Semi-submersible

53,000 DWT
MEGA PASSION

17,726 DWT
MEGA CARAVAN

17,644 DWT
MEGA CARAVAN 2

19,118 DWT
MEGA TRUST

16,800 DWT
MEGA INNOVATION

- Ample free deck area
- Large Width
- Low Depth
- Stern and side loading
- High Ballast Capacity
- Low Acceleration
- Good Stability
- Experienced Crew

MEGALINE

FLEET INTRODUCTION

- **Particulars**

	Mega Passion	Mega Caravan	Mega Caravan 2	Mega Trust	Mega Innovation
FLAG / PORT OF REGISTRY	Republic of Korea	Republic of Korea	Republic of Korea	Republic of Korea	Republic of Korea
TYPE OF VESSEL	Semi-Submersible	Heavy Transport	Heavy Transport	Heavy Transport	Heavy Transport
DEAD WEIGHT TONNAGE	53,000 TON	17,726 TON	17,644 TON	19,118 TON	16,800 TON
SHIPYARD	DSME, Korea	DSME, Korea	DSME, Korea	Shin-an Heavy Ind., Korea	Lianyungang Hen Chen, China
DELIVERY DATE	June 2010	April 2011	September 2011	December 2008	September 2009
IMO NUMBER	9528421	9578608	9586758	9520352	9549164
DIMENSIONS	203.0M x 63M x 11M	163.8M x 47.0M x 9.5M	163.8M x 47.0M x 9.5M	148.0M x 50.0M x 9.5M	152.6M x 45.0M x 10.0M
LENGTH	203	163.8	163.8	148	152.6
BREADTH	63	47 (42)	47 (42)	50	45(38)
DEPTH	11.0	9.5	9.5	9.5	10.0
DRAFT (SCANTLING)	8.2M	8.5M	8.5M	8.0M	8.0M
DRAFT (S.L.W.L)	6.6M	6.0M	6.0M	5.8M	6.8M
DRAFT (SUBMERSIBLE)	23.7M	N/A	N/A	N/A	N/A
FREE DECK	171.0M x 63.0M	140.0M x 47.0M	140.0M x 47.0M	124.0 x 50.0M	131.0M x 45.0M
DECK STRENGTH	28 - 40 TON/m2	28.0 TON/SQ.M.	28.0 TON/SQ.M.	25.0 TON/SQ.M.	18.0 TON/SQ.M.
SPEED	12 KNOTS	12 KNOTS	12 KNOTS	12 KNOTS	12 KNOTS
BALLAST PUMP	3,000 CU.M./HR x 8 UNITS	2,500 CU.M. /HR x 4 UNITS	2,500 CU.M. /HR x 4 UNITS	2,500 CU.M. /HR x 6 UNITS	2,300 CU.M. /HR x 4 UNITS
BUNKER CAPACITY	F.O. 3,052.5 CU.M.	F.O. 1,679 CU.M.	F.O. 1,679 CU.M.	F.O. 1,093 CU.M.	F.O. 1,094 CU.M.
	D.O. 827.5 CU.M.	D.O. 340 CU.M.	D.O. 340 CU.M.	D.O. 199 CU.M.	D.O. 594 CU.M.
BALLAST CAPACITY	102,919.1 CU.M.	30,513.7 CU.M.	30,513.7 CU.M.	32,601.3 CU.M.	19,064.9 CU.M.
ENGINE FUEL	380 CST	380 CST	380 CST	380 CST	180 CST
FLEET AVERAGE AGE	7.0 Years				

Fleet Introduction

- **Vessel Redundancy**

Propulsion System Description/Redundancy
MEGA PASSION

Propulsion System

Main Propulsion Motor	
No. of sets	Two (2)
Type	Marine Propulsion Converter
Model	MV 7000 with F/converter
Rating at MCR	4,000 kw at 120.0 rpm
Direction of rotation	One clockwise and the other counter-clockwise
Main Generator Engine (MGE)	
No. of sets	Four (4)
Model	HHI 6H32/40
Rating at MCR	3,000 kw at 720 rpm
Fuel	HFO up to 600 cst and MDO(ISO-F-DMC)

Redundancy

Based on GL Noble Denton –"Guidelines for Marine Transportations"		
Voyage by self-propelled vessels with redundant propulsion systems. A vessel with a redundant propulsion system is defined as having, as a minimum:		
	Requirements	Status of Vessel
1	2 or more independent main engines	Equipped with two(2) independent Motors and propulsion system 1) Four MGE running : Motor max 120 rpm 2) Three MGE running : Motor max 110 rpm 3) Two MGE running : Motor max 98 rpm
2	2 or more independent fuel supplies	Total two independent units. Each unit has one (1) F.O circulating pump, one (1) F.O supply pump and one(1) F.O heater.
3	2 or more independent power transmission systems	Two (2) independent power transmission systems
4	2 or more independent switchboards	Two independent groups in main switchboard, which can be separately operating by opening main bus tie if one side switchboard is not available.
5	2 or more independent steering systems, or an alternative means of operation of a single steering system (but excluding emergency steering systems that cannot be operated from the bridge)	Equipped with two (2) independent steering systems
6	The ability to maintain any desired heading in all conditions up to and including the design storm, taking account of the windage of the cargo	For the above reasons, proposed vessel "Mega , Passion equipped with the up-to-date propulsion and steering systems that shall keep vessel desired

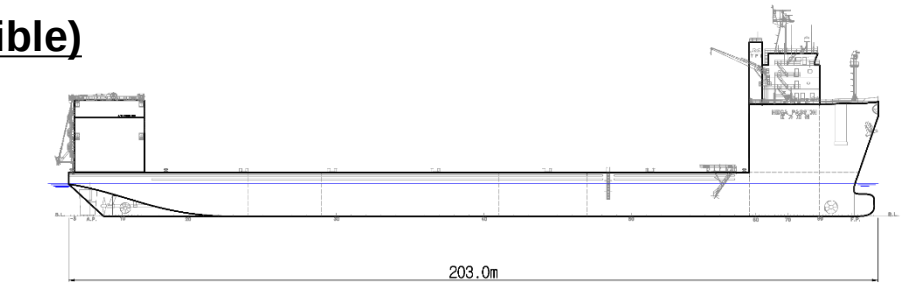
- 4 vessels equipped with up-to-date redundant propulsion and steering system based on **Noble Denton redundancy guidelines**
  - ✓ 2 independent main engines and propulsion system
  - ✓ 2 F.O supply unit
  - ✓ 2 independent power transmission system
  - ✓ 2 main switchboard
  - ✓ 2 independent steering systems

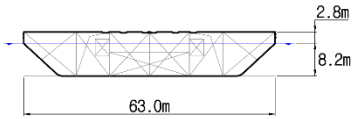
MEGALINE

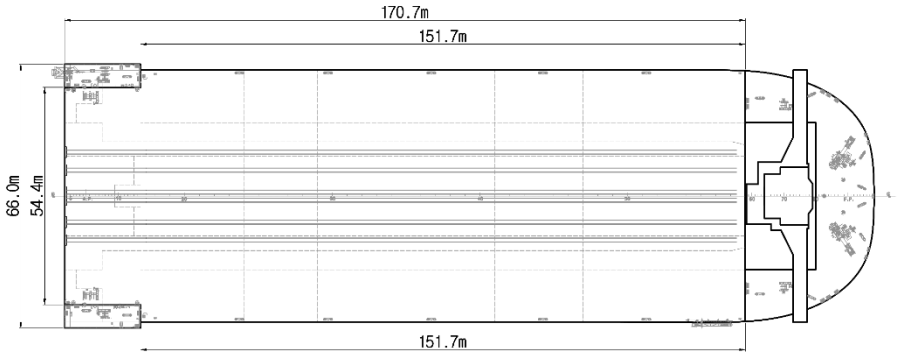
Fleet Introduction

- **Mega Passion (semi-submersible)**

L.O.A	**203.0 m**
Breadth	**63.0 m**
Depth	**11.0 m**
Draft (submerged)	**8.2 m (23.7 m)**
Free deck	**170.7 m x 63.0 m**
Deadweight	**53,000 ton**
Deck load	**28~40 ton /m^2**
Ballasting	**8 pumps 3,000 m^3/hr**



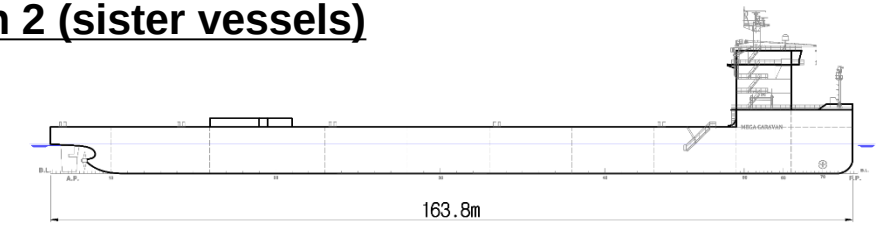


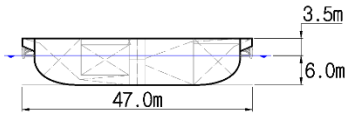


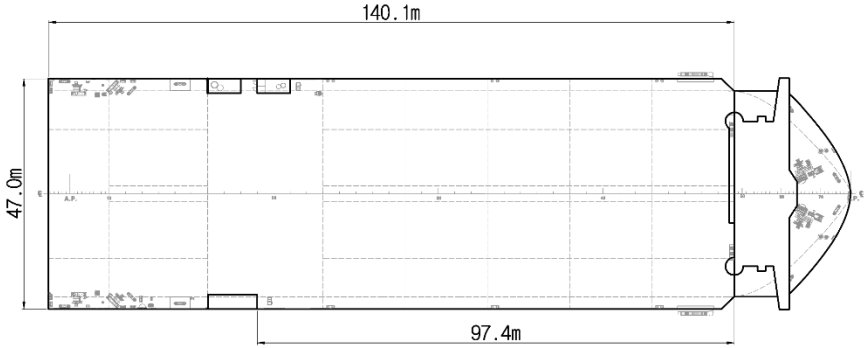
Fleet Introduction

- **Mega Caravan & Mega Caravan 2 (sister vessels)**

L.O.A	**163.8 m**
Breadth	**42.0 m**
Depth	**9.5 m**
Draft	**6.0 m**
Free deck	**140.0 m x 47.0 m**
Deadweight	**17,726 / 17,644 ton**
Deck load	**25 /m²**
Ballasting	**4 pumps 2,500 m³/hr**



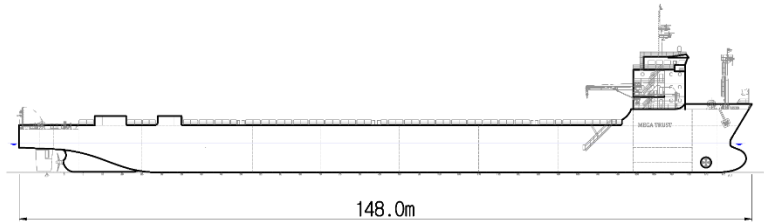


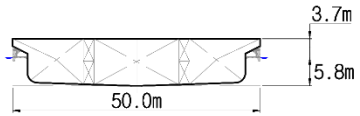


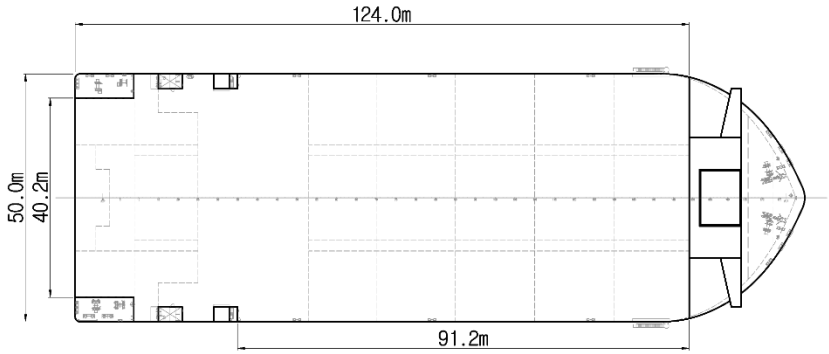
Fleet Introduction

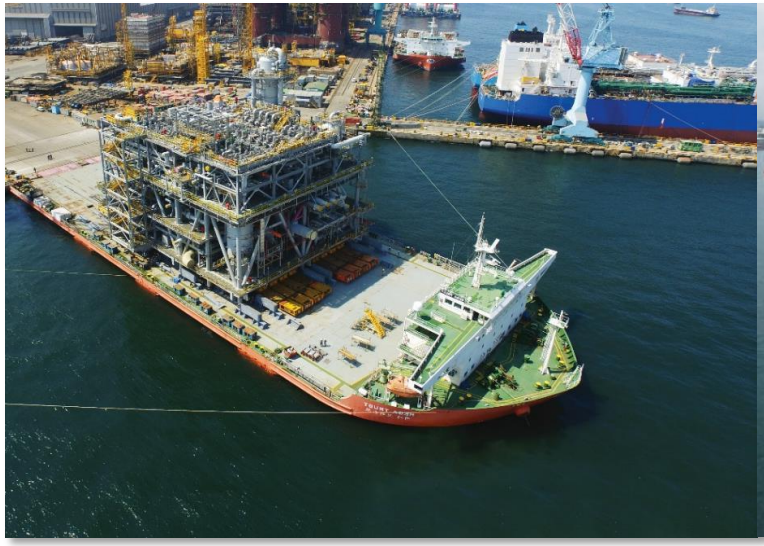
- **Mega Trust**

L.O.A	**148.0 m**
Breadth	**44.0 m**
Depth	**9.5 m**
Draft	**5.8 m**
Free deck	**124.0 m x 50.0 m**
Deadweight	**19,118 ton**
Deck load	**25 /m^2**
Ballasting	**6 pumps 2,500 m^3/hr**





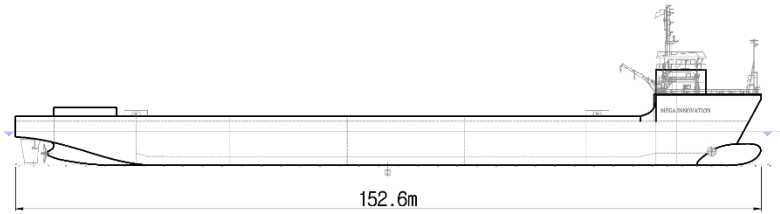


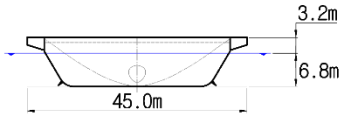


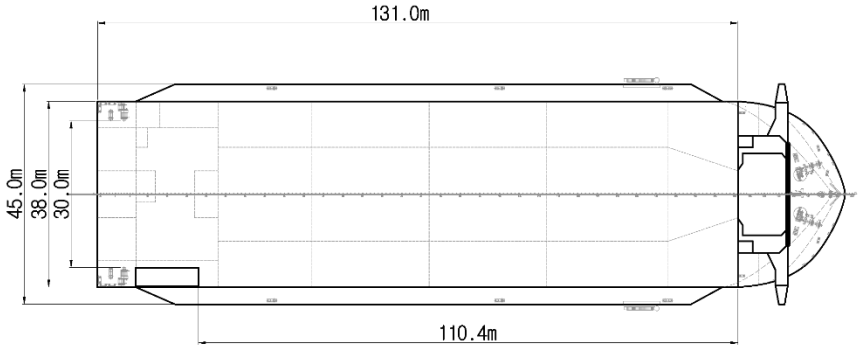
Fleet Introduction

- **Mega Innovation**

L.O.A	**152.6 m**
Breadth	**38.0 m**
Depth	**10.0 m**
Draft	**6.8 m**
Free deck	**131.0 m x 38.0 m**
Deadweight	**16,800 ton**
Deck load	**18 /m²**
Ballasting	**4 pumps 2,300 m³/hr**

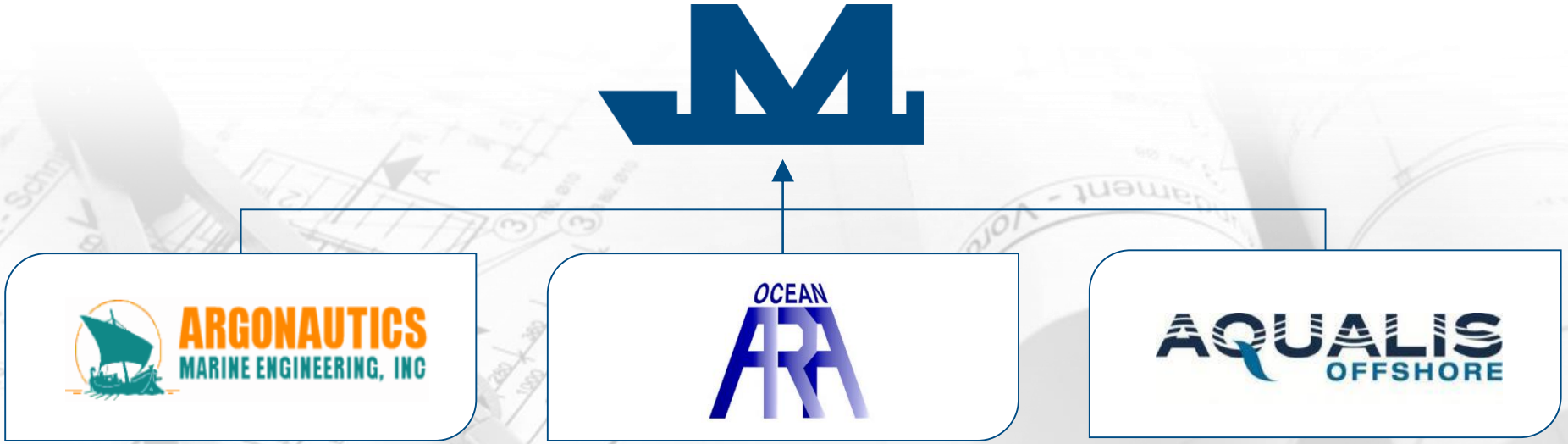






Engineering

- **Engineering Structure**



Company Introduction
- 30 years of expertise
- Salvage, survey, supervise

SOW with Megaline
- Technical advisor
- Engineering support

Company Introduction
- 25 years fab yard expertise
- Fabrication, basic design

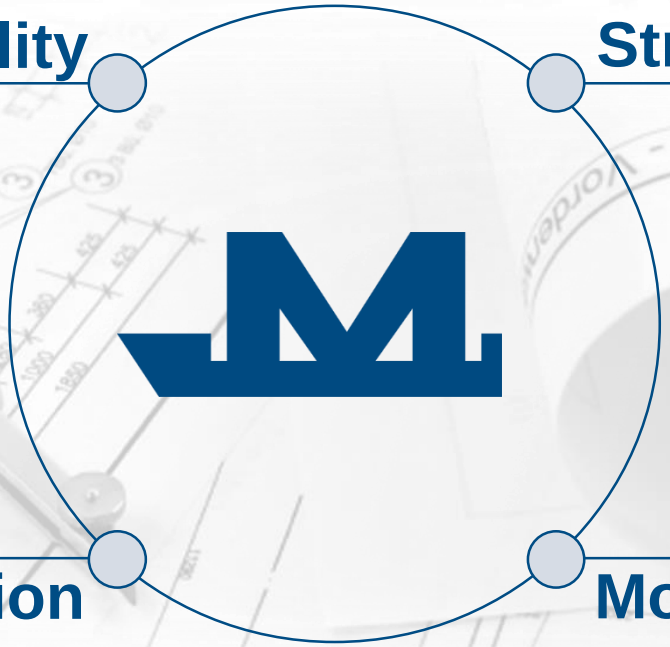
SOW with Megaline
- Technical support team
- Outsourced engineering

Company Introduction
- Office in 15 countries
- Offshore marine and engineering

SOW with Megaline
- Marine warranty services
- Technical advisory

Engineering

- **In-house Engineering**



NAPA
GHS
Cyloader

Stability

Voyage condition
Longitudinal strength
Hull Deflection
IMO, DNV OS criteria

Patran/Nastran
GineE
Xtract, Postrep

Structure

Grillage, Sea-fastening
Strength assessment
FEM analysis
Buckling check
Vessel Reinforcement
Construction drawing

Octopus Office
HydroD
WADAM

Motion

Design acceleration
Route analysis
GWS database

Optimoor

Mooring

Ship to ship
Worst Case
One line failure

Thank you