

Delivery of MT “Torm Timothy” - 50,000 DWT Product/Chemical Tanker



SMC is pleased to report delivery of MT “Torm Timothy”, Hull No. S3092 in Sungdong Shipbuilding and Marine Engineering Co., Ltd., South-Korea. This is the second vessel delivered from the series of 6 x 50,000 DWT Product/ Chemical tanker (IMO Type: II/III) ordered by TORM A/S.

Vessel's principal particulars: LOA = 183.0 m, B = 32.2 m, D = 19.1 m, T d/s = 11.0/13.3 m. Propelled by MAN B&W 6G50ME-B9.3 with ECT Part Load tuning and developing 6,219 kW x 83.9 rpm at NCR the vessel will operate at the speed of 15 knots. All vessels in the series are classed by LR and will be built to Singapore flag requirements.

Classification notes: +100A1, Double Hull Oil and Chemical Tanker, Ship Type 2 and Ship type 3, CSR, ESP, ShipRight (CM, ACS(B)), *IWS, LI, SPM4, +LMC, IGS, UMS. Descriptive Notes: COW (LR), ETA, ShipRight (BWMP(S, T), IHM, SERS, VECS, SCM)).

The vessel departed from shipyard on 6th November 2015 on her maiden voyage to Malaysia to load vegetable oil for Europe.

Delivery of MV “Minerva” - 2,345 TEU Container

SMC is pleased to report delivery of MV “Minerva” in Yangfan Group Co., Ltd, Zhejiang East Coast Shipyard, China, Hull No. 2299, the seventh unit from the series of 12 x 2,345 TEU container vessels ordered jointly by B. Schulte and J.P. Morgan.

Vessel's principal particulars: LOA = 189.0 m, B = 30.4 m, D = 16.9 m, T d/s = 8.5/10.5 m. Propelled by main engine MAN B&W 6G60ME-C9.2 Tier II, 12,832 kW x 97 rpm at NCR the vessel will operate at the speed of 18.85 knots. Vessels from H2297 to H2300 are dual classed by LR and CCS and all other vessels in the series are classed by LR. All of the 12 vessels will be built to Singapore flag requirements.

Classification notes: LR +100A1 Container Ship, Ship Right (SDA, FDA plus (25 N/A), ACS (B), CM), LI, *IWS, ECO (IHM, EEDI-3), +LMC, UMS, NAV1, Descriptive Notes: ShipRight (SCM, SERS, (BWMP(T)).

The vessel was named on 1st July 2015 by Ms. Hannah Kudlich and delivered on 30th September 2015.



Delivery of MV “Interlink Probity” - 38,500 DWT Bulk Carrier



SMC is pleased to report the Delivery in Huatai Heavy Industry Co. Ltd, Nantong, China: of MV “Interlink Probity”, Hull No. H0019, the third vessel of the series of 8 x 38,500 DWT Bulk Carriers ordered by Marine Capital Corporation, Bermuda.

Vessel's principal particulars: LOA = 179.95 m, B = 32.00 m, D = 15.00 m, T d/s = 9.50 m/10.50 m. Propelled by MAN 5S50ME-B9.3-Tier II engine with Part Load tuning, EGB and developing 4,575 kW x 89.9 rpm at NCR, the vessel will operate at a service speed of 13.70 knots. All vessels in the series are classed by LR and are built to Marshall Islands flag requirements.

Classification notes: LR +100A1 Bulk Carrier, BC-A, CSR, GRAB [20], Hold Nos. 2 & 4 may be empty, ESP, LI, Ship Right (CM, ACS (B,D)), Ice Class 1C FS, IWS, BWMP (F,T), ECO (P, BWT, EEDI, IHM), +LMC, UMS, SCM, SERS.

The vessel was delivered to the Owner on 30 Oct 2015.

SCR and EGR Technology Principals

Steven Nolan
Technical Manager
Shanghai Head Office

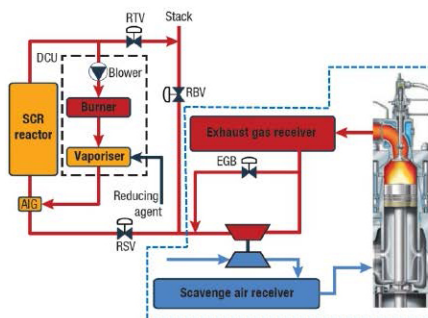


With the introduction of Tier III looming we have to consider fitting the NOx units to our next generation of new build vessels. So what's on offer?

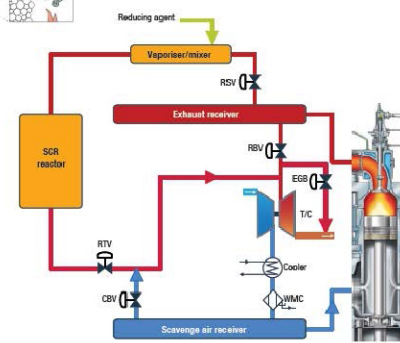
The SCR – Selective Catalyst Reduction and the EGR – Exhaust Gas Recycling units – are the two being offered with the SCR coming with two different systems, the high pressure and the low pressure versions. The SCR high pressure unit is fitted between the exhaust gas receiver and the turbocharger (i.e. high pressure exhaust) and the low pressure unit is fitted after the Turbocharger. The EGR unit is fitted on the engine casing between the exhaust receiver and the scavenge receiver. Selective Catalytic Reduction (SCR) is an exhaust gas treatment method by which the NOx generated in a marine diesel engine exhaust can be reduced to a level in compliance with the NOx Tier III requirements.

The NOx reduction is obtained by a catalytic process in an SCR reactor installed in the exhaust line after the combustion process.

LP SCR



HP SCR

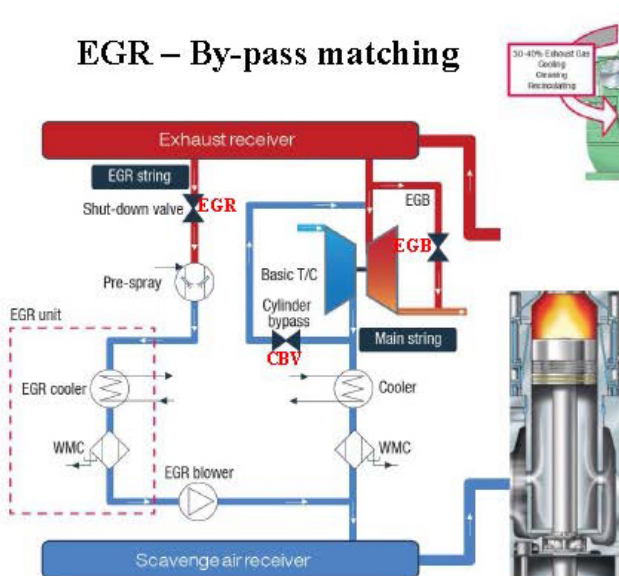


In the SCR reactor, the NOx is reduced catalytically to nitrogen and water by adding ammonia as a reducing agent. The catalyst in the reactor consists of blocks with a large number of channels, providing a large surface area, in which the catalytic process takes place. The process can be carried out on the gas on either side of the turbocharger. Difference is that the high pressure solution (SCR position between engine and TC) has a lower opex (saves fuel), which would make sense if the vessel is to operate for a longer time in emission control areas. The benefit of the low pressure solution (SCR position after the TC, but before boiler) is that the space might be more easily found in the exhaust funnel. Both solutions can be retrofitted and both solutions would only generate opex while running. If the vessel is outside of an emission control area the systems can be by-passed or shut off.

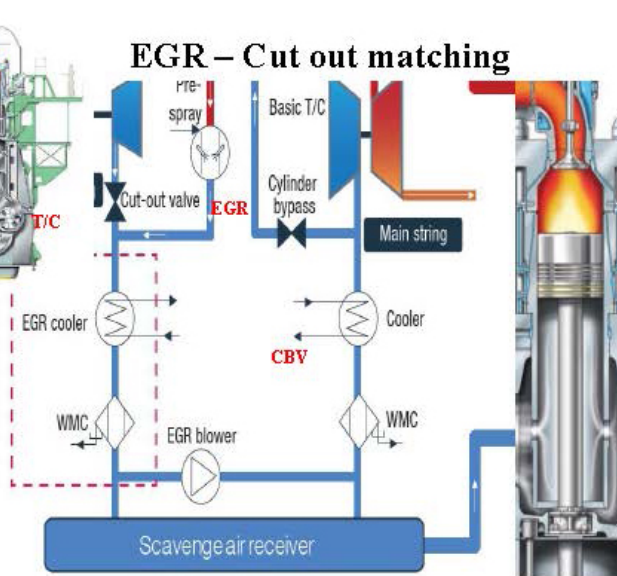
Exhaust Gas Recirculation (EGR) is a method to significantly reduce the formation of NOx in marine diesel engines exhaust. In the EGR system, after a cooling and cleaning process, part of the exhaust gas is recirculated to the scavenge air receiver. In this way, part of the oxygen in the scavenge air is replaced by CO2 from the combustion process. This replacement slightly increases the heat capacity of the scavenge air, thus reducing the temperature peak of the combustion and the formation of NOx. The NOx reduction is almost linear to the ratio of recirculated exhaust gas.

Two modes are available for this system, Tier II mode is the standard mode used in non-ECAs. Only the main string is in operation, and the EGR string is kept closed by the shut-down valve. The cylinder by-pass is also kept closed in this mode. At high load, the exhaust gas by-pass is open to increase the efficiency of the engine, when in ECA the recirculation mode is brought into operation.

EGR – By-pass matching



EGR – Cut out matching



For further information, please refer to MAN's Emission Project Guide on their website:

http://www.mandieselturbo.com/download/project_guides_tier2/special_pg/7020-0145-001web.pdf

Introduction of Sungdong Site Office



SSungdong Shipbuilding & Marine Engineering (SSME) was established in 2001 and is located in Tongyeong, on the South Eastern side of the Korean peninsula. The company is engaged in wide ranges of ship building and offshore activities. Up to now, SSME has delivered 198 vessels to ship owners worldwide comprising of bulk carriers, crude tanks, chemical tankers, container vessels, tune purse

seiners, FSOs, LPG and LNG carriers.

Oaktree Capital Management (UK) LLC together with Break Water Capital contracted 6 x 50,000 DWT IMO type II chemical tankers to SSME in 2013. In July 2015, when Oaktree took control of 62% shares of TORM A/S and completed their restructuring, these vessels were moved under the ownership, management and operation of TORM A/S worldwide. Steel cutting of the first vessel was completed on October 7th, 2014. Presently two vessels from the series have been successfully delivered to owners, three vessels have been launched and one vessel is under erection on skid. The project is scheduled to be completed by March 2016.

The site team presently comprises of 14 personnel, including one site manager, three machinery supervisors, two electrical supervisors, five paint supervisors, two hull supervisors and one secretary appointed by SMC. "ONE TEAM, ONE GOAL" is the motto of site team executing their responsibilities in a professional manner with flexibility, active participation and excellent team work based on diligence, sincerity and accountability.

Supervisors of Sungdong Site Office



Praveen Singh Tomar
Site Manager



Eun-ki Lee
Paint Supervisor



Han-seong Nam
Paint Supervisor



Jung-soo Kang
Paint Supervisor



Ki-sun Yang
Paint Supervisor



Sang-hoon Lee
Paint Supervisor



Seock Lee
Hull Supervisor



Seoung-hyun Oh
Machinery Supervisor



Su-in Lee
Machinery Supervisor



Sung-chol Kim
Machinery Supervisor



Tae-ho Shin
Electrical Supervisor



Young-il Jo
Hull Supervisor



Young-sik Jang
Electrical Supervisor



Ji-yeon Lee
Site Secretary

Two more containers from CSSC

Frederick V. Ama, Site Manager

CSSC (Hongkong) Shipping Co. Ltd. has ordered another two 1,700 TEU container vessels at Guangzhou Wenchong Shipyard Co. Ltd. SMC has one on-site team to offer supervision services for both these two vessels and another two ordered last year.

They will have the same specification as their sister vessels Hull nos.486/487. The vessels will be classed by Germanischer Lloyd and will be built on Singapore flag requirements.

Vessel will be propelled by Wartsila 6RT-flex58T-E TII engine with load tuning and developing 12,204 kW x 101.4 RPM @ CSR. Designed fuel consumption will be approx. 48.21 t/day at CSR of the main engine, on the condition of fuel oil of lower calorific value (LCV) of 42,700 kJ/kg under ISO reference condition and fulfilling the IMO NOx emission limitation Tier II.



Bulk Carrier Project from SINOKOR

Waldemar Pogorzelski, Site Manager

In September 2015 SMC secured the 3 x 180,000 DWT Capesize Bulk Carrier project for its on-site supervision from the Korean ship owner – SINOKOR MARITIME CO., LTD, who inaugurated the first container liner service between Korea and China in 1989, and entered its Dry Bulk & Tanker Carriage Sectors in 2001. Chinese Shanghai Waigaoqiao Shipbuilding Co., Ltd., who has built 200 similar size bulkers so far, was rewarded with the contract from SINOKOR for the construction of these three ships.

Since the start of the SMC site office activity in SWS, the SMC site team has been receiving highly professional support and assistance from two SINOKOR experts.

First Bernhard Schulte Shipping Day held in Shanghai



Bernhard Schulte held its first Shipping Day during the Marintec Conference & Exhibition in Shanghai on Wednesday 2nd December 2015.

Hosted by Chief Financial Officer, Tobias Pinker, the event was moderated by Stefan Glaebe, Director - Relationship Management, and attended by senior decision makers from the Chinese finance and shipping industry.

A full agenda provided for an afternoon packed with information about the industry, services of the Schulte Group and solutions for distressed assets in the portfolios of financial institutions and shipyards.

Among more than 130 participants were special guests Ms. Liu Ya from the Export-Import Bank of China and Mr. Li Zhizhan from the China Export & Credit Insurance Corporation.

Participants in the panel discussion included Mr. Wu Hongliang (The Export-Import Bank of China), Mr. Fan Enhui (Bank of China), Mr. Yang Changkun (ICBC Financial Leasing Co., Ltd.) and Mr. Fang Xiuzhi (Bank of Communications Financial Leasing Co., Ltd.).

4 | Bernhard Schulte's Corporate Counsel, Dr. Max Asschenfeldt, presented an overview of lessons learnt from the German KG shipping crisis and explained how the Group's experience in warehousing solutions for distressed assets can add value to lenders.

Bernhard Schulte Shipmanagement's Marketing and Business Development Director, Robin Thuillier, Schulte Marine Concept Managing Director, Krzysztof Kozdron, and BSM Hong Kong Managing Director, Firoze Mirza, outlined the advantages of integrated newbuild consultancy, supervision and full ship management in safeguarding and adding value to ship assets.

In the subsequent presentation Dr. Klaus Dimigen from shipping law firm Ehlermann Rindfleisch Gadow (ERG) highlighted the risks for lessors where counterparties face distress situations.

The afternoon concluded with a panel discussion moderated by Dr. Stefan Rindfleisch (ERG) where the participants raised concerns about the current state of the industry and shipping order books. They stressed that whilst they are not necessarily restricting their lending and leasing volume, they are taking an ever closer look at their partners.

All of the Chinese panelists shared the view that Bernhard Schulte is a top tier partner for banks and leasing companies due to the Group's transparency, commitment to quality and market leading software applications which provide customers with real time access to vessel operation and financial information.



Mr. Krzysztof Kozdron, Managing Director of SMC

Launching of new logo



We would like to present and share with you the new logo of Schulte Marine Concept. The logo was finalized and approved by our mother company - BS end of November, in parallel with the first external use in the current issue of the SMC Newsletter.

The design was created by BSM. By introducing a fresh approach to use of the letter "SMC", the new design creates a clear association with "Schulte Marine Concept". In order to show that SMC is a part of BSM, the design was aligned with the BSM logo artwork, using the colors blue and red instead of green and red and the same font types.

The new logo will be applied to all SMC documents and material. New stationery material, such as business card, envelope, letterhead, compliment slip, folder, etc. will be developed soon.

QMS Audit

SMC has developed and implemented ISO 9001:2008 Quality Management System (QMS) since 2011. Since then, we had every year one Internal Audit and one External Audit.

In 2015, the Internal Audit was carried out from Oct 5th to Oct 8th five for site offices in Korea (2 sites in Sundong Shipyard, 2 sites in STX Jinhae and 1 in HMD), and from Oct 12-17, 2015 for site offices in China (3 in Zhoushan, 1 in Taizhou, 1 in Nantong and 1 in Qingdao). These audits were carried out by BSM Group Auditor Capt. Savior Fernandes. Shanghai Office was audited by Capt. Umesh Lulla on 28th Oct 2015 and Hong Kong Office by Capt. Savio Fernandes on 27th Nov 2015. With the assistance of all the site managers, the audits could be carried smoothly and successfully. There were no NCRs and only a few observations which are in the process of closure. This is the 6th year of our QMS implementation and we have managed to do it successfully.

The external audit is scheduled to be carried out in the second week of Jan 2016. Two sites in China and Shanghai office will be audited. Hong Kong office will be audited in the third week of Jan 2016.

