

The background features a dark blue grid pattern. A faint, large-scale logo is visible in the center, consisting of a stylized globe with the letters 'C' and 'S' integrated into its design.

Status and Feedback Of the Application of CSR in China

Part I Recent Status of Application of CSR in China

General

After CSR has been into force, most shipbuilding industry companies and yards of China have finished upgrading the design of mainly vessel types and re-evaluation in accordance with the requirements of CSR. With the favorable marketing chance, there are the following mainly vessel types of CSR available in China

Part I Recent Status of Application of CSR in China

Mainly Vessel Types of CSR Design in China

Oil Carrier:

VLCC (230,000DWT ~ 320,000DWT)

Suezmax (160,000DWT)

Aframax (105,000DWT ~ 110,000DWT)

Panamax (72,000DWT ~ 76,000DWT)

Product Oil Carrier (30,000DWT ~ 46,000DWT)

Part I Recent Status of Application of CSR in China

Mainly Vessel Types of CSR Design in China

Bulk Carrier:

Capasize Bulk Carrier (176,000DWT ~ 180,000DWT)

Post Panamax Bulk Carrier (87,500DWT ~ 93,000DWT)

Panamax Bulk Carrier (74,500DWT ~ 76,000DWT)

Handymax Bulk Carrier (53,000DWT ~ 57,000DWT)

Single Hull Handy Size Bulk Carrier (28,000DWT ~ 38,000DWT)

Double Hull Handy Size Bulk Carrier (24,000DWT ~ 38,000DWT)

Part I Recent Status of Application of CSR in China

Recently, the shipbuilding industry of China begin to get a mass of order books of CSR vessels.

With general statistics, following table is the list of CSR vessels' order books in hands of mainly yards in China.

Part I Recent Status of Application of CSR in China

CSSC Group

Oil Carrier

316,000DWT VLCC	6vsIs
308,000DWT VLCC	4vsIs

Bulk Carrier

176,000DWT Capesize B/C	15 vsIs
177,000DWT Capesize B/C	4 vsIs
115,000DWT B/C	21vsIs
87,500DWT Post-panamax B/C	24 vsIs
76,000DWT Panamax B/C	18 vsIs
39,000DWT B/C	7vsIs
50,500DWT B/C	29vsIs

Part I Recent Status of Application of CSR in China

CSIC Group

Oil Carrier

320,000DWT VLCC

163,000DWT Suezmax O/C

76,000DWT Product O/C 10 vsls

Bulk Carrier

180,000DWT Capesize B/C 30 vsls

35,000DWT Hanzysize B/C 4 vsls

Part I Recent Status of Application of CSR in China

Regional Shipyards / Private Shipyards

Bulk Carrier

33,300DWT Handysize B/C	20 vsls
34,000DWT Handysize B/C	8 vsls
35,000DWT Handysize B/C	40 vsls
38,000DWT Handysize B/C	2 vsls
57,000DWT Handymax B/C	200 vsls

Part II Main Feedbacks

The application of CSR happens to coincide with this new prospering period of shipbuilding industry (CSR application is one reason for this prosperity). Because of the excellent market performance and the overwhelming orders, some technique deficiency and contradiction is concealed.

Main issues as followings.

Part II Main Feedbacks

1. PSPC issue. PSPC (Performance Standard for Protective Coatings) should apply to CSR vessels with contract date after 8 December 2006. But many shipyard in china especially most middle / small size shipyards can't meet the high requirements of PSPC. Most of orders are before 8 December 2006.

Part II Main Feedbacks

2. Some descriptive scantling requirements of CSR are too server. In CSR Tanker, the proportion requirement for profile sections refused many long time using industry standard profiles. (Bulb profile HP300x12 AH32 can't used as deck longitudinal even after the rule change of slenderness coefficient from 37 to 41)

Part II Main Feedbacks

3. In CSR Bulk Carrier, the scantling requirements of inner bottom and hopper for steel coil load are too high compared with traditional rule and industry experience. To meet and CSR Rule requirement without increasing scantling too much, six (6) dunnages are used for one steel coil in many designs which will increase operation cost of the ship.

Part II Main Feedbacks

4. Some structure requirements are not clear in CSR. The scantling requirements for crane foundation and underdeck reinforcement are not clearly indicated in CSR Bulk and different class societies still have different requirements. This contradicts with the intent of CSR Rule.

Part II Main Feedbacks

CSR also have positive feedbacks. The most obvious advantage of CSR is that the common rule helps the shipyard save time in design and construction. The shipyard can use one design for different owners classed in different class societies. In the past, the design has to comply with many different structure rules and have many versions.

Conclusion

CSR as a new milestone in shipbuilding industry pay more attention to ship's structure safety than traditional rules and have higher requirements than them. The application of CSR will produce a new generation of more strong and safe tankers and bulk carriers. The CSR Rule has been recognized by most ship owners by their generous orders of CSR vessels. Though accepted by the whole ship industry, CSR still have a long way to go to improve itself. Many requirements should be carefully calibrated with industry experience to be more reasonable and some requirements should be clarified to be convenient for users and remove inconsistency.