

共享技术进步 受益增值服务

*Share Our Exquisite Expertise
Benefit From Our Value-added Service*

To download more service product files, please visit www.ccs.org.cn/en/spad.htm

Business Management Department, China Classification Society

Add : CCS Mansion, 9 Dongzhimen Nan Da Jie, Beijing, China 100007

Tel : +86 10 58112548/50

Fax : +86 10 58112821

www.ccs.org.cn

E-mail: mm@ccs.org.cn



COMPASS[®] Software System [Marine]

COMPASS[®] Software System [Marine]

INTRODUCTION

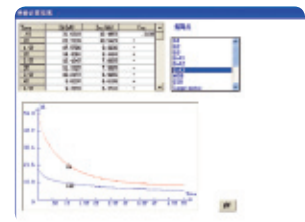
COMPASS-RULES is a computer assessing system developed by CCS for sea-going ships in accordance with CCS Rules for Classification of Sea-going Steel Ships, IACS URs, Regulations for Statutory Surveys of Ships and Offshore Installations by MSA of PRC, relevant IMO conventions and codes and other updated technical standards. The software aims to cater for the rapid developing shipbuilding and shipping industries and to provide high-level service to customers. As a high-end and high-tech assessment system for ships, COMPASS-RULES represents latest outcome of CCS rules development and research and CCS holds independent copyright of the software. The software has been widely applied in plan approval, rules development and research, auxiliary design and shipping safety assessment, and has successfully performed analysis and assessment for thousands of ships, contributing to the fast development of China's shipbuilding and shipping industries.

COMPASS-RULES is an important means to safeguard safety of ships by providing strong technical support to surveys and safety assessment of sea-going ships. It is used for plan approval, rules development and research, establishment of technical standards, auxiliary design, shipping safety assessment and failure analysis of ships.

- ⊙ In ship design period: providing rules design and check, strength assessment and assessment of fatigue life;
- ⊙ In ship service period: providing condition assessment, cause analysis of failure and sea damage;
- ⊙ In ship repair period: providing ship modification assessment.

MAIN MODULES

COMPASS-RULES comprises more than 20 functional modules categorized in four sub-systems: performance calculation, structure calculation, shafting calculation and electrical calculation systems.

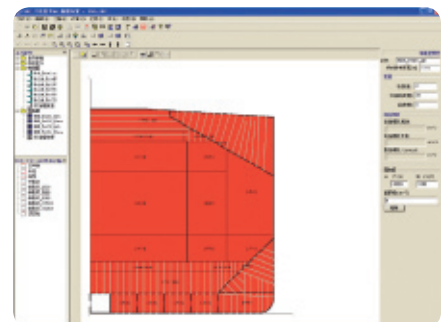


COMPASS-STRUCTURE-CSR

- ⊙ COMPASS-STRUCTURE-CSR-SDP (for BC): Structure design program for bulk carriers (SDP_BC) is developed by CCS in accordance with the latest version of Common Structural Rules for Bulk Carriers (CSR BC). The program is mainly used for the structural design and check for the full length of single or double side skin bulk carriers at length of 90 m and up to less than 350 m for global service. The software's interface and operation styles feature the typical design of CCS' large structural assessment software (SDP), which is characterized by multiple functions and flexible operation. As one of the latest research outcomes of CCS, SDP_BC relieves users of tedious calculation for CSR and provides an advanced calculation approach to the design and check of bulk carriers.

Feature and functions:

1. Reflecting the latest requirements of CSR BC;
2. Providing calculation for all main structures, including cargo hold region, bow, stern, machinery space and superstructures;
3. User friendly;
4. Performing accurate and reliable calculation;
5. Outputting calculation results in a flexible way;
6. Updating with latest CSR.

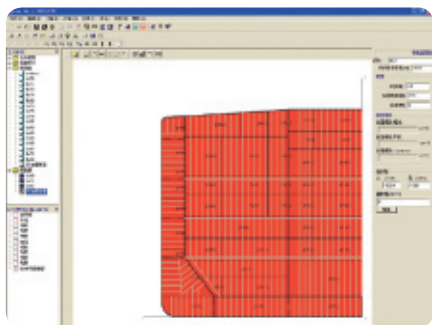


To provide better service for shipyards, designers and shipowners, SDP_BC is free of charge and may be downloaded from the link below:

http://www.ccs.org.cn/CSR/CSR_JBP.html



© COMPASS-STRUCTURE-CSR-SDP (for OT): Structural design program for oil tankers (SDP_OT) is developed by CCS in accordance with the latest version of Common Structural Rules for Oil Tankers (CSR OT). The program is mainly used for structural design and check for the full length of the classed double hull oil tankers at length of 150 m and over carrying oil in bulk. The software's interface and operation styles feature the typical design of CCS' large structural assessment software (SDP), which is characterized by multiple functions and flexible operation. As one of the newest software developed by CCS, SDP_BC relieves users of the tedious calculation for CSR and provides an advanced approach to the design and check of oil tankers.

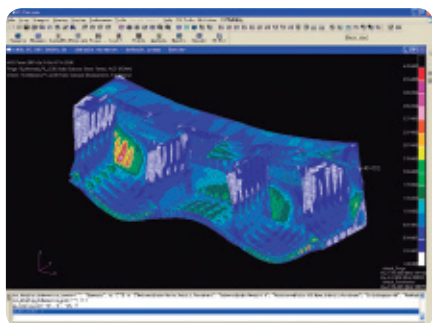


Feature and functions:

1. Representing the latest requirements of CSR OT;
2. Providing calculation for all main structures, including cargo tank region, bow, stern, machinery space and superstructures;
3. Easy to learn and use;
4. Performing accurate and reliable calculation;
5. Outputting calculation results in a flexible way;
6. Updating with latest CSR.

To provide better service for shipyards, designers and shipowners, SDP_OT is free of charge and may be downloaded from the link below:
http://www.ccs.org.cn/CSR/CSR_JTP.html

© COMPASS-STRUCTURE-CSR-DSA: Direct structural analysis (DSA) is developed in accordance with IACS Common Structural Rules for bulk carriers and oil tankers and on the basis of MSC.Patran. Due to complicated nature of CSR, traditional manual calculation approach spends great amount of time on load determination, corrosion deduction and result processing. Moreover, direct calculation is greatly increased in CSR due to the addition of more conditions and the introduction of fine mesh and very fine mesh analysis. DSA uses Patran's PCL language and presents flexible assessment approaches, and hence greatly reduces calculation period in finite element modeling and increases analysis efficiency, to enable engineers to complete FE analysis quickly and accurately.



Feature and functions:

1. Having a diversified rich marine profile database;
2. Capable of automatic loading according to the requirements of CSR, and hence avoiding the tedious manual loading process;
3. Capable of automatic boundary constraining;
4. Capable of corrosion deduction;
5. Providing powerful postprocessor approaches including buckling assessment, automatic mesh refining and fatigue calculation, etc;
7. Easy to learn and use;
8. Performing accurate and reliable calculation;
9. Updating with latest CSR.

To provide better service for shipyards, designers and shipowners, DSA is free of charge and may be downloaded from the link below:
http://www.ccs.org.cn/CSR/CSR_JBP.html or http://www.ccs.org.cn/CSR/CSR_JTP.html