

Speech by  
Chinese Shipbuilding Industry  
CSSC

Contents

1. The acceptance of IMO PSPC standard
2. Preparation done by Chinese shipbuilding industry
3. Suggestion from Chinese shipbuilding industry

## Acceptation of PSPC

Our opinion: the approved IMO MSC 216(82) and revised SOLAS II-1/3-2 and XII/6, PSC did make the great contribution for the reduction and prevention of corrosion in marine safety.

## Acceptation of PSPC

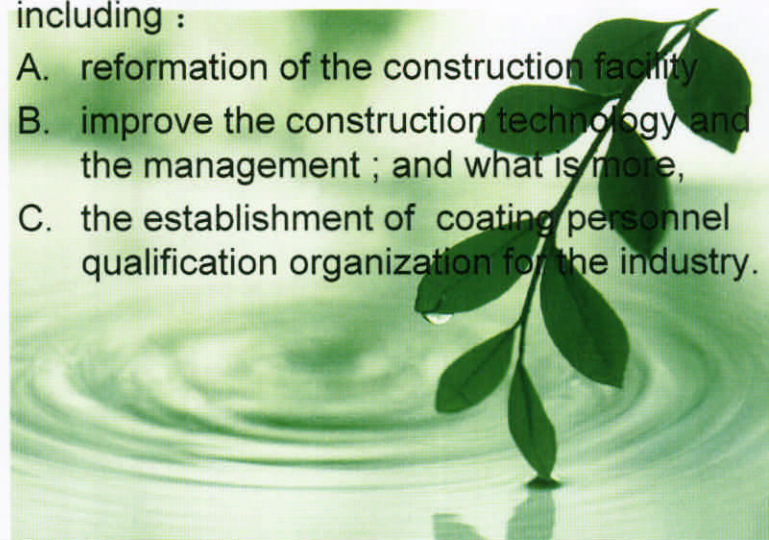
It is recognized by the Chinese shipbuilding industry: that the new standard of PSPC, not only a challenge but a trial for the promotion and improvement to the Chinese shipyards in way of management, technology and the development at the same time.



## Preparation


good preparation before the implementation :  
including :

- A. reformation of the construction facility
- B. improve the construction technology and the management ; and what is more,
- C. the establishment of coating personnel qualification organization for the industry.






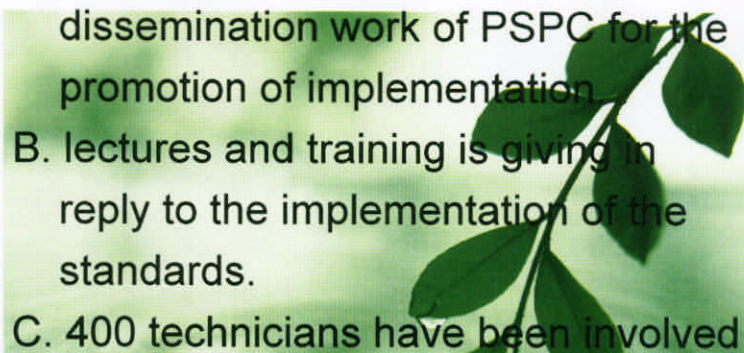
## Preparation

- A. better understanding of PSPC
  - B. survey and investigate the present situation of Chinese shipbuilding industry
  - C. put forward the strategies and recommendations upon investigation
  - D. assessment of Chinese shipyard's current coating process and the criteria
- 

## Preparation

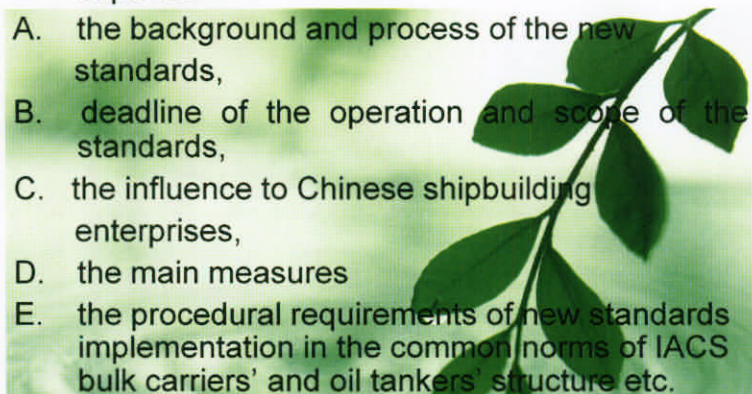
- A. establishment of the international standards
  - B. communication and cooperation with China and Japan, Korea
  - C. forms the basic and united views of PSPC in the shipbuilding industry,
- 

## Preparation

- A. carrying out the standards dissemination work of PSPC for the promotion of implementation
  - B. lectures and training is giving in reply to the implementation of the standards.
  - C. 400 technicians have been involved
- 

## Preparation

The dissemination mainly deals with the following aspects:

- A. the background and process of the new standards,
  - B. deadline of the operation and scope of the standards,
  - C. the influence to Chinese shipbuilding enterprises,
  - D. the main measures
  - E. the procedural requirements of new standards implementation in the common norms of IACS bulk carriers' and oil tankers' structure etc.
- 



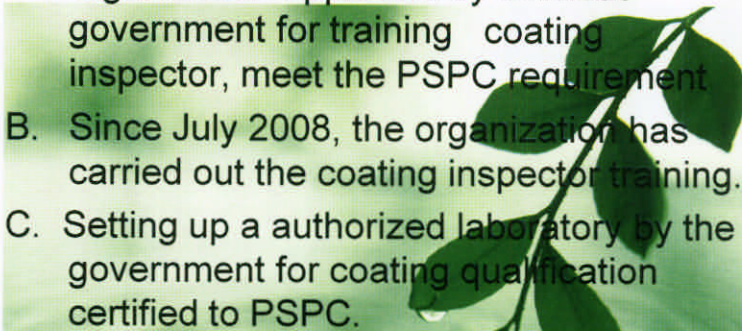
## Preparation

- A. establishing the relevant standards and guidance documents
- B. investigation of PSPC related parameter, such as soluble salt content on the steel surface
- C. developing some technology for the implementation of PSPC
- D. The reduction of salt by a series of corresponding measures at the first and the second surface treatment
- E. result: the content of the soluble salt significantly dropped.

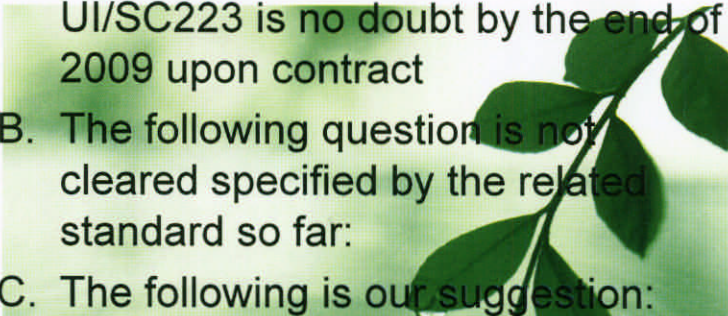
## Preparation

The damaged area of the tanks has fallen into the standard requirements through such measures based on the technology research of the coating & non-coating sectors by means of establishing some enterprises' standards.

## Preparation

- A. Setting up a qualification certificate organization approved by Chinese government for training coating inspector, meet the PSPC requirement
  - B. Since July 2008, the organization has carried out the coating inspector training.
  - C. Setting up a authorized laboratory by the government for coating qualification certified to PSPC.
- 

## Suggestions

- A. The implementation of PSPC and UI/SC223 is no doubt by the end of 2009 upon contract
  - B. The following question is not cleared specified by the related standard so far:
  - C. The following is our suggestion:
- 



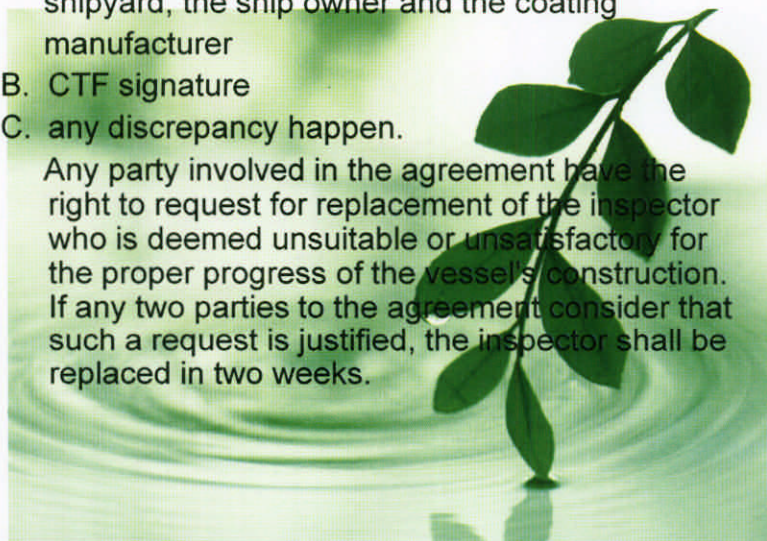
## Suggestions

- A. The dispatch of the Coating inspectors
- B. The inspection of coating quality
- C. Associated.
- D. The supervisory authority
- E. Spot check



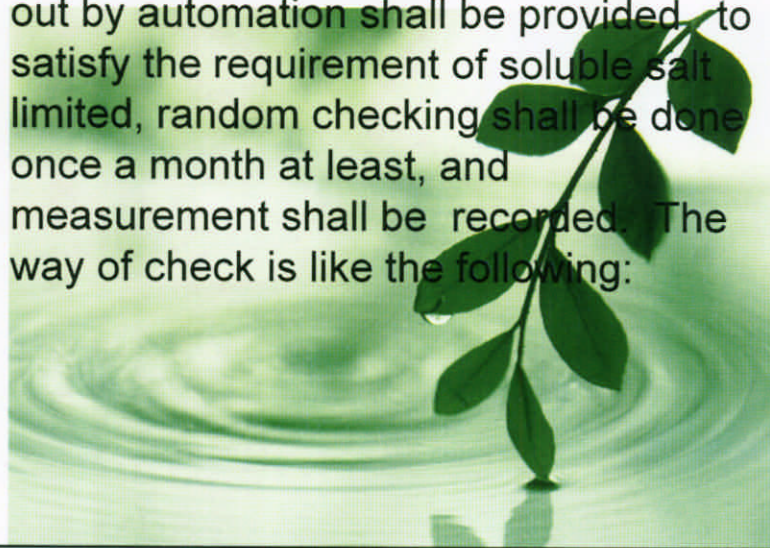
## Suggestions

- A. The certificate or the Representatives from the shipyard, the ship owner and the coating manufacturer
  - B. CTF signature
  - C. any discrepancy happen.
- Any party involved in the agreement have the right to request for replacement of the inspector who is deemed unsuitable or unsatisfactory for the proper progress of the vessel's construction. If any two parties to the agreement consider that such a request is justified, the inspector shall be replaced in two weeks.



## Suggestions

Primary surface preparation, carried out by automation shall be provided, to satisfy the requirement of soluble salt limited, random checking shall be done once a month at least, and measurement shall be recorded. The way of check is like the following:



## Suggestions

1st , Chose three pieces of dealt steel plates where salt contents will be measured respectively on one spot point selected randomly. If all the three measured values of salt contents on these pieces of steel plates are below 50mg/m<sup>2</sup> , the salt contents on all the steel plates at primary surface preparation stage are acceptable.





## Suggestions

2nd, If two or all of these three measured values are above 50 mg/m<sup>2</sup>, salt contents on steel plates at primary surface preparation stage are not acceptable.

If only one of the three measured values is above 50 mg/m<sup>2</sup>, then another two pieces of deaerated steel plates shall be selected randomly and re-measured as stated above.

If this two re-measured values are below 50 mg/m<sup>2</sup>, then the salt contents on all the steel plates at primary surface preparation stage are acceptable.

Otherwise, salt contents on steel plates at primary surface preparation stage are not acceptable.

Then the corrective actions shall be implemented to satisfy the requirement.

## Suggestions

3rd the Salt content before the 1st coat on the block should be no more than 50mg/m<sup>2</sup> (equivalent to NaCl) upon ISO 8502-9 as random sample, the block is passed

Otherwise, another two spot points of this block will be selected for the measurement of salt content.

If this two measured values are below 50 mg/m<sup>2</sup>, the salt contents on this block are acceptable.

Otherwise, salt contents of this block are not accepted and

the corrective actions shall be implemented to satisfy the requirement.

## Suggestions

4th Assessment and calculation of coating damaged areas

The damaged areas as Fig 1, caused by erection joint and the fillet welding on tank boundary watertight bulkhead, need not to be assessed.  
unit: mm





## Suggestions

### 5th Painting of pre-erection stage

Coating defects shall be repaired before erection. Use power tools grinding and de-rusting the erection joint of ballast tanks after block assembly, Grade of de-rusting is St3 of ISO 8501-1:1988

Small damages up to 2% of total area and contiguous damages up to 25 m<sup>2</sup> (except erection joint and the fillet welding on tank boundary watertight bulkhead) St 3 ISO 8501-1: 1988

Contiguous damages over 25 m<sup>2</sup> or over 2% of the total area of the tank (except erection joint and the fillet welding on tank boundary watertight bulkhead), Sa 2½ should be applied according to ISO 8501-1 .

## Suggestions

### 6th Arbitration

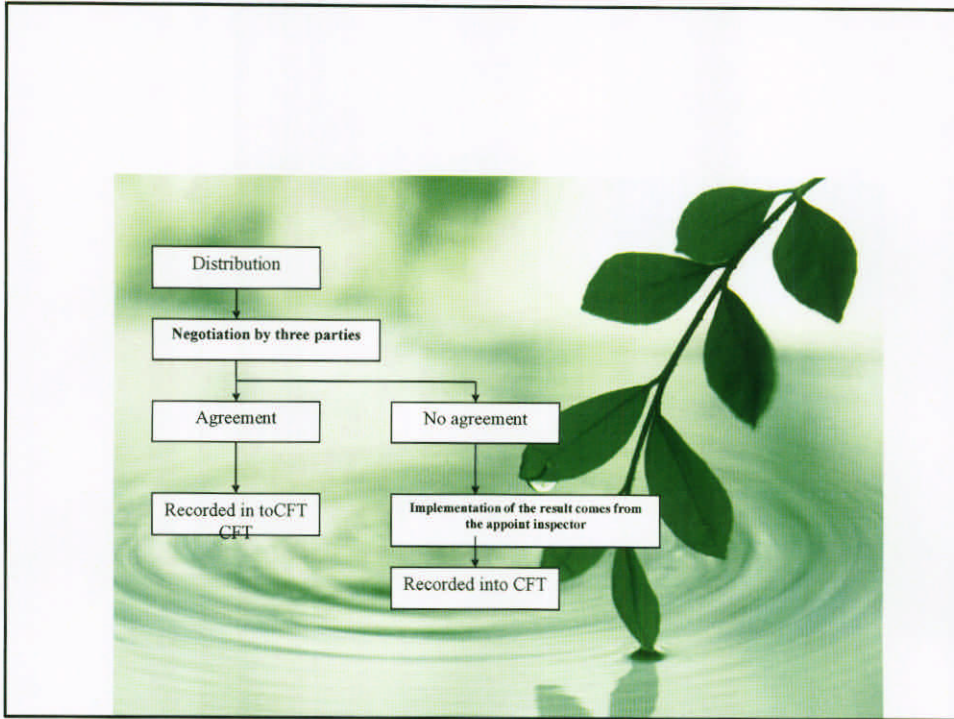
In the process of coating inspection, the disagreement might happen on the situation of the technique and quality among the ship owner, shipyard and paint manufacturer ,

Then the friendly negotiation should be the 1st choice, and

if disputation still exists,

the final arbitration comes from the shipyard inspector, and result should be recorded in CTF.

It is illustrated as follows:



Speech by  
Chinese Shipbuilding Industry  
(CSSC)

Thank you

