

CI-T 9 Plans to be supplied onboard the ship indicating the renewal thickness

(Aug. 2011)

Rule Section

3/2.2.2.1 Plans to be submitted
 3/2.2.3 Plans to be supplied onboard the ship
 12/1.1.3 Requirements for documentation
 12/1.4.2 Renewal criteria
 Knowledge Centre Question No 777 and 1058

Description

Procedure and specific instructions for what plans need to be submitted and what should be included in a "Renewal thickness plan."

Common Interpretation/Procedure

A. Requirements for documentation (in accordance with the Rules – see figure PR1)

Plans submitted for approval and plans supplied onboard the ship (Section 3/2.2.3) are to indicate the as-built and renewal thickness for each structural item (Section 3/2.2.1.3 and Section 3/2.2.1.4).

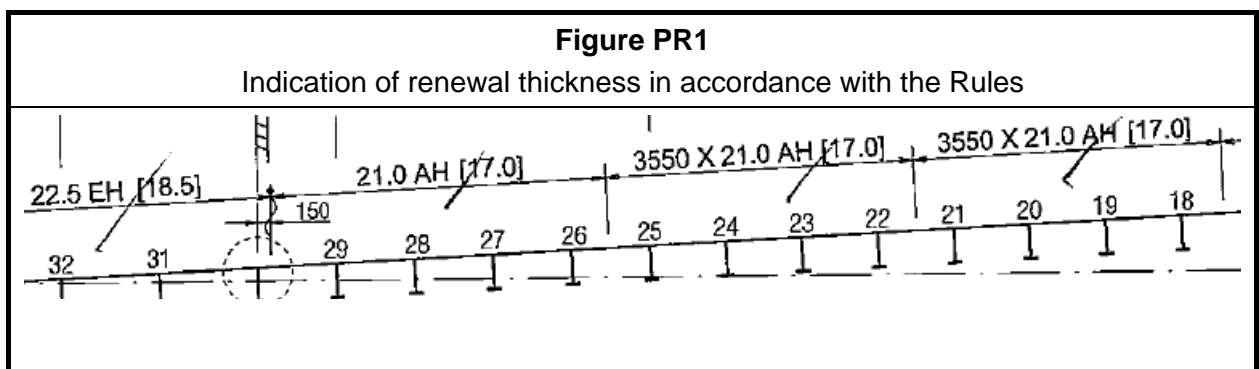
The structural drawings that need to be indicated with renewal thickness if submitted at the time of class approval are the following:

Key structural drawings that include:

- Typical Midship section
- Construction profiles/plans and deck plans
- Shell expansion
- Cargo tank construction plans
- Typical oil-tight, watertight and non-tight transverse bulkheads
- Fore End and Aft End construction plans
- Engine Room construction plans

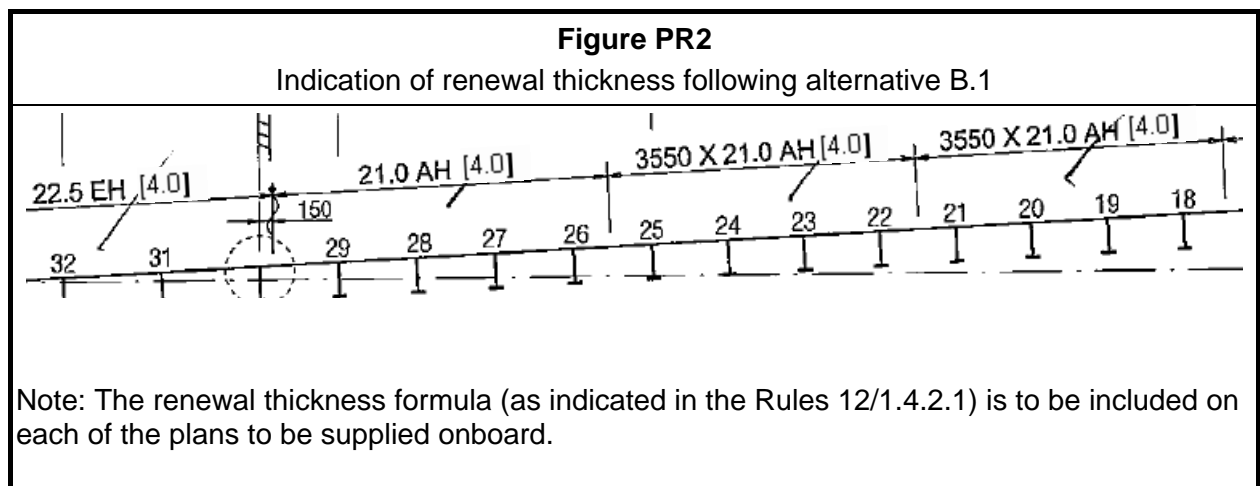
Renewal thickness is to be marked for:

- All plating members
- All primary and local supporting members including face plates



B. Alternative for documentation of renewal thickness for plans supplied onboard the ship

B.1 (Ref. KC#1058) As an alternative to indicating the renewal thickness on the plans supplied onboard (Section 3/2.2.3) it is acceptable to indicate the corrosion addition beside the as-built thickness, $t_{as-built}$, of each member. The renewal thickness formula (as indicated in the Rules 12/1.4.2.1) is to be included on each of the plans to be supplied onboard. Any owner's extra is also to be clearly indicated on the drawings. See figure PR2 for an example.



B.2 (Ref. KC#777) As an alternative, it is acceptable to present wastage allowances in a separate plan ("Renewal thickness plan") if ship specific information is included and if it covers all structural elements. It is understood that this plan is to be available/submitted at the plan approval stage and is to be approved. If the submitted structural drawings show renewal thicknesses then no separate "renewal thickness plan" is necessary for approval. See figure PR3 for an example.

In case a Renewal Thickness Plan is prepared in a table format in lieu of indicating the renewal thicknesses on the structural drawings, all structural members listed in the table should have specific descriptions for easy identification. The plan should include:

- Ship's specific information
- As-built thickness ($t_{as-built}$), corrosion addition (t_{corr}) and renewal thickness (t_{ren}) for all structural members
- Owners extra is also to be included (t_{own})

Figure PR3 "Renewal Thickness Plan" following alternative B.2							
Structural Elements		Material Grade	$t_{as-built}$ (As built thickness, in mm)	t_{own} (Owner's additional wastage allowance, in mm)	t_{corr} (Corrosion Addition, in mm)	t_{ren} (Renewal thickness, in mm)	Remarks
Framing							
Upper deck	No. 1 - 21	'A' HT32	12	0	4	8	
	No. 23 - 24	'A' HT32	12	0	4	8	

B.3 Further alternative methods such as providing corrosion additions on a simplified pictorial representation ("corrosion map") of the structure(s) and the formulae for deriving the renewal thickness, and other information such as owner's extra, may also be accepted. All relevant information (as-built thickness, voluntary additions, corrosion additions, formulae, etc.) are to be given in the drawing in a reasonable and easy-to-understand manner that allows for relatively easy determination of the renewal thickness.

Implementation date

This CIP is effective from 1 September 2011.

Background

According to Section 3/2.2.3.1, plans indicating the renewal thickness for each structural items are to be supplied onboard the ship.

In accordance with Knowledge Centre Question No 1058, the renewal thickness formula and corrosion addition can be indicated on the plans supplied onboard the ship beside the as-built thickness, $t_{as-built}$ of each member.

Moreover, Knowledge Centre Question No 777 allows a separate plan ("Renewal thickness plan") if ship specific information is included in this separate plan where the plan covers all structural elements.

However, the scope of plans that need to have renewal thickness indicate on them is still not clear. This Common Interpretation has been prepared to ensure a unified understanding of the requirement and to provide guidance on its practical implementation for classification purposes.