

Improve the current effective area coefficient for the curved face plate of primary supporting structure

■ Summary of Major Amendments

Related Rules/Guidance	Effective date
Part 13 Common Structural Rules for Bulk Carriers and Oil Tankers	July. 1. 2020

■ Major Amendments

○ Reason for Amendments

In accordance with RCN1(2019)

○ Amendments

Improved the effective area coefficient for the curved face plate of PSM.

○ Impact Analysis

✓ Impact in scantlings

: Need to develop the arrangement of supporting members or increase scantlings

Table 3: Impact on OT-VLCC

Location	Dimension of face plate and radius	Efficiency with Current Requirement	Efficiency with RCN
Opening iwo hopper web plate	300 mm, 900 R	58%	63%
	250mm, 1000 R	83%	77%
Bracket at the lower end of longitudinal bulkhead	400mm, 6000 R	100%	91%
	400mm, 5000 R	100%	89%
Bracket at the upper end of longitudinal bulkhead	400mm, 3500 R	100%	83%
	350mm, 2500 R	98%	82%
	500mm, 5000 R	94%	81%
Bracket at the swash bulkhead	500mm, 5000 R	94%	81%
Bracket at the end of deck transverse member below deck	350mm, 5000 R	100%	92%
Bracket at the end of horizontal stringers iwo transverse bulkheads	450mm, 5500 R	100%	87%
	350mm, 3500 R	100%	88%