



TÜRK LOYDU RULE CHANGE SUMMARY

TL NUMBER: 01/2018

JANUARY 2018

Latest editions of TL Rules incorporate all rule changes. The latest rule revisions of a published rule are shown with a vertical line. Changes after the publication of the rule are written in red colour.

Please note that within this document added items are written in red and for deleted items strikethrough is applied. After the publication of relevant rule, those revisions are to be indicated with a vertical line. Following Rule Changes presented in English are also implemented into Turkish Version of Rules.

RULE CHANGE SUMMARY

CHAPTER 1 - HULL

<u>No</u>	<u>Item</u>
01	Section 29

CHAPTER 4 - MACHINERY

<u>No</u>	<u>Item</u>
01	Section 9
02	Section 18

**ADDITIONAL RULE – SHIPBUILDING AND REPAIR
QUALITY STANDARD**

<u>No</u>	<u>Item</u>
01	Section 1
02	Section 2

PART A – CHAPTER 1 – HULL

01. Section 29 – Tugs

Revision Date: January 2018

Entry into Force Date: 1 February 2018

Item F formula of b_{h2} is revised as below:

$$b_{h2} = \frac{0.7 \cdot T \cdot H \cdot c \cdot \cos \theta}{9.81 \cdot \Delta}$$

PART B – CHAPTER 4 – MACHINERY

01. Section 9 – Steering Gears and Thrusters

Revision Date: January 2018

Entry into Force Date: 1 February 2018

Footnote (1) on item A.1.1 is deleted according to UI SC242 Corr.1 Reinstated as below:

.....

This section is applicable to ships for which steering is affected by means of a rudder and an electric, hydraulic or electro-hydraulic steering gear-(1).

~~(1) In accordance with UI SC 242, for a ship fitted with multiple steering systems, the requirements in SOLAS II/30.2 are to be applied to each of the steering systems.~~

.....

Revision Date: January 2017

Entry into Force Date: 1 February 2018

Item A.1.3.4 is revised according to UI SC242 Corr.1 Reinstated as below:

.....

- In a passenger ship, each of the steering systems is fitted with two or more identical power units, capable of satisfying the requirements in 1.4.1 while any one of the power units is out of operation;
- In a cargo ship, each of the steering systems is fitted with one or more identical power units, capable of satisfying the requirements in 1.4.1 while operating with all power units;

.....

The above capacity requirements apply regardless whether the steering systems are arranged with common or dedicated power units.

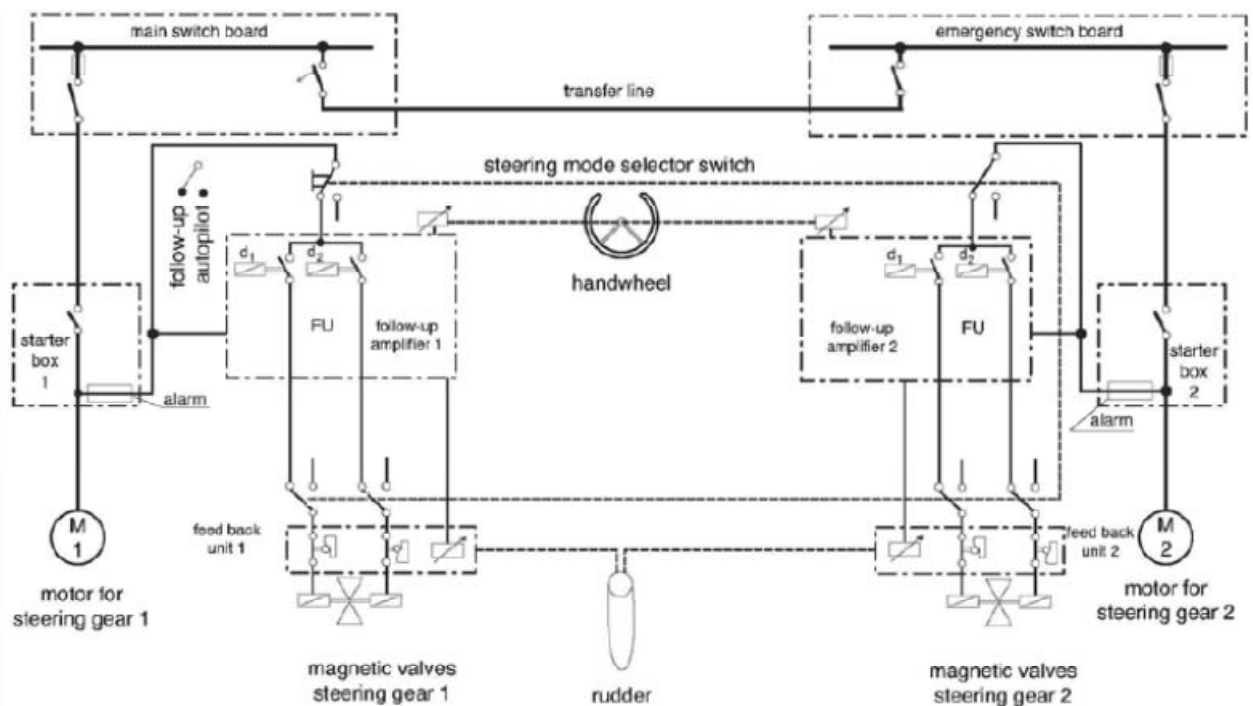
Item A.3.1.2 is revised according to UI SC242 Corr.1 Reinstated as below:

For a ship fitted with **multiple** steering systems, such as but not limited to azimuthing propulsors or water jet propulsion systems, ~~the main steering arrangement and the auxiliary steering arrangement shall be so arranged that the failure of one of them will not render the other one inoperative~~ **the requirement in item 3.1.1 is considered satisfied if each of the steering systems is equipped with its own dedicated steering gear.**

For a ship fitted with multiple steering systems, the requirement in item 3.1.1 is considered satisfied if each of the steering systems is equipped with its own dedicated steering gear provided that:

- Each of the steering systems is fulfilling the requirements for main steering gear (as given in item 1.4.1).
- Each of the steering systems is provided with an additional possibility of positioning and locking the failed steering system in a neutral position after a failure of its own power unit (s) and actuator (s).

Figure 9.3 revised according to UI SC94 Rev.2 Corr.1 as below:



Item B.3 is revised according to UI SC242 Corr.1 Reinstated as below:

For a ship fitted with **multiple** steering systems, such as but not limited to azimuthing propulsors or water jet propulsion systems, ~~the main steering arrangement and the auxiliary steering arrangement shall be so arranged that the failure of one of them will not render the other one inoperative~~ **the requirement in item A.3.1.1 is considered satisfied if each of the steering systems is equipped with its own dedicated steering gear.**

For a ship fitted with multiple steering systems, the requirement in item A.3.1.1 is considered satisfied if each of the steering systems is equipped with its own dedicated steering gear provided that:

~~Each of the steering systems is fulfilling the requirements for main steering gear (as given in item A.1.4.1).~~

~~Each of the steering systems is provided with an additional possibility of positioning and locking the failed steering system in a neutral position after a failure of its own power unit (s) and actuator (s).~~

Item B.3.4.4 is revised according to UI SC242 Corr.1 Reinstated as below:

.....

- In a passenger ship, each of the steering systems is **fitted with two or more identical power units**, capable of satisfying the requirements in 1.4.1 while any one of the power units is out of operation;
- In a cargo ship, each of the steering systems is **fitted with one or more identical power units**, capable of satisfying the requirements in 1.4.1 while operating with all power units;

.....

~~The above capacity requirements apply regardless whether the steering systems are arranged with common or dedicated power units.~~

02. Section 18 – Fire Protection and Fire Extinguishing Equipment

Revision Date: January 2018

Entry into Force Date: 1 February 2018

Item L.2.3 is revised according to MSC.1/Circ.1430 as below:

2.3 Pressure water spraying systems for special category and ro/ro cargo spaces ~~(29)~~

~~2.3.1 Only approved full bore nozzles are to be used.~~

~~2.3.2 The nozzles are to be arranged in such a way that effective, uniform distribution of the water at 3.5 l/m² · min where the deck height is less than 2.5 m. and 5 l/m² · min where the deck height is 2.5 m. or more is ensured.~~

~~2.3.3 The system may be divided into sections. Each section shall be not less than 20 m. length and extend across the full width of the vehicle deck, except in areas which are divided longitudinally by "Type A" partitions (e.g. machinery, ventilation or stairway shafts).~~

2.3.1 Fixed water-based fire fighting systems for protection of vehicle, special category and ro-ro spaces shall be designed in accordance with the guidelines of MSC.1/Circ.1430 (29).

2.3.2 Water spray systems shall be designed acc. to sections 3 and 4 of MSC.1/Circ.1430. The water spray nozzles shall be approved as per item 3.11 of the guidelines.

2.3.3 Water mist systems shall be type approved and be designed acc. to sections 3 and 5 of MSC.1/Circ.1430

~~2.3.4 The distribution valves are to be installed adjacent to the space to be protected at a location easily accessible and not likely to be cut off by a fire in the protected space. There must be direct access from the vehicle deck and from outside.~~

~~The room where the distribution valves are located must be adequately ventilated.~~

A pressure gauge is to be provided on the valve manifold.

Each distribution valve must be clearly marked as to the section served.

Instructions for maintenance and operation are to be displayed in the valve (drencher) room.

~~2.3.5 One or more separate pumps are to be provided, the capacity of which must be sufficient to supply the two largest adjoining sections with water simultaneously.~~

~~In addition, a connection from the fire main is to be provided. Reverse flow from the water spraying system into the fire main is to be prevented by means of a screw-down non-return valve. The valve is to be secured in closed position with a lock.~~

~~Note : The minimum flow rates indicated in this paragraph are not applicable to approved water mist systems (29).~~

2.3.5 In case of manually activated systems the water spraying pump must be capable of being started from the distribution valve group. All the shutoff valves located between the seawater inlet and the distribution valves must be capable of being opened from the distribution valve group, unless they are secured in the open position.

2.3.6 Drainage and pumping arrangements are to be designed in compliance with Section 16, N.4.3.5 and N.4.4 of this Chapter, as applicable.

The system has to be fitted with sufficient number of drainage valves.

(29) *Pressure water spraying systems deviating from these requirements may be used if approved as equivalent by TL. See Refer to IMO MSC.1/Circ.1430, "Revised Guidelines for the Approval of Fixed Water-Based Fire-Fighting Systems for Ro-Ro Spaces and Special Category Spaces Equivalent to that Referred to in Resolution A.123(V)*

ADDITIONAL RULE – SHIPBUILDING and REPAIR QUALITY STANDARD

01. Section 1 – Shipbuilding and Remedial Quality Standard for New Construction

Revision Date: January 2018

Entry into Force Date: 1 February 2018

References are added to the end of section and references are given from related items according to IACS Rec. 47 Rev.8 as below:

REFERENCES

- A1. IACS Recommendation No.76 "Bulk Carriers - Guidelines for Surveys, Assessment and Repair of Hull Structure"
- A2. TSCF "Guidelines for the inspection and maintenance of double hull tanker structures"
- A3. TSCF "Guidance manual for the inspection and condition assessment of tanker structures"
- A4. IACS UR W7 "Hull and machinery steel forgings"
- A5. IACS UR W8 "Hull and machinery steel castings"
- A6. IACS UR W11 "Normal and higher strength hull structural steels"
- A7. IACS UR W13 "Thickness tolerances of steel plates and wide flats"
- A8. IACS UR W14 "Steel plates and wide flats with specified minimum through thickness properties ("Z" quality)"
- A9. IACS UR W17 "Approval of consumables for welding normal and higher strength hull structural steels"
- A10. IACS UR W28 "Welding procedure qualification tests of steels for hull construction and marine structures"
- A11. Annex I to IACS UR Z10.1 "Hull surveys of oil tankers", and Z10.2 "Hull surveys of bulk carriers", Z10.3 "Hull Surveys of Chemical Tankers", Z10.4 "Hull Surveys of Double Hull Oil Tankers" and Z10.5 "Hull Surveys of Double-Skin Bulk Carriers" Annex I

- A12. IACS UR Z23 “Hull survey for new construction”
- A13. IACS Recommendation No. 12 “Guidelines for surface finish of hot rolled plates and wide flats”
- A14. IACS Recommendation No. 20 “Non-destructive testing of ship hull steel welds”
- A15. IACS Recommendation No.96 “Double Hull Oil Tankers- Guidelines for Surveys, Assessment and Repair of Hull Structures”
- A16. IACS Recommendation No.55 “General Dry Cargo Ships- Guidelines for Surveys, Assessment and Repair of Hull Structures”
- A17. IACS Recommendation No.84 “Container Ships- Guidelines for Surveys, Assessment and Repair of Hull Structures”

Item A.3 is revised according to IACS Rec. 47 Rev.8 as below:

.....

A more stringent standard may however be required for critical and highly stressed areas of the hull, and this is to be agreed with TL in each case **In assessing the criticality of hull structure and structural components, reference is made to ref. A1, A2, A3, A11, A15, A16 and A17.**

02. Section 2 – Repair Quality Standard for Existing Ships

Revision Date: January 2018

Entry into Force Date: 1 February 2018

References are added to the end of section and references are given from related items according to Rec. 47 Rev.8 as below:

REFERENCES

- B1. IACS Recommendation 76 “Bulk Carriers - Guidelines for Surveys, Assessment and Repair of Hull Structure”
- B2. TSCF “Guidelines for the inspection and maintenance of double hull tanker structures”
- B3. TSCF “Guidance manual for the inspection and condition assessment of tanker structures”
- B4. IACS UR W11 “Normal and higher strength hull structural steels”
- B5. IACS UR W17 “Approval of consumables for welding normal and higher strength hull structural steels”
- B6. Annex I to IACS Z10.1 “Hull surveys of oil tankers”, and Z10.2 “Hull surveys of bulk carriers”, Z10.3 “Hull Surveys of Chemical Tankers”, Z10.4 “Hull Surveys of Double Hull Oil Tankers” and “Z10.5 Hull Surveys of Double-Skin Bulk Carriers” Table IV
- B7. IACS UR Z3 “Voyage repairs and maintenance”
- B8. IACS Recommendation 12 “Guidelines for surface finish of hot rolled steel plates and wide flats”
- B9. IACS Recommendation 20 “Non-destructive testing of ship hull steel welds”
- B10. IACS Recommendation No.96 “Double Hull Oil Tankers- Guidelines for Surveys, Assessment and Repair of Hull Structures”
- B11. IACS Recommendation No.55 “General Dry Cargo Ships- Guidelines for Surveys, Assessment and Repair of Hull Structures”
- B12. IACS Recommendation No.84 “Container Ships- Guidelines for Surveys, Assessment and Repair of Hull Structures”

Item A.2 is revised according to IACS Rec. 47 Rev.8 as below:

.....

A more stringent standard may however be required for critical and highly stressed areas of the hull, and this is to be agreed with TL in each case. **In assessing the criticality of hull structure and structural components, reference is made to ref. B1, B2, B3, B6, B10, B11 and B12.**

Table 2.2 is revised according to IACS Rec. 47 Rev.8 as below:

Table 2.2 Guidance on steel grades comparable to the normal and high strength hull structural steel grades given in TL rules

Steel grades according to TL rules (ref. B4)						Comparable steel grades (1)				
Grade	Yield stress ReH min. N/mm ²	Tensile strength Rm N/mm ²	Elongation A ₅ min. %	Average impact energy for t ≤ 50 mm		EN 10025:1990 (2) ISO 4950-2:1995	EN 10025 Series:2004	ASTMA 131 GB712-2011	JIS G 3106	
				Test temp. °C	J, min. L T					
A	235	400 - 520	22	+20	-	Fe 360B	S235JR	A	SM400B	
B				0	27	20	Fe 360C	S235J0	B	SM400B,SM400C
D				-20	27	20	Fe 360D	S235J2	D	-
E				-40	27	20	-	S275NL,S275ML	E	-
A 27				265	400 - 530	22	0	-	Fe 430C Fe	S275J0
D 27	-20	27	20				430D	S275J2,S275N/S275M	-	-
E 27	-40	-	-				S275NL,S275ML	-	-	
A 32	315	440 - 570	22	0	-	-	-	AH32	SM490B,SM490C	
D 32				-20	31	22	-	-	DH32	-
E 32				-40	-	-	-	-	EH32	-
A 36	355	490 - 630	21	0	-	Fe 510C	S355J0	AH36	SM520B,SM520C	
D 36				-20	34	24	Fe510D	S355J2,S355N,S355	DH36	-
E 36				-40	-	-	E355DD	M S355NL,S355ML	EH36	-
A 40	390	510 - 660	20	0	-	E390CC	S420N S420M	AH40	SM570	
D 40				-20	39	26	E390DD	S420N/S420M	DH40	-
E 40				-40	-	-	E390E	S420NL,S420ML	EH40	-

Note :

(1) In selecting comparable steels from this table, attention should be given to the requirements of Table 2.1 and the dimension requirements of the product with respect to TL rules. Some steel grades as per national or international standard are defined with specified yield and tensile strength properties which depend on thickness. For thicknesses with tensile properties specified lower than those of TL Rules, case-by-case consideration shall be given with regards to design requirements.

(2) EN 10025:1990 is superseded by EN10025 series.

For further information:

Bekir Sıtkı TÜRKMEN

Division Manager, Rule Development and Statutory Legislation

Tel: +90- 216 581 37 83

Fax: +90- 216 581 38 40

E-mail: tl_kural@turkloydu.org

Web: www.turkloydu.org *LEGAL NOTICE All rights reserved.*

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