
GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS

Part M

Welding

GUIDANCE

2022 AMENDMENT NO.1

Notice No.31 30 June 2022

Resolved by Technical Committee on 26 January 2022

AMENDMENT TO THE GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS

“Guidance for the survey and construction of steel ships” has been partly amended as follows:

Part M WELDING

M2 WELDING WORKS

M2.1 General

Paragraph M2.1.1 has been amended as follows.

M2.1.1 Application

1 In **2.1.1-3, Part M of the Rules**, application of welding consumables used for rolled stainless steel, ~~aluminium alloys, stainless steel pipes, steel tubes for boilers and heat exchangers, steel pipes for pressure piping, headers and steel pipes for low temperature service etc.~~ is to comply with the requirements specified in ~~-2~~ to ~~-4~~**5** as follows.

2 Rolled Stainless Steel

((1) and (2) are omitted.)

3 Aluminium Alloys

((1) and (2) are omitted.)

4 Stainless steel pipes, steel tubes for boilers and heat exchangers, steel pipes for pressure piping, headers and steel pipes for low temperature service

The welding consumables corresponding to the kind of steel pipes (of tubes) or headers are, in principle, to be selected in accordance with **Table M2.1.1-1** or **Table M2.1.1-3**. Other considerations for selecting welding consumables may be acceptable in cases where technical documents clarifying the suitability of the selection are submitted and deemed to be appropriate by the Society.

5 Rolled steels for boilers and pressure vessels

The welding consumables corresponding to the kind of steel are, in principle, to be selected in accordance with **Table M2.1.1-4**. Other considerations for selecting welding consumables may be acceptable in cases where technical documents clarifying the suitability of the selection are submitted and deemed to be appropriate by the Society.

Table M2.1.1-1 Application of Welding Consumables
(Rolled Stainless Steel and Stainless Steel Pipes)
(Table and Note are omitted.)

Table M2.1.1-2 Application of Welding Consumables (Aluminium Alloys)
(Table and Note are omitted.)

Table M2.1.1-3 has been amended as follows.

Table M2.1.1-3 Application of Welding Consumables
(Steel tubes for boilers and heat exchangers, steel pipes for pressure piping, headers and steel pipes for low temperature service)

Kind of base pipe (or tube)	Grade of base pipe (or tube)	Grade of applicable welding consumables ⁽¹⁾
Steel tubes for boilers and heat exchangers, steel pipes for pressure piping, headers	<i>KSTB33, KSTB35, KSTPG38, KSTS38, KSTPT38</i>	1, 2, 3, 51, 52, 53, 54, 52Y40, 53Y40, 54Y40, <u>55Y40</u> , L1, L2, L3
	<i>KSTB42, KSTPG42, KSTS42, KSTPT42, KBH-1</i>	51, 52, 53, 54, 52Y40, 53Y40, 54Y40, <u>55Y40</u> , L2, L3, 2Y42, 3Y42, 4Y42, 5Y42
	<i>KSTS49, KSTPT49, KBH-2</i>	51, 52, 53, 54, 52Y40, 53Y40, 54Y40, <u>55Y40</u> , L3, 2Y42, 3Y42, 4Y42, 5Y42
Steel pipes for low temperature service	<i>KLPA</i>	L1, L2, L3, 54, 54Y40, <u>55Y40</u>
	<i>KLPB, KLPC</i>	L2, L3
	<i>KLP9</i>	L91, L92

Note:

- (1) The symbols for the welding consumables listed above indicate materials which are specified in **Table M6.1**, **Table M6.12**, **Table M6.21**, **Table M6.29** or **Table M6.58** that have the same mark at the end. (For example, “3” indicates *KMW3*, *KAW3*, *KSW3* and *KEW3*; “L3” indicates *KMWL3*, *KAWL3* and *KSWL3*; and “3Y42” indicates *KMW3Y42*, *KAW3Y42* and *KSW3Y42*.)

Table M2.1.1-4 has been added as follows.

Table M2.1.1-4 Application of Welding Consumables
(Rolled steels for boilers and pressure vessels)

Kind of base plate	Grade of base plate	Grade of applicable welding consumables ⁽¹⁾
Rolled steel for boilers	<u>KP42</u>	51, 52, 53, 54, 52Y40, 53Y40, 54Y40, 55Y40, L2, L3, 2Y42, 3Y42, 4Y42, 5Y42
	<u>KP46, KPA46, KP49, KPA49</u>	51, 52, 53, 54, 52Y40, 53Y40, 54Y40, 55Y40, L3, 2Y42, 3Y42, 4Y42, 5Y42
Rolled steel for pressure vessels	<u>KPV24⁽²⁾</u>	2, 3, 52, 53, 54, 52Y40, 53Y40, 54Y40, 55Y40, 2Y42, 3Y42, 4Y42, 5Y42
	<u>KPV32⁽³⁾</u>	52, 53, 54, 52Y40, 53Y40, 54Y40, 55Y40, 2Y42, 3Y42, 4Y42, 5Y42
	<u>KPV36</u>	63Y47, 2Y42, 3Y42, 4Y42, 5Y42, 2Y46, 3Y46, 4Y46, 5Y46, 3Y50, 4Y50, 5Y50
	<u>KPV42, KPV46</u>	63Y47, 3Y50, 4Y50, 5Y50, 3Y55, 4Y55, 5Y55
	<u>KPV50</u>	3Y55, 4Y55, 5Y55, 3Y62, 4Y62, 5Y62

Notes:

- (1) The symbols for the welding consumables listed above indicate materials which are specified in **Table M6.1**, **Table M6.12**, **Table M6.21**, **Table M6.29** or **Table M6.58** that have the same mark at the end. (For example, “3” indicates *KMW3*, *KAW3*, *KSW3* and *KEW3*; “L3” indicates *KMWL3*, *KAWL3* and *KSWL3*; and “3Y42” indicates *KMW3Y42*, *KAW3Y42* and *KSW3Y42*.)
- (2) The symbols for the welding consumables listed above as “2, 3, 52, 53, 54, 52Y40, 53Y40, 54Y40, 55Y40” are applicable only for *KMW* and *KSW*.
- (3) The symbols for the welding consumables listed above as “52, 53, 54, 52Y40, 53Y40, 54Y40, 55Y40” are applicable only for *KMW* and *KSW*.

EFFECTIVE DATE AND APPLICATION

1. The effective date of the amendments is 1 July 2022.
2. Notwithstanding the amendments to the Guidance, the current requirements apply to welding procedure and related specifications for which the application for approval is submitted to the Society before the effective date.