

Rolling mill plants - Inspection method of large steel castings

Clause 4, 1)

Replace "**JIS Z 2241:2011**" with "**JIS Z 2241:2023**".

Clause 4, 2)

Replace "**JIS Z 2241:2011**" with "**JIS Z 2241:2023**".

Rolling mill plants - Inspection method of steel forgings

Clause 1, NOTE(5)

Replace "JIS G 4051:2018" with "JIS G 4051:2023".

Clause 1, NOTE(5)

Replace "JIS G 4053:2003" with "JIS G 4053:2023".

Clause 4.2, 1)

Replace "JIS Z 2241:2011" with "JIS Z 2241:2023".

Clause 4.2, 2)

Replace "JIS Z 2241:2011" with "JIS Z 2241:2023".

Clause 4.3, 1)

Replace "JIS Z 2242:2020" with "JIS Z 2242:2023".

Rolling mill plants - Rust prevention treatment and packing
for machines and parts to be exported

Clause 2.3

Replace "**JIMS D-1007:2008**" with "**JIMS D-1007:2026**".

Rolling mill plants - Storage for exported machines and parts at site

Clause 2.1.3, NOTE(2)

Replace "Law for Prevention against Damage from Radioactive Isotopes" with
"Act on the Regulation of Radioisotopes, etc.".

Rolling mill plants - Installation of equipment - General requirements

Clause 2, 1)

Replace "**JIMS D-1011:2022**" with "**JIMS D-1011:2026**".

Clause 2, 2)

Replace "**JIMS D-1012:2022**" with "**JIMS D-1012:2026**".

Clause 2, 3)

Replace "**JIMS D-1013:2022**" with "**JIMS D-1013:2026**".

Clause 2, 4)

Replace "**JIMS D-1014:2022**" with "**JIMS D-1014:2026**".

Clause 2, 5)

Replace "**JIMS D-1015:2022**" with "**JIMS D-1015:2026**".

Clause 2, 6)

Replace "**JIMS D-1016:2022**" with "**JIMS D-1016:2026**".

Clause 2, 7)

Replace "**JIMS D-1017:2022**" with "**JIMS D-1017:2026**".

Clause 2, 8)

Replace "**JIMS D-1018:2022**" with "**JIMS D-1018:2026**".

Clause 2, 9)

Replace "**JIMS D-1019:2022**" with "**JIMS D-1019:2026**".

Clause 2, 10)

Replace "**JIMS D-1020:2022**" with "**JIMS D-1020:2026**".

Clause 2, 11)

Replace "**JIMS D-1021:2022**" with "**JIMS D-1021:2026**".

Clause 12, 1)

Replace "**JIMS D-1011:2022**" with "**JIMS D-1011:2026**".

Clause 12, 2)

Replace "**JIMS D-1018:2022**" with "**JIMS D-1018:2026**".

Clause 12, 3)

Replace "**JIMS D-1019:2022**" with "**JIMS D-1019:2026**".

Rolling mill plants - Piping

Clause 2

Replace "**JIMS D-1010:2022**" with "**JIMS D-1010:2026**".

Clause 2

Replace "**JIMS D-1018:2022**" with "**JIMS D-1018:2026**".

Clause 2

Replace "**JIMS D-1019:2022**" with "**JIMS D-1019:2026**".

Clause 3, Table 1, (c)

Replace "**JIS G 3455:2020**" with "**JIS G 3455:2024**".

Clause 3, Table 1, (c)

Replace "**JIS G 3456:2019**" with "**JIS G 3456:2024**".

Clause 7.5

Replace the text with the following.

7.5 Packing (Gasket)

Unless otherwise specified, packing as given in Table 15 shall be used in accordance with the drawings or specifications after checking the fluid, pressure, temperature, etc. However, the material of the O-ring used for sealing oil or grease may be selected as appropriate according to the properties of the oil or grease, even if it does not conform to Table 15.

Packing of different hardness and sizes are used depending on the purpose of use. Prepare a packing list and store the packing in accordance with this list so as to eliminate erroneous use.

Clause 7.5, Table 15

Replace Table 15 with the following table:

Table 15

Fluid to be used, Purpose of use		Service range		Packing		Remark
		Pressure MPa	Temperature °C	Type	Material	
Lubrication oil		0.98	Room temp.	Flat ring	Non-asbestos seal	
Hydraulic oil	Supply	6.86	Room temp.	JIS B 2401-1:2012 O-ring	Nitrile rubber ^a	Type A Durometer hardness: 70, 90
		20.6	Room temp.	JIS B 2401-1:2012 O-ring	Nitrile rubber ^a	Type A Durometer hardness: 70, 90
	Return	0.98	Room temp.	Flat ring	Non-asbestos seal	
Non-combustible oil		20.6	Room temp.	JIS B 2401-1:2012 O-ring	Fluoroelastomer	Type A Durometer hardness: 70, 90
Centralized grease supply		20.6	Room temp.	JIS B 2401-1:2012 O-ring	Nitrile rubber ^a	Type A Durometer hardness: 70, 90
Oil mist Oil air		0.98	Room temp.	Flat ring	Non-asbestos seal	
Roll coolant		0.98	Room temp.	Flat ring	Non-asbestos seal	Depends on fluid
Cooling water		0.98	Room temp.	Flat ring	Non-asbestos seal	
Descaling		20.6	Room temp.	JIS B 2401-1:2012 O-ring	Nitrile rubber ^a	Type A Durometer hardness: 90
Steam		1.57	203	Flat ring	Non-asbestos seal (For steam only)	Graphite compound may be applied.
Air		0.98	Room temp.	Flat ring	Non-asbestos seal (For steam only)	
^a The material of the O-ring used for sealing oil or grease may be selected as appropriate according to the properties of the oil or grease, even if it does not conform to this table.						

Rolling mill plants - Installation of mill stands

Clause 3

Replace "**JIMS D-1010:2022**" with "**JIMS D-1010:2026**".

Rolling mill plants - Installation of main drives

Clause 2

Replace "**JIMS D-1010:2022**" with "**JIMS D-1010:2026**".

Rolling mill plants - Installation of pinion stands

Clause 1

Replace "**JIMS D-1013:2022**" with "**JIS D-1013:2026**".

Clause 2

Replace "**JIMS D-1010:2022**" with "**JIS D-1010:2026**".

Rolling mill plants - Installation of down coilers

Clause 2

Replace "**JIMS D-1010:2022**" with "**JIMS D-1010:2026**".

Rolling mill plants - Installation of roller tables

Clause 2

Replace "**JIMS D-1010:2022**" with "**JIMS D-1010:2026**".

JIMS
D-1017 : 2008
AMENDMENT 2 : 2026

Rolling mill plants - Inspection method of equipment foundations

Clause 4, 3) REMARK

Replace "**JIMS D-1010:2022**" with "**JIMS D-1010:2026**".

Rolling mill plants - Pipe pickling

Clause 2

Replace "**JIMS D-1011:2022**" with "**JIMS D-1011:2026**".

Clause 2

Replace "**JIMS D-1019:2022**" with "**JIMS D-1019:2026**".

Clause 4.10, Reference Table 2

Replace "(MIL)" with "(MIL-P-116)".

Rolling mill plants - Pipe flushing

Clause 2

Replace "**JIMS D-1011:2022**" with "**JIMS D-1011:2026**".

Clause 2

Replace "**JIMS D-1018:2022**" with "**JIMS D-1018:2023**".

Clause 4.6.1, 1)

Replace " NAS class 10 - 12" with "contamination level code 21/19/15 to 23/21/18 in accordance with JIS B 9933:2023 (equivalent to NAS Class 10 – 12 in accordance with NAS 1683)".

Clause 4.6.1, 1), NOTE(3)

Replace the text with the following.

NOTE (3) Working fluid (hydraulic fluid) in general use is contamination level code 21/19/15 to 23/21/18 (equivalent to NAS Class 10 - 12). It is preferable to use fluid of code 21/19/15 to 23/21/18 (NAS Class 10 - 12) as far as possible, though fluids of poor contamination level worse than 23/21/18 (NAS Class 12) are being used in some cases.

Clause 4.6.1, Reference(2)

Replace the text and table with the following.

REFERENCE (2) JIS B 9933 is a standard that defines a contamination level code representing the distribution of contaminants in a fluid by counting the number of particles per 1 mL of hydraulic fluid.

The counted particles are classified into three particle size ranges:

- (1) equal to or larger than 4 µm;
- (2) equal to or larger than 6 µm; and
- (3) equal to or larger than 14 µm.

The scale numbers assigned in Reference Table 1 are indicated in the order of (1)/(2)/(3), separated by slashes (/).

NAS 1683 is an American Standard for aircraft and it has standardized the purity of working fluid (hydraulic fluid) based on the measured values of the size and quantity of contaminated particles contained in fluid of 100 mL and grading is made as shown in Reference Table 1 according to the measured values.

Since there is no direct compatibility between the contamination level codes of JIS B 9933 and the classes of NAS 1683, this standard adopts JIS B 9933 as the primary reference, and the NAS 1683 classes are provided for reference only.

Reference Table 1 - Allocation of scale numbers in accordance with JIS B 9933:2023

Number of particles per 1mL		Scale number
More than	Up to and including	
2 500 000	—	> 28
1 300 000	2 500 000	28
640 000	1 300 000	27
320 000	640 000	26
160 000	320 000	25
80 000	160 000	24
40 000	80 000	23
20 000	40 000	22
10 000	20 000	21
5 000	10 000	20
2 500	5 000	19
1 300	2 500	18
640	1 300	17
320	640	16
160	320	15
80	160	14
40	80	13
20	40	12
10	20	11
5	10	10
2.5	5	9
1.3	2.5	8
0.64	1.3	7
0.32	0.64	6
0.16	0.32	5
0.08	0.16	4
0.04	0.08	3
0.02	0.04	2
0.01	0.02	1
0.00	0.01	0

Reference Table 2 - NAS 1683 classes

Particle size (µm)	Class													
	00	0	1	2	3	4	5	6	7	8	9	10	11	12
5 - 15	125	250	500	1 000	2 000	4 000	8 000	16 000	32 000	64 000	128 000	256 000	512 000	1 024 000
15 - 25	22	44	89	178	356	712	1 425	2 850	5 700	11 400	22 800	45 500	91 200	182 400
25 - 50	4	8	16	32	63	126	253	506	1 012	2 025	4 050	8 100	16 200	32 400
50 - 100	1	2	3	6	11	22	45	90	180	360	720	1 440	2 880	5 760
Over 100	0	0	1	1	2	4	8	16	32	64	128	256	512	1 024

Clause 4.6.4, Reference(4)

Replace "Reference Table 2" with " Reference Table 3".

Clause 4.6.4, Reference Table 2

Replace the table and the table number with the following.

Reference Table 3

JIS* standard sieve (μm)						Other typical standard sieves				
Nominal size	Sieve mesh opening tolerance		Wire diameter			ASTM**		Tyler***		ISO****
	Average	Maximum	Nominal	Maximum	Minimum	Nominal No.	Sieve mesh opening mm	Nominal mesh	Sieve mesh opening mm	Nominal size (sieve mesh opening) μm
75	± 3.7	25.9	50	58	43	200	0.075	200	0.074	75
90	± 4.2	28.6	63	72	54	170	0.090	170	0.088	90
106	± 4.7	31.4	71	82	60	140	0.106	140	0.104	106
125	± 5.2	34.5	90	104	77	120	0.125	120	0.124	125
150	± 6.0	38.3	100	115	85	100	0.150	100	0.147	150
180	± 6.8	42.7	125	150	106	80	0.180	80	0.175	180
212	± 7.8	47.1	140	170	120	70	0.212	70	0.208	212
250	± 8.9	52.0	160	190	130	60	0.250	60	0.246	250
* JIS Z 8801-1:2019 ** ASTM E11-24 *** Tyler Company Standard **** ISO 3310-1:2016										

Clause 4.7.1, Reference Table 3

Replace “Reference Table 3” with “Reference Table 4”.

Clause 5.1.2, 6)

Replace “judge the grade of NAS by microscope” with “determine the contamination level in accordance with JIS B 9933 using an optical microscope, an optical automatic particle counters, or equivalent equipment”.

Clause 5.2

Replace “the required grade of NAS” with “the required contamination level in accordance with JIS B 9933”.

JIMS
D-1020 : 2008
AMENDMENT 2 : 2026

Rolling mill plants - Contracts for supervising services

Clause 1, NOTE(1)

Replace "**JIMS D-1010:2022**" with "**JIMS D-1010:2026**".

Clause 3.2, NOTE(3)

Replace "**JIMS D-1010:2022**" with "**JIMS D-1010:2026**".

Rolling mill plants - Installation of hydraulic equipment

Clause 2

Replace "**JIMS D-1010:2022**" with "**JIMS D-1010:2026**".

JIMS
D-1042 : 2008
AMENDMENT 2 : 2026

Rolling mill plants - Inspection method of large steel castings

Clause 2, REMARK

Delete "**JIS B 1455**:1988, *Rubber shaft couplings*".