

202506_Relevant approved standards for the machinery sector

Item	Standard Number	Standard Title in English	Standard Type	Replaced Standard	Implementation Date	SAC/TC	Adopted International Standard	Adoption Degree
1	GB 38031-2025	Electric vehicles traction battery safety requirements	Mandatory	GB 38031-2020	2026-07-01	114	Na.	Na.
2	GB/T 6994-2025	Electrical installation in ships—Definitions and general requirements	Voluntary	GB/T 6994-2006	2025-11-01	531	IEC 60092-101:2018	IDT
3	GB/T 7357-2025	Electrical installations in ships—System design—Protection	Voluntary	GB/T 7357-2010	2025-11-01	531	IEC 60092-202:2016	IDT
4	GB/T 7358-2025	Electrical installations in ships—System design—General	Voluntary	GB/T 7358-1998	2025-11-01	531	IEC 60092-201:2019	IDT
5	GB/T 10250-2025	Electrical and electronic installations in ships—Electromagnetic compatibility(EMC)—Ships with a metallic hull	Voluntary	GB/T 10250-2007	2025-11-01	531	IEC 60533:2015	IDT
6	GB/T 12789.1-2025	Criteria for nuclear reactor instrumentation—Part 1: General principles	Voluntary	GB/T 12789.1-1991	2025-11-01	30	IEC 60231A:1969	IDT
7	GB/T 12789.2-2025	Criteria for nuclear reactor instrumentation—Part 2: Pressurized water reactors	Voluntary	GB/T 12789.2-1991	2025-11-01	30	IEC 60231D:1975	IDT
8	GB/T 12789.3-2025	Criteria for nuclear reactor instrumentation—Part 3: High temperature gas-cooled reactor	Voluntary	GB/T 12789.3-1992	2025-11-01	30	IEC 60231E:1977	IDT
9	GB/T 13594-2025	Performance requirements and test methods of anti-lock braking system for commercial vehicle and trailer	Voluntary	GB/T 13594-2003	2025-08-01	114	Na.	Na.
10	GB/T 17435-2025	Design and installation of electrolysis of seawater anti-fouling system for ship	Voluntary	GB/T 17435-1998	2025-08-01	12	Na.	Na.
11	GB/T 17436-2025	Selection of explosion proof electrical equipment in ship hazardous areas	Voluntary	GB/T 17436-1998	2025-11-01	531	Na.	Na.

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12	GB/T 18487.4-2025	Electric vehicle conductive charging and discharging system—Part 4: Discharging requirements for electric vehicle	Voluntary		2025-11-01	114	Na.	Na.
13	GB/T 21307-2025	Roller gin	Voluntary	GB/T 21307-2007	2025-11-01	47	Na.	Na.
14	GB/T 24931-2025	Prescription for installation of the external lighting and light-signalling devices for the all-terrain vehicles	Voluntary	GB/T 24931-2010	2025-11-01	344	Na.	Na.
15	GB/T 25105.1-2025	Industrial communication networks—Fieldbus specifications—Type 10: PROFINET IO specifications—Part 1: Application layer service definition	Voluntary	GB/T 25105.1-2014	2025-11-01	124	IEC 61158-5-10:2023	IDT
16	GB/T 25105.2-2025	Industrial communication networks—Fieldbus specifications—Type 10: PROFINET IO specifications—Part 2: Application layer protocol specification	Voluntary	GB/T 25105.2-2014	2025-11-01	124	IEC 61158-6-10:2023	IDT
17	GB/T 25105.3-2025	Industrial communication networks—Fieldbus specifications—Type 10: PROFINET IO specifications—Part 3: PROFINET IO communication profile	Voluntary	GB/T 25105.3-2014	2025-11-01	124	IEC 61784-2-3:2023	IDT
18	GB/T 28559-2025	Supercritical and ultra-supercritical turbine—Blades	Voluntary	GB/T 28559-2012	2025-11-01	172	Na.	Na.
19	GB/T 30425-2025	Water cooling equipment for converter valves for high voltage direct current (HVDC) power transmission	Voluntary	GB/T 30425-2013	2025-11-01	60	Na.	Na.
20	GB/T 32197-2025	Industrial robot controller open communication interface specification	Voluntary	GB/T 32197-2015	2025-11-01	591	Na.	Na.

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21	GB/T 32960.3-2025	Technical specifications for remote service and management system for electric vehicles—Part 3: Communication protocol and data format	Voluntary	GB/T 32960.3-2016	2025-11-01	114	Na.	Na.
22	GB/T 36217-2025	Ships and marine technology—Ship's mooring and towing fittings—Universal fairleads with upper roller	Voluntary	GB/T 36217-2018	2025-08-01	129	ISO 13733:2020	IDT
23	GB/T 37150-2025	Electromagnetic compatibility—Risk assessment—Basic requirements	Voluntary	GB/Z 37150-2018	2025-11-01	79	Na.	Na.
24	GB/T 38659.5-2025	Electromagnetic compatibility—Risk assessment—Part 5: 150 kHz~30 MHz conducted disturbance	Voluntary		2025-11-01	79	Na.	Na.
25	GB/T 40032.2-2025	Safety requirements of battery swap for electric vehicles—Part 2: Commercial vehicle	Voluntary		2025-11-01	114	Na.	Na.
26	GB/T 40425.2-2025	Overhead contact charging system for electric buses—Part 2: Charging connection set	Voluntary		2025-11-01	114	Na.	Na.
27	GB/T 40711.5-2025	Off-cycle technology/device energy saving effects evaluation methods for passenger cars—Part 5: Generator	Voluntary		2025-11-01	114	Na.	Na.
28	GB/T 45523.1-2025	Remote handling devices for radioactive materials—Part 1: General requirements	Voluntary		2025-04-25	58	ISO 17874-1:2010	NEQ
29	GB/T 45523.2-2025	Remote handling devices for radioactive materials—Part 2: Mechanical master-slave manipulator	Voluntary		2025-04-25	58	ISO 17874-2:2004.	NEQ
30	GB/T 45523.3-2025	Remote handling devices for radioactive materials—Part 3: Electrical master-slave manipulators	Voluntary		2025-04-25	58	ISO 17874-3:2011	NEQ

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31	GB/T 45523.4-2025	Remote handling devices for radioactive materials—Part 4:Power manipulator	Voluntary		2025-04-25	58	ISO 17874-4:2006	NEQ
32	GB/T 45523.5-2025	Remote handling devices for radioactive materials—Part 5: Remote handling tongs	Voluntary		2025-04-25	58	ISO 17874-5:2007	NEQ
33	GB/T 45525.2-2025	Nanotechnology—Nanogenerator—Part 2: Test methods for electric performance of triboelectric nanogenerators	Voluntary		2025-11-01	279	Na.	Na.
34	GB/T 45527-2025	Technical specification at the project level for assessment of greenhouse gas emission reductions—Power energy substitution projects	Voluntary		2025-08-01	524	Na.	Na.
35	GB/T 45529-2025	Road vehicles—Electrical electronic switching devices—Relay	Voluntary		2025-11-01	114	Na.	Na.
36	GB/T 45561.1-2025	Industrial trucks—Sustainability—Part 1: Vocabulary	Voluntary		2025-11-01	332	ISO 23434-1:2021	IDT
37	GB/T 45561.2-2025	Industrial trucks—Sustainability—Part 2: Factors and reporting	Voluntary		2025-11-01	332	ISO 23434-2:2021	IDT
38	GB/T 45562-2025	Heavy mechanical—Design specifications for automation system	Voluntary		2025-04-25	409	Na.	Na.
39	GB/T 45563.1-2025	Specification of intellectual property appraisalment—Part 1: General	Voluntary		2025-04-25	554	Na.	Na.
40	GB/T 45563.2-2025	Specification of intellectual property appraisalment—Part 2: Patent	Voluntary		2025-04-25	554	Na.	Na.
41	GB/T 45563.3-2025	Specification of intellectual property appraisalment—Part 3: Trademark	Voluntary		2025-04-25	554	Na.	Na.

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42	GB/T 45565-2025	Coding regulations of lithium ion batteries	Voluntary		2025-11-01	MIIT	Na.	Na.
43	GB/T 45568-2025	Information specification for relay protection	Voluntary		2025-08-01	524	Na.	Na.
44	GB/T 45574-2025	Data security technology—Security requirements for processing of sensitive personal information	Voluntary		2025-11-01	260	Na.	Na.
45	GB/T 45575-2025	Technical requirements of automatic inspection system for surface defect of industrial product	Voluntary		2025-11-01	159	Na.	Na.
46	GB/T 45576-2025	Cybersecurity technology—Guidelines for application of cybersecurity insurance	Voluntary		2025-11-01	260	Na.	Na.
47	GB/T 45577-2025	Data security technology—Risk assessment method for data security	Voluntary		2025-11-01	260	Na.	Na.
48	GB/T 45579-2025	Robot intelligent vision evaluation method and classification	Voluntary		2025-08-01	591	Na.	Na.
49	GB/T 45580-2025	Safety technical requirements of metal portable tank for liquid dangerous goods transported by road	Voluntary		2025-08-01	251	Na.	Na.
50	GB/T 45595-2025	Centrifugal refrigerant compressors	Voluntary		2025-11-01	238	Na.	Na.
51	GB/T 45616.4-2025	Automation systems and integration—Digital twin framework for manufacturing—Part 4: Information exchange	Voluntary		2025-04-25	159	ISO 23247-4:2021	IDT
52	GB/T 45626-2025	Information technology—Equipment digital twin system—General requirements	Voluntary		2025-11-01	28	Na.	Na.

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53	GB/T 45628-2025	Artificial intelligence—Knowledge graph—Knowledge exchange protocol	Voluntary		2025-04-25	28	Na.	Na.
54	GB/T 45646-2025	Greenhouse gases—The quantification method and requirement for carbon footprint of products—Internal combustion engines	Voluntary		2025-11-01	177	Na.	Na.
55	GB/T 45648.1-2025	Technical specification of energy absorption device for high voltage direct current (HVDC) power transmission—Part 1: DC controllable and self-recovery energy absorption device	Voluntary		2025-11-01	333	Na.	Na.
56	GB/T 45648.2-2025	Technical specification of energy absorption device for high voltage direct current (HVDC) power transmission—Part 2: AC controllable and self-recovery energy absorption device	Voluntary		2025-11-01	333	Na.	Na.
57	GB/T 45650-2025	Air source heat pump packages with carbon dioxide as refrigerants	Voluntary		2025-11-01	238	Na.	Na.
58	GB/T 45652-2025	Cybersecurity technology—Security specification for generative artificial intelligence pre-training and fine-tuning data	Voluntary		2025-11-01	260	Na.	Na.
59	GB/T 45654-2025	Cybersecurity technology—Basic security requirements for generative artificial intelligence service	Voluntary		2025-11-01	260	Na.	Na.
60	GB/T 45674-2025	Cybersecurity technology—Generative artificial intelligence data annotation security specification	Voluntary		2025-11-01	260	Na.	Na.