Fatal and non-fatal accidents in metal plating products in Japan in 1999-2022

metal plating products industry Code No.011204

Type of accidents in metal plating products in 1999-2022

Type of accidents	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	total
fall from height	35	26	36	27	21	20	24	26	24	22	26	18	15	19	17	19	17	11	19	13	25	16	16	20	512
falling to same level	35	34	33	34	33	27	30	30	35	35	17	28	21	30	34	24	21	17	23	32	23	26	20	34	676
crash	11	15	15	11	13	12	9	7	11	9	5	7	9	5	8	9	5	6	7	8	12	8	14	11	227
struck by flying or falling object	42	42	29	31	28	18	35	26	30	24	25	25	28	14	23	29	23	20	17	23	19	16	21	19	607
collapse	16	9	13	12	11	8	9	14	8	10	8	4	12	8	5	10	6	5	6	3	4	8	7	5	201
crashed by	17	12	15	12	13	9	13	9	12	18	6	11	14	10	9	12	9	10	11	8	13	4	11	14	272
caught in/between	78	52	53	79	48	57	56	52	55	54	43	38	54	46	42	51	32	37	40	42	35	33	30	33	1,140
cut	17	13	13	7	8	8	9	6	13	9	4	4	9	8	4	8		11	8	6	7	4	4	3	183
injury to the sole of the foot				2		2				1	1		1			2	3		1	1		2			16
drown																									
contact to high/low-	17	12	20	20	14	23	12	15	9	4	10	18	12	13	14	11	11	13	11	12	16	10	11	9	317

temperature																									
contact to harmful substance	11	10	16	23	32	20	14	23	23	12	11	14	9	12	13	17	10	18	9	20	19	22	14	16	388
electric shock					1	2					2					1									6
explosion		1	1				1	1		1	1		1		1	1				1					10
burst									1					1		1			1				1		5
fire				1	2			4		1			1	1											10
traffic accident (public road)		2	2		1	2	1	3	3	3	3	2	1		2	2			1		2		2	2	34
traffic accident (others)																									
reaction to motion/improper motion	25	23	21	17	15	20	18	24	20	29	8	13	14	19	15	18	10	14	16	10	17	13	17	24	420
others	1	2	3	1	1	4			2			1		2		2	2				2				23
unclassifiable			2			1			1																4
total	305	253	272	277	241	233	231	240	247	232	170	183	201	188	187	217	149	162	170	179	194	162	168	190	5,051

Causal agents (large) of fatal and non-fatal accidents in metal plating products in 1999-2022

Causal (L) agents	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	total
machine	50	30	34	42	27	41	31	30	36	33	37	31	37	28	23	27	15	33	24	25	23	23	16	18	714

crane, conveying machine	40	38	42	32	29	30	28	23	30	39	20	16	33	19	25	30	20	16	23	17	30	19	26	34	659
other equipment	58	53	45	59	47	46	53	42	52	35	41	37	29	33	29	43	33	28	36	31	40	30	36	31	967
temporary buildings, establishments	47	38	47	31	38	39	31	39	45	35	28	28	23	36	40	38	28	22	27	31	33	33	24	40	821
substance, material	69	59	71	89	74	52	59	74	65	59	32	48	51	47	52	57	38	46	46	51	49	46	41	41	1,316
load	22	23	24	11	16	8	16	16	14	24	9	8	18	13	6	12	5	8	8	14	7	3	11	13	309
environment		1	1	3	1	4	1	3	1	1		7	7	3	4	3	4	4	1	3	5	2	3	2	64
others	19	11	8	10	9	13	12	13	4	6	3	8	3	9	8	7	6	5	5	7	7	6	11	11	201
total	305	253	272	277	241	233	231	240	247	232	170	183	201	188	187	217	149	162	170	179	194	162	168	190	5,051

Causal agents (middle) of fatal and non-fatal accidents in metal plating products in 1999-2022

Causal (M) agents	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	total
engine													1							1					2
power transmission mechanism	2	1	2	4	2	1	4	5	4	4	3	6	1	6	4	2	1	3	1		1	5	1	2	65
woodworking machine	1		1			3	1					1				1			1			1			10

construction machine																						1			1
metal manufacturing machine	32	13	18	16	12	21	18	11	14	20	20	18	17	12	11	17	9	17	17	10	13	9	8	7	360
general machine	15	16	13	22	13	16	8	14	18	9	14	6	18	10	8	7	5	13	5	14	9	7	7	9	276
mobile silviculture machine																									
crane	21	19	12	14	14	13	10	8	7	18	8	9	14	9	11	15	9	7	8	9	18	12	11	17	293
conveying machine	18	18	28	17	14	15	18	12	20	17	11	6	17	10	12	13	11	9	14	8	11	7	14	15	335
vehicle	1	1	2	1	1	2		3	3	4	1	1	2		2	2			1		1		1	2	31
pressure vessel						1	1								1	1									4
chemical facilities		2		3	1	2	1		2	3	2		1	1		2	2	1		1	3		1	1	29
welding equipment		2	2			1		5	1														1		12
kiln, caldron	3	5	2	5	1	2	4		5		4	5		3	5	3	3	1	2		2	5	2	4	66
electric equipment			1		2	1		1			2											2			9
human power machine, tools	12	9	7	12	7	6	11	10	11	10	5	6	6	4	7	14	8	4	6	8	7	7	9	7	193
tools	25	22	22	26	25	19	24	16	25	14	21	19	18	16	12	17	19	8	15	14	19	11	13	10	430
other equipments,																									

facilities	18	13	11	13	11	14	12	10	8	8	7	7	4	9	4	6	1	14	13	8	9	5	10	9	224
temporary buildings, establishments	47	38	47	31	38	39	31	39	45	35	28	28	23	36	40	38	28	22	27	31	33	33	24	40	821
hazards, harmful substances	19	13	27	30	41	28	17	25	26	16	13	18	19	15	24	25	14	21	12	23	22	20	18	18	504
materials	50	46	44	59	33	24	42	49	39	43	19	30	32	32	28	32	24	25	34	28	27	26	23	23	812
load	22	23	24	11	16	8	16	16	14	24	9	8	18	13	6	12	5	8	8	14	7	3	11	13	309
natural environment		1	1	3	1	4	1	3	1	1		7	7	3	4	3	4	4	1	3	5	2	3	2	64
other causal agent	9	5	1	1	2	3	4	2	1	1	1	4		1		1	3			3	2	1	2		47
no causal agent	10	6	6	9	6	8	7	11	2	5	2	3	3	7	8	6	3	4	5	4	5	5	9	11	145
unclassifiable			1		1	2	1		1			1		1				1							9
total	305	253	272	277	241	233	231	240	247	232	170	183	201	188	187	217	149	162	170	179	194	162	168	190	5,051

Causal agents (small) of fatal and non-fatal accidents in metal plating products in 1999-2022

Causal (S) agents	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	total
engine													1							1					2
power transmission mechanism			2		2		4	5	4	4	3	6	1	6	4	2	1	3	1		1	5	1	2	57

circular sawing machine							1					1				1			1			1			5
band sawing machine																									
wood planer machine																									
hollow chisel mortiser, wood borer																									
chamfering machine, router, woodworking milling machine																									
chain saw																									
other woodworking machines			1																						1
leveling, transporting or loading machine																									
excavating machine																									
foundation work machine																									
hardening machine																									

demolition machine																									
vehicle for high lift work																						1			1
other construction machines																									
lathe									1	2	4		2	1		2	2		1				1		16
drill press, milling machine			1				1		2	2								2			1		1	1	11
grinding machine, buffing machine			8		7		8	8	5	7	8	8	7	8	6	6	3	8	10	3	4	5	1	2	122
power press			2				4		1	3	2	1			1	1	2		1	1	2	1		1	23
forging pressure hammer																									
shearing machine									2				1					1			1	1		1	7
other metal manufacturing machines			7		5		5	3	3	6	6	9	7	3	4	8	2	6	5	6	5	2	5	2	99
centrifugal machine			1				1			2			2		1				1		2	1	1		12
mixer, grinder								1					1												2
roll machine (except printingroll machine)							1	1	2	1	1		3			1	2							1	13

injection molding machine					1					1													1		3
food manufacturing machine																									
printing machine							1															1			2
industrial robot			1						1					1		3		1					1	1	9
other general power machines			11		12		5	12	15	5	13	6	12	9	7	3	3	12	4	14	7	5	4	7	166
felling machine																									
mobile logging machine																									
skyline yarding machine																									
other mobile silviculture machine																									
crane			9		12		9	6	4	16	8	9	13	9	10	11	9	5	7	7	15	8	11	15	193
mobile crane			1												1	2									4
derrick crane																									
elevator, lift			1		1			1	1	1			1			1				1	1			1	10
cargo lifting appliance																									
gondola																									

lumberyard equipment, logging cableway																									
simple skyline yarding equipment																									
other powered crane			1		1		1	1	2	1						1		2	1	1	2	4		1	19
truck			7		4		5	7	8	5	4	3	6	1	3	2	5	1	4	2	3	1	6	5	82
forklift			11		6		7	2	5	8	3	3	6	8	3	6	4	3	6	3	4	3	4	8	103
railway equipment			1				1		1		1		1			1	1		1						8
conveyor			5		2		2	2	5	2	1		1	1	4	4	1	3	1		1	1	2		38
loader																									
straddle carrier																									
rough terrain hauler																									
other powered conveying machines			4		2		3	1	1	2	2		3		2			2	2	3	3	2	2	2	36
cars, bus, motorcycle			2		1			3	3	4	1	1	2		2	2			1		1		1	2	26
railway vehicle																									
other vehicles																									
boiler															1										1

pressure vessel																									
other pressure vessels							1									1									2
chemical facilities					1		1		2	3	2		1	1		2	2	1		1	3		1	1	22
gas welding equipment			1						1																2
arc welding equipment			1					4																	5
other welding equipment								1															1		2
kiln, caldron			2		1		4		3		4	4		3	2	3	3	1	2		1	4	2	4	43
industrial dryer									2			1			3						1	1			8
other kiln, caldron																									
transmission								1			1											2			4
electric power facilities					1																				1
other electrical equipment			1		1						1														3
human power cranes							1							1					1				2	2	7
human power hauling equipment			2		3		8	8	9	8	4	6	2	1	5	9	6	3	4	4	6	6	5	4	103

human power machine								1											1						2
hand tool			5		4		2	1	2	2	1		4	2	2	5	2	1		4	1	1	2	1	42
ladder			10		7		5	6	6	3	7	8	2	8	3	5	6	2	4	6	8	5	5	3	109
slinging tool			5		11		7	3	6	3	5	5	6		2	5	4		1	3		4	2	1	73
other tools			7		7		12	7	13	8	9	6	10	8	7	7	9	6	10	5	11	2	6	6	156
other equipment, facilities			11		11		12	10	8	8	7	7	4	9	4	6	1	14	13	8	9	5	10	9	166
scaffolding							1		1					1	2	1					1	1			8
timbering																									
stairs, landing stage			11		7		8	9	9	6	9	8	5	4	9	5	4	2	6	5	11	13	7	7	145
opening					1			1		1	1					1	1		1					1	8
roof, beam, haze, crossbeam, principal rafter			1		1		2			2			1	1	1		1	1	1	1					13
working platform, boot board			5		7		4	7	3	7	6	7	5	3	4	5	4	6	5	4	5	4	2	8	101
passage			13		17		12	14	23	14	6	7	8	17	21	18	11	8	9	15	12	11	10	14	260
building, establishment			9		1		3	6	8	5	2	2	2	8	1	7	4	1	3	3	1	4	1	6	77
other temporary buildings,			8		4		1	2	1		4	4	2	2	2	1	3	4	2	3	3		4	4	54

establishments																									
explosive substance					1																				1
inflammable substance			1		2					2			2	1	1										9
inflammable gas										1			2			2				1	1				7
harmful substance			15		27		12	17	17	7	8	10	9	8	13	17	11	17	6	17	16	13	9	11	260
radiation																									
other hazards, harmful substances			11		11		5	8	9	6	5	8	6	6	10	6	3	4	6	5	5	7	9	7	137
metal material			42		31		40	44	34	40	17	29	30	28	26	31	23	23	34	24	24	23	21	22	586
lumber, bamboo			1						1	1	1		1		2			1			2		1		11
stone, sand, substance			1					1												1					3
other materials					2		2	4	4	2	1	1	1	4		1	1	1		3	1	3	1	1	33
load			22		16		15	15	14	23	7	8	16	12	6	12	5	7	7	14	6	3	11	9	228
machine/equipment as load			2				1	1		1	2		2	1				1	1		1			4	17
natural ground, rock															1										1
standing tree																									
water			1					1					2				1								5
abnormal																									

environment																		1				1			2
high/cold temperature environment					1		1	2	1			6	3	1	1		2	3		3	3	1	2		30
other environments										1		1	2	2	2	3	1		1		2		1	2	18
other causal agent			1		2		4	2	1	1	1	4		1		1	3			3	2	1	2		29
no causal agent			6		6		7	11	2	5	2	3	3	7	8	6	3	4	5	4	5	5	9	11	112
unclassifiable			1		1		1		1			1		1				1							7
total	305	253	272	277	241	233	231	240	247	232	170	183	201	188	187	217	149	162	170	179	194	162	168	190	5,051

Workers age of fatal and non-fatal accidents in metal plating products in 1999-2022

Age	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	total
19 years old or less	2	6	7	11	6	9	6	10	5	6	4	5	3	2	8	3	7	1	4	6	2	2	3	3	121
20-29	56	41	56	61	51	43	33	44	44	42	24	24	34	41	42	48	29	31	30	33	37	34	26	29	933
30-39	51	51	49	56	48	57	58	74	60	61	41	48	46	54	34	57	36	41	36	32	38	32	37	41	1,138
40-49	62	48	46	38	41	43	46	40	45	45	34	39	44	38	46	60	33	35	52	45	43	35	38	35	1,031
50-59	97	80	79	76	69	59	57	49	48	43	39	37	42	35	34	27	23	38	27	49	45	39	39	54	1,185
60 years old or more	37	27	35	35	26	22	31	23	45	35	28	30	32	18	23	22	21	16	21	14	29	20	25	28	643
total	305	253	272	277	241	233	231	240	247	232	170	183	201	188	187	217	149	162	170	179	194	162	168	190	5,051

Workers' number of workplace of fatal and non-fatal accidents in metal plating products in 1999-2022

Workers scale	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	total
9 workers or less	59	50	43	47	43	52	44	42	42	43	28	28	33	25	21	19	21	23	17	15	19	18	11	18	761
10-29	104	79	106	111	82	82	85	84	87	66	62	54	76	67	63	73	50	42	50	49	56	50	49	57	1,684
30-49	62	56	52	58	59	44	36	45	45	55	38	48	33	30	44	49	28	43	46	55	49	39	48	34	1,096
50-99	46	44	51	38	36	42	46	43	45	47	29	42	37	42	37	47	33	29	32	35	37	29	34	41	942
100-299	33	24	18	23	19	11	20	26	28	20	12	10	22	21	19	28	16	24	24	22	31	23	24	36	534
300 workers or more	1		2		2	2				1	1	1		3	3	1	1	1	1	3	2	3	2	4	34
total	305	253	272	277	241	233	231	240	247	232	170	183	201	188	187	217	149	162	170	179	194	162	168	190	5,051

Month of fatal and non-fatal accidents in metal plating products in 1999-2022

Month	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	total
January	22	22	12	20	26	20	15	31	29	20	15	15	12	14	18	15	14	8	11	11	8	15	14	23	410
February	25	10	32	19	21	18	20	11	23	24	7	6	19	25	11	18	11	9	9	16	11	10	16	20	391
March	29	18	22	20	18	25	21	19	25	25	19	14	29	18	16	11	10	18	11	14	19	15	16	22	454
April	24	22	26	33	19	17	15	10	17	17	14	19	18	16	12	18	12	18	18	16	12	12	8	11	404
May	21	14	24	18	21	16	21	15	20	14	11	9	11	10	11	26	9	12	10	12	22	11	15	17	370
June	31	32	14	24	24	22	19	21	25	17	14	12	19	15	9	21	9	16	11	15	16	13	14	17	430

July	27	27	22	29	20	13	21	29	20	16	14	20	13	15	18	20	13	13	23	21	24	19	11	15	463
August	17	19	31	19	21	19	31	20	14	24	12	15	21	9	16	25	10	17	15	16	18	12	13	13	427
September	42	21	19	25	18	26	10	25	15	18	11	21	11	16	22	15	12	14	16	10	19	13	21	16	436
October	27	23	25	26	17	17	16	18	24	18	16	20	10	16	24	19	19	13	13	15	20	5	13	9	423
November	24	27	24	25	12	25	23	25	19	14	17	14	24	20	20	15	17	11	18	21	11	17	9	15	447
December	16	18	21	19	24	15	19	16	16	25	20	18	14	14	10	14	13	13	15	12	14	20	18	12	396
total	305	253	272	277	241	233	231	240	247	232	170	183	201	188	187	217	149	162	170	179	194	162	168	190	5,051

Prefecture of fatal and non-fatal accidents in metal plating products in 1999-2022

Prefecture	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	total
Hokkaido	6	5	9		11			1	3	2	3	4	3	3	5	2	2	1	2	1	1	2	3	3	72
Aomori	1									3							1				3				8
Iwate	3		2		1		2	2		1	2	1		2	2	1	1			1	4	1	1		27
Miyagi					1					1			2	1		1					2	3		1	12
Akita	1		1				2	3	4	2	3		4	2	2	3	3		3	3	2	2	5	4	49
Yamagata	1	2	4		1		3	2	3	6	1	4	3	6	4	4	1	3	5	1	4	5	1	5	69
Fukushima	2	1	4		5		1	1	5	5	1	4	2	2	1	1		1	2	4		2	1	2	47
Ibaraki	2	5			2		1	1	5	1		2	4	1	3	4	6		4	2	3	5	4	5	60
Tochigi	4	4	4		1		5	1	3	3	1	1	2	3	1	2		3			2	2	1	2	45
Gunma	8	3	11		8		6	12	10	14	8	16	7	9	13	10	3	7	4	14	9	7	5	13	197

Saitama	12	15	12		14		11	7	21	10	10	16	15	13	12	13	17	12	15	15	11	9	6	8	274
Chiba	11	4	8		9		8	8	6	7	6	6	9	11	8	8	11	7	5	5	7	8	3	4	159
Tokyo	23	31	17		14		14	18	22	16	12	9	13	17	11	7	12	5	6	10	7	9	12	7	292
Kanagawa	12	9	11		5		14	13	17	3	9	10	8	14	6	6	3	8	7	4	7	4	6	9	185
Niigata	14	7	8		11		6	13	5	5	5	4	12	5	11	3	7	6	7	4	13	5	2	7	160
Toyama	3	5	6		1		2	2	2			1	2	4	2	4	1	2		2		1	1	2	43
Ishikawa	2	5	3		5		1	4	7	4	4	2		2	5	5	4	4	4	1	1	4	2	1	70
Fukui	2		1					1	2				2		2	1		1	1	3	1		2		19
Yamanashi					1			2		2					1			2	1		2	1		2	14
Nagano	11	3	5		4		8	7	1	2	1	3	5	7	4	8	5	5	8	3	6	6	5	13	120
Gifu	6	4	9		9		1	3	9		5	1	1	2	2	3	3	2	4	2		1	5	3	75
Shizuoka	11	5	11		8		8	12	9	9	1	4	16	3	9	13	5	5	6	6	1	10	4	7	163
Aichi	39	36	41		32		28	35	40	29	25	26	20	32	24	37	15	30	25	25	35	23	33	23	653
Mie	3	4	5		1		2	3		4	2	5	1	3	2	3	2	1		2	2	2	2	5	54
Shiga		2			4		2	2	1	2	1	1	1	3	1	3	1	2	1	1	1		1		30
Kyoto	5	6	9		3		3	1	2	1	4	4	2	1	5	2	1	5	6	3	3		1	5	72
Osaka	78	60	50		53		59	45	44	51	44	22	32	21	23	32	23	25	28	28	38	25	27	21	829
Hyogo	16	12	9		7		8	4	2	11	4	9	5	5	3	10	7	2	6	10	6	2	7	3	148
Nara												1							1	1	1	1			5
Wakayama	1							1	1	1	1		2					1	1		1			4	14
Tottori			1					1							1			1				1	1		6

Shimane																					1		1		2
Okayama	1				2		2		2	3	1		1			2					1	1		1	17
Hiroshima	5	6	9		8		8	11	5	12	4	8	5	5	4	6	4	7	6	5	3	8	5	5	139
Yamaguchi	7	4					2	1	1	2		1	1	1		1	1	1	1	1	2	2	3		32
Tokushima	1				1		1	1				1	2	2	1	1							1		12
Kagawa		2	1					1	3		2	3	2	1	1	2	1	1		5	3		1	1	30
Ehime	3	3	4		7		5	4		4	2	3	5	1	4	2	2	3	2	5	1	3	1	2	66
Kochi	2	1	1		1			1					1											1	8
Fukuoka	3	5	4		6		10	7	4	6	4	3	4	2	8	8	3	4	3	5	5	3	5	6	108
Saga		1										1	1				1							1	5
Nagasaki	2	1	3				2	1	2	1	1	1		1		4	1		1		1			4	26
Kumamoto	2	1	4				4	3	5	6	2	3	5	2	5		1	3	3	4	3	3	6	8	73
Oita	2	1	1				1	1		1	1	2	1	1	1	1					1	1	1		17
Miyazaki			3		3		1	2	1	1						1	1		1	3			1	1	19
Kagoshima			1		1			2		1						2		2	1				2	1	13
Okinawa					1							1				1									3
total	305	253	272	277	241	233	231	240	247	232	170	183	201	188	187	217	149	162	170	179	194	162	168	190	5,051

Fatal and non-fatal accidents mean fatal and non-fatal injuries and occupational diseases with work absence of 4 days and more.

Data of 2022 year do not include Covid-19 cases. Data of 2020 & 2021 year include Covid-19 cases. Fatal and non-fatal data are same situation.

Data of 2011 year include fatal and non-fatal accidents caused by Great East Japan Earthquake in 2011.

Data sources: https://anzeninfo.mhlw.go.jp/user/anzen/tok/anst00.html (MHLW, Japan)

Return to https://www.jisha.or.jp/english/statistics/2022e_industry.html

==========

Fatal accidents in metal plating products in Japan in 1999-2022

metal plating products industry Code No.011204

Type of fatal accidents in metal plating products in 1999-2022

Type of accidents	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	total
fall from height	2		2	1									1	1											7
falling to same level																									
crash																									
struck by flying or falling object				1	1																				2
collapse	1															1									2
crashed by				1			1																		2
caught in/between	1		1	1	1									1	1		1	2	1	1			1	1	13
cut																									
injury to the sole of the foot																									

drown																									
contact to high/low-temperature									1			1				1			2	1					6
contact to harmful substance	1				2	2			1		2		1	1				1	1						12
electric shock											1														1
explosion																									
burst								1																	1
fire														1											1
traffic accident (public road)																									
traffic accident (others)																									
reaction to motion/improper motion																									
others																									
unclassifiable																									
total	5		3	4	4	2	1	1	2		3	1	2	4	1	2	1	3	4	2			1	1	47

Causal agents (large) of fatal accidents in metal plating products in 1999-2022

Causal (L) agents	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	total
machine	1			1	1												1	2		1			1		8
crane, conveying machine			1	1										1	1	1			1					1	7
other equipment	1		1	1					1		2		1			1			1	1					10
temporary buildings, establishments	1		1				1						1	1											5
substance, material	1			1	2	2		1	1		1			2					2						13
load	1				1																				2
environment												1						1							2
others																									
total	5		3	4	4	2	1	1	2		3	1	2	4	1	2	1	3	4	2			1	1	47

Causal agents (middle) of fatal accidents in metal plating products in 1999-2022

Causal (M) agents	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	total
engine																									
power transmission mechanism																		1							1

woodworking machine																									
construction machine																									
metal manufacturing machine	1																								1
general machine				1	1												1	1		1			1		6
mobile silviculture machine																									
crane				1												1									2
conveying machine			1											1	1				1					1	5
vehicle																									
pressure vessel																									
chemical facilities													1												1
welding equipment																									
kiln, caldron	1								1		1								1						4
electric equipment											1														1
human power machine, tools																									
tools			1	1																					2
other equipments,																									

facilities																1				1					2
temporary buildings, establishments	1		1				1						1	1											5
hazards, harmful substances					2	2			1		1			2					1						9
materials	1			1				1											1						4
load	1				1																				2
natural environment												1						1							2
other causal agent																									
no causal agent																									
unclassifiable																									
total	5		3	4	4	2	1	1	2		3	1	2	4	1	2	1	3	4	2			1	1	47

Causal agents (small) of fatal accidents in metal plating products in 1999-2022

Causal (S) agents	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	total
engine																									
power transmission mechanism																		1							1

circular sawing machine																									
band sawing machine																									
wood planer machine																									
hollow chisel mortiser, wood borer																									
chamfering machine, router, woodworking milling machine																									
chain saw																									
other woodworking machines																									
leveling, transporting or loading machine																									
excavating machine																									
foundation work machine																									
hardening machine																									

demolition machine																									
vehicle for high lift work																									
other construction machines																									
lathe																									
drill press, milling machine																									
grinding machine, buffing machine																									
power press																									
forging pressure hammer																									
shearing machine																									
other metal manufacturing machines	1																								1
centrifugal machine																									
mixer, grinder																									
roll machine (except printingroll machine)																									

injection molding machine																									
food manufacturing machine																									
printing machine																									
industrial robot																		1							1
other general power machines				1	1												1			1			1		5
felling machine																									
mobile logging machine																									
skyline yarding machine																									
other mobile silviculture machine																									
crane				1												1									2
mobile crane																									
derrick crane																									
elevator, lift																									
cargo lifting appliance																									
gondola																									

lumberyard equipment, logging cableway																									
simple skyline yarding equipment																									
other powered crane																									
truck																									
forklift														1										1	2
railway equipment																									
conveyor																									
loader																									
straddle carrier																									
rough terrain hauler																									
other powered conveying machines			1												1				1						3
cars, bus, motorcycle																									
railway vehicle																									
other vehicles																									
boiler																									

pressure vessel																									
other pressure vessels																									
chemical facilities													1												1
gas welding equipment																									
arc welding equipment																									
other welding equipment																									
kiln, caldron	1								1		1								1						4
industrial dryer																									
other kiln, caldron																									
transmission											1														1
electric power facilities																									
other electrical equipment																									
human power cranes																									
human power hauling equipment																									

human power machine																									
hand tool																									
ladder			1	1																					2
slinging tool																									
other tools																									
other equipment, facilities																1				1					2
scaffolding																									
timbering																									
stairs, landing stage																									
opening																									
roof, beam, haze, crossbeam, principal rafter													1												1
working platform, boot board																									
passage																									
building, establishment	1		1											1											3
other temporary buildings,							1																		1

establishments																									
explosive substance																									
inflammable substance														1											1
inflammable gas																									
harmful substance					2	2			1		1			1					1						8
radiation																									
other hazards, harmful substances																									
metal material	1			1				1											1						4
lumber, bamboo																									
stone, sand, substance																									
other materials																									
load	1				1																				2
machine/equipment as load																									
natural ground, rock																									
standing tree																									
water																									
abnormal																									

environment																		1							1
high/cold temperature environment												1													1
other environments																									
other causal agent																									
no causal agent																									
unclassifiable																									
total	5		3	4	4	2	1	1	2		3	1	2	4	1	2	1	3	4	2			1	1	47

Workers age of fatal accidents in metal plating products in 1999-2022

Age	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	total
19 years old or less																			1						1
20-29			1												1			1							3
30-39	1		1	3					1		1		1			1		2	1						12
40-49			1	1	1		1					1		2			1		1	1				1	11
50-59	3				3	1		1			1		1	1		1				1			1		14
60 years old or more	1					1			1		1			1					1						6
total	5		3	4	4	2	1	1	2		3	1	2	4	1	2	1	3	4	2			1	1	47

Workers' number of workplace of fatal accidents in metal plating products in 1999-2022

Workers scale	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	total
9 workers or less						1			1								1	1	1						5
10-29	3			3	4	1			1		2	1		2	1					1					19
30-49	1		2	1										2		2		1	2						11
50-99	1						1	1			1		1										1	1	7
100-299			1										1					1	1	1					5
300 workers or more																									
total	5		3	4	4	2	1	1	2		3	1	2	4	1	2	1	3	4	2			1	1	47

Month of fatal accidents in metal plating products in 1999-2022

Month	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	total
January					1		1							1			1		1						5
February			1	1														1	1						4
March						2									1										3
April											1									1					2
May	1										1		2												4
June					2									1											3

July	1		1	2								1													5
August	1																	1	1	1					4
September														1					1					1	3
October	1		1		1				1														1		5
November				1				1	1		1					1									5
December	1													1		1		1							4
total	5		3	4	4	2	1	1	2		3	1	2	4	1	2	1	3	4	2			1	1	47

Prefecture of fatal accidents in metal plating products in 1999-2022

Prefecture	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	total
Hokkaido																									
Aomori																									
Iwate																									
Miyagi																									
Akita																									
Yamagata																									
Fukushima					2																				2
Ibaraki																			1						1
Tochigi													1	1											2
Gunma											1														1

Saitama							1					1				1								1	4
Chiba	1		1														1								3
Tokyo	1		1																						2
Kanagawa				1	1				1		1			2					1						7
Niigata									1																1
Toyama																		1							1
Ishikawa																									
Fukui																				1					1
Yamanashi																		1							1
Nagano	1																	1							2
Gifu																									
Shizuoka					1																				1
Aichi															1				1						2
Mie																									
Shiga																									
Kyoto																									
Osaka	2		1	2		2		1			1								1	1					11
Hyogo																									
Nara																									
Wakayama																									
Tottori																							1		1

Shimane																									
Okayama																									
Hiroshima																									
Yamaguchi																									
Tokushima																									
Kagawa																									
Ehime																									
Kochi																									
Fukuoka																1									1
Saga																									
Nagasaki				1										1											2
Kumamoto													1												1
Oita																									
Miyazaki																									
Kagoshima																									
Okinawa																									
total	5		3	4	4	2	1	1	2		3	1	2	4	1	2	1	3	4	2			1	1	47

Data sources: https://anzeninfo.mhlw.go.jp/user/anzen/tok/anst00.html (MHLW, Japan)

Return to https://www.jisha.or.jp/english/statistics/2022e_industry.html