Fatal and non-fatal accidents in metal plating products in Japan in 1999-2021

metal plating products industry Code No.011204

Type of accidents in metal plating products in 1999-2021

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	total	Type of accidents
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	492	fall from height
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	642	falling to same
crash	11	15	15	11	13	12	9	7	11	9	5	7	9	5	8	9	5	6	7	8	12	8	14	216	crash
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	588	struck by flying or falling object
collapse	16	9	13	12	11	8	9	14	8	10	8	4	12	8	5	10	6	5	6	3	4	8	7	196	collapse
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	258	crashed by
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	1,107	caught in/between
cut	17	13	13	7	8	8	9	6	13	9	4	4	9	8	4	8		11	8	6	7	4	4	180	cut
injury to the sole of the foot				2		2				1	1		1			2	3		1	1		2		16	injury to the sole of the foot
drown																									drown
contact to high/low- temperature	17	12	20	20	14	23	12	15	9	4	10	18	12	13	14	11	11	13	11	12	16	10	11	308	contact to high/low- temperature

contact to harmful																									contact to
	11	10	16	23	32	20	14	23	23	12	11	14	9	12	13	17	10	18	9	20	19	22	14	372	harmful
substance																									substance
electric shock					1	2					2					1								6	electric shock
explosion		1	1				1	1		1	1		1		1	1				1				10	explosion
burst									1					1		1			1				1	5	burst
fire				1	2			4		1			1	1										10	fire
traffic accident (public		2	2		1	2	1	3	3	3	3	2	1		2	2			1		2		2	32	traffic accident
road)							I	3	3	3														32	(public road)
traffic accident																									traffic accident
(others)																									(others)
reaction to																									reaction to
motion/improper	25	23	21	17	15	20	18	24	20	29	8	13	14	19	15	18	10	14	16	10	17	13	17	396	motion/improper
motion																									motion
others	1	2	3	1	1	4			2			1		2		2	2				2			23	others
unclassifiable			2			1			1															4	unclassifiable
total	305	253	272	277	241	233	231	240	247	232	170	183	201	188	187	217	149	162	170	179	194	162	168	4,861	total

Causal agents (large) of fatal and non-fatal accidents in metal plating products in 1999-2021

Causal (L) agents	1000	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	total	Causal (L)
Causar (L) agents		2000	2001	2002	2003	2004	2003	2000	2007	2000	2003	2010	2011	2012	2013	2014	2013	2010	2017	2010	2017	2020	2021	II I	agents
machine	50	30	34	42	27	41	31	30	36	33	37	31	37	28	23	27	15	33	24	25	23	23	16	696	machine
crane, conveying																									crane,

machine	40	38	42	32	29	30	28	23	30	39	20	16	33	19	25	30	20	16	23	17	30	19	26	625	conveying
Пастите																									machine
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	936	other
other equipment	36	33	43	39	47	40	33	42	32	33	41	37	29	33	29	43	33	20	30	31	40	30	30	930	equipment
tomporani buildings																									temporary
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	781	buildings,
establishments																									establishments
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	1,275	substance,
substance, material	09	39	, ,	09	/			/-	05	39	52	40	J 1	47	52			40	40	J 1	43	40		1,273	material
load	22	23	24	11	16	8	16	16	14	24	9	8	18	13	6	12	5	8	8	14	7	3	11	296	load
environment		1	1	3	1	4	1	3	1	1		7	7	3	4	3	4	4	1	3	5	2	3	62	environment
others	19	11	8	10	9	13	12	13	4	6	3	8	3	9	8	7	6	5	5	7	7	6	11	190	others
total	305	253	272	277	241	233	231	240	247	232	170	183	201	188	187	217	149	162	170	179	194	162	168	4,861	total

Causal agents (middle) of fatal and non-fatal accidents in metal plating products in 1999-2021

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	total	Causal (M) agents
engine													1							1				2	engine
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	63	power transmission mechanism
woodworking machine	1		1			3	1					1				1			1			1		10	woodworking machine

construction machine																						1		1	construction
																						<u> </u>			machine
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	353	metal manufacturing machine
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	267	general machine
mobile silviculture machine																									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	276	crane
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	320	conveying machine
vehicle	1	1	2	1	1	2		3	3	4	1	1	2		2	2			1		1		1	29	vehicle
pressure vessel						1	1								1	1								4	pressure vessel
chemical facilities		2		3	1	2	1		2	3	2		1	1		2	2	1		1	3		1	28	chemical facilities
welding equipment		2	2			1		5	1														1	12	welding equipment
kiln, caldron	3	5	2	5	1	2	4		5		4	5		3	5	3	3	1	2		2	5	2	62	kiln, caldron
electric equipment			1		2	1		1			2											2		9	electric equipment
human power machine,	12	9	7	12	7	6	11	10	11	10	5	6	6	4	7	14	8	4	6	8	7	7	9	186	human power machine, tools
																									11 11

tools	25	22	22	26	25	19	24	16	25	14	21	19	18	16	12	17	19	8	15	14	19	11	13	420	tools
other equipments,	18	13	11	13	11	14	12	10	8	8	7	7	4	9	4	6	1	14	13	8	9	5	10	215	other equipments, facilities
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	781	temporary buildings, establishments
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	486	hazards, harmful substances
materials	50	46	44	59	33	24	42	49	39	43	19	30	32	32	28	32	24	25	34	28	27	26	23	789	materials
load	22	23	24	11	16	8	16	16	14	24	9	8	18	13	6	12	5	8	8	14	7	3	11	296	load
natural environment		1	1	3	1	4	1	3	1	1		7	7	3	4	3	4	4	1	3	5	2	3	62	natural environment
other causal agent	9	5	1	1	2	3	4	2	1	1	1	4		1		1	3			3	2	1	2	47	other causal agent
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	134	no causal agent
unclassifiable			1		1	2	1		1			1		1				1						9	unclassifiable
total	305	253	272	277	241	233	231	240	247	232	170	183	201	188	187	217	149	162	170	179	194	162	168	4,861	total

Causal agents (small) of fatal and non-fatal accidents in metal plating products in 1999-2021

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	total	Causal (S) agents

engine										1							1				2	engine
power transmission mechanism		2	2	4	5	4	4	3	6	1	6	4	2	1	3	1		1	5	1	55	power transmission mechanism
circular sawing machine				1					1				1			1			1		5	circular sawing machine
band sawing machine																						band sawing machine
wood planer machine																						wood planer machine
hollow chisel mortiser, wood borer																						hollow chisel mortiser, wood borer
chamfering machine, router, woodworking milling machine																						chamfering machine, router, woodworking milling machine
chain saw																						chain saw
other woodworking machines		1																			1	other woodworking machines
leveling, transporting or loading machine																						leveling, transporting or loading machine
excavating machine																						excavating machine
foundation work																						foundation work

hardening machine																						hardening machine
demolition machine																						demolition machine
vehicle for high lift work																			1		1	vehicle for high lift work
other construction machines																						other construction machines
lathe						1	2	4		2	1		2	2		1				1	16	lathe
drill press, milling machine		1		1		2	2								2			1		1	10	drill press, milling machine
grinding machine, buffing machine		8	7	8	8	5	7	8	8	7	8	6	6	3	8	10	3	4	5	1	120	grinding machine, buffing machine
power press		2		4		1	3	2	1			1	1	2		1	1	2	1		22	power press
forging pressure																						forging pressure hammer
shearing machine						2				1					1			1	1		6	shearing machine
other metal manufacturing machines		7	5	5	3	3	6	6	9	7	3	4	8	2	6	5	6	5	2	5		other metal manufacturing machines
centrifugal machine		1		1			2			2		1				1		2	1	1	12	centrifugal machine
mixer, grinder					1					1											2	mixer, grinder
roll machine (except printingroll machine)				1	1	2	1	1		3			1	2								roll machine (except printingroll machine)
injection molding																						injection molding

machine			1				1													1	3	machine
food manufacturing machine																						food manufacturing machine
printing machine				1															1		2	printing machine
industrial robot		1				1					1		3		1					1	8	industrial robot
other general power machines		11	12	5	12	15	5	13	6	12	9	7	3	3	12	4	14	7	5	4	159	other general power machines
felling machine																						felling machine
mobile logging machine																						mobile logging machine
skyline yarding machine																						skyline yarding machine
other mobile																						other mobile
silviculture machine																						silviculture machine
crane		9	12	9	6	4	16	8	9	13	9	10	11	9	5	7	7	15	8	11	178	crane
mobile crane		1										1	2								4	mobile crane
derrick crane																						derrick crane
elevator, lift		1	1		1	1	1			1			1				1	1			9	elevator, lift
cargo lifting appliance																						cargo lifting appliance
gondola																						gondola
lumberyard																						lumberyard
equipment, logging																						equipment, logging
cableway																						cableway

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simple skyline																							simple skyline
yarding equipment																							yarding equipment
other powered		1		1	1	1	2	1						1		2	1	1	2	4		18	other powered
crane					Ľ	Ŀ											<u> </u>						crane
truck		7		4	5	7	8	5	4	3	6	1	3	2	5	1	4	2	3	1	6	77	truck
forklift		11		6	7	2	5	8	3	3	6	8	3	6	4	3	6	3	4	3	4	95	forklift
railway equipment		1			1		1		1		1			1	1		1					8	railway equipment
conveyor		5		2	2	2	5	2	1		1	1	4	4	1	3	1		1	1	2	38	conveyor
loader																							loader
straddle carrier																							straddle carrier
rough terrain hauler																							rough terrain hauler
other powered		4		2	3	1	1	2	2		3		2			2	2	3	3	2	2	34	other powered
conveying machines		4			3													<u></u>	3)4	conveying machines
cars, bus,		2		1		3	3	4	1	1	2		2	2			1		1		1	24	cars, bus,
motorcycle				<u> </u>																		24	motorcycle
railway vehicle																							railway vehicle
other vehicles																							other vehicles
boiler													1									1	boiler
pressure vessel																							pressure vessel
other pressure					1									1								2	other pressure
vessels																							vessels
chemical facilities				1	1		2	3	2		1	1		2	2	1		1	3		1	21	chemical facilities
gas welding		1					1															2	gas welding

equipment																						equipment
arc welding equipment		1			4																5	arc welding equipment
other welding equipment					1															1	2	other welding equipment
kiln, caldron		2	1	4		3		4	4		3	2	3	3	1	2		1	4	2	39	kiln, caldron
industrial dryer						2			1			3						1	1		8	industrial dryer
other kiln, caldron																						other kiln, caldron
transmission					1			1											2		4	transmission
electric power facilities			1																		1	electric power
other electrical equipment		1	1					1													3	other electrical equipment
human power cranes				1							1					1				2	5	human power cranes
human power hauling equipment		2	3	8	8	9	8	4	6	2	1	5	9	6	3	4	4	6	6	5	99	human power hauling equipment
human power machine					1											1					2	human power machine
hand tool		5	4	2	1	2	2	1		4	2	2	5	2	1		4	1	1	2	41	hand tool
ladder		10	7	5	6	6	3	7	8	2	8	3	5	6	2	4	6	8	5	5	106	ladder
slinging tool		5	11	7	3	6	3	5	5	6		2	5	4		1	3		4	2	72	slinging tool
other tools		7	7	12	7	13	8	9	6	10	8	7	7	9	6	10	5	11	2	6	150	other tools
other equipment,																						other equipment,

facilities		11	11	12	10	8	8	7	7	4	9	4	6	1	14	13	8	9	5	10	157	facilities
scaffolding				1		1					1	2	1					1	1		8	scaffolding
timbering																						timbering
stairs, landing stage		11	7	8	9	9	6	9	8	5	4	9	5	4	2	6	5	11	13	7	138	stairs, landing stage
opening			1		1		1	1					1	1		1					7	opening
roof, beam, haze, crossbeam, principal rafter		1	1	2			2			1	1	1		1	1	1	1				13	roof, beam, haze, crossbeam, principal rafter
working platform, boot board		5	7	4	7	3	7	6	7	5	3	4	5	4	6	5	4	5	4	2	93	working platform, boot board
passage		13	17	12	14	23	14	6	7	8	17	21	18	11	8	9	15	12	11	10	246	passage
building, establishment		9	1	3	6	8	5	2	2	2	8	1	7	4	1	3	3	1	4	1	71	building, establishment
other temporary buildings, establishments		8	4	1	2	1		4	4	2	2	2	1	3	4	2	3	3		4	50	other temporary buildings, establishments
explosive substance			1																		1	explosive substance
inflammable substance		1	2				2			2	1	1									9	inflammable substance
inflammable gas							1			2			2				1	1			7	inflammable gas
harmful substance		15	27	12	17	17	7	8	10	9	8	13	17	11	17	6	17	16	13	9	249	harmful substance
radiation																						radiation
other hazards,		11	11	5	8	9	6	5	8	6	6	10	6	3	4	6	5	5	7	9	130	other hazards, harmful substances

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metal material		42	31	40	44	34	40	17	29	30	28	26	31	23	23	34	24	24	23	21	564	metal material
lumber, bamboo		1				1	1	1		1		2			1			2		1	11	lumber, bamboo
stone, sand,					1												1				2	stone, sand,
substance																	•				3	substance
other materials			2	2	4	4	2	1	1	1	4		1	1	1		3	1	3	1	32	other materials
load		22	16	15	15	14	23	7	8	16	12	6	12	5	7	7	14	6	3	11	219	load
machine/equipment		,		1	1		1	2			1				1	1		1			13	machine/equipment
as load				'	ľ			2		2					I			<u> </u>			13	as load
natural ground,												1									1	natural ground,
rock																						rock
standing tree																						standing tree
water		1			1					2				1							5	water
abnormal															4							abnormal
environment															I				1		2	environment
high/cold																						high/cold
temperature			1	1	2	1			6	3	1	1		2	3		3	3	1	2	30	temperature
environment																						environment
other environments							1		1	2	2	2	3	1		1		2		1	16	other environments
other causal agent		1	2	4	2	1	1	1	4		1		1	3			3	2	1	2	29	other causal agent
no causal agent	(5	6	7	11	2	5	2	3	3	7	8	6	3	4	5	4	5	5	9	101	no causal agent
unclassifiable		1	1	1		1			1		1				1						7	unclassifiable
total		272	241	231	240	247	232	170	183	201	188	187	217	149	162	170	179	194	162	168	3,793	total

Age	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	total	Age
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	118	19 years old or less
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	904	20-29
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	1,097	30-39
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	996	40-49
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	1,131	50-59
60 years old or	37	27	35	35	26	22	31	23	45	35	28	30	32	18	23	22	21	16	21	14	29	20	25	615	60 years old or
more	57								7.5		20		52								23	20		013	more
total	305	253	272	277	241	233	231	240	247	232	170	183	201	188	187	217	149	162	170	179	194	162	168	4,861	total

Workers' number of workplace of fatal and non-fatal accidents in metal plating products in 1999-2021

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	total	Workers scale
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	743	9 workers or less
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	1,627	10-29
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	1,062	30-49
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	901	50-99
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	498	100-299
300 workers or	1		2		2	2				1	1	1		3	3	1	1	1	1	3	2	3	2	30	300 workers or
more																									more
total	305	253	272	277	241	233	231	240	247	232	170	183	201	188	187	217	149	162	170	179	194	162	168	4,861	total

Month	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	total	Month
January	22	22	12	20	26	20	15	31	29	20	15	15	12	14	18	15	14	8	11	11	8	15	14	387	January
February	25	10	32	19	21	18	20	11	23	24	7	6	19	25	11	18	11	9	9	16	11	10	16	371	February
March	29	18	22	20	18	25	21	19	25	25	19	14	29	18	16	11	10	18	11	14	19	15	16	432	March
April	24	22	26	33	19	17	15	10	17	17	14	19	18	16	12	18	12	18	18	16	12	12	8	393	April
May	21	14	24	18	21	16	21	15	20	14	11	9	11	10	11	26	9	12	10	12	22	11	15	353	May
June	31	32	14	24	24	22	19	21	25	17	14	12	19	15	9	21	9	16	11	15	16	13	14	413	June
July	27	27	22	29	20	13	21	29	20	16	14	20	13	15	18	20	13	13	23	21	24	19	11	448	July
August	17	19	31	19	21	19	31	20	14	24	12	15	21	9	16	25	10	17	15	16	18	12	13	414	August
September	42	21	19	25	18	26	10	25	15	18	11	21	11	16	22	15	12	14	16	10	19	13	21	420	September
October	27	23	25	26	17	17	16	18	24	18	16	20	10	16	24	19	19	13	13	15	20	5	13	414	October
November	24	27	24	25	12	25	23	25	19	14	17	14	24	20	20	15	17	11	18	21	11	17	9	432	November
December	16	18	21	19	24	15	19	16	16	25	20	18	14	14	10	14	13	13	15	12	14	20	18	384	December
total	305	253	272	277	241	233	231	240	247	232	170	183	201	188	187	217	149	162	170	179	194	162	168	4,861	total

Prefecture of fatal and non-fatal accidents in metal plating products in 1999-2021

Prefecture 19	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	total	Prefecture
Hokkaido 6	5	5	9		11			1	3	2	3	4	3	3	5	2	2	1	2	1	1	2	3	69	Hokkaido
Aomori 1	I									3							1				3			8	Aomori
Iwate 3	3		2		1		2	2		1	2	1		2	2	1	1			1	4	1	1	27	lwate

Miyagi				1				1			2	1		1					2	3		11	Miyagi
Akita	1		1		2	3	4	2	3		4	2	2	3	3		3	3	2	2	5	45	Akita
Yamagata	1	2	4	1	3	2	3	6	1	4	3	6	4	4	1	3	5	1	4	5	1	64	Yamagata
Fukushima	2	1	4	5	1	1	5	5	1	4	2	2	1	1		1	2	4		2	1	45	Fukushima
Ibaraki	2	5		2	1	1	5	1		2	4	1	3	4	6		4	2	3	5	4	55	Ibaraki
Tochigi	4	4	4	1	5	1	3	3	1	1	2	3	1	2		3			2	2	1	43	Tochigi
Gunma	8	3	11	8	6	12	10	14	8	16	7	9	13	10	3	7	4	14	9	7	5	184	Gunma
Saitama	12	15	12	14	11	7	21	10	10	16	15	13	12	13	17	12	15	15	11	9	6	266	Saitama
Chiba	11	4	8	9	8	8	6	7	6	6	9	11	8	8	11	7	5	5	7	8	3	155	Chiba
Tokyo	23	31	17	14	14	18	22	16	12	9	13	17	11	7	12	5	6	10	7	9	12	285	Tokyo
Kanagawa	12	9	11	5	14	13	17	3	9	10	8	14	6	6	3	8	7	4	7	4	6	176	Kanagawa
Niigata	14	7	8	11	6	13	5	5	5	4	12	5	11	3	7	6	7	4	13	5	2	153	Niigata
Toyama	3	5	6	1	2	2	2			1	2	4	2	4	1	2		2		1	1	41	Toyama
Ishikawa	2	5	3	5	1	4	7	4	4	2		2	5	5	4	4	4	1	1	4	2	69	Ishikawa
Fukui	2		1			1	2				2		2	1		1	1	3	1		2	19	Fukui
Yamanashi				1		2		2					1			2	1		2	1		12	Yamanashi
Nagano	11	3	5	4	8	7	1	2	1	3	5	7	4	8	5	5	8	3	6	6	5	107	Nagano
Gifu	6	4	9	9	1	3	9		5	1	1	2	2	3	3	2	4	2		1	5	72	Gifu
Shizuoka	11	5	11	8	8	12	9	9	1	4	16	3	9	13	5	5	6	6	1	10	4	156	Shizuoka
Aichi	39	36	41	32	28	35	40	29	25	26	20	32	24	37	15	30	25	25	35	23	33	630	Aichi
Mie	3	4	5	1	2	3		4	2	5	1	3	2	3	2	1		2	2	2	2	49	Mie
Shiga		2		4	2	2	1	2	1	1	1	3	1	3	1	2	1	1	1		1	30	Shiga
Kyoto	5	6	9	3	3	1	2	1	4	4	2	1	5	2	1	5	6	3	3		1	67	Kyoto

Osaka	78	60	50	53	59	45	44	51	44	22	32	21	23	32	23	25	28	28	38	25	27	808	Osaka
Hyogo	16	12	9	7	8	4	2	11	4	9	5	5	3	10	7	2	6	10	6	2	7	145	Hyogo
Nara										1							1	1	1	1		5	Nara
Wakayama	1					1	1	1	1		2					1	1		1			10	Wakayama
Tottori			1			1							1			1				1	1	6	Tottori
Shimane																			1		1	2	Shimane
Okayama	1			2	2		2	3	1		1			2					1	1		16	Okayama
Hiroshima	5	6	9	8	8	11	5	12	4	8	5	5	4	6	4	7	6	5	3	8	5	134	Hiroshima
Yamaguchi	7	4			2	1	1	2		1	1	1		1	1	1	1	1	2	2	3	32	Yamaguchi
Tokushima	1			1	1	1				1	2	2	1	1							1	12	Tokushima
Kagawa		2	1			1	3		2	3	2	1	1	2	1	1		5	3		1	29	Kagawa
Ehime	3	3	4	7	5	4		4	2	3	5	1	4	2	2	3	2	5	1	3	1	64	Ehime
Kochi	2	1	1	1		1					1											7	Kochi
Fukuoka	3	5	4	6	10	7	4	6	4	3	4	2	8	8	3	4	3	5	5	3	5	102	Fukuoka
Saga		1								1	1				1							4	Saga
Nagasaki	2	1	3		2	1	2	1	1	1		1		4	1		1		1			22	Nagasaki
Kumamoto	2	1	4		4	3	5	6	2	3	5	2	5		1	3	3	4	3	3	6	65	Kumamoto
Oita	2	1	1		1	1		1	1	2	1	1	1	1					1	1	1	17	Oita
Miyazaki			3	3	1	2	1	1						1	1		1	3			1	18	Miyazaki
Kagoshima			1	1		2		1						2		2	1				2	12	Kagoshima
Okinawa				1						1				1								3	Okinawa
total	305	253	272	241	231	240	247	232	170	183	201	188	187	217	149	162	170	179	194	162	168	4,351	total

Fatal and non-fatal accidents mean fatal and non-fatal injuries and occupational diseases with work absence of 4 days and more. 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.htm (MHLW, Japan)

Return to https://www.jisha.or.jp/english/statistics/2021e_industry.html

Fatal accidents in metal plating products in Japan in 1999-2021

metal plating products industry Code No.011204

Type of fatal accidents in metal plating products in 1999-2021

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	total	Type of accidents
fall from height	2		2	1									1	1										7	fall from height
falling to same level																									falling to same level
crash																									crash
struck by flying or falling object				1	1																			2	struck by flying or falling object
collapse	1															1								2	collapse
crashed by				1			1																	2	crashed by
caught in/between	1		1	1	1									1	1		1	2	1	1			1	12	caught in/between
cut																									cut

		 							 										 			·
injury to the sole of																						injury to the sole
the foot																						of the foot
drown																						drown
contact to high/low-																						contact to
temperature								1		1				1			2	1			6	high/low-
																						temperature
contact to harmful																						contact to
substance	1			2	2			1	2		1	1				1	1				12	harmful
																						substance
electric shock									1												1	electric shock
explosion																						explosion
burst							1														1	burst
fire												1									1	fire
traffic accident (public																						traffic accident
road)																						(public road)
traffic accident (others)																						traffic accident
trame accident (others)																						(others)
reaction to																						reaction to
motion/improper																						motion/improper
motion																						motion
others																						others
unclassifiable																						unclassifiable
total	5	3	4	4	2	1	1	2	3	1	2	4	1	2	1	3	4	2		1	46	total

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	total	Causal (L) agents
machine	1			1	1												1	2		1			1	8	machine
crane, conveying machine			1	1										1	1	1			1					6	crane, conveying machine
other equipment	1		1	1					1		2		1			1			1	1				10	other equipment
temporary buildings, establishments	1		1				1						1	1											temporary buildings, establishments
substance, material	1			1	2	2		1	1		1			2					2					13	substance, material
load	1				1																			2	load
environment												1						1						2	environment
others																									others
total	5		3	4	4	2	1	1	2		3	1	2	4	1	2	1	3	4	2			1	46	total

Causal agents (middle) of fatal accidents in metal plating products in 1999-2021

Causal (M) agents	1000	2000	2001	2002	2003	2004	2005	2006	2007	2008	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2010	2020	2021	total	Causal (M)
ausai (M) ageilts	1999	2000	2001	2002	2003	2004	2003	2000	2007	2008	2009	2010	2011	2012	2013	2014	2013	2010	2017	2010	2019	2020	2021	totai	agents

engine																			engine
power transmission mechanism													1					1	power transmission mechanism
woodworking machine																			woodworking machine
construction machine																			construction machine
metal manufacturing machine	1																	1	metal manufacturing machine
general machine			1	1								1	1		1		1	6	general machine
mobile silviculture machine																			mobile silviculture machine
crane			1								1							2	crane
conveying machine		1							1	1				1				4	conveying machine
vehicle																			vehicle
pressure vessel																			pressure vessel
chemical facilities								1										1	chemical facilities
welding equipment																			welding equipment

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kiln, caldron	1							1	1						1				4	kiln, caldron
electric equipment									1										1	electric equipment
human power machine, tools																				human power
tools		1	1																2	tools
other equipments, facilities													1			1			2	other equipments, facilities
temporary buildings, establishments	1	1				1					1	1							5	temporary buildings, establishments
hazards, harmful substances				2	2			1	1			2			1				9	hazards, harmful substances
materials	1		1				1								1				4	materials
load	1			1															2	load
natural environment										1				1					2	natural environment
other causal agent																				other causal agent
no causal agent																				no causal agent
unclassifiable																				unclassifiable
		 							 			1		 			 1		1	

total	5		3	4	4	2	1	1	2		3	1	2	4	1	2	1	3	4	2			1	46	total	
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Causal agents (small) of fatal accidents in metal plating products in 1999-2021

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	total	Causal (S) agents
engine																									engine
power transmission mechanism																		1						1	power transmission mechanism
circular sawing machine																									circular sawing machine
band sawing machine																									band sawing machine
wood planer machine																									wood planer machine
hollow chisel mortiser, wood borer																									hollow chisel mortiser, wood borer
chamfering machine, router, woodworking milling machine																									chamfering machine, router, woodworking milling machine
chain saw																									chain saw
other woodworking																									other woodworking

leveling,														leveling,
transporting or														transporting or
loading machine														loading machine
excavating machine														excavating machine
foundation work														foundation work
machine														machine
hardening machine														hardening machine
demolition machine														demolition machine
vehicle for high lift														vehicle for high lift
work														work
other construction														other construction
machines														machines
lathe														lathe
drill press, milling														drill press, milling
machine														machine
grinding machine,														grinding machine,
buffing machine														buffing machine
power press														power press
forging pressure														forging pressure
hammer														hammer
shearing machine														shearing machine
other metal														other metal
manufacturing	1												1	manufacturing
machines														machines

centrifugal machine																		centrifugal machine
mixer, grinder																		mixer, grinder
roll machine (except																		roll machine (except
machine)																		machine)
injection molding machine																		injection molding machine
food manufacturing machine																		food manufacturing machine
printing machine																		printing machine
industrial robot												1					1	industrial robot
other general power machines			1	1							1			1		1	5	other general power machines
felling machine																		felling machine
mobile logging																		mobile logging machine
skyline yarding machine																		skyline yarding machine
other mobile silviculture machine																		other mobile silviculture machine
crane			1							1							2	crane
mobile crane																		mobile crane
derrick crane																		derrick crane
elevator, lift																		elevator, lift
		1	11	II	11					11			F	11	11	11		

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

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

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

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inflammable gas																	inflammable gas
harmful substance				2	2		1	1		1			1			8	harmful substance
radiation																	radiation
other hazards,																	other hazards,
harmful substances																	harmful substances
metal material	1		1			1							1			4	metal material
lumber, bamboo																	lumber, bamboo
stone, sand,																	stone, sand,
substance																	substance
other materials																	other materials
load	1			1												2	load
machine/equipment																	machine/equipment
as load																	as load
natural ground,																	natural ground,
rock																	rock
standing tree																	standing tree
water																	water
abnormal												1					abnormal
environment																	environment
high/cold																	high/cold
temperature									1							1	temperature
environment																	environment
other environments																	other environments
other causal agent																	other causal agent

no causal agent																						no causal agent
unclassifiable																						unclassifiable
total	5	3	4	4	2	1	1	2	3	1	2	4	1	2	1	3	4	2		1	46	total

Workers age of fatal accidents in metal plating products in 1999-2021

Age	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	total	Age
19 years old or less																			1					1	19 years old or less
20-29			1												1			1						3	20-29
30-39	1		1	3					1		1		1			1		2	1					12	30-39
40-49			1	1	1		1					1		2			1		1	1				10	40-49
50-59	3				3	1		1			1		1	1		1				1			1	14	50-59
60 years old or more	1					1			1		1			1					1					6	60 years old or more
total	5		3	4	4	2	1	1	2		3	1	2	4	1	2	1	3	4	2			1	46	total

Workers' number of workplace of fatal accidents in metal plating products in 1999-2021

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	total	Workers scale
9 workers or less						1			1								1	1	1					5	9 workers or less
10-29	3			3	4	1			1		2	1		2	1					1				19	10-29
30-49	1		2	1										2		2		1	2					11	30-49
50-99	1						1	1			1		1										1	6	50-99
ı																									

100-299		1									1					1	1	1			5	100-299
300 workers or																						300 workers or
more																						more
total	5	3	4	4	2	1	1	2	3	1	2	4	1	2	1	3	4	2		1	46	total

Month of fatal accidents in metal plating products in 1999-2021

Month	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	total	Month
January					1		1							1			1		1					5	January
February			1	1														1	1					4	February
March						2									1									3	March
April											1									1				2	April
May	1										1		2											4	May
June					2									1										3	June
July	1		1	2								1												5	July
August	1																	1	1	1				4	August
September														1					1					2	September
October	1		1		1				1														1	5	October
November				1				1	1		1					1								5	November
December	1													1		1		1						4	December
total	5		3	4	4	2	1	1	2		3	1	2	4	1	2	1	3	4	2			1	46	total

Prefecture	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	total	Prefecture
Hokkaido																									Hokkaido
Aomori																									Aomori
lwate																									lwate
Miyagi																									Miyagi
Akita																									Akita
Yamagata																									Yamagata
Fukushima					2																			2	Fukushima
Ibaraki																			1					1	Ibaraki
Tochigi													1	1										2	Tochigi
Gunma											1													1	Gunma
Saitama							1					1				1								3	Saitama
Chiba	1		1														1							3	Chiba
Tokyo	1		1																					2	Tokyo
Kanagawa				1	1				1		1			2					1					7	Kanagawa
Niigata									1															1	Niigata
Toyama																		1						1	Toyama
Ishikawa																									Ishikawa
Fukui																				1				1	Fukui
Yamanashi																		1						1	Yamanash
Nagano	1																	1						2	Nagano
Gifu																									Gifu

Shizuoka				1														1	Shizuoka
Aichi											1			1				2	Aichi
Mie																			Mie
Shiga																			Shiga
Kyoto																			Kyoto
Osaka	2	1	2		2	1		1						1	1			11	Osaka
Hyogo																			Hyogo
Nara																			Nara
Wakayama																			Wakayama
Tottori																	1	1	Tottori
Shimane																			Shimane
Okayama																			Okayama
Hiroshima																			Hiroshima
Yamaguchi																			Yamaguchi
Tokushima																			Tokushima
Kagawa																			Kagawa
Ehime																			Ehime
Kochi																			Kochi
Fukuoka												1						1	Fukuoka
Saga																			Saga
Nagasaki			1							1								2	Nagasaki
Kumamoto									1									1	Kumamoto
Oita																			Oita

Miyazaki																						Miyazaki
Kagoshima																						Kagoshima
Okinawa																						Okinawa
total	5	3	4	4	2	1	1	2	3	1	2	4	1	2	1	3	4	2		1	46	total

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

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