

Industrial accidents in optical instruments in Japan in 1999-2020

optical instruments industry Code No.011303

Type of accidents in optical instruments in 1999-2020

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
fall from height	7	3	3	4	2	3	3	5	6	8	4	5	5	5	2	4	5	3	5	4	4	3
falling to same level	9	8	7	11	15	11	13	12	11	17	3	5	11	12	18	11	10	12	14	12	17	16
crash	2	4	2	7	1	3	1	3	1	3	5	1	5	4	1	3	5	3	2	1	2	1
struck by flying or falling object	3	6	5	2	5	5	2	5	2	4	2	2	1	2	0	0	0	2	1	2	4	2
collapse	0	2	1	1	0	1	0	2	0	1	0	0	1	2	1	1	1	0	1	1	0	0
crashed by	4	2	1	-	0	1	2	0	0	3	1	1	1	3	0	0	3	0	1	4	1	1
caught in/between	24	26	23	25	19	29	25	23	22	16	6	9	12	12	6	12	4	8	10	11	9	7
cut	2	6	3	13	8	7	11	10	8	7	5	3	7	7	4	1	2	6	4	2	5	1
injury to the sole of the foot	0	1	0	-	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
drown	0	0	0	-	0	-	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
contact to high/low-temperature	1	2	3	1	1	-	1	3	2	0	2	0	0	2	0	1	2	0	1	0	1	0
contact to harmful substance	1	0	1	2	2	2	2	2	4	0	0	2	4	0	0	1	1	1	2	1	1	0
electric shock	1	1	1	1	1	-	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
explosion	0	0	0	-	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
burst	0	0	0	-	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
fire	0	0	0	-	0	-	1	0	1	0	0	0	1	0	0	0	2	0	0	0	0	0
traffic accident (public road)	0	0	1	1	2	3	1	0	0	0	2	8	2	0	0	1	0	1	1	1	1	0
traffic accident (others)	0	0	0	-	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
reaction to motion/improper motion	1	10	3	3	5	7	5	9	14	12	8	3	8	2	5	3	6	6	3	8	7	3
others	2	0	0	-	0	-	0	0	2	1	0	0	0	0	1	0	0	0	0	0	1	9

unclassifiable	0	2	0	-	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
total	57	73	54	71	61	72	68	74	73	72	38	40	58	51	38	38	41	42	45	47	54	43

Causal agents (middle) of industrial accidents in optical instruments in 1999-2020

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
engine	0	0	0	-	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
power transmission mechanism	0	1	0	-	0	1	0	1	1	0	1	0	0	2	0	0	0	1	0	0	0	1
woodworking machine	0	0	0	-	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
construction machine	0	0	0	-	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
metal manufacturing machine	20	19	7	19	10	18	21	15	12	7	5	4	10	6	5	7	4	6	4	7	8	5
general machine	8	10	15	18	8	7	9	18	12	10	2	5	5	7	2	3	2	3	6	4	9	3
mobile silviculture machine																	0	0	0	0	0	0
crane	0	1	1	-	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0
conveying machine	1	0	3	1	0	1	0	2	1	1	1	2	0	1	0	3	1	0	1	0	0	1
vehicle	0	0	1	1	2	3	2	0	0	3	2	9	2	0	0	2	0	1	2	2	1	0
pressure vessel	0	0	0	-	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
chemical facilities	0	0	0	1	0	-	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
welding equipment	0	0	0	-	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
kiln, caldron	1	0	1	-	1	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
electric equipment	0	1	0	-	1	-	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
human power machine, tools	3	4	1	2	5	4	6	3	4	2	1	0	1	3	2	1	2	1	4	3	2	0
tools	2	1	1	2	2	4	4	7	4	9	3	3	4	7	2	1	4	2	2	6	5	4
other equipments, facilities	2	5	3	4	1	3	1	2	1	3	3	2	2	0	2	1	2	5	3	0	1	2
temporary buildings,	7	12	9	13	19	15	12	8	13	18	7	5	13	11	15	11	10	12	12	14	11	13

equipment																						
arc welding equipment			0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
other welding equipment			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
kiln, caldron			0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
industrial dryer			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
other kiln, caldron			1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
transmission			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
electric power facilities			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
other electrical equipment			0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
human power cranes			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
human power hauling equipment			1	2	5	1	2	1	0	0	0	2	0	0	2	0	4	2	1	0		0
human power machine			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
hand tool			0	3	1	2	2	1	1	0	1	1	2	1	0	1	0	1	1	0		0
ladder			0	1	0	7	3	3	1	0	4	3	1	0	1	1	1	1	1	3		0
slinging tool			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1		1	1
other tools			1	1	4	0	1	6	2	3	0	4	1	1	3	1	1	5	1		3	3
other equipment, facilities			3	1	1	2	1	3	3	2	2	0	2	1	2	5	3	0	1		2	2
scaffolding			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0
timbering			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0
stairs, landing stage			0	2	3	1	2	3	4	4	5	4	2	3	2	3	3	1	2		2	2
opening			0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0		0	0	0
roof, beam, haze, crossbeam, principal rafter			1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0		0	0	0
working platform, boot board			1	1	3	1	1	3	0	0	2	2	0	1	3	2	3	0	2		0	0
passage			4	11	5	5	7	11	2	1	3	5	9	5	4	5	3	12	6		9	9
building, establishment			2	4	0	1	2	0	0	0	2	0	1	0	0	1	2	1	1		0	0

19 years old or less	1	4	6	3	2	1	2	1	0	2	2	3	2	0	0	0	0	1	2	0	2	0
20-29	16	12	12	17	18	14	18	25	19	11	5	9	16	9	2	4	9	7	8	9	8	2
30-39	9	18	8	14	13	18	11	20	24	21	9	11	16	14	6	12	4	9	13	10	7	5
40-49	12	18	10	13	10	17	12	13	12	15	11	3	10	7	14	7	9	9	13	12	17	8
50-59	13	18	13	17	13	14	18	8	11	18	8	10	10	16	14	12	11	13	4	12	14	21
60 years old or more	6	3	5	7	5	8	7	7	7	5	3	4	4	5	2	3	8	3	5	4	6	7
total	57	73	54	71	61	72	68	74	73	72	38	40	58	51	38	38	41	42	45	47	54	43

Workers' number of workplace of industrial accidents in optical instruments in 1999-2020

Workers scale	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
9 workers or less	20	17	8	7	10	17	12	10	10	3	4	5	5	9	2	2	6	0	2	3	3	3
10-29	8	12	15	12	17	14	14	15	7	13	5	4	7	8	5	4	4	5	5	7	8	6
30-49	5	8	7	13	6	10	10	16	3	5	3	3	8	8	3	5	4	7	7	4	10	3
50-99	6	8	9	10	7	12	4	4	13	17	11	4	10	4	7	5	7	6	9	6	6	4
100-299	13	18	8	23	10	12	16	14	22	22	9	19	11	8	9	7	9	13	10	17	7	10
300 workers or more	5	10	7	6	11	7	12	15	18	12	6	5	17	14	12	15	11	11	12	10	20	17
total	57	73	54	71	61	72	68	74	73	72	38	40	58	51	38	38	41	42	45	47	54	43

Month of industrial accidents in optical instruments in 1999-2020

Month	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
January	2	4	6	5	7	6	6	6	5	8	5	6	9	6	3	4	2	5	2	4	6	4
February	15	9	8	3	4	10	9	7	8	13	1	1	8	7	5	5	3	4	4	6	6	1
March	4	3	5	8	2	5	5	6	8	4	4	1	7	6	3	2	8	1	2	3	6	2
April	5	4	5	7	6	3	6	4	5	5	4	1	5	4	6	4	2	0	6	7	3	6
May	1	6	3	8	7	7	3	3	6	5	4	1	3	2	1	2	2	2	3	2	3	5
June	4	7	4	3	10	4	3	3	4	3	0	3	5	3	2	4	3	5	7	1	5	3
July	2	7	2	4	3	6	8	9	6	7	3	3	2	3	4	2	4	1	2	5	6	2
August	4	9	6	8	6	9	7	6	11	7	4	4	3	4	0	3	4	7	3	5	6	2
September	3	5	8	13	10	6	9	10	2	9	5	5	4	5	4	4	4	2	3	2	2	1
October	7	6	5	3	3	7	4	7	5	6	2	1	1	5	4	2	3	6	1	5	3	5
November	4	6	0	3	1	6	4	6	6	1	4	12	5	4	2	3	4	4	5	4	4	9
December	6	7	2	6	2	3	4	7	7	4	2	2	6	2	4	3	2	5	7	3	4	3

construction machine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
metal manufacturing machine	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
general machine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
mobile silviculture machine																0	0	0	0	0	0	0
crane	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
conveying machine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
vehicle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
pressure vessel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
chemical facilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
welding equipment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
kiln, caldron	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
electric equipment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
human power machine, tools	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
tools	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
other equipments, facilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
temporary buildings, establishments	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
hazards, harmful substances	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
materials	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
load	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
natural environment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
other causal agent	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
no causal agent	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
unclassifiable	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
total	0	1	1	0	0	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0

Oita	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Miyazaki	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kagoshima	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Okinawa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
total	0	1	1	0	0	2	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0

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

Return to https://www.jisha.or.jp/english/statistics/2020e_industry.html