

## ForgeNet International

PRODUCTION VOLUME OF FORGINGS (metric net tons x 1000)	EUROFORGE countries		Japan		USA, Canada, Mexico		China		India		Brazil		Korea		Taiwan		WORLD	
	2022	FC 2023	2022	FC 2023	2022	FC 2023	2022	FC 2023	2022	FC 2023	2022	FC 2023	2022	FC 2023	2022	FC 2023	2022	FC 2023
<b>CLOSED DIE FORGING TOTAL</b>	<b>3.708</b>	<b>3.771</b>	<b>1.813</b>	<b>1.813</b>	<b>2.404</b>	<b>2.404</b>	<b>8.326</b>	<b>7.909</b>	<b>1.600</b>	<b>1.800</b>	<b>498</b>	<b>498</b>	<b>1.445</b>	<b>1.600</b>	<b>789</b>	<b>650</b>	<b>20.583</b>	<b>20.445</b>
of which production of forging industry (subcontracting)	2.576	2.619							1.600	1.800	460	460	1.445	1.600	789	650	6.870	7.129
of which inhouse production of the automotive industry	186	186															186	186
of which inhouse production of the finished assembly subcontracting	202	199									36	36					238	235
of which catalogue items (flanges+fitings, pipes, connectors, armatures, tools, etc.)	295	302									2	2					297	304
<b>COLD FORGING TOTAL</b>	<b>760</b>	<b>805</b>	<b>93</b>	<b>93</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>200</b>	<b>250</b>	<b>3</b>	<b>3</b>	<b>148</b>	<b>160</b>	<b>79</b>	<b>65</b>	<b>1.283</b>	<b>1.376</b>
of which production of cold forging industry (subcontracting)	651	691							200	250	2	2	148	160	79	65	1.080	1.168
of which inhouse production of final customer industries	75	80									1	1					76	81
<b>OPEN DIE FORGING TOTAL</b>	<b>1.178</b>	<b>1.177</b>	<b>382</b>	<b>382</b>	<b>514</b>	<b>514</b>	<b>4.829</b>	<b>4.973</b>	<b>400</b>	<b>480</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>14</b>	<b>14</b>	<b>7.317</b>	<b>7.540</b>
of which ring rolling	286	284	254	254	348	348	1.050	1.155	120	130					5	5	2.063	2.176
of which other open die forging (excluding steel bars, blanks and railway stacks)	728	723	128	128			3.779	3.818	250	300					9	9	4.894	4.978
<b>CLOSE DIE FORGING NON-FERROUS</b>	<b>226</b>	<b>229</b>	<b>56</b>	<b>56</b>					<b>130</b>	<b>150</b>			<b>50</b>	<b>60</b>	<b>30</b>	<b>24</b>	<b>492</b>	<b>519</b>
<b>TOTAL FORGING PRODUCTION VOLUME</b>	<b>5.872</b>	<b>5.982</b>	<b>2.344</b>	<b>2.344</b>	<b>2.918</b>	<b>2.918</b>	<b>13.155</b>	<b>12.882</b>	<b>2.330</b>	<b>2.680</b>	<b>501</b>	<b>501</b>	<b>1.643</b>	<b>1.820</b>	<b>912</b>	<b>753</b>	<b>29.675</b>	<b>29.880</b>
Change to previous year (%)		2%		0%		0%		-2%		15%		0%		11%		-17%		1%
<b>NB OF FORGE PLANTS</b>	<b>569</b>	<b>571</b>	<b>323</b>	<b>323</b>	<b>490</b>	<b>490</b>	<b>460</b>	<b>460</b>	<b>415</b>	<b>430</b>	<b>37</b>	<b>37</b>	<b>100</b>	<b>100</b>	<b>200</b>	<b>200</b>	<b>2.594</b>	<b>2.611</b>
<b>NB OF EMPLOYEES</b>	<b>65.809</b>	<b>65.396</b>	<b>15.253</b>	<b>15.253</b>	<b>32.400</b>	<b>32.400</b>	<b>12.900</b>	<b>12.900</b>	<b>325.000</b>	<b>345.000</b>	<b>14.000</b>	<b>14.000</b>	<b>7.000</b>	<b>6.500</b>	<b>12.000</b>	<b>12.000</b>	<b>484.362</b>	<b>503.449</b>

\*The following indicators were determined on the basis of historical indicators: Japan 2022 plants & FC2023; North America complete database; Brazil complete database; Taiwan FC2023 plants & employees.

# EUROFORGE

PRODUCTION VOLUME OF FORGINGS (metric net tons x 1000)	Germany		Italy		France		Spain		United Kingdom		Sweden		Czech Republic		Poland		Slovenia		Finland		Turkey		EUROFORGE	
	2022	FC 2023	2022	FC 2023	2022	FC 2023	2022	FC 2023	2022	FC 2023	2022	FC 2023	2022	FC 2023	2022	FC 2023	2022	FC 2023	2022	FC 2023	2022	FC 2023	2022	FC 2023
	<b>CLOSED DIE FORGING TOTAL</b>	1.393	1.410	972	960	261	262	276	285	192	194	73	69	81	81	188	203	59	60	3	3	210	244	3.708
of which production of forging industry (subcontracting)	1.000	1.015	809	800			251	255	156	157	73	69	44	44			55	57	3	3	185	219	2.576	2.619
of which inhouse production of the automotive industry	155	155											31	31									186	186
of which inhouse production of the finished assembly subcontracting	85	85	82	80									6	6			4	3			25	25	202	199
of which catalogue items (flanges+fittings, pipes, connectors, armatures, tools, etc.)	153	155	81	80			25	30	36	37			0	0									295	302
<b>COLD FORGING TOTAL</b>	690	730	0	0	34	34	21	23	12	13	0	0	0	0	0	0	0	0	0	0	3	5	760	805
of which production of cold forging industry (subcontracting)	615	650					21	23	12	13									0	0	3	5	651	691
of which inhouse production of final customer industries	75	80																					75	80
<b>OPEN DIE FORGING TOTAL</b>	347	340	260	248	54	54	6	7	26	27	161	153	159	169	110	116	0	0	1	1	54	62	1.178	1.177
of which ring rolling	152	150	70	68			6	7			10	9	26	28							22	22	286	284
of which other open die forging (excluding steel bars, blanks and railway stacks)	195	190	190	180					26	27	151	144	133	141					1	1	32	40	728	723
<b>CLOSE DIE FORGING NON-FERROUS</b>	54	55			138	139							30	31							4	4	226	229
<b>TOTAL FORGING PRODUCTION VOLUME</b>	2.484	2.535	1.232	1.208	487	489	303	315	230	234	234	222	270	281	298	319	59	60	4	4	271	315	5.872	5.982
Change to previous year (%)		2%		-2%		0%		4%		2%		-5%		4%		7%		2%		0%		16%		2%
<b>NB OF FORGE PLANTS</b>	235	235	85	85	73	73	32	32	44	44	8	8	19	19	31	31	4	4	6	6	32	34	569	571
<b>NB OF EMPLOYEES</b>	31.000	30.700	10.133	9.900	7.415	7.415	2.824	2.850	3.700	3.875	1.000	950	3.298	3.202	3.000	2.980	795	780	94	94	2.550	2.650	65.809	65.396

\*Estimates for Finland and Sweden based on historical values are also included.