CENSUS OF WORLD CASTING PRODUCTION



Worldwide casting production grew by 5.3% during a busy 2017.

A MODERN CASTING STAFF REPORT

n 2017, global production increased to more than 109.8 million metric tons, an increase of 5.3% when compared to the previous year, according to this year's Modern Casting Census of World Casting Production. The nearly 110 million metric tons of metal castings produced in 2017 represent an increase of 5.5 million tons. This rate of growth comes after two years of less than a half percent growth.

Of the 33 countries that provided data for the past two years, 25 reported an expansion in annual volumes when comparing 2017 to 2016. Among the top-10 countries in total output, Russia had the highest growth in 2017 with an increase of 8.3% in production.

China increased its total production by two million metric tons to a total of 49.4 million. Meanwhile, the U.S. saw its tonnage increase by 4%, and the gray-iron heavy India saw an increase of 6.2%.

Total production of iron increased, with gray iron growing 6% and ductile iron expanding by 3.8%. Steel output grew by 6%, while aluminum production jumped by 6.7%.

The data reported in the Census of World Casting Production is supplied by each nation's metalcasting association or similar representatives., as well as the World Foundry Organization and CAEF-The European Foundry Association. MC

2017 Casting Production (metric tons)

| Country | Gray Iron | Ductile Iron | Malleable Iron | Steel | Copper Base | Aluminum | Magnesium | Zinc | Other Nonferrous | Total |
|--------------------------|------------------------|-----------------|-------------------|------------|----------------|------------------------|-----------|---------|---------------------|-------------|
| Austria | 42,900 | 102,900 | А | 10,800 | - | 148,287 | - | - | - | 304,887 |
| Belarus | - | - | - | - | - | - | - | - | - | 258,900 |
| Belgium | 26,900 | 8,400 | А | 7,300 | - | 799 | - | - | - | 43,399 |
| Bosnia & Herzegovina* | 17,500 | 9,100 | - | 1,350 | - | 10,500 | - | - | - | 38,450 |
| Brazil | 1,261,107 | 517,222 | - | 186,616 | 20,811 | 223,359 | 5,458 | 1,154 | - | 2,215,727 |
| Bulgaria | 30,300 | 9,200 | А | 10,400 | 292 | 5,540 | - | 42 | - | 55,774 |
| Canada | 330,841** | - | - | 90,091** | 14,237** | 211,374 ^B | - | - | - | 646,543 |
| China | 21,150,000 | 13,750,000 | 600,000 | 5,550,000 | 800,000 | 7,300,000° | - | - | 250,000 | 49,400,000 |
| Croatia* | 31,100 | 11,800 | - | 50 | 221 | 25,174 | - | 25 | 15 | 68,385 |
| Czech Republic | 176,000 | 55,000 | Α | 64,000 | 20,000 | 101,000 | - | 1,000 | - | 417,000 |
| Denmark | 27,500 | 56,100 | А | | 1,292 | 3,014 | | - | 100 | 88,006 |
| Egypt | 175,000 | - | - | 10,000 | 8,000 | 7,000 | - | - | - | 200,000 |
| Finland | 19,500 | 36,300 | А | 6,200 | 3,247 | 2,548 | - | 101 | - | 67,896 |
| France | 574,100 | 696,300 | Α | 60,400 | 17,877 | 346,899 | - | 24,719 | 2,501 | 1,722,796 |
| Germany | 2,421,400 | 1,587,700 | А | 175,800 | 79,192 | 1,137,096 | 18,190 | 62,188 | 4 | 5,481,570 |
| Hungary | 24,600 | 54,500 | А | 3,100 | 1,799 | 124,229 | 327 | 1,717 | - | 210,272 |
| India | 8,442,300 | 1,227,200 | 50,000 | 1,030,200 | | 1,305,400 | - | - | - | 12,055,100 |
| Italy | 755,800 | 425,100 | А | 54,100 | 71,007 | 856,381 | 8,001 | 72,007 | 700 | 2,243,096 |
| Japan | 2,281,000 | 1,403,612 | 42,000 | 161,900 | 75,401 | 1,489,700 ^D | - | - | - | 5,453,613 |
| Korea (Republic of) | 1,019,800 | 686,500 | 2,000 | 159,800 | 25,700 | 629,400 | - | - | 13,000 | 2,536,200 |
| Mexico | 892,188 | 526,897 | - | 373,965 | 217,200 | 817,911 | - | 81,300 | - | 2,909,461 |
| Norway | 8,300 | 21,100 | Α | - | - | 8,883 | - | - | - | 38,283 |
| Pakistan | 163,000 | 24,730 | - | 45,550 | 15,540 | 17,600 | - | - | - | 266,420 |
| Poland | 480,000 | 160,000 | А | 50,000 | 6,100 | 330,000 | - | 7,500 | 2,900 | 1,036,500 |
| Portugal | 41,500 | 97,200 | Α | 5,900 | 16,800 | 35,000 | - | 2,250 | - | 198,650 |
| Romania | 20,000 | 3,500 | - | 7,000 | 4,500 | 70,000 | 7,000 | 500 | 250 | 112,750 |
| Russia | 2,637,500 ^E | - | - | 862,500 | - | 725,000⁵ | - | - | - | 4,225,000 |
| Serbia | 26,300 | 3,100 | - | 18,150 | 3,100 | 10,120 | 1 | 30 | - | 60,801 |
| Slovenia | 75,100 | 38,600 | Α | 30,200 | 842 | 51,209 | - | - | - | 195,951 |
| South Africa | 140,000 | 157,000 | - | 93,500 | 14,000 | 38,000 | - | 500 | - | 443,000 |
| Spain | 365,700 | 698,100 | Α | 64,900 | 15,096 | 141,810 | - | 8,941 | 850 | 1,295,397 |
| Sweden | 159,400 | 55,600 | Α | 21,750 | 8,312 | 46,138 | 1,138 | 9,274 | - | 301,612 |
| Switzerland | 36,500 | 22,800 | А | 1,100 | 2,021 | 13,373 | - | 1,209 | - | 77,003 |
| Taiwan | 605,081 | 208,293 | - | 66,193 | 30,826 | 368,286 | - | - | - | 1,278,679 |
| Turkey | 720,000 | 825,000 | A | 170,000 | 25,000 | 380,000 | - | 35,000 | - | 2,155,000 |
| Ukraine** | 400,000 | 120,000 | 30,000 | 580,000 | 60,000 | 280,000 | 15,000 | 25,000 | 50,000 | 1,560,000 |
| U.K. | 138,000 | 196,000 | Α | 44,700 | 8,500 | 136,200 | 2,640 | 7,350 | - | 533,390 |
| U.S. Metric | 3,327,027 | 2,633,294 | 40,034 | 1,264,026 | 209,369 | 1,679,072 | 138,890 | 325,062 | 51,292 | 9,668,066 |
| WORLD TOTAL | 49,043,244 | 26,428,148 | 764,034 | 11,281,541 | 1,776,282 | 19,076,302 | 196,645 | 666,869 | 371,612 | 109,863,577 |

^{* 2016} Results ** 2015 Results A Includes Malleable Iron B Source: Aluminum Association C Includes Magnesium D Includes all diecasting E All iron F All nonferrous



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| Country | by Nation & Iron | Steel | Nonferrous | 2017 Total |
|-----------------------|------------------|-------|------------|------------|
| Austria | 20 | 3 | 33 | 56 |
| Belarus | - | - | - | 135 |
| Belgium | - | - | 6 | 6 |
| Bosnia & Herzegovina* | 5 | 2 | 4 | 11 |
| Brazil | 452 | 153 | 565 | 1,170 |
| Bulgaria | 80 | - | 18 | 98 |
| Canada** | - | - | - | 175 |
| China* | 14,000 | 4,000 | 8,000 | 26,000 |
| *Croatia | 26 | 5 | - | 31 |
| Czech Republic | - | - | 37 | 37 |
| Denmark | 8 | - | 7 | 15 |
| Finland | 11 | 7 | 14 | 32 |
| France | - | - | - | 380 |
| Germany | 192 | 45 | 337 | 574 |
| Hungary | 27 | 7 | 86 | 120 |
| India | - | - | - | 4,600 |
| Italy | 139 | 37 | 862 | 1,038 |
| Japan** | - | - | - | 1,612 |
| Korea | 550 | - | 100 | 650 |
| Mexico | - | - | - | 800 |
| Norway | 5 | - | 6 | 11 |
| Pakistan | 1,595 | 60 | 185 | 1,840 |
| Poland | 180 | 35 | 240 | 455 |
| Portugal | 23 | 8 | 57 | 88 |
| Romania | - | - | - | 100 |
| Russia* | - | - | - | 1,140 |
| Serbia* | 11 | 8 | 17 | 36 |
| Slovenia | - | - | 45 | 45 |
| South Africa | 38 | 43 | 86 | 167 |
| Spain | 46 | 29 | 52 | 127 |
| Sweden | 26 | 12 | 61 | 99 |
| Switzerland | 15 | 2 | 39 | 56 |
| Taiwan | - | - | - | - |
| Turkey | 441 | 105 | 386 | 932 |
| Ukraine* | 270 | 280 | 290 | 840 |
| U.K.* | 216 | - | 204 | 420 |
| U.S. | 617 | 341 | 977 | 1,935 |
| TOTAL | 18,697 | 5,182 | 12,510 | 45,331 |

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