



## CENSUS OF WORLD CASTING PRODUCTION

# Fewer Castings Made in 2020

The COVID-19 pandemic had a significant impact on production as nearly all countries—except China—reported fewer shipments in 2020.

A MODERN CASTING STAFF REPORT

In 2020, countries around the world felt the effect of government-mandated work stoppages and restrictions due to the COVID-19 pandemic. Nearly every country surveyed reported a significant drop in production in 2020 compared to 2019. One of the few exceptions was China, which felt the effects of COVID earlier than most, but then rebounded to

show a 6% growth overall. This comes after two straight years of production retraction for China. Korea's casting shipments were even with no decline or growth.

New to the census this year is an entry from Indonesia. According to the Indonesian Foundry Industries Association (APLINDO), the country produced 589,779 metric tons of castings, with aluminum as the main metal poured.

The top 10 casting-producing nations are listed on page 30. Once again, China, India, and the U.S. hold the top three spots.

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.

## 2020 Casting Production (metric tons)

Country	Gray Iron	Ductile Iron	Malleable Iron	Steel	Copper Base	Aluminum	Magnesium	Zinc	Other Nonferrous	Total
Austria	33,400	91,700 <sup>A</sup>	-	9,600	-	106,798	4,504	-	-	246,002
Belgium	43,000	3,900 <sup>A</sup>	-	5,500	-	-	-	-	-	52,400
Brazil	1,148,123	468,952	-	269,512	20,524	160,464	4,534	1,064	-	2,073,173
Canada <sup>B</sup>	330,841	-	-	90,091	14,237	211,374	-	-	-	646,543
China	21,750,000	15,300,000	630,000	6,350,000	870,000	6,800,000	-	-	250,000	51,950,000
Croatia	19,465	6,161	-	120	202	65,606	-	-	131	91,685
Czech Republic	117,000	34,500 <sup>A</sup>	-	41,000	16,000	77,400	300	800	-	287,000
Denmark <sup>C</sup>	28,900	58,100 <sup>A</sup>	-	-	1,188	2,224	-	-	112	90,524
Finland	17,300	23,100 <sup>A</sup>	-	6,700	2,415	1,730	-	-	-	51,245
France	431,900	593,600 <sup>A</sup>	-	41,900	16,118	293,529	-	18,880	2,180	1,398,107
Germany	1,618,700	957,100 <sup>A</sup>	-	138,000	46,076	652,738	20,489	49,761	19	3,482,883
Hungary	16,500	58,000 <sup>A</sup>	-	2,000	729	118,900	250	1,662	99	198,140
India	7,911,763	1,095,522	50,000	912,893	-	1,344,182	-	-	-	11,314,360
Indonesia	77,783	42,060	86,940	128,724	46,086	182,586	-	-	25,600	589,779
Italy	534,400	300,600 <sup>A</sup>	-	58,000	38,168	540,296	3,676	75,834	1,235	1,552,209
Japan	1,598,113	1,169,743	29,439	153,000	57,019	343,651	-	13,792	82,146 <sup>G</sup>	3,446,903
Korea (Republic of)	881,400	670,700	-	150,000	24,100	642,200	12,000 <sup>D</sup>	-	-	2,380,400
Mexico <sup>E</sup>	816,160	560,270	-	336,250	215,500	832,770	-	79,500	15,200	2,855,650
Norway <sup>C</sup>	8,800	22,300 <sup>A</sup>	-	-	-	6,526	-	-	-	37,626
Pakistan <sup>C</sup>	181,000	24,540	-	48,750	14,200	21,200	-	-	2,730	292,420
Poland	360,000	124,000 <sup>A</sup>	-	40,000	4,800	272,000	-	6,000	2,400	809,200
Portugal	26,100	76,100 <sup>A</sup>	-	4,100	16,203	31,966	-	2,165	-	156,634
Romania <sup>C</sup>	15,000	1,500	-	3,500	3,000	60,000	2000	250	90	85,340
Russia <sup>C</sup>	2,184,000 <sup>E</sup>	-	-	1,134,000	117,600	588,000	75,600	-	100,800	4,200,000
Slovenia	59,300	39,800 <sup>A</sup>	-	17,600	990	44,618	-	7,477	-	169,785
South Africa <sup>C</sup>	-	-	-	-	-	-	-	-	-	443,000
Spain	283,100	582,800 <sup>A</sup>	-	65,300	15,279	101,317	-	7,304	683	1,055,783
Sweden	126,000	51,000 <sup>A</sup>	-	20,200	-	56,400	-	-	-	253,600
Switzerland	8,400	11,900 <sup>A</sup>	-	2,500	2,023	10,815	-	762	-	36,400
Taiwan (ROC)	543,617	179,697	-	55,007	27,368	481,593	6,237	-	-	1,293,519
Turkey	617,300	854,700 <sup>A</sup>	-	192,000	24,851	449,503	761	31,644	-	2,170,759
Ukraine <sup>B</sup>	-	-	-	-	-	-	-	-	-	1,560,000
U.K.	128,400	195,600 <sup>A</sup>	-	41,600	8,300	102,522	2,000	7,300	-	485,722
U.S.	7,616,824	-	-	-	304,279	1,425,120	-	47,786	354,802	9,748,811
<b>WORLD TOTAL</b>	<b>49,532,589</b>	<b>23,597,945</b>	<b>796,379</b>	<b>10,317,847</b>	<b>1,907,255</b>	<b>16,028,028</b>	<b>132,351</b>	<b>352,773</b>	<b>838,227</b>	<b>105,505,602</b>

A) Includes malleable iron B) 2015 data C) 2019 data D) Includes magnesium E) 2017 data F) Includes all ferrous G) Includes aluminum diecasting

## Metalcasting Plants by Nation

Country	Iron	Steel	Nonferrous	2018 Total
Austria	12	3	22	37
Belgium	5	8	6	19
Brazil	329	130	400	859
Canada <sup>A</sup>	-	-	-	175
China <sup>B</sup>	14,000	4,000	8,000	26,000
Croatia <sup>B</sup>	26	5	-	31
Czech Republic	55	27	37	119
Denmark <sup>C</sup>	8	-	7	15
Finland	11	7	13	31
France <sup>C</sup>	86	34	-	120
Germany	140	39	327	506
Hungary <sup>C</sup>	27	12	33	72
India	-	-	-	4,500
Italy	134	38	864	1,036
Japan <sup>D</sup>	913	-	1,647	2,560
Korea (Republic of)	513	134	230	877
Mexico <sup>E</sup>	-	-	-	800
Norway <sup>C</sup>	5	-	3	8
Pakistan <sup>C</sup>	-	-	-	1,880
Poland	180	36	240	456
Portugal	23	8	57	88
Romania <sup>C</sup>	25	15	40	80
Russia <sup>B</sup>	-	-	-	1,140
Serbia <sup>B</sup>	-	-	-	36
Slovenia	8	3	47	58
South Africa <sup>E</sup>	-	-	-	135
Spain	43	31	52	126
Sweden <sup>C</sup>	25	11	60	96
Switzerland	13	2	31	46
Taiwan (ROC)	386	199	309	894
Turkey	447	109	396	952
Ukraine <sup>C</sup>	-	-	-	840
U.K. <sup>B</sup>	-	-	-	420,671
U.S.	-	-	-	1,661

A) 2015 data B) 2016 data C) 2019 data D) Includes diecasting facilities E) 2017 data

## TOP 10 CASTING PRODUCERS

**1. China** 51,950,000 metric tons  
Percent change: 6%

**5. Germany** 3,482,883 metric tons  
Percent change: -29.6%

**8. Korea** 2,380,200 metric tons  
Percent change: 0%

**2. India** 11,314,360 metric tons  
Percent change: -1.5%

**6. Japan** 3,446,903 metric tons  
Percent change: -34.7%

**9. Turkey** 2,170,759 metric tons  
Percent change: -6%

**3. U.S.** 9,748,811 metric tons  
Percent change: -13.7%

**7. Mexico** 2,855,650 metric tons  
No new data.

**10. Brazil** 2,073,173 metric tons  
Percent change: -9.4%

**4. Russia** 4,200,000 metric tons  
No new data.