

Industrial Gases: Fourth Quarter 2004

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MQ325C(04)-4

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U S C E N S U S B U R E A U

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U.S. Department of Commerce
Economics and Statistics Administration
U.S. CENSUS BUREAU

Table 1. Summary of Production of Principal Gases: 2002 to 2004
 [Million cubic feet, except as noted]

| Quarter and year | Acetylene (3251201) | Gas (3251204111) | Carbon dioxide [short tons] | | Argon, high purity (325120D121) | Hydrogen, high and low purity (100 percent) (325120D pt.) | Nitrogen, high and low purity (100 percent) (3251207) | Oxygen, high and low purity (100 percent) (325120A) |
|----------------------|------------------------|---------------------|--------------------------------|-----------------------|--|---|---|---|
| | | | Liquid (3251204121) | Solid (3251204131) | | | | |
| Year-to-date: | | | | | | | | |
| 2004..... | 1,442 | 9,276,624 | 6,189,032 | 400,498 | 23,317 | 624,758 | 942,213 | 690,337 |
| 2003..... | 1,592 | 6,236,115 | 5,696,359 | 366,847 | 21,459 | 507,624 | 937,856 | 697,741 |
| 2002..... | 2,618 | 5,081,134 | 7,007,979 | 416,111 | 18,661 | 478,533 | 918,983 | 605,745 |
| 2004 | | | | | | | | |
| Total..... | 1,442 | 9,276,624 | 6,189,029 | 400,498 | 23,317 | 624,758 | 942,213 | 690,337 |
| Fourth quarter..... | 357 | 2,761,063 | 1,788,759 | 102,657 | 6,038 | 167,581 | 239,835 | 185,752 |
| Third quarter..... | 381 | 2,339,911 | 1,703,153 | 118,261 | 5,785 | 169,648 | 234,974 | 186,565 |
| Second quarter..... | 338 | 2,210,930 | 1,426,197 | 98,478 | 5,869 | 143,348 | 232,343 | 179,034 |
| First quarter..... | 366 | 1,964,720 | 1,270,923 | 81,102 | 5,625 | 144,181 | 235,061 | 138,986 |
| 2003 1/ | | | | | | | | |
| Total..... | 1,592 | 6,236,115 | 5,696,359 | 366,847 | 21,459 | 507,624 | 937,856 | 697,741 |
| Fourth quarter..... | 423 | 1,687,654 | 1,314,801 | 88,699 | 5,476 | 130,444 | 234,510 | 184,634 |
| Third quarter..... | 399 | 1,673,980 | 1,728,245 | 104,067 | 5,630 | 127,608 | 237,108 | 176,239 |
| Second quarter..... | 405 | 1,428,567 | 1,432,718 | 91,792 | 5,131 | 128,720 | 232,775 | 171,372 |
| First quarter..... | 365 | 1,445,914 | 1,220,595 | 82,289 | 5,221 | 120,852 | 233,463 | 165,496 |
| 2002 | | | | | | | | |
| Total..... | 2,618 | 5,081,134 | 7,007,979 | 416,111 | 18,661 | 478,533 | 918,983 | 605,745 |
| Fourth quarter..... | 655 | 1,400,966 | 1,529,974 | 101,574 | 5,444 | 117,209 | 235,778 | 168,557 |
| Third quarter..... | 663 | 1,216,568 | 1,841,967 | 115,049 | 3,994 | 116,423 | 201,053 | 137,290 |
| Second quarter..... | 656 | 1,262,040 | 1,884,245 | 104,529 | 4,776 | 127,247 | 237,543 | 155,120 |
| First quarter..... | 644 | 1,201,560 | 1,751,793 | 94,959 | 4,447 | 117,654 | 244,609 | 144,778 |

1/Data are revised based on the annual summary report for this series, MQ325C(03)-5, "Industrial Gases," issued December 2004.

Table 2. Primary Production of Specified Industrial Gases
 [Quantity in million cubic feet, unless otherwise noted. Value in thousands of dollars]

| Product code | Product description | Fourth quarter 2004 | | | | | Thrid quarter 2004 | | | | | Quantity produced and consumed in plant |
|--------------|---|---------------------|------------------|--------------------|------------------|---|--------------------|------------------|--------------------|--|---------|---|
| | | Quantity produced | Quantity shipped | Value of shipments | | Quantity produced and consumed in plant | Quantity produced | Quantity shipped | Value of shipments | | | |
| 3251201 | Acetylene..... | 357 | 272 | 10,588 | | (X) | 381 | 303 | 10,483 | | (X) | |
| 3251201111 | Produced for compression, including cylinder and pipeline..... | (D) | (D) | (D) | | (X) | (D) | (D) | (D) | | (X) | |
| 3251201121 | Produced for pipeline shipment, excluding that shipped to be compressed, and for consumption in same plant..... | (D) | (D) | (D) | | (X) | (D) | (D) | (D) | | (X) | |
| 3251204 | Carbon dioxide [short tons]..... | 4,652,476 | 3,444,470 | 125,805 | | 155,828 | 4,161,325 | 3,394,174 | 128,656 | | 148,270 | |
| 3251204111 | Gas, including amounts produced and liquefied..... | b/ 2,761,063 | a/ 1,950,210 | c/ 11,483 | b/ 147,483 | b/ 2,339,911 | a/ 1,922,410 | c/ 13,382 | b/ 139,661 | | | |
| 3251204121 | Liquid, including amounts produced and used to make dry ice..... | c/ 1,788,756 | c/ 1,353,688 | a/ 103,171 | (D) c/ 1,703,153 | c/ 1,330,096 | a/ 103,947 | (D) | | | | |
| 3251204131 | Solid (dry ice)..... | c/ 102,657 | c/ 140,572 | c/ 11,151 | (D) c/ 118,261 | c/ 141,668 | c/ 11,327 | (D) | | | | |
| 325120D121 | Argon, high purity: Produced for cylinder and bulk delivery and pipeline shipments, and for consumption in same plant..... | c/ 6,038 | a/ 6,856 | b/ 89,723 | (D) c/ 5,785 | c/ 6,226 | c/ 87,661 | (D) | | | | |
| 325120D pt. | Hydrogen..... | 167,581 | 125,667 | 219,551 | 24,289 | 169,648 | 124,804 | 206,998 | 29,492 | | | |
| | Gas produced for: | | | | | | | | | | | |
| 325120D131 | Merchant shipment..... | c/ 134 | (S) | (S) | (X) b/ 150 | c/ 341 | c/ 2,311 | (X) | | | | |
| 325120D141 | Pipeline and onsite use..... | a/ 120,218 | b/ 118,913 | (S) | (X) b/ 121,795 | a/ 118,163 | c/ 163,345 | (X) | | | | |
| 325120D151 | Consumption in same plant..... | a/ 40,778 | (X) | (X) | a/ 24,289 | a/ 41,396 | (X) | a/ 29,492 | | | | |
| | Liquid produced for: | | | | | | | | | | | |
| 325120D161 | Merchant shipment..... | (D) | (D) | (D) | (X) | (D) | (D) | (D) | (X) | | | |
| 325120D171 | Other shipments or uses..... | (D) | (D) | (D) | (X) | (D) | (D) | (D) | (X) | | | |
| 3251207 | Nitrogen..... | 239,835 | 275,550 | 772,499 | 1,478 | 234,974 | 273,079 | 720,185 | 1,878 | | | |
| | Gas produced by: | | | | | | | | | | | |
| 3251207111 | Cryogenic onsite and pipeline..... | b/ 136,401 | b/ 167,978 | (S) | (X) b/ 138,744 | b/ 169,353 | (S) | (X) | | | | |
| 3251207121 | Noncryogenic processes by industrial gas producing companies, including psa, vpsa, membrane, etc. | (D) | (D) | (D) | (X) | (D) | (D) | (X) | | | | |
| | Captive uses for consumption in same plant (user owned): | | | | | | | | | | | |
| 3251207131 | Cryogenic processes..... | a/ 819 | (X) | (X) | (D) a/ 825 | (X) | (X) | (X) | (D) | | | |
| 3251207141 | Noncryogenic processes, including psa, vpsa, membrane, etc. | (D) | (X) | (X) | (D) | (D) | (X) | (X) | (D) | | | |
| | Liquid produced for: | | | | | | | | | | | |
| 3251207151 | Merchant shipment..... | a/ 87,002 | a/ 97,574 | b/ 595,944 | (X) c/ 80,352 | c/ 93,639 | c/ 593,264 | (X) | | | | |
| 3251207161 | Consumption in same plant..... | b/ 3,374 | (X) | (X) | (D) a/ 3,023 | (X) | (X) | (X) | (D) | | | |
| 3251207171 | Other shipments or uses..... | c/ 9,396 | (D) | (D) | (X) | 9,143 | (D) | (D) | (X) | | | |
| 325120A | Oxygen..... | 185,752 | 169,586 | 622,494 | (D) | 186,565 | 170,940 | 623,319 | (D) | | | |
| | Gas produced by: | | | | | | | | | | | |
| 325120A111 | Cryogenic onsite and pipeline..... | b/ 136,459 | b/ 126,948 | (S) | (X) b/ 139,507 | b/ 128,745 | (S) | (X) | | | | |
| 325120A121 | Noncryogenic processes by industrial gas producing companies, including psa, vpsa, membrane, etc. | (D) | (D) | (D) | (X) | (D) | (D) | (D) | (X) | | | |
| | Captive uses for consumption in same plant (user owned): | | | | | | | | | | | |
| 325120A131 | Cryogenic processes..... | (D) | (X) | (X) | (D) | (D) | (X) | (X) | (D) | | | |
| 325120A141 | Noncryogenic processes, including psa, vpsa, membrane, etc. | (D) | (X) | (X) | (D) | (D) | (X) | (X) | (D) | | | |
| | Liquid produced for: | | | | | | | | | | | |
| 325120A151 | Merchant shipment..... | a/ 33,362 | c/ 29,814 | a/ 179,406 | (X) c/ 30,777 | c/ 29,641 | a/ 179,972 | (X) | | | | |
| 325120A161 | Consumption in this plant..... | (D) | (X) | (X) | (D) | (D) | (X) | (X) | (D) | | | |
| 325120A171 | Other shipments or uses..... | b/ 7,373 | (D) | (D) | (X) c/ 7,722 | (D) | (D) | (D) | (X) | | | |

D Withheld to avoid disclosing data for individual companies. pt. Part. S Does not meet publication standards. X Not applicable.

Note: Percent of estimation of each item is indicated as follows: a/10 to 25 percent of this item is estimated. b/26 to 50 percent of this item is estimated. c/Over 50 percent of this item is estimated.

Table 3. Production, Exports, Imports, and Apparent Consumption of Industrial Gases
 [Million cubic meters, unless otherwise noted]

| Product code 1/ | Product description | Manufacturers' production | Exports of domestic merchandise 2/ | Percent exports to manufacturers' net production | Imports for consumption 3/ | Apparent consumption 4/ | Percent imports to manufacturers' net production |
|--------------------------------|--|---------------------------|------------------------------------|--|----------------------------|-------------------------|--|
| Fourth quarter 2004 | | | | | | | |
| 3251204 | Carbon dioxide, gas, liquid, and solid (metric tons) 5/..... | 4,220,656 | 27,966 | 0.7 | 6,560 | 4,199,250 | 0.2 |
| 325120D021 | Argon 6/..... | 171 | 36 | 21.1 | 6 | 141 | 4.3 |
| 325120D031, 041, 051, 061, 071 | Hydrogen 6/..... | 4,745 | 111 | 2.3 | 31 | 4,665 | 0.7 |
| 3251207 | Nitrogen 6/..... | 6,791 | 18 | 0.3 | 13 | 6,786 | 0.2 |
| 325120A | Oxygen 6/..... | 5,260 | 23 | 0.4 | 1 | 5,238 | - |
| Third quarter 2004 | | | | | | | |
| 3251204 | Carbon dioxide, gas, liquid, and solid (metric tons) 5/..... | 3,775,092 | 31,798 | 0.8 | 7,947 | 3,751,241 | 0.2 |
| 325120D021 | Argon 6/..... | 164 | 42 | 25.6 | 6 | 128 | 4.7 |
| 325120D031, 041, 051, 061, 071 | Hydrogen 6/..... | 4,804 | 94 | 2.0 | 35 | 4,745 | 0.7 |
| 3251207 | Nitrogen 6/..... | 6,654 | 34 | 0.5 | 25 | 6,645 | 0.4 |
| 325120A | Oxygen 6/..... | 5,283 | 16 | 0.3 | 4 | 5,271 | 0.1 |

- Represents zero.

1/For comparison of the North American Industry Classification System (NAICS)-based product codes with Schedule B export codes, and HTSUSA import codes, see Table 4 of the first quarter report for this series, MQ325C(04)-1, "Industrial Gases," issued June 2004.

2/Source: Census Bureau report EM 545, U.S. Exports.

3/Source: Census Bureau report IM 145, U.S. Imports for Consumption.

4/Apparent consumption is derived by subtracting exports from the total of net production plus imports.

5/A conversion factor of .907185 metric tons per one short ton was used to convert manufacturers' production from short tons to metric tons.

6/A conversion factor of .028317 million cubic meters per one million cubic feet was used to convert manufacturers' production from cubic feet to cubic meters.