

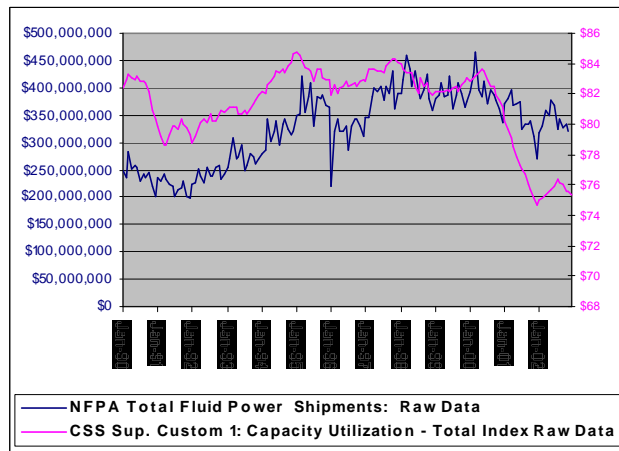
Capacity Utilization Report for 4th Quarter 2002

NFPA has developed the following spreadsheet with capacity utilization and production data obtained from the Federal Reserve Board. The spreadsheet can be used on its own, or CSS participants can use the data in the NFPA Electronic Statistical Toolkit by cutting and pasting data series from the Data Source tab of this file into the custom drivers section of their CompanyData.xls file. More information about the Toolkit can be found at www.nfpa.com.

The Federal Reserve uses an intricate methodology to derive overall capacity utilization figures, but for any given plant, capacity utilization is the percent of maximum potential output that is actually produced. Or, the rate at which total capacity is used. The Federal Reserve defines capacity utilization for any given industry as "equal to an output index (seasonally adjusted) divided by a capacity index." More information on the calculation of capacity indexes, output indexes, and capacity utilization figures can be found at <http://www.federalreserve.gov/releases/G17/About.htm>. In addition, some of the past numbers may change slightly each month, as the new month's data affects seasonal adjustments, and the federal reserve makes revisions to prior months. Finally, the federal reserve makes adjustments to data at year-end. Because seasonal adjustment formulas consider prior years, year end adjustments for 2002 affected data back to the beginning of 1992.

There appears to be some historical relationship between capacity utilization and NFPA's Total Fluid Power Shipment data, as shown in this chart created in the NFPA Electronic Statistical Toolkit.

In addition, capacity utilization has proven to be an accurate predictor of price inflation. As capacity utilization rises for any given manufacturing sector, producers in that sector, producers are increasing production without increasing capital inputs (mainly plant size). Although opinions vary, it is typically felt that when the total industry rate of capacity utilization surpasses 81%-82%, price inflation tends to accelerate mildly (about 0.15 percentage points). Capacity utilization for an end user market can also serve as an indicator of demand for capital inputs, such as industrial fluid power products. When capacity utilization is declining, the excess capacity means the likelihood of end users investing in new equipment decreases. As capacity utilization increases, one could expect greater investment in new equipment is on the horizon.



Capacity utilization has also shown a rather strong inverse relationship to unemployment. As manufacturers increase production, they tend to add shifts or take other measures to add to their workforces. Unemployment decreases as a result.

And finally, according to the Institute for Trend Research, high levels of capacity utilization may lead to "bottlenecks from vendors, extending lead times, and a rise in backlog."

The Federal Reserve publishes monthly reports on industrial capacity utilization, and NFPA will send quarterly updates of this report. However, if you would like to update the spreadsheet yourself on a monthly basis, the data can be found at <http://www.federalreserve.gov/releases/G17/>

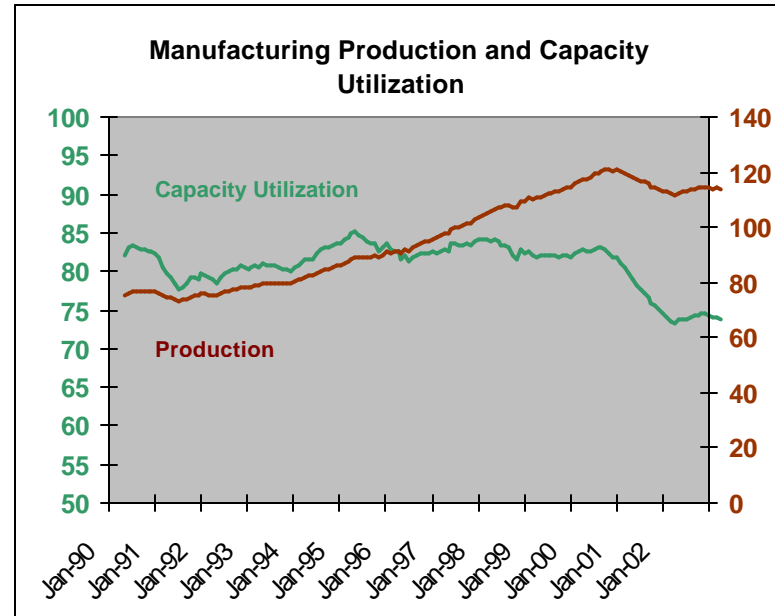
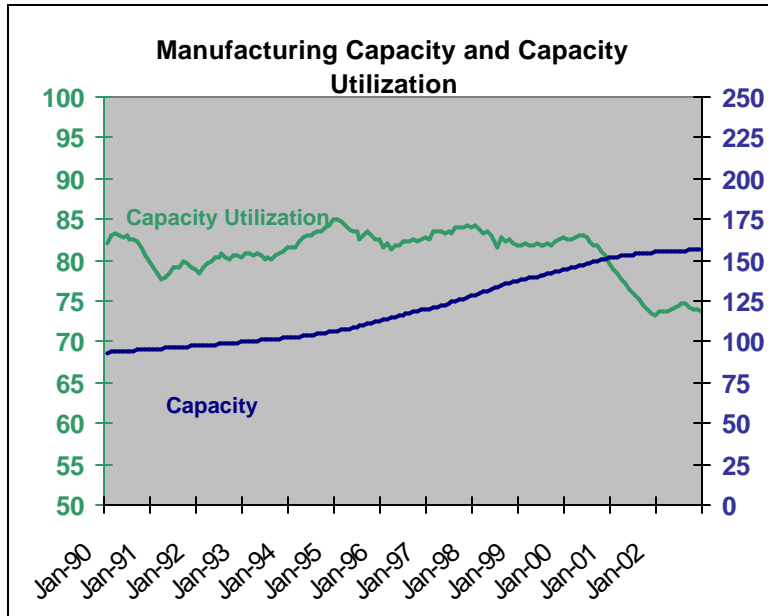
Use the tabs at the bottom of this worksheet to access graphs and raw data.

Manufacturing Production, Capacity and Capacity Utilization Graphs

January 1990 through December 2002

Based on data obtained from the Federal Reserve Bank of the United States

Capacity Utilization and Production data is seasonally adjusted.



Data Source

General Manufacturing

all data is seasonally adjusted

Key End Use Markets

data is seasonally adjusted

| | | | | | Jul-02 | Aug-02 | Sep-02 | Oct-02 | Nov-02 | Dec-02 |
|--------|----------------------|----------|------------|----------------------------|--------|--------|--------|--------|--------|--------|
| | Capacity Utilization | Capacity | Production | Capacity Utilization | | | | | | |
| May-01 | 75.82 | 149.81 | 113.59 | Machinery | 68.03 | 68.80 | 67.93 | 66.85 | 66.90 | 67.23 |
| Jun-01 | 75.14 | 150.10 | 112.78 | Production | 88.37 | 89.36 | 88.23 | 86.83 | 86.88 | 87.30 |
| Jul-01 | 74.95 | 150.36 | 112.69 | Capacity Utilization | 71.54 | 71.23 | 71.24 | 71.66 | 71.09 | 70.78 |
| Aug-01 | 74.41 | 150.61 | 112.07 | Fabricated Metal Products | | | | | | |
| Sep-01 | 73.80 | 150.84 | 111.32 | Capacity Utilization | 74.04 | 74.03 | 73.36 | 72.13 | 74.00 | 71.56 |
| Oct-01 | 73.26 | 151.05 | 110.66 | Transportation Equipment | | | | | | |
| Nov-01 | 72.91 | 151.25 | 110.27 | Capacity Utilization | 83.22 | 82.94 | 82.05 | 79.96 | 83.15 | 79.00 |
| Dec-01 | 72.50 | 151.43 | 109.78 | Motor Vehicles and Parts | | | | | | |
| Jan-02 | 72.93 | 151.61 | 110.57 | Capacity Utilization | 88.31 | 86.68 | 84.74 | 80.65 | 86.12 | 79.13 |
| Feb-02 | 72.98 | 151.77 | 110.75 | Autos and Light Duty Motor | | | | | | |
| Mar-02 | 73.09 | 151.91 | 111.04 | Capacity Utilization | 85.70 | 85.30 | 83.76 | 83.86 | 84.45 | 85.79 |
| Apr-02 | 73.26 | 152.06 | 111.40 | Mining | | | | | | |
| May-02 | 73.51 | 152.19 | 111.87 | Capacity Utilization | 74.30 | 71.88 | 77.90 | 76.89 | 76.96 | 77.05 |
| Jun-02 | 73.69 | 152.31 | 112.24 | Metal Ore Mining | | | | | | |
| Jul-02 | 73.96 | 152.43 | 112.74 | Capacity Utilization | 80.34 | 81.47 | 85.01 | 84.66 | 85.78 | 89.48 |
| Aug-02 | 73.93 | 152.54 | 112.77 | Coal Mining | | | | | | |
| Sep-02 | 73.63 | 152.64 | 112.39 | Capacity Utilization | 92.68 | 91.62 | 87.91 | 88.58 | 89.61 | 90.95 |
| Oct-02 | 73.28 | 152.75 | 111.93 | Oil & Gas Extraction | | | | | | |
| Nov-02 | 73.33 | 152.85 | 112.09 | Capacity Utilization | 65.63 | 66.50 | 66.83 | 66.39 | 66.41 | 66.68 |
| Dec-02 | 73.09 | 152.95 | 111.79 | Semiconductors and Related | | | | | | |