Titanium Data Mining in the United States

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USGS National Minerals Information Center

- **Mission**
  - To collect, analyze, and disseminate information on the domestic and international supply of and demand for minerals and materials essential to the U.S. economy and national security.

- **Coverage**
  - Abrasives to zirconium
  - Afghanistan to Zimbabwe
  - Alabama to Wyoming
Data Collection

Titanium data

- Minerals (ilmenite, rutile)
- Metal (sponge, scrap, ingot, mill products)
- Pigment (titanium dioxide)

Statistical surveys

- Production
- Consumption
- Recycling
- Stocks
- Shipments
Titanium Metal Survey

- Alcoa Howmet
- Allegheny Technologies Inc.
- Alloy Works LLC
- Carlton Forge Works
- Dynamet Inc. (Carpenter Technology Corp.)
- Haynes International Inc.
- Mersen USA
- NF & M International (VSMPO-AVISMA Corp.)
- RTI International Metals, Inc.
- Sandvik Special Metals Corp.
- Selmet Inc.
- Shultz Steel Co.
- Thyssenkrupp VDM USA, Inc.
- Titanium Metals Corp. (North American Operations)
- Western Pneumatic Tube Co.
Data Collection - Quarterly Survey

Section 1: Sponge and powder
Section 2: Scrap
Section 3: Titanium ingot
Section 4: Titanium mill and foundry products
Section 5: Priorities of titanium mill products and castings
Data Collection - Quarterly Survey

+ Beginning stocks
+ Production
+ Receipts
- Consumption
- Shipments
- Ending stocks

Sum = 0
Titanium Metal Statistics – Sponge Consumption and Imports

Titanium Metal Uses by Sector and Industry (Q1 2011)*

By Sector
- Defense 13%
- Commercial 87%

By Industry
- Aerospace 67%
- Other 33%

* Total mill product shipments = 10,300 tons
Publications

- Minerals Yearbook
- Mineral Commodity Summaries
- Mineral Industry Surveys
Obtaining Data

Minerals Information

Statistics and information on the worldwide supply of, demand for, and flow of minerals and materials essential to the U.S. economy, the national security, and protection of the environment.

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- Foreign governments
- Academia
- United Nations
- Industry associations
- Industrial producers and consumers
- Financial analysts
- Professional societies
- News organizations
- General public
Trade Data Caveats, Issues, and Tips

- Online data access

- Trade data issues
  - U.S. Census Bureau, Foreign Trade Division (http://www.census.gov/foreign-trade/contacts/whowho.html)

- Materials imported under a temporary import bond (TIB)
Domestic Survey Data Issues

- Statistics are on a gross-weight basis
- Capacity utilization
- Withheld proprietary data
- Toll processing
- Ingot versus slab production
- Powder and castings production
- Unreported stocks
- Consumption by other industries
- Publicly reported data
- Timeliness
- Survey response and industry support