Titanium Industry Outlook in Japan

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INTRODUCTION

I. Shipments in Japan
II. Imports of Japan
III. Activities of JTS
IV. Current Topics
V. For Further Industry Growth
I. SHIPMENTS IN JAPAN

Sponge Shipments in Japan

- Export
- Domestic
I. SHIPMENTS IN JAPAN

Mill Product Shipments in Japan

MT

Export
Domestic

I. SHIPMENTS IN JAPAN

Mill Product Shipments in Japan; Monthly Comparison of the Past Two Years

MT

0 500 1,000 1,500 2,000 2,500 3,000

07/7 08/7 07/8 08/8 07/9 08/9 07/10 08/10 07/11 08/11 07/12 08/12 08/1 09/1 08/2 09/2 08/3 09/3 08/4 09/4 08/5 09/5 08/6 09/6
I. SHIPMENTS IN JAPAN

Market Share Breakdown by Applications (Y2003)

- Chemical Plants: 1,739 (13%)
- Power Plants: 2,454 (18%)
- Soda-Electrolysis, 700 (5%)
- PHE, 2,664 (19%)
- Aerospace: 725 (5%)
- Automotive: 796 (6%)
- Distributors: 2,119 (15%)
- Other: 2,641 (19%)

Market Share Breakdown by Applications (Y2008)

- Chemical Plants: 1,128 (6%)
- Power Plants: 3,351 (17%)
- Soda-Electrolysis, 2,615 (13%)
- PHE: 5,154 (26%)
- Aerospace: 1,221 (6%)
- Automotive: 1,393 (7%)
- Distributors: 1,654 (9%)
- Other: 3,211 (16%)

(MT)
I. SHIPMENTS IN JAPAN

Application in Power Generation
I. SHIPMENTS IN JAPAN
Application in soda-electrolysis
I. SHIPMENTS IN JAPAN

Application in Plate Heat Exchangers
I. SHIPMENTS IN JAPAN

Application in Aircraft Engine
I. SHIPMENTS IN JAPAN

Application in motorcycle
II. IMPORTS OF JAPAN

Imports of Unwrought Titanium in Japan

- Other
- USA
- Ukraine
- China
- Kazakhstan
- Russia

Years: 1998 to 2008

Quantities: 0 to 10,000
II. IMPORT OF JAPAN

Imports of Mill Product in Japan

- Other
- China
- Russia
- USA
III. ACTIVITIES OF JTS

1. Composition of members in JTS

(As of June 2009)

(1) Regular members: 22
   - Titanium sponge producers: 2
   - Mill products producers: 11
   - Trading companies: 9

(2) Associate members: 177

(3) Individual members: 34

Total: 199 firms and 34 individuals
III. ACTIVITIES OF JTS

2. JTS’ basic action program

JTS’ multidirectional, concrete promotional measures include the following:

◆ Develop manufacturing technology.
◆ Create new markets.
◆ Improve basic infrastructure.
◆ Check world technology and the market trend.
III. ACTIVITIES OF JTS

3. Six key activities in 2009

◆ Expand demand and create new markets.
◆ Collaborate and jointly develop with outside organizations.
◆ Promote the international standardization (ISO) of titanium.
◆ Strengthen international exchange.
◆ Increase application and spread use of titanium
◆ Provide information to members.
III. ACTIVITIES OF JTS

4. Organization of the Application Development Committee

Application Development Committee

- Desalination & Environment SC
- Shipping, Construction & Ocean Energy SC
- Medical & Consumer Goods SC
- Associate Members Committee

Terrestrial Heat Use WG
- Ecology & Environment WG
- Water Service WG
- Fastener WG
- Welfare & Medical WG
- Training Seminar Planning Group

SC: Subcommittee
WG: Working Group
III. ACTIVITIES OF JTS

5. Application Development Committee’s business plan in 2009

◆ Conduct an evaluation test for application of the RO film method in desalination plants.

◆ Collaborate with the German Marine Technical Safe Research Institute for nautical application.

◆ Perform research and development of welfare tools.

◆ Continue field testing for underground water pipe application.

◆ Carry out research on implants for animals.

◆ Host training seminars twice a year.
III. ACTIVITIES OF JTS

6. Organization of the Technical Committee

- Materials SC
- Anti-Corrosion Properties SC
- Non-Destructive Inspection SC
- Chemical Analysis Method SC
- Welding SC
- Industrial Standard Coordination Committee
- Production Technology Workshop

SC: Subcommittee
III. ACTIVITIES OF JTS

7. Technical Committee’s business plan in 2009

◆ Hold titanium seminars.
◆ Review the Japanese Industrial Standards (JIS).
◆ Support research and international exchange.
◆ Host titanium plant tours for teachers of technical high schools.
◆ Participate in the Association of American Welding Society (AWS).
◆ Post cases of failures on the website.
◆ Promote the international standardization (ISO) of titanium.
III. ACTIVITIES OF JTS

Titanium Seminar
IV. CURRENT TOPICS

New Applications: Temple Roof

Gargoyle
IV. CURRENT TOPICS

New Applications: Temple Roof
IV. CURRENT TOPICS

New Applications: Airport Runway (under construction)
IV. CURRENT TOPICS

New Applications: Airport Runway (under construction)
V. FOR FURTHER WORLDWIDE INDUSTRY GROWTH

◆ Create new markets and develop new applications.
◆ Act for international standardization. Unify various specifications (JIS, ASTM, DIS, BS, etc.) into the ISO.
◆ Reduce costs. Develop and commercially apply cost-reduction processes.
◆ Rectify difference in import duties.
  JAPAN - 3%
  EU - 5% for sponge and 7% for mill products
  USA - 15%
Thank you