Can We Process What We Need?

Ed Sobota, Sr.
TechSpec. Inc.
Latrobe Steel
At the ITA conference in *Los Colinas*, Texas in 1999, the featured speaker recommended that this utilization of steel industry sources actually should increase to keep costs down. The reasons being:

(1) The titanium industry cannot afford **not** to invest in itself. Remember when there was an over-capacity of sponge-making in the world.

(2) There is not enough dependable excess capacity in the steel industry. For example - there is no more Cytemp in Titusville, PA, no Bums Harbor, no Sparrow's Point and no Vasco Monaca.

(3) Finally, we have certainly witnessed an upsurge in **both** the steel and titanium industries over the past two years.
Unfortunately, as today's Worlds Trends Panel indicates, there are problems with all three at these points.

(1) The titanium industry cannot afford not to invest in itself. Remember when there was an over-capacity of sponge-making in the world.

(2) There is not enough dependable excess capacity in the steel industry. For example - there is no more Cytemp in Titusville, PA, no Bums Harbor, no Sparrow's Point and no Vasco Monaca.

(3) Finally, we have certainly witnessed an upsurge in both the steel and titanium industries over the past two years.
Machined Jumbo Slab
World Titanium Industry Trends Processing Survey

(Please return by August 15, 2005)

● (1.) Has your company invested in the past two years or intends to invest in the next two years in buildings, equipment, etc. to improve your product or sales of your product.
  a. Yes
  b. No

● (2.) Describe the type of investment that has been made or planned.
By far, the biggest investment reported was for new or upgraded equipment and the building space to house it. With the increased demand for titanium products over the past two years, the investments are for increasing.

1. Melting capacity
2. Alloy productions
3. Laboratory testing
4. Rolling capacity
5. Finishing equipment
   1. Bar straighteners
   2. Bar peelers
   3. Saws
   4. Water jet cutting and shearing
6. Ultrasonic testing equipment
7. Increased warehousing space and more sawing equipment
DEBOTTLENECKING
G&S Titanium of Wooster, Ohio is investing over 5 million dollars in:

1. New building space exceeding 100,000 square feet to house
2. Coil and bar grit blasters
3. Coil vacuum anneal furnace
4. Straightening and finishing equipment
5. Eddy current inspection equipment
The Perryman Company, headquartered in Houston, Pennsylvania has announced a 10 million dollar expansion of their rolling facilities. The expansion includes:

(1) A Kocks 215 mm Reducing and Sizing Block (RSB) rolling mill

(2) The Kocks RSB will enable rolling of titanium and titanium alloy rounds from .200" to 2.00" diameter

(3) With increased drawing and shaving lines, the addition of the RSB will double Perryman capacity by 2006.
President Titanium of Hanson, MA is Investing 1.5 Million Dollars in:

(1) A Hydmech plate/bar saw

(2) A Kasto auto-feed plate saw

(3) Nearly 17,000 square feet of new building space to house the equipment and additional warehouse space
President Titanium
President Titanium
RTI headquartered in Niles, Ohio has made and continues to make a 50 million dollar investment in:

1. increased extrusion capacity
2. increased machining capabilities of extremely long products for the oil industry
3. added water-jet cutting
4. upgraded the Niles, Ohio rolling mill which will increase flat rolled products capacity by 15-20%
5. Acquired Claro Products of Montreal last year which add full machining and assembly capabilities to their line of products
Solar Atmospheres of Western Pennsylvania is also undergoing an over 5 million dollar expansion, adding:

1. large capacity (84" OD x 24 ft. long x 50,000 lbs. Capacity) vacuum furnace identical to their first "world's largest vacuum furnace"

2. 50,000 square feet of new building space to house the furnace and 5,000 square feet of additional office space.

3. Here is an illustration of the furnace
Solar Atmospheres of Western Pennsylvania
Tico Titanium, headquartered in New Hudson Michigan, will invest nearly 10 million dollars over the next three years in:

(1) a new warehouse and office in Texas
(2) additional sawing and shearing equipment
(3) adding a third water-jet cutting operation
Titanium Industries headquartered in Parsippany, New Jersey has over the past 18 months and continuing for the next 12 months invested in:

(1) a new 90,000 square foot facility
(2) totally upgraded its computer system
(3) added new material handling equipment
(4) added and will add new billet and plate saws
Ulbrich Stainless Steels and Special Metals, Inc. by volume produces primarily precision strip and foil in stainless steel, but also makes the same products in titanium. The company is investing 20 million dollars into:

1. updated gauging control on its precision rolling equipment
2. higher rolling speed capability to increase production on 4-High and Z mills
3. high speed cleaning and brushing line
4. continuous strip anneal
5. stretch and bend leveling capability
6. high speed precision slitters
7. the building space to house this equipment
Finally, TechSpec, Inc. (aka TSI Titanium) of Derry, Pennsylvania has invested over 3 million dollars in the past two years in

1. large diameter bar turning equipment for machining bars and billets from 3" to 12" diameter
2. custom built #3 Medart bar peeler for .500" diameter to 3" diameter finished bars with integrated laser micrometers
3. a three-head Hetran continuous bar polisher with integrated laser-micrometer and stenciling capabilities
4. over 18,000 square feet of new building and office space to house these items which more than double finishing capacity
5. Future rolling mill expansion will increase production by over 50%
TSI Peeler
TSI Polisher
So, back to the initial question - what is the titanium industry doing to be self sufficient? - A lot!!

In addition to Timet's and ATI's announced investments in plant expansion and upgrades, other member companies both announced and anonymous (per my survey) total

(1) Timet                     38,000,000+
(2) ATI                      100,000,000+
(3) Other ITA Companies     170,000,000+
TOTAL investments            308,000,000+
Titanium
Choose It
Use It
but make sure you can
Produce It