Specializing in Titanium and Super Alloys offering high strength and corrosion resistance materials necessary for the most challenging oil and gas environments

Titanium Alloy and Products

- **Ti 6Al-4V and Ti 6Al-4V EII Bar, Billet and Plate**
  - .125” (3mm) diameter up to 14” (355mm) diameter
  - Precision ground available, please inquire other sizes and diameters.

- **Brake Press Formed and Welded Titanium Pipe**
  - Available up to 20’ RL (6 meters)
  - .500” (13mm) NPS to 4” (100mm) NPS
  - Schedule 10S, 40S, 80S and custom.

- **Ti 6Al-2Sn-4Zr-6Mo Bar and Billet**
  - Typically 20’ RL (6 meters) (inquire for longer)
  - 1” (25mm) NPS to 36” (900mm) NPS
  - Schedule 10S and 40S.

- **Roll Formed and Welded Titanium Pipe (Gr 2)**
  - Available up to 20’ RL (6 meters)
  - .500” (13mm) NPS to 4” (100mm) NPS
  - Schedule 10S, 40S, 80S and custom.

- **Fasteners**
  - Available in a variety of shapes and sizes.

- **Seamless Titanium Pipe**
  - Available up to 20’ RL (6 meters)
  - .500” (13mm) NPS to 4” (100mm) NPS
  - Schedule 10S, 40S, 80S and custom.

- **ASTM Standards**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>B265</td>
<td>Ti and Ti alloy strip, sheet and plate.</td>
</tr>
<tr>
<td>B338</td>
<td>Seamless and welded Ti and Ti alloy tubes.</td>
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<tr>
<td>B861</td>
<td>Seamless pipe.</td>
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<tr>
<td>B862</td>
<td>Welded pipe.</td>
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<tr>
<td>B348</td>
<td>Ti and Ti alloy bars and billets.</td>
</tr>
<tr>
<td>B363</td>
<td>Seamless and welded Ti and Ti alloy wrought fittings.</td>
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<tr>
<td>B367</td>
<td>Ti and Ti alloy castings.</td>
</tr>
<tr>
<td>B381</td>
<td>Ti and Ti alloy forgings.</td>
</tr>
<tr>
<td>B863</td>
<td>Ti and Ti alloy wire.</td>
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</tbody>
</table>

Ti Grades – 1-4 are pure Ti. Pure Ti is used due to its high corrosion resistance and alloyed because of its high strength to weight ratio.

- **Gr 5** – Most common Ti alloy. High strength and high heat resistance. (Aerospace and Oil & Gas, Medical)
- **Gr 6** – Superior corrosion resistance in reducing and oxidizing environments. (Chemical Industry)
- **Gr 9** – High strength and corrosion resistance. (Hydraulic piping)
- **Gr 23** (6-4EII) – Greater ductility and fracture toughness compared to Gr 5.

22 Ti
Titanium 47.867

Additional Oil and Gas Alloys available. Please inquire for other alloys such as K-500, 13-8, and 15-5.

28 Ni
Nickel 58.6934

Nickel Based Alloy Products

718 Bar and Billet
- Available .500” (13mm) – 10.0” (250mm) diameter (inquire for other sizes)
- AMS, ASTM, NACE and OEM specifications

625 Bar and Billet
- Available .500” (13mm) – 10.0” (250mm) diameter (inquire for other sizes)
- AMS, ASTM, NACE and OEM specifications

ATI S240® Bar and Billet (Superior Strength to 13-8)
- A martensitic precipitation-hardening stainless steel with tensile strength of 240 ksi (1,655 MPa), high fracture toughness, and good corrosion and stress corrosion cracking resistance. Available in the solution annealed and solution annealed and aged condition.

<table>
<thead>
<tr>
<th>Property</th>
<th>ATI S240®</th>
<th>ATI S240®</th>
<th>13-8</th>
<th>13-8</th>
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<tbody>
<tr>
<td></td>
<td>H950</td>
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<tr>
<td>UTS</td>
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<td>1515 MPa</td>
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<td>1593 MPa</td>
<td>205 ksi</td>
<td>1415 MPa</td>
<td>215 ksi</td>
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