

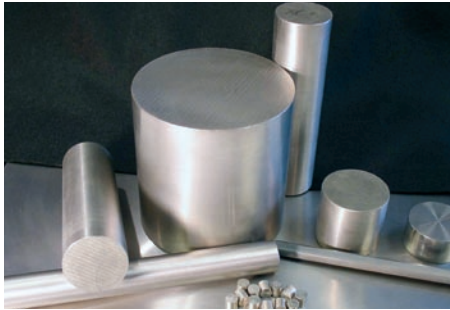
**High-Purity Metals**

**Honeywell**



**Honeywell Titanium  
Mill Products**

# Honeywell High-Purity Titanium Mill Products



Electron-Beam Melted Wrought Forms

## OVERVIEW

Honeywell is an ISO9001/14001 certified, industry-leading producer of high purity titanium for specialty applications. In addition to ultra-high purity titanium for semiconductor applications, we also offer ultra-low interstitial commercially pure titanium grades well-suited for wire drawing and medical device design and manufacture.



Fombell, Pennsylvania Facility

## APPLICATIONS

- Fine Wire Drawing
- Deep Drawing
- Medical Staples
- Precision Alloys
- High Purity Alloys
- PVD Coatings

## BENEFITS

- Unique mechanical properties
- Improved formability
- Enhanced deep drawing
- Low inclusions
- Low interstitial content
- Low metallics content
- Corrosion resistance

## PROPERTIES

**99.9+400** illustrates how exhaustive control of interstitial levels (oxygen, nitrogen and carbon) can result in material exhibiting industry standard minimum tensile strength and yield strength coupled with enhanced formability.

**99.9+250** is a unique grade of material ideally suited for applications where ultra-low interstitial content (<250 PPM oxygen), high metallic purity (<200 PPM total metallic impurity) and improved formability are required.

**99.995+150** is electronics-grade titanium with primary application in semiconductor and ultra-high purity alloys.

CHEMICAL PURITY	N	C	H	O	Fe	Impurity Content	Overall Purity
<b>99.995+150</b>	50	30	10	150	10	50	100.00%
<b>99.9+250</b>	50	40	10	250	20	200	99.98%
<b>99.9+400</b>	50	50	10	400	50	300	99.97%
<b>CP Grade 1</b>	300	1000	150	1800	2000	5000	99.5%

Typical maximum values in ppm

**FORMS** Ingot, Billet, Hot-rolled coil, Centerless ground bar



RESPONSIBLE CARE<sup>®</sup>  
OUR COMMITMENT TO SUSTAINABILITY

## Honeywell Electronic Materials

195 Hartzell School Road

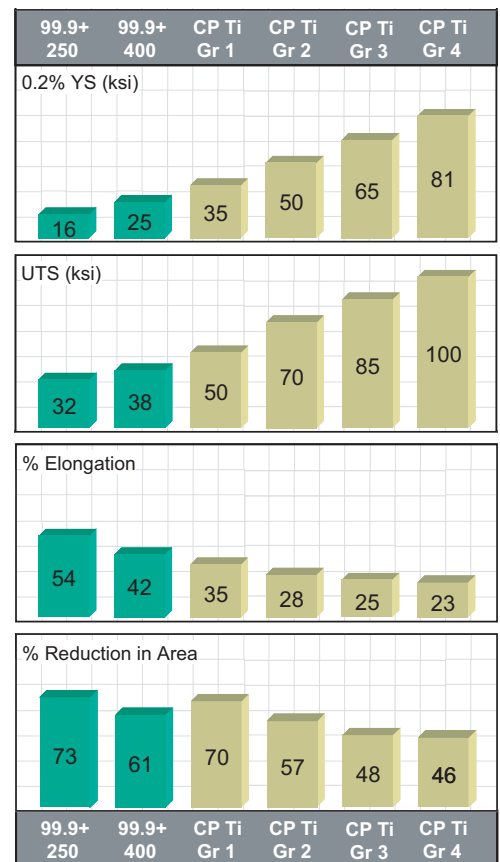
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[www.honeywell.com/sm/em](http://www.honeywell.com/sm/em)

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## MECHANICAL PROPERTIES



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