

# Vested Metals Market Update



September 2021 Issue

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## Metal Price Index Rising

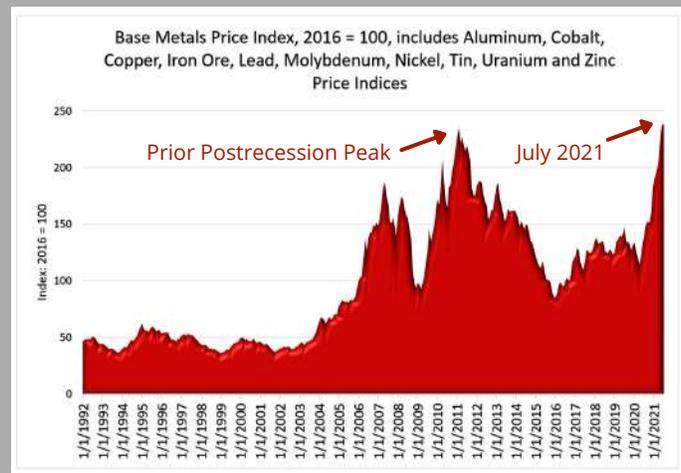
*Surge Comparable To Prior Post-Recession Rebound*

A rapid surge in global demand combined with supply chain disruptions have caused sharp price increases in several commonly used industrial metals. As seen in the below industrial metals index chart, the current surge in prices is comparable to prior peaks achieved after the 08/09 recession.

### Individual Metal Price Trends

Copper prices have surpassed prior peaks going back to 1980 due to long-term demand growth from electric vehicles combined with a sharp rebound in industrial demand (see page 2 for chart).

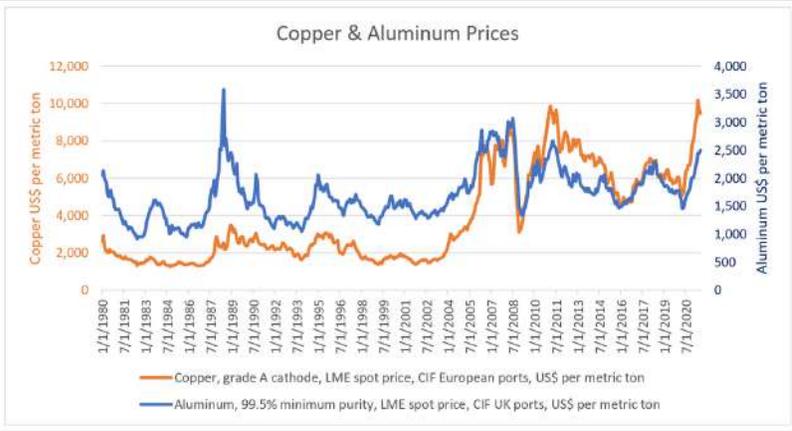
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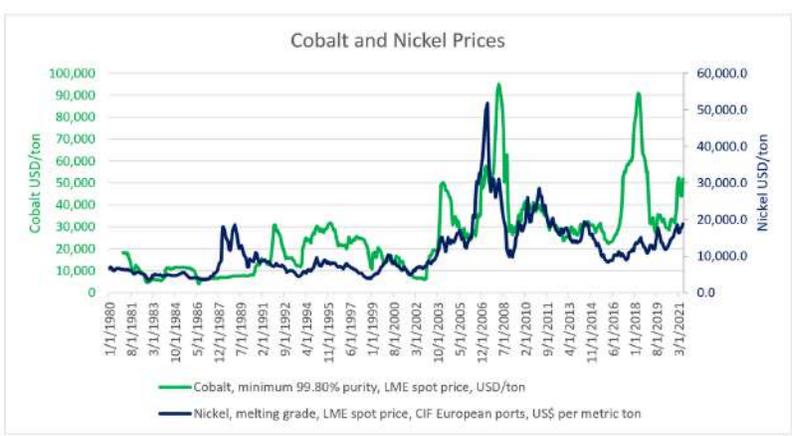
### Vested Metal's 8(a) Certification Can Help Your Business Access Significant Government Contract Revenue

The federal government allocates billions in contracting dollars each year to 8(a) certified companies. Through joint ventures with Vested Metals (teaming agreements) companies that do not have this certification can compete for 8(a) contracts.

Vested Metals is an experienced government contractor that is now 8(a) certified and is looking for teaming agreement partners. Please contact us to learn more. Also, see our [Capabilities Statement](#) for additional details related to Vested Metal's teaming agreement value proposition.



Aluminum has surged although prices are well below prior cycle peaks. The World Bank expects aluminum prices to remain elevated over the long-run as China (56% of refined aluminum production) limits supply to manage green house gas emissions. Note that approximately 80% of China's aluminum is produced using coal.



Cobalt prices are well below levels seen in 2018/2019 despite strong battery demand in part because Tesla announced plans to stop using cobalt in its batteries. Despite this move, Tesla and several other major electric vehicle producers still use significant amounts of cobalt in current models.

Nickel prices have increased in recent months both due to rising stainless steel demand (70% of demand) and long-term growth in electric vehicle use (<10% of demand but growing). Some analysts expect nickel prices to fall in 2022 due to significant production coming online in Indonesia.



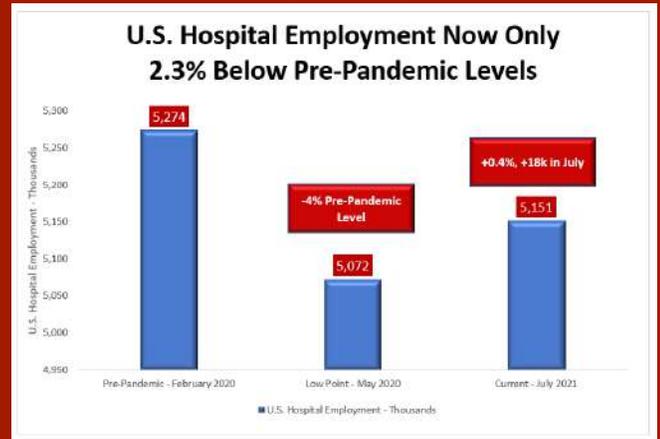
## Insurance Provider United Healthcare Sees Continued Improvement In Health Care Activity

July 15th, 2021 earnings conference call - United Health Care (UHC) Q1 health care trends have returned to normal levels.

UHC's commercial business is outperforming its public business. Additionally, vaccination rates continue to be positively correlated with health care utilization.

## Healthcare Activity News and Hospital Employment Trends

Telehealth usage down to 13-17% of health care activity versus 32% during the height of the pandemic.



"Some Analysts Expect Nickel Prices To Fall In 2022 Due To Significant Capacity Coming Online In Indonesia"

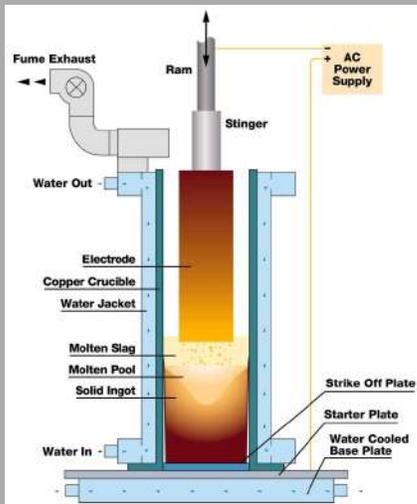
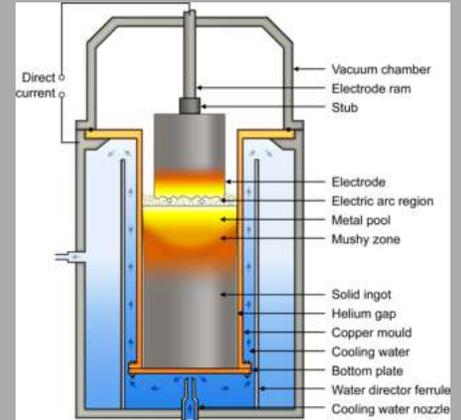
# Metallurgical Minute

By Fred McMann, Metallurgist

## ***Melting Processes of Specialty Metals for Medical Instrumentation and Implant Alloys***

A majority of Specialty Steel alloys get their start from the steel mill scrap yard. Divided and identified scrap material is loaded into an Electric Arc Furnace (EAF). Carbon electrodes are used to strike an arc so to speak, with the scrap remains and liquefy the heat. The result is a heat of metal that is similar but not exact to the final metal specifications regarding the chemistry. Typical size and volume of the EAF heats are approximately 40 to 120 K pounds. It all depends on the equipment at each individual company and mill.

The EAF heats can be poured into divided ingots for feeder material in more advanced melting processes like ESR, VIM (Vacuum Induction Melting) and VAR (Vacuum Arc Remelting).



Most commonly the EAF heat is ladle poured into a waiting Argon Oxygen De-Carburization Vessel, called AOD for short. It is here the liquid metal is further refined regarding chemistry and particularly Phosphorus, Sulfur, Carbon, Silicon and Nitrogen. The AOD material can be then fed into a Continuous Caster (CC) or poured into Ingots.

If you hear the term “air melted” for the melt quality it normally comes from AOD melted stock. European mills normally use what is called Vacuum Degassing in lieu of AOD melting. Essentially they yield the same quality air melted stock. Many surgical components and instruments are manufactured from Vacuum Degassed or AOD melt quality material. 17-4PH, 304L, 420, and 440-C are several of the alloys that are further crafted into Medical quality instruments.

## ***Additional Element Pricing Trends***



## **What We're Reading**

Iron ore is in a bull market — and it won't run out of steam soon, says Goldman Report - iPhone 14 Pro models to use titanium alloy chassis

# Vested Metals Inventory Update

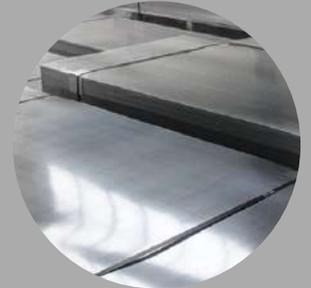
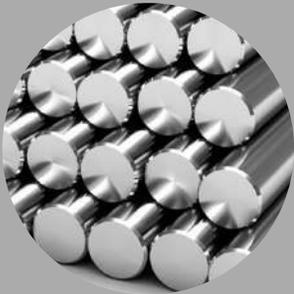
## Featured Items

### 17-4 H900 Stainless Bar:

- Used in applications requiring high strength and a moderate level of corrosion resistance.
- Principal applications include surgical instruments and turbine blades.
- Stocked in a pre-hardened condition to save downstream time for aging final parts.

### 6Al-4V ELI Titanium Plate:

- The ELI (extra low interstitials) variant has moderately high tensile strength, good fatigue strength, and high resistance to general corrosion.
- Principal applications include medical implants, jet engine, rocket components and automotive components.



## In Stock - Ready To Ship

### Titanium

- 6Al-4V ELI Plate & Round Bar
- 6Al-4V Plate & Round Bar

### Stainless

- 316 LVM Flat & Round Bar
- 420 Mod/X15TN (UNS 42025) Round Bar
- 455 Round Bar
- 17-4 & 17-4 H900 Round Bar, Flat, Sheet & Plate
- C465 Round Bar
- CCM Round Bar

## Waterjet Cutting

- Highly versatile - Waterjet machines can cut most metals up to 18 inches thick
- Tight tolerances - Some material/thickness: +0.0625 IN, minimum tolerance: +0.040 IN
- Clean edges, no burns
- For in house material we can fill orders as quickly as 2 days

[Vested Metals Line Card](#)



## What We're Reading

[Elective surgeries are being delayed again. Doctors want to handle it differently this time](#)

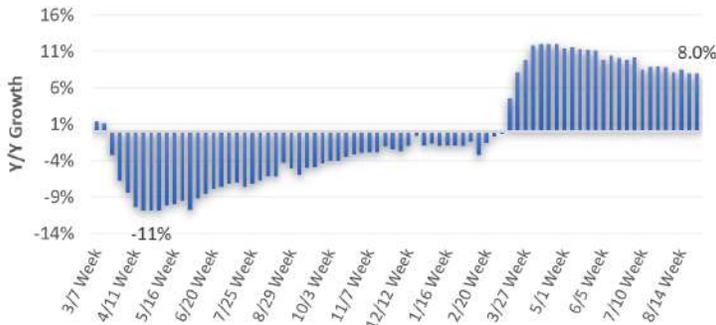
# Macro Trends

## High Frequency Economic Indicators Of Interest

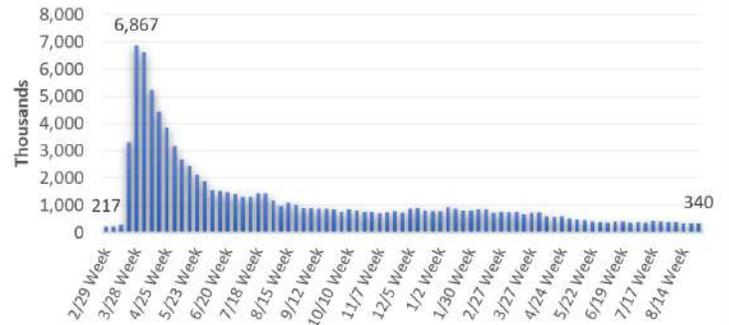
The Weekly Economic Index is composed of ten daily and weekly indicators of real economic activity and is directionally comparable to U.S GDP growth.

Initial jobless claims represent a first-time filing by an unemployed individual.

### Broad Based Index Benefiting From Easy 2020 Comps



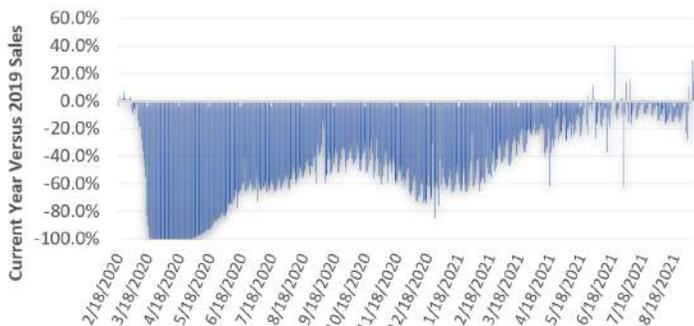
### Weekly Initial Jobless Claims Near Pre-Pandemic Low



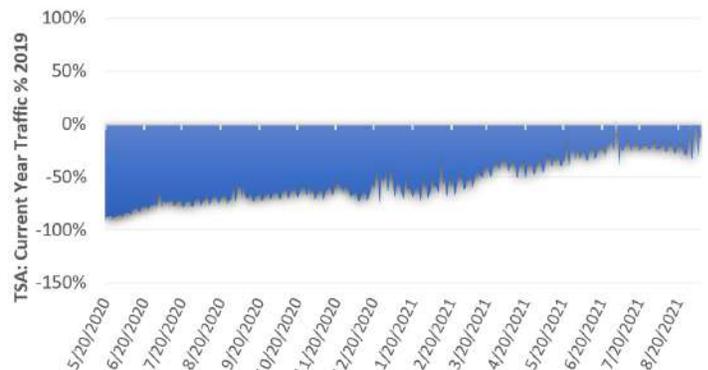
OpenTable's "State of the Industry" report shows Y/Y growth in seated diners at restaurants on the OpenTable network across channels: online reservations, phone reservations, and walk-ins.

TSA checkpoint data measures air travel volume in the United States.

### Open Table Data Shows Mixed Signals Due To Delta Variant



### Air Traffic Volume Recovery Continues



## What We're Reading

[How the pandemic killed a record number of rural hospitals](#)



## Vested Metals Overview

Vested Metals International is a certified customer centric metals supplier focused on locating hard to find metals. We provide various grades of titanium, stainless steel and a range of other metals. Industries we serve include medical, industrial, defense and aerospace.

Vested Metals is also an SBA 8(a) certified organization and is open to teaming agreements that can expand a company's ability to compete for government contracts.

## Contact Vested Metal's Leadership Team To Learn More



### VIV HELWIG

**President**

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Viv founded Vested Metals in 2014 and has 10+ years of experience in the metals industry.

Under Viv's leadership, Vested Metals earned a spot on Inc. Magazine's 5000 fastest growing companies list three years in a row (2019 and 2020). In 2019, the Jacksonville Business Journal named Viv to its "Ultimate CEO" list.

He earned his bachelor's degree from Flagler College where he was also awarded an honorary "Doctor of Laws" degree.



### JOHN PULLIAM

**Chief Operating Officer**

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John is one of Vested Metal's founding investors and has 10+ years of experience as a financial professional including 5 years of experience successfully managing a hedge fund.

He received his MBA from Columbia Business School and has experience investing in commodities including copper, oil & gas, and precious metals.



### RIC SNYDER

**Director of Sales & Marketing**

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Ric has 13 years of industry experience with a focus on orthopedic bar. As a product line manager he developed significant material and technical expertise in a range of raw material products.

He received his MBA from Indiana Wesleyan University and his BA from Indiana University-Purdue University at Fort Wayne.



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