

Raw Material Costs Increased 20.9% YOY in 2Q26

After increasing 18.5% year-over-year in the first quarter, raw material costs increased 20.9% in the second quarter, driven primarily by an increase in copper/brass and thermoplastics. As reported earlier in the year, although many were under the assumption that energy prices in the form of crude oil would start to decline or at least level off in 2026, this has not occurred. In fact, the opposite has taken place. Beginning right around the start of the second quarter of 2026, crude oil prices began rising, breaking the \$100 a barrel price in early September, something that has not occurred since Russia invaded Ukraine in the summer of 2022.

With winter quickly approaching, the increase in crude oil prices will drive up not only the price of thermoplastics, used extensively in connector housings, but also production and overhead costs in the form of energy. The energy to run manufacturing equipment and heat plants, as well as the energy necessary to fuel the transportation of completed products. With the Strait of Hormuz blocked, and the East-West pipeline in Saudi Arabia damaged and in some cases even temporarily closed, it is uncertain when normal trade will return or when crude oil prices will stop rising and level out.

In addition to the continuing conflicts in the middle east affecting the price of crude oil, the transporting of other key materials through the Strait of Hormuz are also being restricted and closely managed by Iran. This has caused a drastic decline in commercial shipping through the strait, with shipping levels falling to historic lows. The most recent figures show that prior to Iran's attempted blockages, approximately 20% of global petroleum liquids, over 20% of global liquefied natural gas (LNG), and a large percentage of non-oil raw materials like sulfur, fertilizers, graphite feedstocks (used to manufacture synthetic graphite for EV battery anodes), aluminum, and helium all passed through the strait.

With raw materials like gold, copper/brass, steel, and thermoplastics derived from petroleum and natural gas, accounting for roughly 75% of the cost of materials in a connector, it is not surprising the role these materials play in establishing connector pricing. The following table shows the year-over-year change in 2Q26 for each material. Gold, which had climbed steadily since the second half of 2024, declined, dropping from a year-over-year increase of 70.9% in the first quarter of 2026 to a 34.1% increase in the second quarter of 2026. Based on figures from Trading Economics, in 2026, gold reached a high of \$5,419.8 on January 28th and a low on July 16th of \$3,976.2, a decline of -26.6%. As of the close of business on September 16th, gold was \$4,263.8, a decline of -21.3% from January's high. With most connector manufacturers recognizing gold as a significant risk factor in their financial forecast for 2026, many have implemented price increases on selective products, while others are passing increased gold costs on through market-linked pricing contracts, shifting the price risk to the customer.

Gold is not the only raw material that is causing connector manufacturers to search for new ways to reduce manufacturing costs. The price of copper has also risen significantly over the last year. Unlike gold though, which has declined, the price of copper has increased steadily. Price per pound figures as quoted by Trading Economics show that on September 18, 2025, copper was \$4.5345 per pound. By September 16, 2026, the price of copper had jumped to \$6.4315, an increase of +41.8% in one year. Note, it is important to remember Bishop uses a monthly average when calculating percent change by material, so changes quoted here may be less than those reflected in the tables.

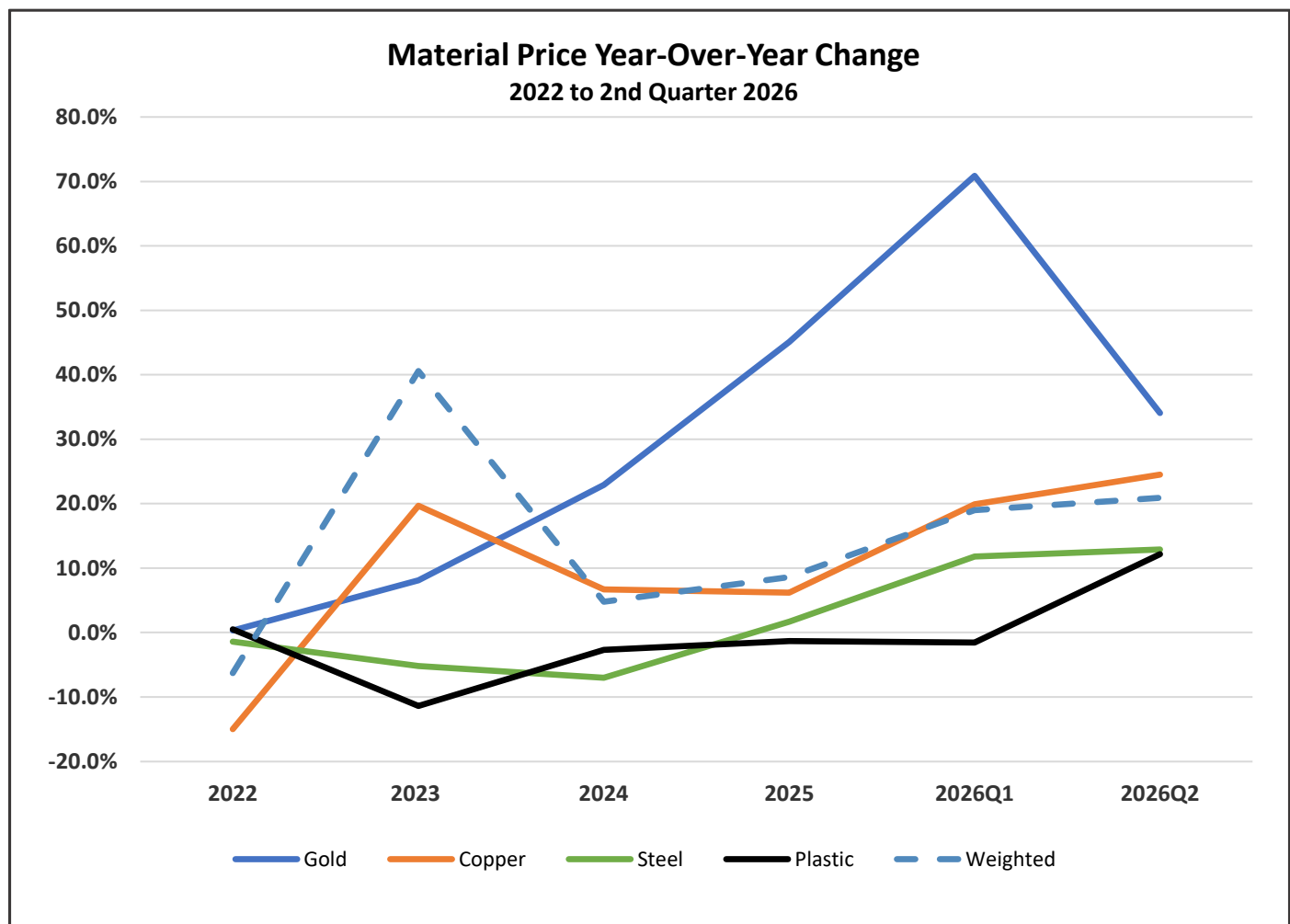
In reference to the use of gold and copper in price sensitive markets like automotive, consumer, and energy distribution (industrial), manufacturers are using alternatives like aluminum or copper-clad aluminum, or evaluating ways to reduce the gold content, by using alternative materials like palladium-nickel alloys with a gold flash, tin or silver. In high reliability applications like military and aerospace environments, platinum and rhodium are being looked at because of their extreme hardness and resistance to corrosion.

Change in Material Cost 2Q2026 Year-Over-Year

Material	2Q26 YOY	Usage Weight	2Q26 Weighted
Gold	34.1%	13.3%	4.5%
Copper/Brass	24.5%	46.7%	11.4%
Steel	12.9%	6.7%	0.9%
Thermoplastics	12.1%	33.3%	4.0%
Total Change	20.9%	100.0%	20.9%

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The following chart shows the YOY change in the cost of these materials over the last four years and for the first two quarters of 2026.



On a sequential or quarter-over-quarter (QOQ) basis, material costs increased +2.5% when comparing 1Q2026 with 2Q2026. The weighted total cost for connectors on a sequential basis increased +4.6% in the second quarter of 2026, significantly lower than last quarter, where on a sequential basis, total weighted cost increased +7.8%.

Change in Material Cost Quarter-Over-Quarter 1Q2026 versus 2Q2026

Material	2Q26 QOQ	2Q26 Weighted
Gold	-11.0%	-1.5%
Copper/Brass	4.2%	2.0%
Steel	5.6%	0.4%
Thermoplastics	11.3%	3.8%
Total Change	2.5%	4.6%

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If we study 2Q2026 from a year-to-date perspective, as the chart below shows, total raw materials increased +22.6% year-to-date, and +19.7% from a weighted perspective, with the greatest increase, as would be expected, seen in gold, where prices increased +50.6%, down from 53.5% as seen in the first quarter. This strong increase, coupled with the increase of +22.2% in copper/brass, up from +9.1% in the first quarter, and +12.4% in steel, up from 8.8% in the first quarter, were the force behind the double-digit YTD increase and double-digit weighted increase.

Change in Material Costs Year-to-Date 2Q2026

Material	2Q26 YTD	Usage Weight	2Q26 Weighted
Gold	50.6%	13.3%	6.7%
Copper/Brass	22.2%	46.7%	10.4%
Steel	12.4%	6.7%	0.8%
Thermoplastics	5.2%	33.3%	1.7%
Total Change	22.6%	100.0%	19.7%

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Bishop Comments

Bishop continues to maintain that if a high level of geopolitical uncertainty remains, price volatility of many raw materials and especially of precious metals like gold, silver and even copper, become a key contributing factor of fluctuating material costs. Although the price of gold did decline from the first to the second quarter of 2026, the rapid and strong increase in copper, created due to a supply shortage, fear of tariffs, and booming demand, caused the year-over-year increase to remain in double-digit territory. In North America, the Federal Reserve did recently announce rate hikes, but it is anticipated that gold will continue to face short term pressure, as higher interest rates are inclined to make other options more attractive. One additional challenge is that the rate hike will likely boost the U.S. dollar, which is how precious metals like gold and silver are priced, making them more expensive for buyers using other currencies.

It does need to be noted that wages are also a key component of manufacturing costs, but one that is very difficult to track. Previously when wages in a particular territory became too high, manufacturing was switched to a lower cost region. Unfortunately, moving a manufacturing line or even establishing a new line can be an expensive endeavor, with many manufacturers choosing instead to automate processes. It has already been proven that in many instances, automation keeps efficiency up, allowing for continuous 24-hour operations, quicker picking, packing, and sorting, and fewer mistakes. Automation also in the case of repetitive tasks, reduces training time, increases accuracy, and enables more efficient material management.

Based on information like what has been previously discussed, Bishop believes raw material prices will increase moderately in 2026, probably in the 5% to 15% range, and could potentially increase in early 2027. Previously, it was anticipated that the price of gold would be the greatest contributing factor, but that has shifted, with gold still a key factor, but the price of copper and thermoplastics also weighing heavily on connector prices.

Conclusion

The connector industry is experiencing the perfect storm. Sales are at historical highs, and connector companies have a legitimate reason for increasing prices. The two combined, higher demand and higher prices will result in the industry's best year ever.

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