

June Sales Up +33.0% Sales Reach \$19B for the Second Quarter in a Row

Regional Performance:

Worldwide year-to-date sales increased +32.7%.

At +41.3% YTD, Europe is exhibiting the highest growth. Japan trails the industry at +22.6%. All regions have double-digit growth YTD. Comparisons to prior year were quite easy in the first half of 2021.

Europe's YOY increase in sales at +45.6% is the highest YOY growth in June. ROW has the highest YOY growth in bookings at +80.4%

2021 Currency Impact:

The industry grew at +26.7% YTD in June in local currencies versus +32.7% in USD.

Fred Krehbiel: The influential executive brought a love of international travel and culture to his work with the company, and in doing so, he expanded Molex's reach to the world.

Industry Outlook - 2021:

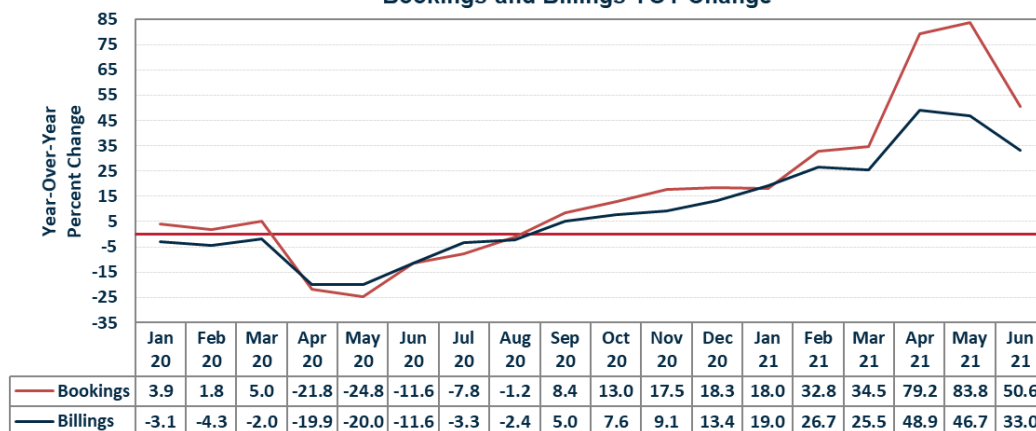
Connector industry demand soared in the first half. Expecting full year to grow +17.7% over 2020.

Merger and Acquisition Services Buy & Sell-Side

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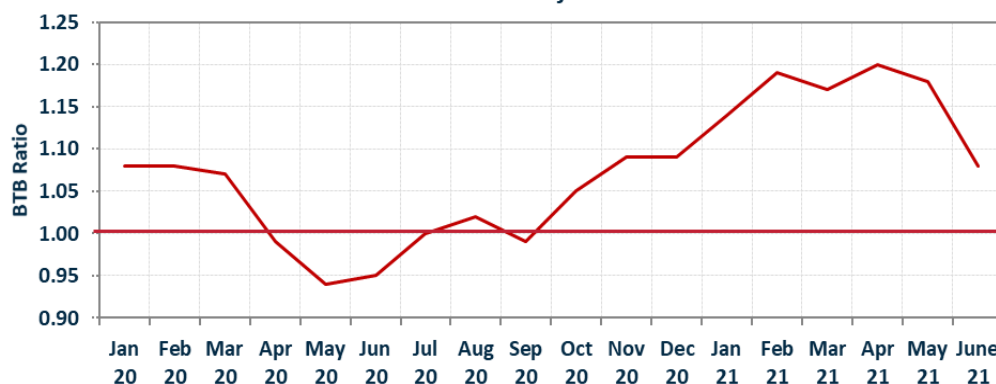
June bookings were up +50.8% from 2020. Sales for the month were up +33.0% YOY. Sequentially, bookings and billings were down from May. Year-to-date sales are up 32.7%. 2Q21 sales grew 42.5% over prior year.

Bookings and Billings YOY Change



The book-to-bill ratio in June was 1.08 as orders began to normalize a bit with harder comparisons. YTD, the book-to-bill ratio is 1.11.

Connector Industry Book-to-Bill

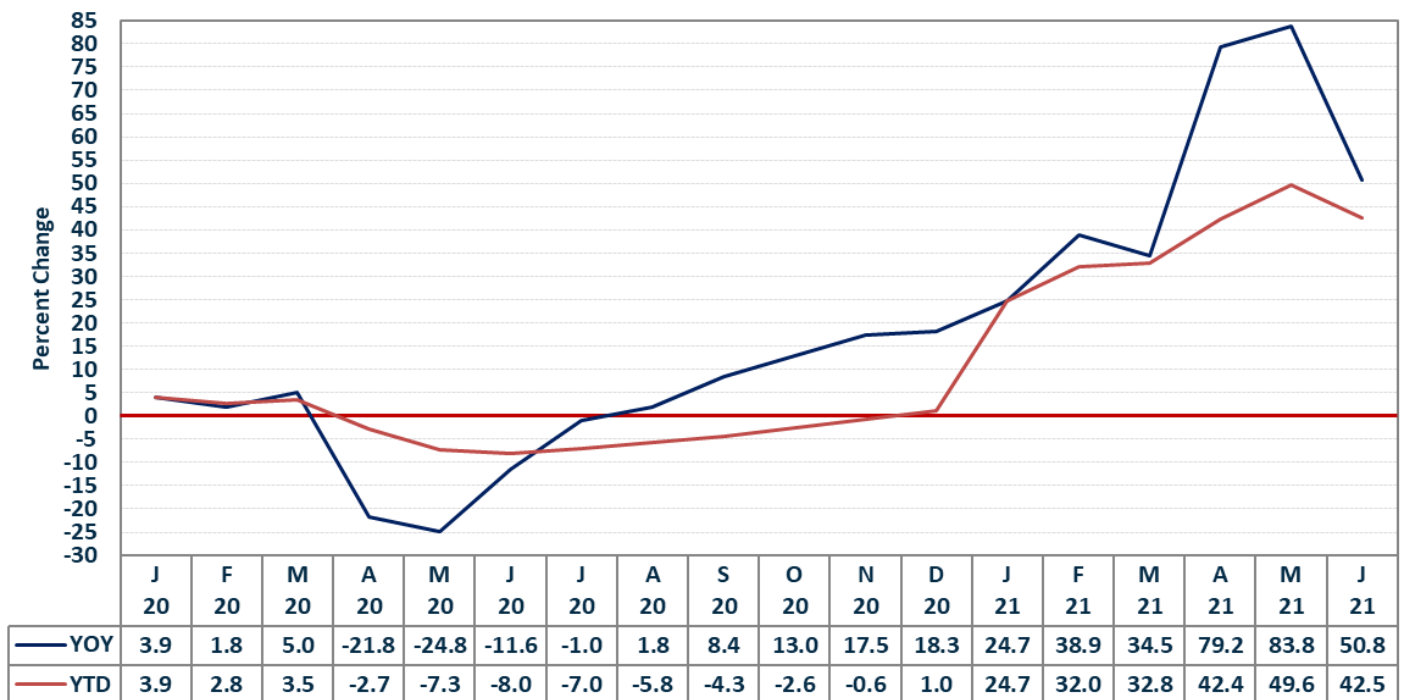


Booking Highlights and Conclusions

Sequential, Year-Over-Year, and Year-To-Date Bookings Percentage Change – 2019/2020/2021

Month	Sequential			Year-Over-Year			Year-To-Date		
	2019	2020	2021	2019	2020	2021	2019	2020	2021
Jan	1.0%	0.2%	2.3%	-3.7%	3.9%	24.7%	-3.7%	3.9%	24.7%
Feb	7.7%	5.5%	17.7%	-6.2%	1.8%	38.9%	-5.0%	2.8%	32.0%
Mar	-4.5%	-1.4%	-3.5%	-6.8%	5.0%	34.5%	-5.6%	3.5%	32.8%
Apr	-2.2%	-27.2%	1.7%	-8.8%	-21.8%	79.2%	-6.4%	-2.7%	42.4%
May	6.9%	2.9%	5.2%	-7.0%	-24.8%	83.8%	-6.5%	-7.3%	49.6%
Jun	-8.9%	7.0%	-12.3%	-9.0%	-11.6%	50.8%	-6.9%	-8.0%	42.5%
Jul	2.8%	15.2%		-8.4%	-1.0%		-6.9%	-7.0%	
Aug	7.8%	10.7%		-5.2%	1.8%		-6.6%	-5.8%	
Sep	-7.1%	-0.9%		-4.3%	8.4%		-6.4%	-4.3%	
Oct	0.6%	4.7%		-6.6%	13.0%		-6.4%	-2.6%	
Nov	10.8%	15.2%		-1.9%	17.5%		-6.0%	-0.6%	
Dec	-7.8%	-7.2%		4.6%	18.3%		-5.2%	1.0%	

Bookings - YOY and YTD



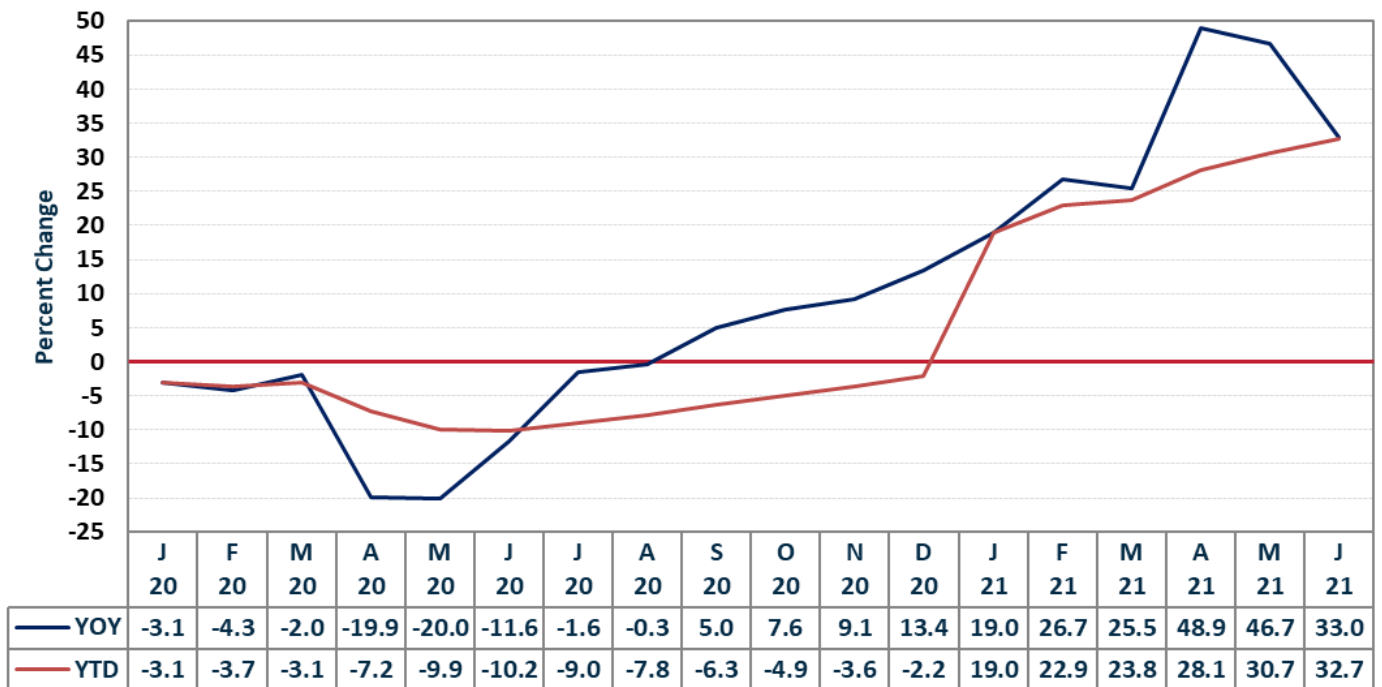
- June bookings rose +50.8% year-over-year.
- Orders decreased -12.3% sequentially.
- The book-to-bill ratio for June was 1.08 and 1.11 YTD. The book-to-bill ratio is starting to normalize a bit as the comparisons become more difficult.

Billing Highlights and Conclusions

Sequential, Year-Over-Year, and Year-To-Date Billings Percentage Change – 2019/2020/2021

Month	Sequential			Year-Over-Year			Year-To-Date		
	2019	2020	2021	2019	2020	2021	2019	2020	2021
Jan	0.3%	-2.8%	-1.6%	-1.0%	-3.1%	19.0%	-1.0%	-3.1%	19.0%
Feb	6.8%	5.5%	12.6%	-2.5%	-4.3%	26.7%	-1.8%	-3.7%	22.9%
Mar	-3.2%	-0.9%	-1.1%	-2.4%	-2.0%	25.5%	-2.0%	-3.1%	23.8%
Apr	-3.7%	-21.2%	-1.5%	-5.4%	-19.9%	48.9%	-2.8%	-7.2%	29.3%
May	9.0%	8.8%	7.1%	-4.3%	-20.0%	46.7%	-3.1%	-9.9%	32.7%
Jun	-4.2%	5.8%	-3.8%	-4.2%	-11.6%	33.0%	-3.3%	-10.2%	32.7%
Jul	-2.0%	9.0%		-3.1%	-1.6%		-3.3%	-9.0%	
Aug	7.0%	9.0%		-4.9%	-0.3%		-3.5%	-7.8%	
Sep	-2.9%	1.7%		-3.7%	5.0%		-3.4%	-6.3%	
Oct	-4.1%	-1.0%		-6.9%	7.6%		-3.7%	-4.9%	
Nov	9.8%	11.4%		-3.4%	9.1%		-3.7%	-3.6%	
Dec	-11.2%	-7.7%		-0.1%	13.4%		-3.8%	-2.2%	

Billings - YOY and YTD

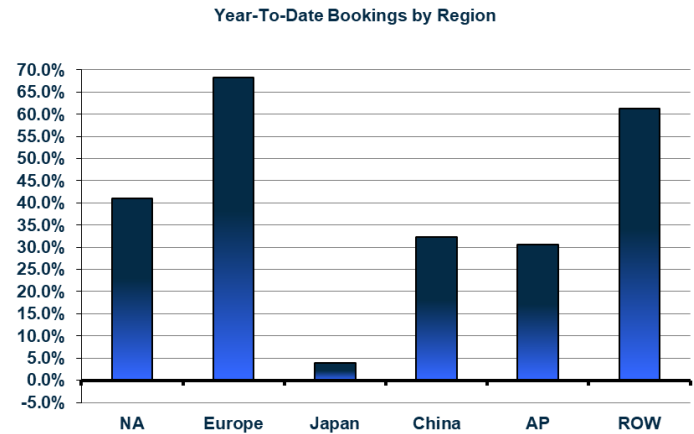


- June billings grew +33.0% YOY.
- Billings are up +32.7% for the year.
- Sequentially billings decreased -3.8%.
- 2Q21 sales grew 42.5% over prior year.

Regional Performance

June 2021 Bookings

Region	Sequential	YOY	YTD
NA	-1.3%	48.9%	41.0%
Europe	-14.1%	67.2%	68.2%
Japan	-28.9%	4.8%	3.9%
China	-14.4%	44.3%	32.4%
AP	-20.0%	51.6%	30.6%
ROW	0.5%	80.4%	61.3%
Total	-12.3%	50.6%	42.5%

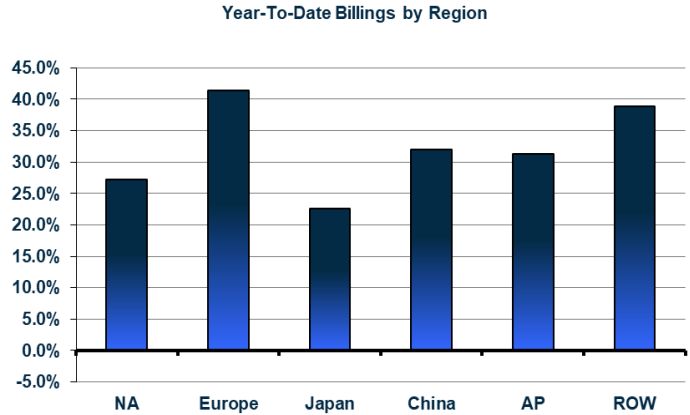


- June bookings increased +42.5% YTD. Bookings performance in June continued at a healthy pace.
- Year-over-year, all regions experienced double-digit growth, with ROW outpacing Europe and Asia Pacific.
- Year-over-year comparisons through the first half of the year have been relatively easy because COVID-19 was still impacting orders at this time last year.

Regional Performance

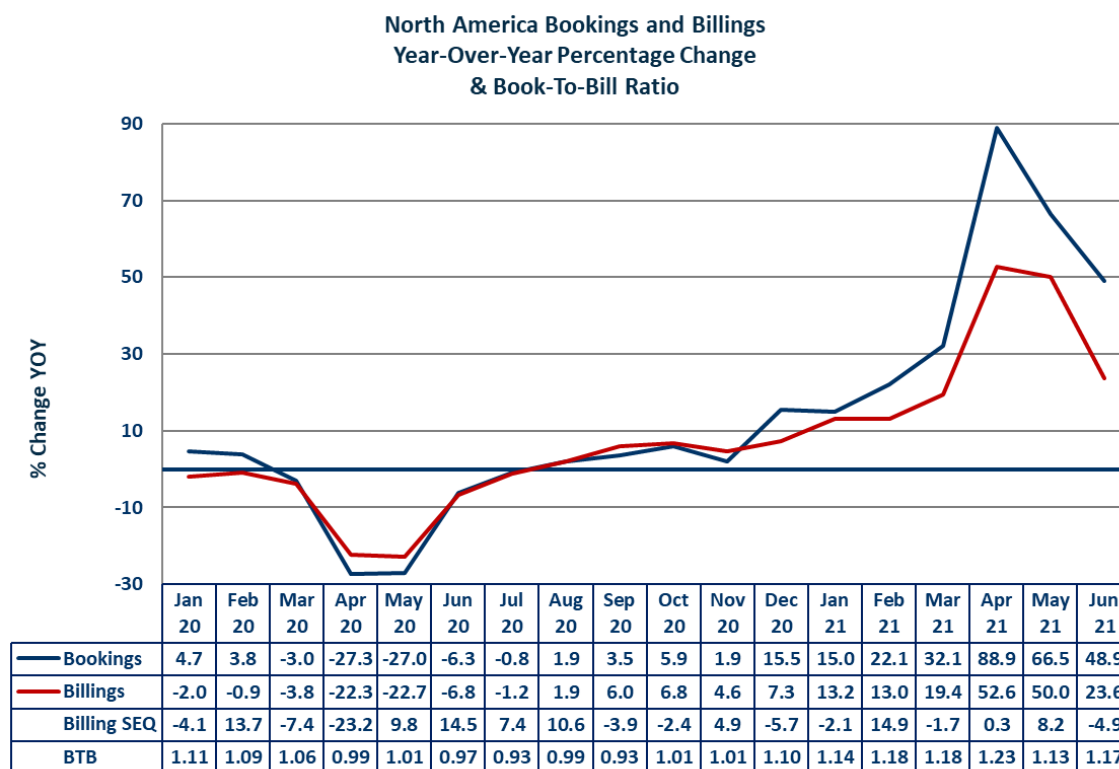
June 2021 Billings

Region	Sequential	YOY	YTD
NA	-4.9%	23.6%	27.2%
Europe	-6.4%	45.6%	41.3%
Japan	2.0%	26.6%	22.6%
China	-2.8%	28.0%	32.0%
AP	-1.1%	39.9%	31.4%
ROW	-1.4%	41.4%	38.9%
Total	-3.8%	33.0%	32.7%



- June connector sales growth increased +33.0% YOY as demand for electronic products and automobiles continued to accelerate.
- Year-over-year, all regions experienced double-digit growth, with Europe growing at the quickest pace of any region at +45.6%, followed by ROW.
- Sequentially, sales decreased in all regions except Japan.
- While 2021 should see strong sales growth, head-winds still prevail in the third quarter, especially in the automotive and telecom markets where semiconductor shortages will put downward pressure on connector sales growth.
- The third and fourth quarters sales will also face the challenge of harder comparisons as the connector industry rebounded strongly in the second half of 2020.

North America: The following chart displays the year-over-year percentage change in bookings and billings for the last 18 months. The monthly book-to-bill (BTB) ratio is also displayed.



North America Performance

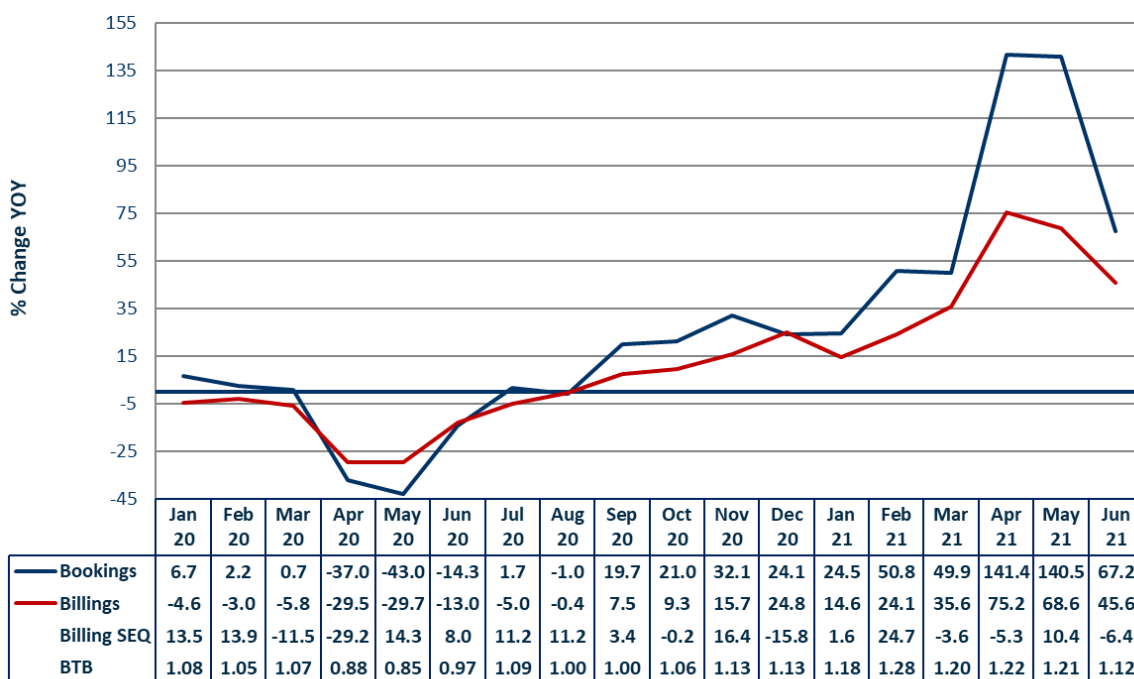
- Sales grew +23.6% and orders were up +48.9% YOY in June. North American billings were down sequentially -4.9%. The book-to-bill remained strong at 1.17.
- US 2Q21 GDP grew 6.5% sequentially, less than the market estimates of 8.5%.
- Industrial production increased 9.8% YOY in June.
- Manufacturing PMI was 63.1 in July, setting another record high for the index.
- US unemployment increased to 5.9% in June.
- Retail sales in the US increased 18.0% in June YOY.
- Investors worldwide have put more than \$900 billion into US-domiciled mutual and exchange-traded funds in the first half of 2021 which is a record amount according to the WSJ.
- The annual inflation rate in the US in June increased 5.4%, reaching a new high since August 2008.
- US automotive sales in June were down 9.9% from May and up 17.8% YOY.

Conclusions

The US economy is running strong, but the annual inflation rate hitting 5.8% in June was well above the predicted 4.9%. These higher rates are upsetting the financial markets and the Federal Reserve. The higher prices are causing the Federal Reserve Board to re-evaluate raising rates sooner rather than later. This will cool off the economy which will negatively impact business, the stock market, and the connector industry.

Europe: The following chart displays the year-over-year percentage change in bookings and billings for the last 18 months. The monthly book-to-bill ratio is also displayed.

Europe Bookings and Billings
Year-Over-Year Percentage Change
& Book-To-Bill Ratio



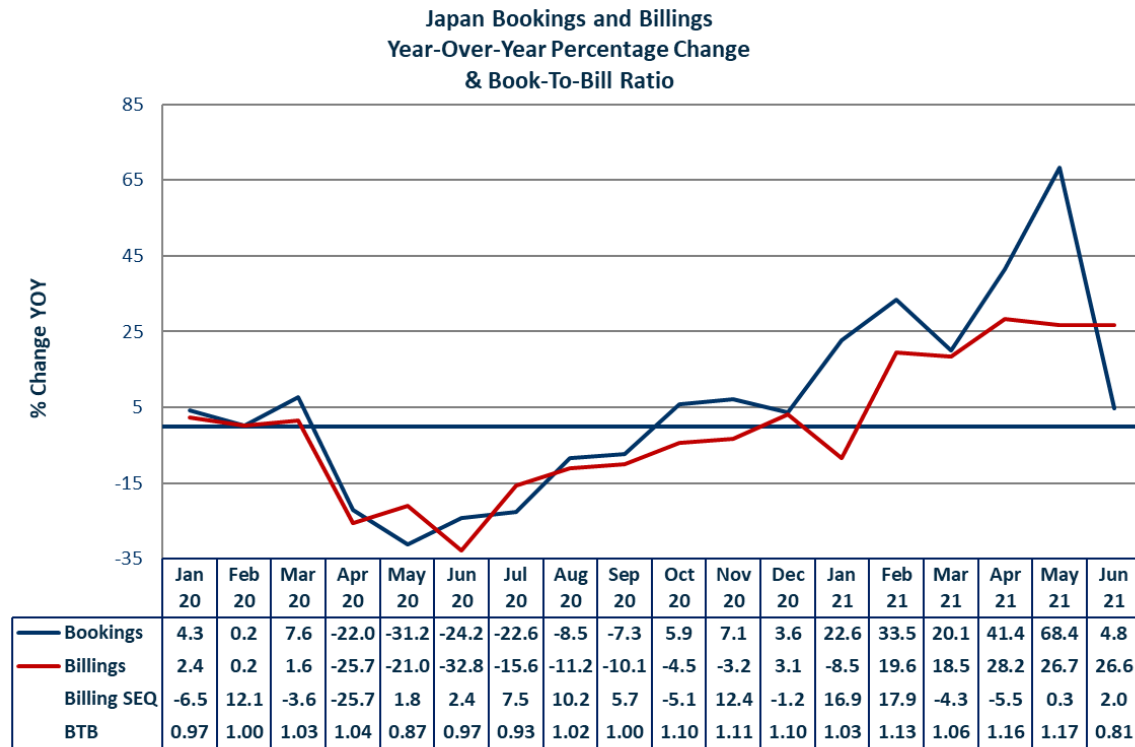
Europe Performance

- YOY billings grew +45.6%, the 10th consecutive positive reading. Orders were up +67.2%, and the book-to-bill ratio was to 1.12. Sequentially, sales were down -6.4%.
- Euro area industrial production increased 20.5% in May YOY, missing market expectations.
- The July manufacturing PMI decreased to 62.6 from 63.4 in June.
- May retail sales increased 9.0% YOY and increased 4.6% sequentially.
- Euro area new car registrations were up 13.0% YOY in June.
- Business confidence rose to 1.71 in June from 1.49 in May.

Conclusions

European new car registrations were up in June which will help their connector industry. The connector industry appears to be running stronger than their economies. Europe has had strong connector bookings and billings for the last six months due to easier comparisons.

Japan: The following chart displays the year-over-year percentage change in bookings and billings for the last 18 months. The monthly book-to-bill ratio is also displayed.



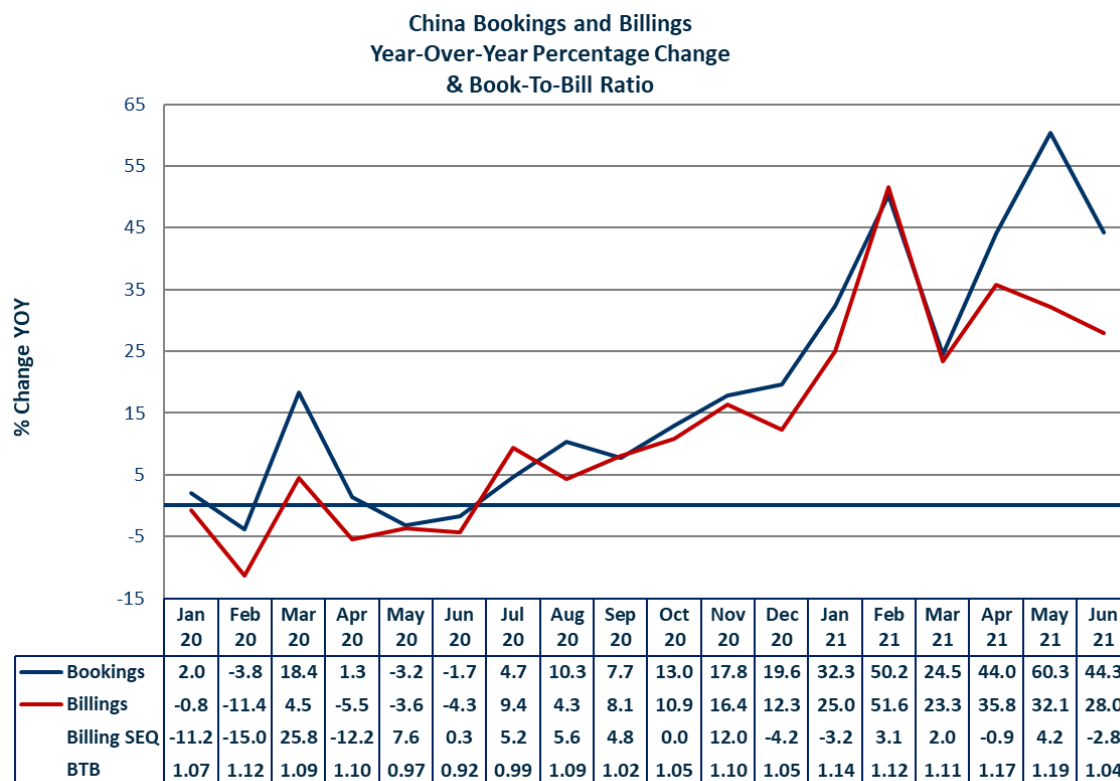
Japan Performance

- Bookings were up +4.8% in June. Sales increased +26.6%. Sequentially, sales were up +2.0%. Japan's book-to-bill ratio was down to 0.81.
- Industrial production increased 21.1% YOY in May.
- May retail sales were up 8.2% YOY.
- The unemployment rate increased to 3.0% in May.
- Exports jumped 48.6% YOY in June. Exports to the US rose 85.5%. Exports of machinery was up 39.6%.
- The July manufacturing PMI decreased to 52.2 from 52.4 in June.

Conclusions

Japan's economy contracted for six consecutive quarters on a YOY basis through 1Q21. This ongoing weak performance will weigh down their connector industry results. They have also had a resurgence of COVID which is impacting their economy. Their booking and sales performance, in the last five months, primarily reflects easy comparisons to the poor results in 2020.

China: The following chart displays the year-over-year percentage change in bookings and billings for the last 18 months. The monthly book-to-bill ratio is also displayed.



China Performance

- Sales and orders, year-over-year, increased +28.0% and +44.3%, respectively. The BTB was 1.04. Sequentially, sales decreased -2.8%.
- 2Q21 GDP increased 7.9% YOY and 1.3% sequentially.
- Industrial production increased 8.3% YOY in June.
- China's manufacturing PMI fell to 51.3 in June from 52.0 in May.
- Retail sales slowed to 12.1% YOY in June compared to 12.4% in May.
- China's auto sales were down 12.4% YOY in June.
- Exports from China were up 32.2% YOY in June. Exports to the US slowed to 17.8% in June from 20.6% in May.

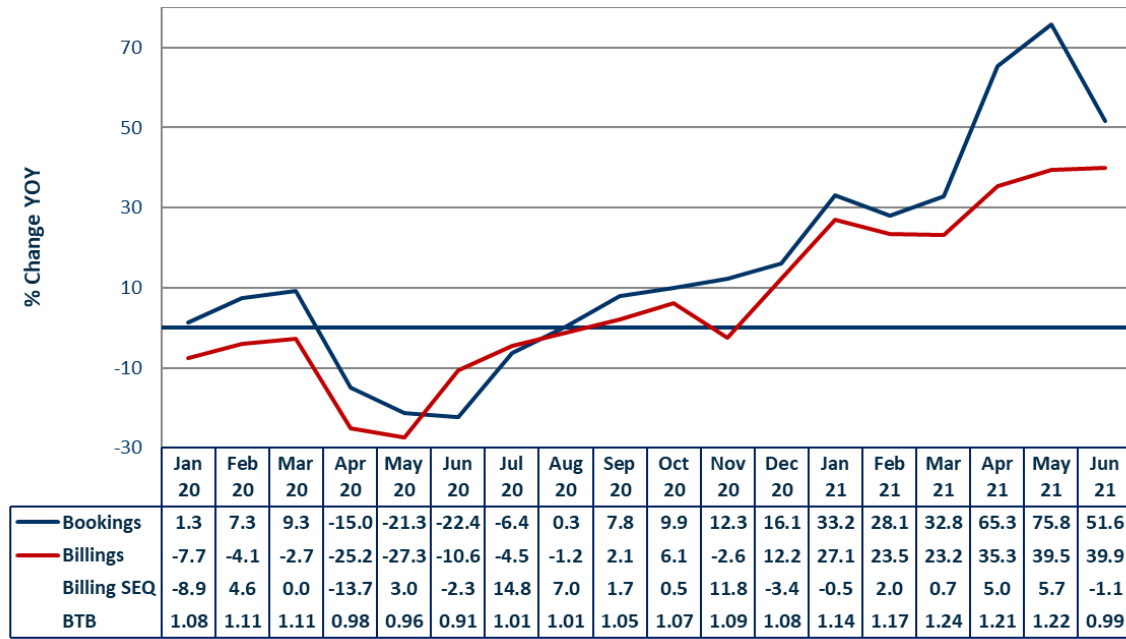
Conclusions

China's industrial production and retail sales continue to grow in their home markets, but at a much slower pace. This is still good for their connector sales. Their economy, though still growing YOY, is starting to slow on a quarter-to-quarter basis.

For the last nine months, China has posted double-digit year-over-year growth in both connectors sales and orders. This growth has allowed China to continue to take connector market share from other regions of the world.

Asia Pacific: The following chart displays the year-over-year percentage change in bookings and billings for the last 18 months. The monthly book-to-bill ratio is also displayed.

Asia Pacific Bookings and Billings
Year-Over-Year Percentage Change
& Book-To-Bill Ratio



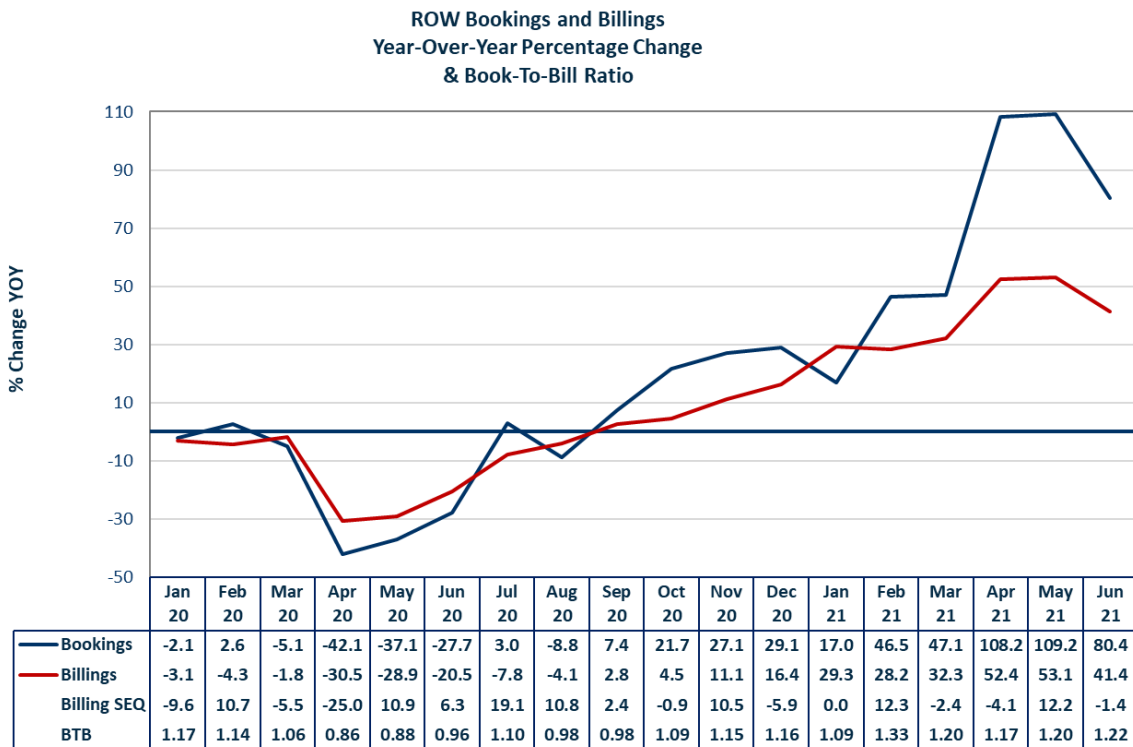
Asia Pacific Performance

- Orders were up +51.6% in June and sales rose +39.9% YOY. The book-to-bill ratio was 0.99. Sequentially, sales decreased -1.1%.
- India's industrial production grew 29.3% YOY in May. Exports were up 7.1% sequentially in June. The export of automobiles was up 77% sequentially by unit volume. The June manufacturing PMI fell to 48.1 from 50.8 in May.
- South Korea's 2Q21 GDP grew 5.9% YOY and 0.7% sequentially. Industrial production grew 15.6% YOY in May. Exports increased 30.7% YOY in June. Exports to the US and the EU were up 51.9% and 65.3% respectively. Exports to China were up 14.3% to China. Exports of chips rose 34.4%.

Conclusions

India is doing better than expected with industrial production and exports given their current surge of COVID-19, which should help their connector sales. South Korea's GDP grew 5.9% in Q2. Their connector sales also have a positive outlook with a strong economy.

Rest of World: The following chart displays the year-over-year percentage change in bookings and billings for the last 18 months. The monthly book-to-bill ratio is also displayed.



Rest of World Performance

- Orders and sales increased +80.4% and +41.4% YOY, respectively, in June. Sequentially, sales in the region decreased -1.4%. The book-to-bill ratio rose to 1.22.
- Brazil's industrial production increased 24.0% YOY in May. The inflation rate rose to 8.35% in June, the fastest rate of inflation since September 2016. The manufacturing PMI increased to 56.4 in June from 53.7 in May.
- Russia's industrial production increased 10.4% YOY in June. Exports decreased 5.6% sequentially in May. The inflation rate increased to 6.5% YOY in June. The unemployment rate declined to 4.9% in May from 5.2% in April.

Conclusions

Both Brazil and Russia continue to have growth in their connector industries, which are outperforming their national economies. Both countries will achieve connector industry growth in 2021.

The ROW connector industry sales have grown in double digits for the last eight months primarily from easy comparison to 2020.

Industry Outlook – 2021

June 2021 bookings were up +50.6% and billings were up +33.0%. For the first half of 2021, bookings were up 42.5% and billings were up +32.7%. These are historical highs for the first half year in the connector industry. This is not surprising when considering the world was closed during the second quarter of 2020 due to COVID-19.

Improved connector demand is certainly part of the story but the main reason for such great growth is the year-over-year comparison to a weak first half of 2020. The remainder of 2021 will be compared to the second half of 2020, during which time the connector industry was in recovery mode. As noted below, we expect second half demand to produce only single digit growth.

The following table provides first half 2021 actual results by quarter and our second half forecast.

World Connector Sales by Quarter

	2019	2020	YOY	2021	YOY
Quarter	Actual	Actual	Change	Forecast	Change
1Q	\$15,890	\$15,397	-3.1%	\$19,061	23.8%
2Q	\$16,097	\$13,333	-17.2%	\$19,000	42.5%
3Q	\$16,475	\$16,689	1.3%	\$18,335	9.9%
4Q	\$15,707	\$17,308	10.2%	\$17,407	0.6%
Total	\$64,169	\$62,727	-2.2%	\$73,803	17.7%

\$ Million, Bishop ©2021 Red=Forecast

In June, bookings again exceeded billings. The order backlog for connectors is large and growing. Consider the following table which shows orders versus sales by month for the first six months of 2021.

Bookings vs. Billings World Connector Industry

	Actual		BTB
Month	Book	Bill	Ratio
Jan	\$6,528	\$5,881	1.11
Feb	\$7,346	\$6,633	1.11
March	\$7,660	\$6,547	1.17
April	\$7,362	\$6,134	1.20
May	\$7,755	\$6,571	1.18
June	\$6,798	\$6,295	1.08
YTD	\$43,449	\$38,061	1.14

\$ Millions

The above normal book-to-bill (BTB) ratio suggests several things are happening.

- Connector demand is strong, and order backlog is growing. Note, orders exceeded shipments by \$5.4 billion in the first half of 2021. The year-to-date BTB ratio is abnormally high at 1.14.
- Lead times are increasing, and on-time delivery is probably declining.
- Customers are most likely engaged in over ordering for fear of product shortages and price increases.
- Manufacturing is probably at or near full capacity, based on number of employees and material availability.

In the second half, we believe demand will soften a bit and customers will begin to push out delivery on orders placed in the first half. We are hopeful that the industry will not experience a large amount of push outs or order cancellations.

Bishop Industry Forecast – Second Half of 2021

We fully expect the second half to continue to result in year-over-year sales growth. However, as previously noted, we believe that growth will be single digits.

2021 World Connector Sales Forecast

Month	2021	% Change
1st Half Actual	\$38,061	32.5%
3Q21 Forecast	\$18,335	9.9%
4Q21 Forecast	\$17,407	0.6%
Full Year 2021	\$73,803	17.7%

\$ Millions

First half growth was +32.5%. Second half growth is anticipated to be around +5.1%. Full year growth is expected to be approximately +17.7%, putting full year industry sales at \$73.8 billion. A new industry record.

2Q21 Connector Industry Results

Industry sales increased +42.5% YOY in 2Q21 to \$19,000 million. This almost ties the record sales amount from 1Q21.

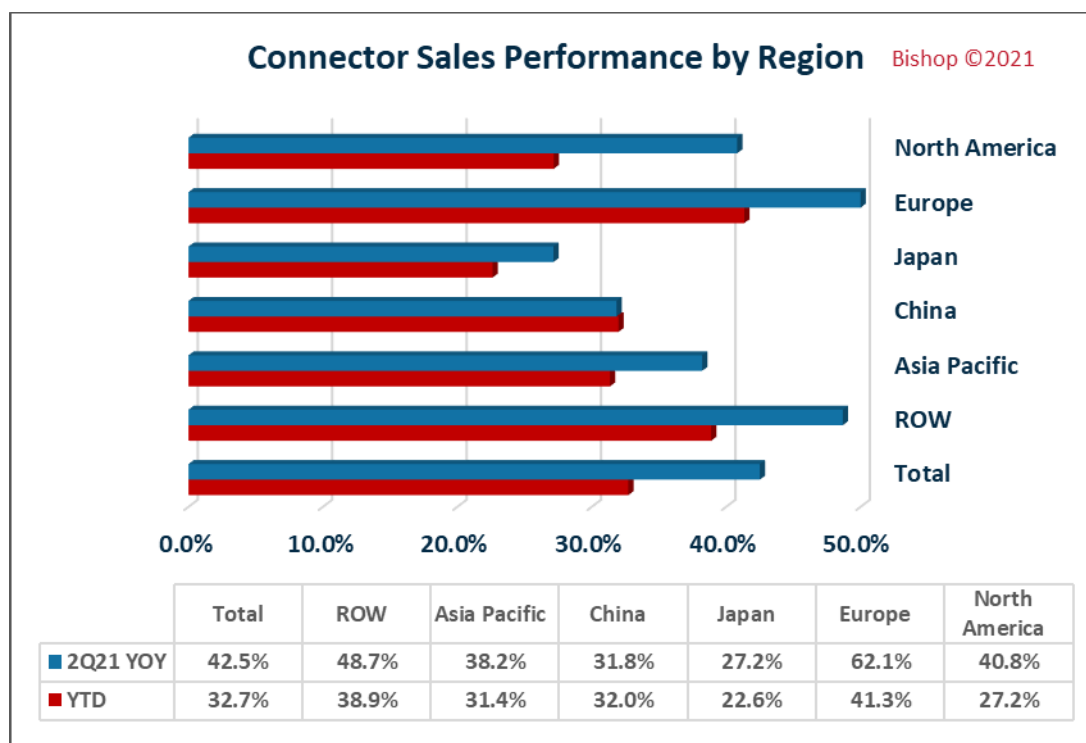
The following table shows industry sales by quarter for 2019, 2020, and 2021, actual and forecast. Our full year 2021 forecast is \$73,803 million, up +17.7% from prior year. Considering current demand, this forecast is more in line with the results we have seen in the first half.

Connector Industry Quarterly Sales Results/Forecast 2019, 2020, and 2021

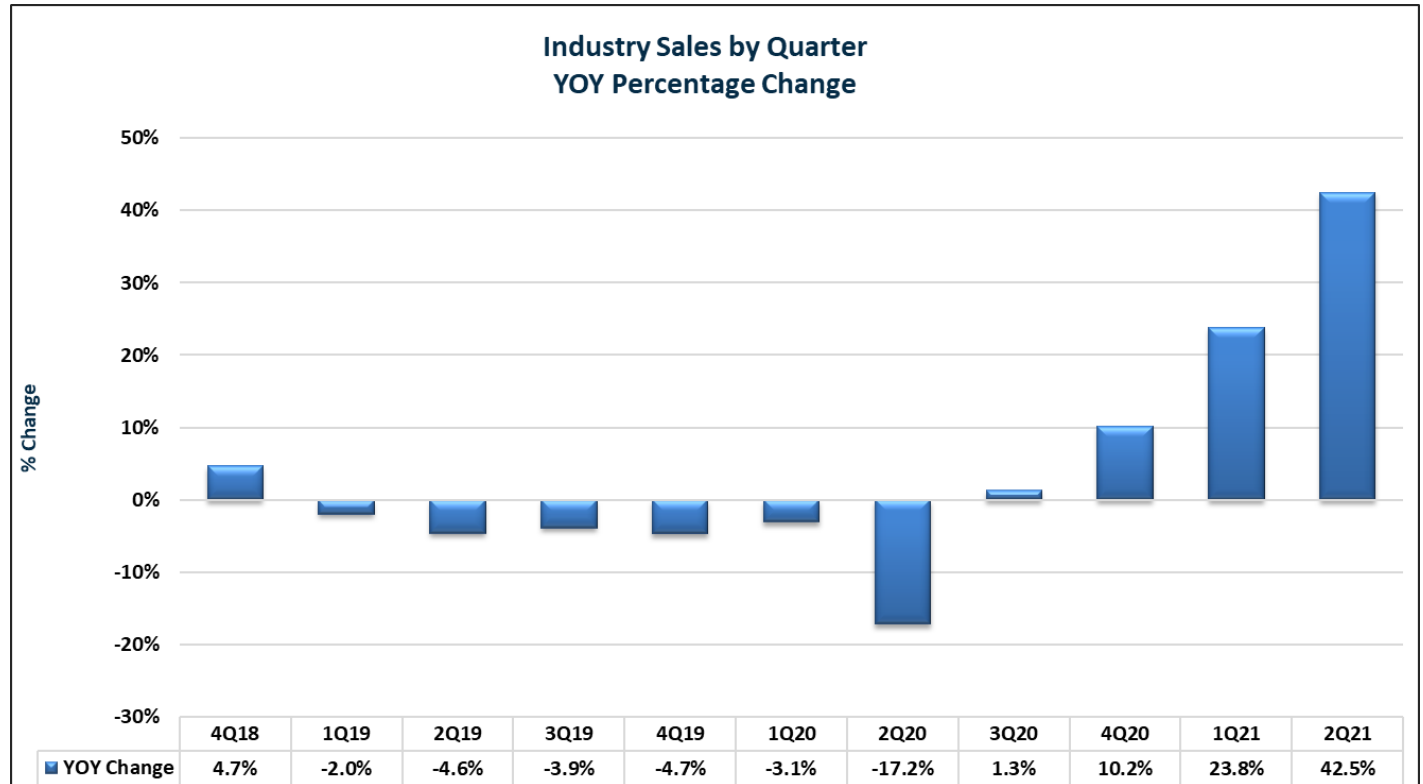
Quarter	2019 Actual	2020 Actual	YOY Change	2021 Forecast	YOY Change
1Q	\$15,890	\$15,397	-3.1%	\$19,061	23.8%
2Q	\$16,097	\$13,333	-17.2%	\$19,000	42.5%
3Q	\$16,475	\$16,689	1.3%	\$18,335	9.9%
4Q	\$15,707	\$17,308	10.2%	\$17,407	0.6%
Total	\$64,169	\$62,727	-2.2%	\$73,803	17.7%

\$ Million, Bishop ©2021 Red=Forecast

Sales growth by region in the first half and YTD of 2021 can be seen in the following chart.



Connector industry sales growth can be seen in the following chart by quarter. In this last contraction, the industry contracted for seven consecutive quarters. Prior to that, the industry achieved eleven consecutive quarters of growth. We have now achieved four consecutive quarters of growth.



2021 YTD Currency Impact on Regional Industry Growth

The dollar has been weakening against the euro, the yen, and the yuan. The following table measures the impact for June 2020 versus June 2021 and shows results for these three currencies.

Local Currency to One USD June 2020 versus June 2021

Currency	2020	2021	% Change
Euro	0.9070	0.8298	9.3%
Yen	108.1709	107.7698	0.4%
Yuan	7.0328	6.4721	8.7%

Europe, China, and Japan account for approximately 60% of world connector sales. Currency fluctuation to the US dollar can have a significant impact on our reporting of sales performance in US dollars.

The following table shows May year-over-year sales performance by region in US dollars and local currencies.

Industry Sales Performance June 2021 USD-vs-Local Currencies

Region	U.S.\$	Local Currency
North America	27.2%	27.2%
Europe	41.3%	29.3%
Japan	22.6%	22.2%
China	32.0%	21.5%
Asia Pacific	31.4%	31.4%
ROW	38.9%	38.9%
World	32.7%	26.7%

World connector sales are 6.0 percentage points lower when stated in local currencies rather than in US dollars, putting industry performance at +26.7% in June. (versus +32.7% in US dollars). This is the result of the continued weakening of the US dollar compared to these currencies.

Remembering Molex's Fred Krehbiel



The influential executive brought a love of international travel and culture to his work with the company, and in doing so, he expanded Molex's reach to the world.

Somewhere in your home, phone, or vehicle, there's a Molex product — most likely, many of them. That's in large part due to the efforts of Fred Krehbiel, whose contributions to his family's business were instrumental in growing the company into its present status as a global connector powerhouse. The former Molex CEO and co-chairman of the board, and Illinois philanthropist, died on June 3, 2021.

Founded in 1938 by Frederick Krehbiel, Molex became one of the world's largest connector suppliers after grandsons John and Fred Krehbiel took the helm as co-

CEOs in the 1960s. In the hands of their father, John Sr., the Lisle, Illinois, company focused mainly on plastic connectors and electric plugs for the U.S. market. Under the guidance of John Jr. and Fred, the company grew into to a global supplier of interconnect products, working with major electronics companies in every market sector at a critical period in technological innovation. (Bishop & Associates ranked the company number 3 in its 2021 Top 100 Connector Manufacturers report.)

At first, Fred Krehbiel didn't plan to join the family business. Although both brothers had spent summers working at Molex, only John Jr. planned a career at the company their grandfather established. Fred was fascinated by world cultures and planned a career as a diplomat. However, he realized that opportunities for travel and impact abroad would be greater in business, and in 1965 he joined Molex. His father put him in charge of the company's new international division — at just the moment that OEMs began expanding into overseas markets.

"Fred was a force at Molex for the nearly 50 years he was with the company, not only as a member of the founding family, but as a very talented businessman," said Molex CEO Joe Nelligan. "An early innovator in the rapidly growing global electronics industry, one of his most notable achievements was making Molex an international company by establishing operations outside the U.S, starting in 1967. He was responsible for Molex being one of the first U.S. companies to set-up operations in Japan, as well as sites in Europe, Mexico, and Asia. This was a very bold undertaking, since he was the only employee of Molex's international business when that division started. Today, international accounts for well over half of Molex's revenues."

Fred Krehbiel's perspective on international business relationships was key to his success. "He was very hands-on and visited Molex operations all over the world on a regular basis but was savvy enough to have local leaders running these entities. He knew they best understood the local market, customers, employees, and culture, putting Molex in the position to be successful," said Nelligan.

"We all admired Fred not only for his business acumen but for his charisma, sense of humor, and his deep and enduring commitment to Molex employees and customers. An empowering and inspirational leader, he made every employee feel valued and important, encouraging them to experiment and take risks to improve the business. Known for his generosity, he also impacted many lives through his philanthropy."

“He was a visionary businessman,” said Bishop & Associates President Ron Bishop, who worked at Molex earlier in his career. “I remember that Fred was an excellent speaker. Many of us believed that he would run for high office someday. Speculation was that he would become a U.S. senator. He was very warm and engaging with a good sense of humor.”

However, Bishop said that Fred’s greatest achievement was developing the Molex culture. “People like to work at the company, they stay at Molex for years, and often family members of employees join the company, which creates a generational, family feel to the work environment. It is a company with character. That’s what Fred and John created.”

Fred strategically built outposts in Japan, Mexico, South America, Europe, China, and Southeast Asia as those regions became significant electronics centers. In its first year, Molex International generated \$54,000 in sales; it ultimately grew to more than \$2 billion in revenue with outposts in 50 countries. In 2013, the Krehbiels sold the Molex company to another set of brothers, Charles and David Koch, of Koch Industries.

A fixture on Forbes’s richest Americans list for many years, Fred Krehbiel was active in philanthropic circles, with a special focus in Chicago arts and cultural institutions. He also founded Ballyfin Demesme, a five-star hotel in Ireland, and enjoyed Irish art, architecture, and culture. He is survived by his brother, John; his wife, Kay; his two sons, five grandchildren, and many nieces and nephews.

Significant Events

TE Connectivity to Acquire ERNI

TE Connectivity has signed a definitive agreement to acquire ERNI, complimenting TE's broad connectivity product portfolio, particularly in high-speed and fine-pitch connectors for factory automation, automotive, medical, and other industrial applications. ERNI augments TE's engineering and manufacturing footprint and capabilities in board connectivity and expands TE's customer base and presence in several attractive market segments. The transaction is expected to close by the end of the current quarter.

Weidmuller Acquires Emphatec Inc.

Weidmüller has acquired Emphatec Inc. Emphatec and Weidmüller have had an extensive collaboration over decades. "It's an ideal fit – Weidmüller's global sales and marketing resources and extensive product offering alongside Emphatec's innovative process automation focused products," said Don Robinson, former owner of Emphatec Inc., now director of Klippon Engineering Canada.

Rosenberger Announces Management Changes

Dr. Kristijan Bauer has joined the management team of the Rosenberger Group as COO along with Eric Küppers, who already took up his position as CEO. The pair bring entrepreneurial and international experience to the Rosenberger Group seen as an asset for the expanding company. Küppers has held various positions in private as well as internationally operating companies, most recently with TE Connectivity as president global automotive. Bauer held international management positions at Continental AG for more than 20 years and was most recently responsible for the worldwide production at Festo SE & Co. KG, an automation and control technology company. Rosenberger will continue to be family owned. The current managing directors, brothers Peter, Hans, and Bernhard Rosenberger, will withdraw from the daily operational business and participate in the newly created supervisory board, to which the new management will report.

Hon-Hai Adjusts Production Due to Flooding

Hon Hai Precision Industry Co., the world's largest contract electronics maker, will adjust production in China in response to the severe floods seen in Henan province in China. Hon Hai, also known as Foxconn globally, said all of its employees at its big production complex in Zhengzhou in Henan were fine. According to international news media, homes, railway stations and roads in the province were submerged in rising flood waters caused by heavy rains, with more than 10,000 people evacuated. Hon Hai said the top priority for the company will be to take good care of its employees in Zhengzhou and keep them safe from the torrential rains.

Worldwide IC Market Forecast to Top \$500 billion in 2021

Strong demand across the entire IC market this year is projected to lift sales for the total IC market 24% and break through the USD 500 billion plateau for the first time in history. At the mid-point of 2021, IC production was returning to normal levels, but a surge in chip demand caused by the Covid-19 pandemic meant that ICs used in smartphones, computers, TVs, automobiles, and other end-use applications remained in short supply—an industry condition that could last well into 2022. The IC market is forecast to see continued growth next year and again in 2023 when worldwide IC revenues are projected to exceed USD 600 billion for the first time. Throughout the forecast period, momentum is expected to surge for 5G connectivity, artificial intelligence, deep learning, virtual reality, and other emerging applications in mobile, data center and cloud-computer servers, automotive, and industrial markets, resulting in a robust IC market CAGR of 10.7% from 2020-2025.

US Mandates Reports on ADAS-Related Crashes

Advanced driver assistance systems are coming under greater scrutiny after a federal regulator ordered manufacturers and operators of ADAS systems to promptly report crashes. The incident reporting mandate issued by the National Highway Transportation Safety Administration (NHTSA) orders carmakers and operators to report crashes involving automated driving systems and Level 2 ADAS-equipped vehicles. Companies must now report crashes “within one day” of learning of a crash. The order covers fatalities, injuries, vehicle towing, air bag deployments or incidents involving pedestrians or cyclists.

Component Prices Rise 10% to 40%

According to EPS News “Increased component prices are inevitable when demand outstrips supply. But the electronics supply chain is being hammered on all sides – from materials to logistics -- with rising costs. As one freight expert put it: “In 2020 and 2021, global logistics just can’t seem to catch a break. In June, prices of aluminum, copper, electronic components/assemblies, epoxy, packaging materials, plastics, resins, PVC, semiconductors and steel were higher than in May. Copper and aluminum have been on the increased-price list for 13 weeks, and semiconductors are expected to be scarce through 2023. Availability is king.”

Instrumentation Market for Connectors

Bishop & Associates Inc. has just released their newest report, *Instrumentation Market for Connectors*. This eight-chapter, 223-page research report provides detailed information on the instrumentation market, including connector types used and their suppliers, instrumentation equipment suppliers, and applications where connectors are found in the instrumentation market.



Instrumentation Market for Connectors

The total worldwide value of connector shipments to the Test, Measurement, and Instrumentation (TMI) market in 2020 was \$X,XXX.7 million, representing a decrease of Y.Y% over the prior year. Although 2020 results vary regionally, the worldwide TMI industry was negatively affected by market conditions resulting from the COVID-19 pandemic. Longer lead-time and higher cost items, especially for ATE systems, involving capital budgets had more stability than analytical & scientific instrumentation that are often project focused with reactive short-term budget affects. However, that trend is expected to reverse itself in 2021 and beyond.

The outlook for the value of connector shipments for the worldwide TMI market in 2021 is projected at \$X,XXX.2 million, an increase of Y.Y% over the previous year, reflecting the recovery starting late 2020. By 2026, total worldwide Instrumentation connector sales are expected to reach \$X,XXX.0 million, representing a five-year CAGR of Y.Y%.

The global instrumentation market is broken down into three primary categories Automatic Test Equipment (ATE), Analytical & Scientific Instruments, and Other Instruments. The global Automated Test Equipment market is expected to exceed \$X.23 billion by 2026 with a five-year CAGR of Y.64% over the period. Automated test equipment for semiconductor testing, in-circuit (or test handler) testing, and other automated testing systems for electronics, telecommunications, automotive and transportation, industrial, aerospace and defense, medical and other growing industries are expected to drive market growth over the forecast period.

The global Analytical & Scientific Instruments market is expected to exceed \$XX.02 billion by 2026 with a five-year CAGR of Y.38% over the period, primarily resulting from growth in medical, life sciences, biopharma and all its related clinical research laboratory instrument testing, telecommunications, consumer electronics, and other industries benefiting from 5G technology.

The total worldwide value of connector shipments to the Other Instruments segment in 2020 was \$XXX.8 million, a small decrease of Y.Y% from 2019. The forecast value of connector shipments for 2021 is estimated to reach \$XXX.4 million, reflecting a Y.Y% increase from the prior year, which was impacted by the COVID-19 pandemic. By 2026, the worldwide Instrumentation connector forecast for Other Instruments is expected to reach \$XXX.3 million, representing a five-year CAGR of Y.5%.

As shown on the following pages, tables included in the report provide sales by region for connectors used in instrumentation applications, sales by connector product types by region used in instrumentation applications and instrumentation connectors sales by region.

Instrumentation Market for Connectors

Total North America Instrumentation Connector Sales by Market Sub-Sector 2019, 2020, 2021F, and 2026F With Percent Change and Five-Year CAGR

Sub-Sector	2019	2020	Y.Y%	2021F		2026F	2021/2026 CAGR
Automatic Test Equipment	\$XX.X	\$XX.X	Y.Y%	\$XX.X	Y.Y%	\$XXX.X	Y.Y%
Analytical & Scientific Instruments	\$XXX.X	\$XXX.X	Y.Y%	\$XXX.X	Y.Y%	\$XXX.X	Y.Y%
Other Instruments	\$XX.X	\$XX.X	Y.Y%	\$XX.X	Y.Y%	\$XX.X	Y.Y%
Total North America	\$XXX.X	\$XXX.X	Y.Y%	\$XXX.X	Y.Y%	\$XXX.X	Y.Y%

\$ Millions

Total Worldwide Instrumentation Connector Sales by Region 2019, 2020, 2021F, and 2026F With Percent Change and Five-Year CAGR

Region	2019	2020	Percent Change	2021F	Percent Change	2026F	5-Year CAGR
North America	\$XXX.X	\$XXX.X	Y.Y%	\$XXX.X	Y.Y%	\$XXX.X	Y.Y%
Europe	\$XXX.X	\$XXX.X	Y.Y%	\$XXX.X	Y.Y%	\$XXX.X	Y.Y%
Japan	\$XXX.X	\$XXX.X	Y.Y%	\$XXX.X	Y.Y%	\$XXX.X	Y.Y%
China	\$XXX.X	\$XXX.X	Y.Y%	\$XXX.X	Y.Y%	\$XXX.X	Y.Y%
Asia Pacific	\$XXX.X	\$XX.X	Y.Y%	\$XXX.X	Y.Y%	\$XXX.X	Y.Y%
ROW	\$XX.X	\$XX.X	Y.Y%	\$XX.X	Y.Y%	\$XX.X	Y.Y%
Total World	\$X,XXX.X	\$X,XXX.X	Y.Y%	\$X,XXX.X	Y.Y%	\$X,XXX.X	Y.Y%

\$ Millions

China Instrumentation Connector Sales by Product Type 2019, 2020, 2021F, and 2026F With Percent Change and Five-Year CAGR

Product Type	2019	2020	Percent Change	2021F	Percent Change	2026F	5-Year CAGR
PCB	\$XXX.X	\$XXX.X	Y.Y%	\$XXX.X	Y.Y%	\$XXX.X	Y.Y%
Rectangular I/O	\$XX.X	\$XX.X	Y.Y%	\$XX.X	Y.Y%	\$XX.X	Y.Y%
IC Sockets	\$XX.X	\$XX.X	Y.Y%	\$XX.X	Y.Y%	\$XX.X	Y.Y%
RF Coax	\$XX.X	\$XX.X	Y.Y%	\$XX.X	Y.Y%	\$XX.X	Y.Y%
Circular	\$XX.X	\$XX.X	Y.Y%	\$XX.X	Y.Y%	\$XX.X	Y.Y%
Telephone/Telecom	\$XX.X	\$XX.X	Y.Y%	\$XX.X	Y.Y%	\$XX.X	Y.Y%
Fiber Optic	\$XX.X	\$XX.X	Y.Y%	\$XX.X	Y.Y%	\$XX.X	Y.Y%
Terminal Blocks	\$XX.X	\$XX.X	Y.Y%	\$XX.X	Y.Y%	\$XX.X	Y.Y%
Heavy Duty	\$XX.X	\$XX.X	Y.Y%	\$XX.X	Y.Y%	\$XX.X	Y.Y%
Power/High Voltage	\$XX.X	\$XX.X	Y.Y%	\$XX.X	Y.Y%	\$XX.X	Y.Y%
Application Specific	\$XX.X	\$XX.X	Y.Y%	\$XX.X	Y.Y%	\$XX.X	Y.Y%
Other Connectors	\$XX.X	\$XX.X	Y.Y%	\$XX.X	Y.Y%	\$XX.X	Y.Y%
Total China	\$XXX.X	\$XXX.X	Y.Y%	\$XXX.X	Y.Y%	\$XXX.X	Y.Y%

\$ Millions

Instrumentation Market for Connectors

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Instrumentation Market for Connectors

What's New ?

Bishop & Associates has recently completed several new research reports about the worldwide connector industry. A table of contents for each report can be found at <https://store.bishopinc.com>.

- **Report C-122-21** **2021 Connector Industry Yearbook (July 2021)**
- **Report M-310-21** **Instrumentation Market for Connectors (June 2021) NEW**
- **Report P-410-21** **Computer Server Market Trends and Connector Use 2020 – 2030 (May 2021) NEW**
- **Report M-607-21** **World Industrial Market for Connectors (April 2021) NEW**
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- **Report M-1601-20** **Top 50 Medical Interconnect Solutions Companies (December 2020)**
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- **Report M-799-20** **2020 World Cable Assembly Market (May 2020)**
- **Report M-4100-20** **Non-Automotive Transportation Market for Connectors (February 2020)**

THE BISHOP REPORT - CONNECTOR INDUSTRY YEARBOOK

An annual subscription to [THE BISHOP REPORT](#) (12 issues) is available for \$1,750. *The Bishop Report* subscription includes access, through Bishopinc.com, to prior issues of The Bishop Report, 30-40 yearly News Briefs, Industry Financial Benchmarks, and various connector industry indices. In addition, your subscription will include the *Connector Industry Yearbook* report (normally \$1,500).

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