

# Status of the 2021 Extrusion Market

## Where the Industry Goes from Here

By Lynn Brown, Long Point Associates

**A**fter a pandemic driven slide in 2020, the North American extrusion market came bounding back in 2021, reflecting strong GDP growth (+5.7%). The market ended up being just shy of 2018's peak (Figure 1). North American demand was up 12.9% year-on-year in 2021, topping 5.8 billion lbs of extruded shapes, rod and bar, and pipe and tube.

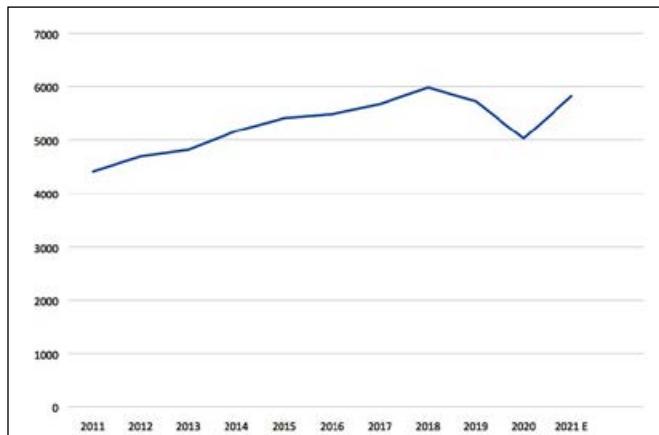


Figure 1. Extruded product shipments in the U.S. and Canada (in million lbs). (Source: The Aluminum Association.)

### Shipments and Market Demand

While the Aluminum Association's detailed shipment numbers for 2021 are still being finalized, a review of the preliminary data leads to several conclusions regarding a number of markets.

Imports were significant in 2021. While the total demand for the year was off by less than 3% from the 2018 total, North American extruders' total production fell short of 2018 by over 6.5%. Imports were up 41% from 2018 to 2021, with the majority of that growth coming last year—likely a result of the extended lead times that resulted from North American extruders' challenges in finding sufficient labor and metal to meet the strong market demand.

The building and construction (B&C) market generally lagged in 2021. Although B&C volumes in total appeared to be up slightly year-on-year, they were dragged down by weakness in the commercial construction (curtainwall and storefront) sector. In addition, nonresidential spending was off 3.1%.

Automotive extrusion usage continued to be positive last year. Despite the fact that light vehicle builds leveled off due to supply chain issues, extrusion shipments to the sector showed another double digit increase, as per vehicle content continued to rise.

The solar power market also appears to have had a strong year, with shipments to the sector up by around 60%. This was fueled by a more than 30% growth in non-residential solar installations. Solar's growth was also the driver for a strong electrical market, without which electrical growth would look flat, like B&C.

However, markets influenced by the COVID pandemic were often the big winners. The amount of folks working from home, forgoing travel, and cashing their stimulus checks, resulted in increased shopping—often for recreational toys and home improvement projects (Figure 2). Extrusion shipments were up by over 30% for RVs, 40% for boats and water sports, over 25% for swimming pool projects, and 30% for sporting goods. Another winner during the pandemic was the commercial trucking market (up by over 30%), which needed more semis and trailers to haul all the packages being delivered.

A number of smaller segments were also significant growth contributors, leading the transportation, durables, electronics, and machinery and equipment sectors to double digit growth—at least four times that of the B&C market. Note that these smaller sector estimates are still subject to revision, but the overall picture is fairly compelling. When the final numbers for extrusion shipments are verified, it is likely that every major market will prove to have surpassed their 2019 volumes (Figure 3).

**Backlogs and Lead Times:** Another major story for the extrusion industry in 2021 was the issue surrounding backlogs and lead times, with many extruders reporting booking orders for 2022 early in the second half of 2021. Certainly, the strength of the demand rebound was a major factor, but difficulties in both re-staffing and securing billet were significant contributors.

In fact, if one looks at the Aluminum Association's capacity utilization numbers, they might question why there were such lengthy backlogs. This was in part due to the fact that the average press was running at slightly less than 14 shifts per week. For large presses (10 inch or more), capacity utilization was actually less than in the peak year of 2018. Clearly, the orders from customers were there—but the crews were not. As one extruder said recently, "We still can't fully staff our second and third shifts, so we're just having to allocate what capacity we do have and push some business away."



Figure 2. Extrusion shipments to a number of markets, such as home improvements, boats and water sports, and recreational vehicles, saw increases during the COVID pandemic.

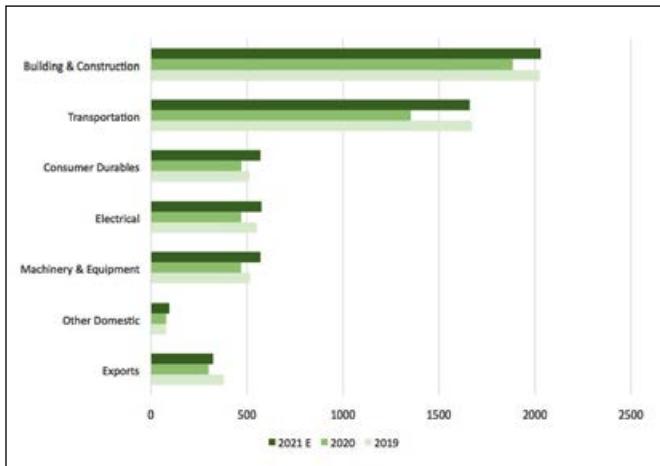


Figure 3. Extruded product shipments by major market (in million lbs). (Source: The Aluminum Association and Long Point Associates.)

### Looking Forward

The question is what's next? Can extrusion shipments maintain their momentum in the face of inflation, rising interest rates, high gasoline prices, and uncertainties around the war in Ukraine—not to mention record metal costs? Will decreasing COVID and supply chain disruptions be sufficient to overcome the drag on the market from Ukraine, rising consumer costs, and significant hits to 401(k) accounts?

As of late March, most extruders are still bullish, as backlogs are robust and the major issues are ones of capacity allocation, securing billet, press crewing, and managing pricing. In addition, shipments in January and February have been strong—with more than 4% growth over

the first two months of 2021. As one extruder noted, “Our backlogs go out past mid-year, and orders are still coming in. Maybe there could be issues later in the year, but I don’t see it.” Others are less certain, citing construction projects being put on hold until the mid-term economic picture clarifies.

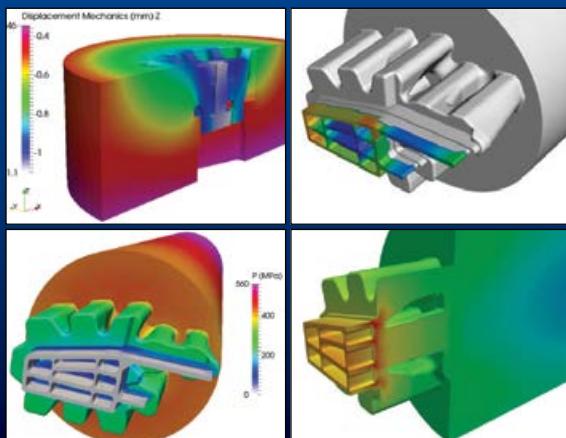
It may be appropriate to start thinking about a Plan B, however, as there are economic indicators that suggest demand is likely to slow. Per the University of Michigan, consumer sentiment has slipped for two months in a row and now stands at 62.8%, down substantially from 76.8% one year ago. Existing home sales are still hot in most markets, but were off 7.2% month-on-month and 2.4% year-on-year, which is probably not surprising given that mortgage payments are up 28% from a year ago (per the National Association of Realtors) due to price and interest rate increases. For new homes, the pending sales index has now fallen three months in a row and shows a 7.6% year-on-year decline. Furthermore, some of those big growth areas for 2021—boats and RVs—are likely to be hit by high gas prices.

At the same time, automotive builders are optimistic about getting past the chip challenges. Ford projects a 10% increase in build rates. Higher build rates, combined with rapidly accelerating launches and sales of electric vehicles, should result in strong demand for extrusions for battery enclosures and other components.

If there is a conclusion, it is that we're likely to see concerns shift from getting production out to getting orders in as the year progresses. At the very least, the rest of the year appears to be a challenging roller coaster ride for extruders. Keeping an eye out for early warning signals and a finger on the pulse of customers will be essential for extruders, and agility will be key to navigating a challenging market. ■

## When productivity matters...

- Best in class extrusion simulation
- Best in class global die design team
- Best in class die heat treatment technology
- Continuous improvement partners



### Youngstown – Phoenix Extrusion Dies

2572 Salt Springs Road  
Youngstown, OH 44509  
Ph: 330.747.4464  
[www.youngstowntool.com](http://www.youngstowntool.com)