



2020 Metalworking Industry Report

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Overview and Key Concepts

Metalworking Businesses Face the Future

How have metalworking businesses navigated the COVID-19 pandemic? What are their plans for the future? Which technologies and workforce development strategies will make an impact in the years to come?

Grainger conducted a survey of 356 businesses in late 2020 and early 2021 to get insights on their plans for the future. Surveyed companies ranged from small (30 or fewer employees) to large (more than 500 employees), in manufacturing, contracting and other categories. Drawing on that research, this report offers a look at where the industry is today and what trends will shape its future.

2020 in Review: Unprecedented Challenges

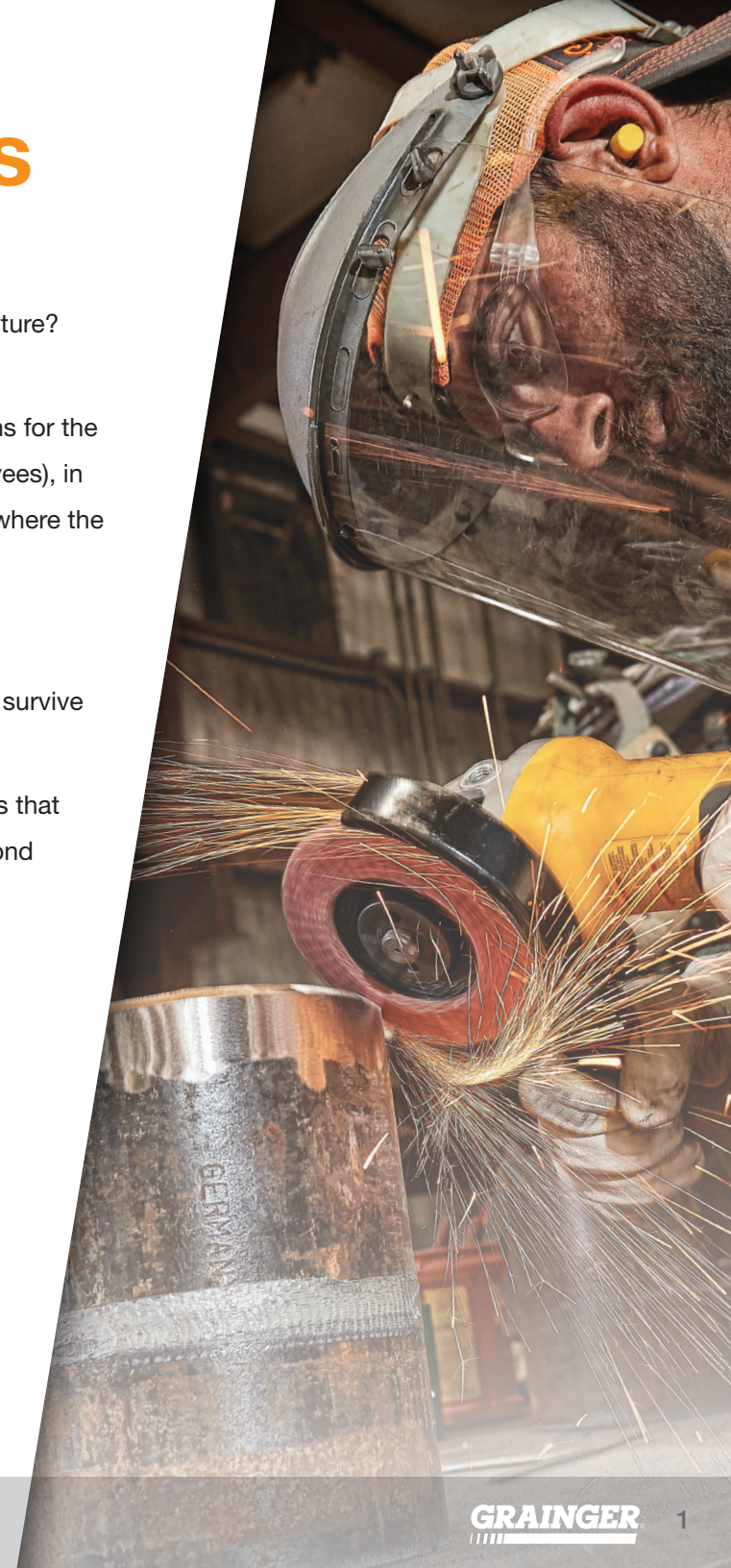
In 2020, metalworking businesses showed resilience in the face of unexpected challenges, adapting to survive and even thrive in a new economic landscape.

Early in the year, the COVID-19 pandemic set in motion an unprecedented upheaval with consequences that continue to be felt. All sectors of the economy have been touched and every business has had to respond to these turbulent conditions in its own way.

Many metalworking and manufacturing businesses saw substantial drops in production when the pandemic was at its worst. But today, companies can look with optimism at rising production levels and a continuing recovery.

Key Concepts

- 1 Resilience and Optimism
- 2 Refocusing Technology Investment
- 3 Developing the Workforce



Key Concepts



Resilience and Optimism

After the significant disruptions of the pandemic, more than half of metalworking businesses have either returned to pre-pandemic production levels already or expect to do so during 2021.



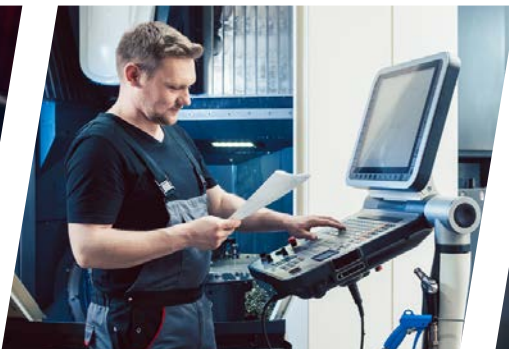
Refocusing Technology Investment

As metalworking businesses plan their future investments, they see many technologies as having diminished in strategic importance during the pandemic. However, they still see strong potential in additive manufacturing and some other technologies.



Developing the Workforce

The challenge of finding and retaining skilled workers remains significant, and businesses have adopted a range of solutions. Remote work and flexible work arrangements have become newly important during the pandemic, but their lasting effect remains to be seen.



How the Pandemic Affected Metalworking Businesses

It comes as no surprise that 2020 was a challenging year for metalworking businesses. More than half of survey respondents saw a moderate or large negative effect from the pandemic. Many saw substantial production declines, and **38% reported that output had dropped to half capacity or lower when conditions were at their worst.**

However, a substantial proportion, **25%, reported little or no overall effect to business during the pandemic, and 13% reported that production level was above capacity** even when it was most affected by the pandemic.

SURVEY RESPONSES

What would you say is the biggest lasting impact to your business as a result of the COVID-19 pandemic?

- Health/safety measures and new PPE usage
- Social distancing design will need to be considered for the foreseeable future
- Remote workforce may never return
- Disruption of incoming materials due to port delays
- The need for having a plan for significant business disruption in the future, whether it be health, weather or other possible disruptions



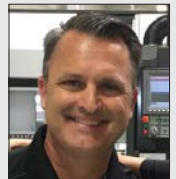
Grainger Insights:

Adapting and Optimizing

For a production shop, not producing is not an option. Throughout 2020, metalworking companies of all sizes stepped up, doing what they needed to do to keep going during this unprecedented situation—whether that was retooling on the fly or aligning to a totally different industry. Being able to adapt was key for metalworking businesses in 2020.

Optimization was another important theme for the year. In 2020, it was critical for companies to get the most out of what they already had. Strategies like consolidating tooling and reducing on-hand inventory helped companies get in position for future success.

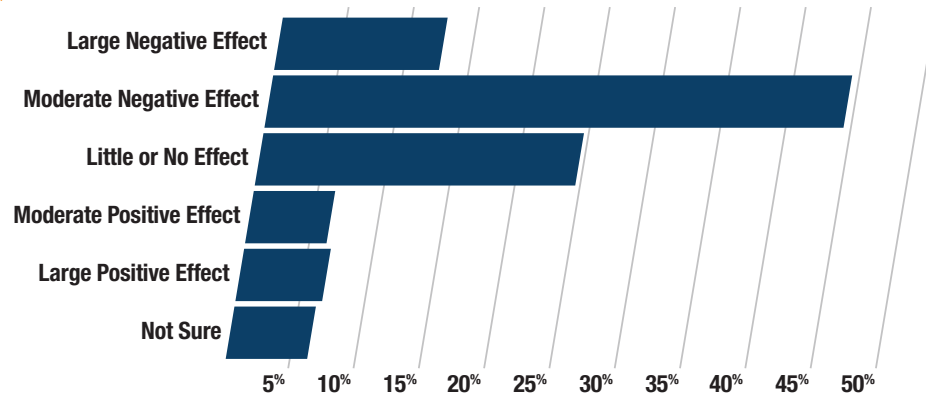
—Mark Fine
Corporate Metalworking Field
Senior Manager



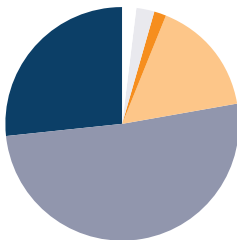
How the Pandemic Affected Metalworking Businesses (Cont.)



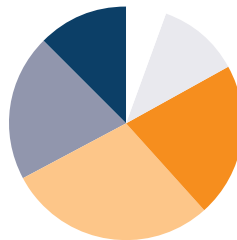
Overall, how has your business been affected by the COVID-19 pandemic?



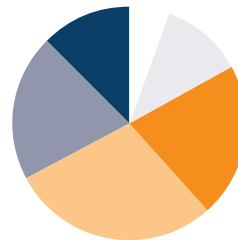
How would you describe your production output in terms of percentage of capacity—before the pandemic, at your most impacted point, and currently?



Production Before
COVID-19



Point of Most Impact
by COVID-19



Current
Production

>100% Capacity (Backlogged)
 75-100% Capacity

51-75% capacity
 26-50% Capacity

1-25% Capacity
 0% Capacity (Shutdown)



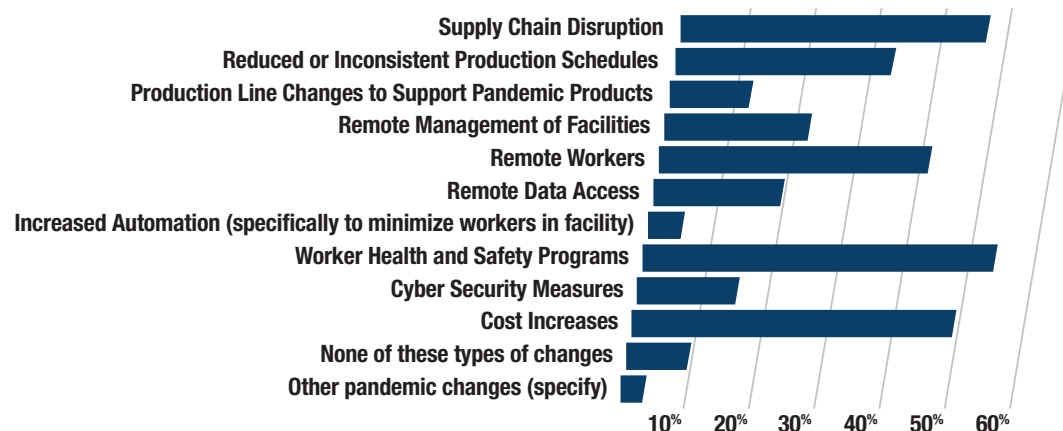
What Changed for Operations

Metalworking businesses saw dramatic changes in many areas of their operations as they adapted to the pandemic. **Newly developed or modified health and safety programs were reported by 54% of respondents. Among other commonly reported changes were supply chain disruptions, reported by 47%, and cost increases, reported by 49%.** The areas most responsible for the cost increases were raw materials and safety supplies, including PPE.

Businesses also reported changes related to remote operations: **41% reported having newly remote workers, while 23% reported remote management of facilities and 20% reported remote data access.**



Thinking specifically of pandemic impact, which of the following changes have you seen taking place at your company during this time?



Grainger Insights:

Changing Purchasing Practices

Purchasing has changed a lot since the pandemic. Digital purchasing has become really important. A lot of logistics and purchasing departments have been doing more work from home, so online access is a must. Some businesses are also looking to self-serve digital channels for a growing share of their spending.

But the digital expansion doesn't mean that it's getting to be more transactional.

If anything, the pandemic has shown the importance of working with trusted partners. Companies are narrowing down their suppliers to the ones they can really trust. And they want to lean more on their suppliers, too, looking to their expertise to help make sure they have what they need, letting them focus more on core manufacturing operations.

— Ryan Miles
Grainger Regional
Metalworking Manager



Looking to the Future

Metalworking businesses are optimistic about the future: while **18% report that their production levels have already returned to or surpassed their pre-pandemic levels, an additional 41% expect to reach this milestone during 2021.**

However, the pandemic has altered the landscape, and its long-term effects remain to be seen. Looking to the future, metalworking businesses predict that remote work will be a lasting consequence of the pandemic, along with the increased emphasis on safety protocols and PPE. And the scarcity of skilled labor, widely recognized as a problem before the pandemic, is seen as a continuing difficulty. The percentage reporting this problem had held steady since our **2018 report at 59%.**

Looking beyond the pandemic, businesses are optimistic about American manufacturing, but they see threats on the horizon, most notably from global competition and political uncertainties.

SURVEY RESPONSES

Aside from the pandemic, what would you say are the biggest threats in North American manufacturing in the near future?

- Outsourcing to foreign countries
- Higher prices and longer lead times
- Trained, dependable, skilled workforce; we must continue to advance our methods and processes in order to be competitive
- Being able to purchase the metal needed at reasonable prices for repairs, without going to new products

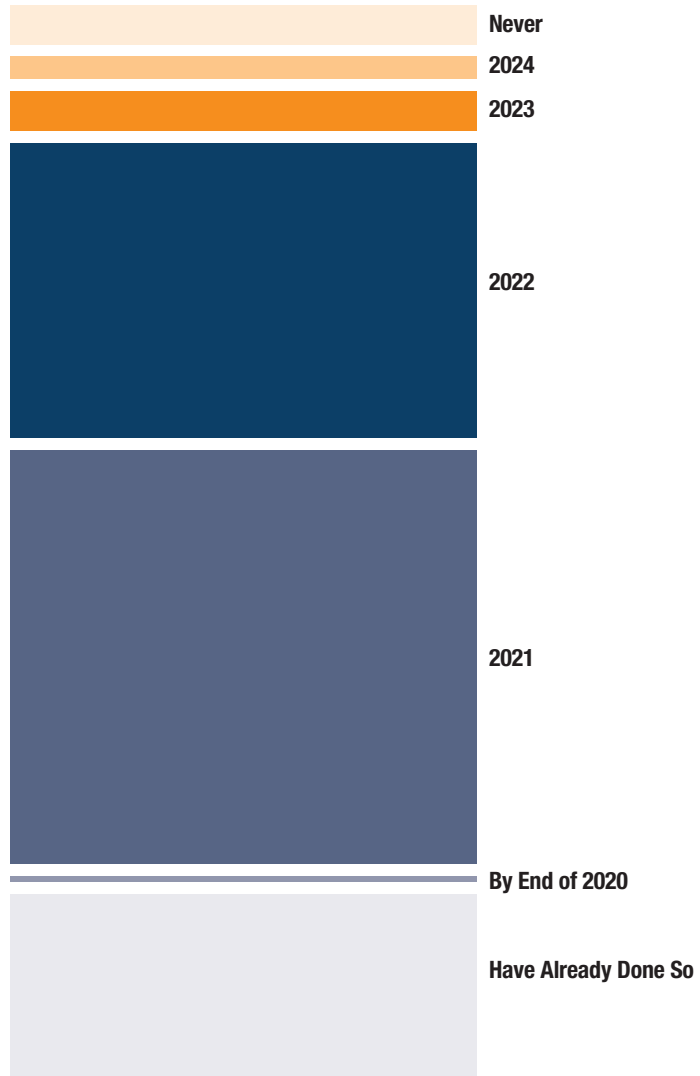
In their own businesses, 91% of survey respondents saw economic conditions as a challenge, and more than 80% pointed to the workforce problems (finding and keeping qualified employees), raw materials costs and supply chain disruptions.



Looking to the Future (Cont.)



In what year do you expect your production levels to return to or surpass pre-COVID levels?



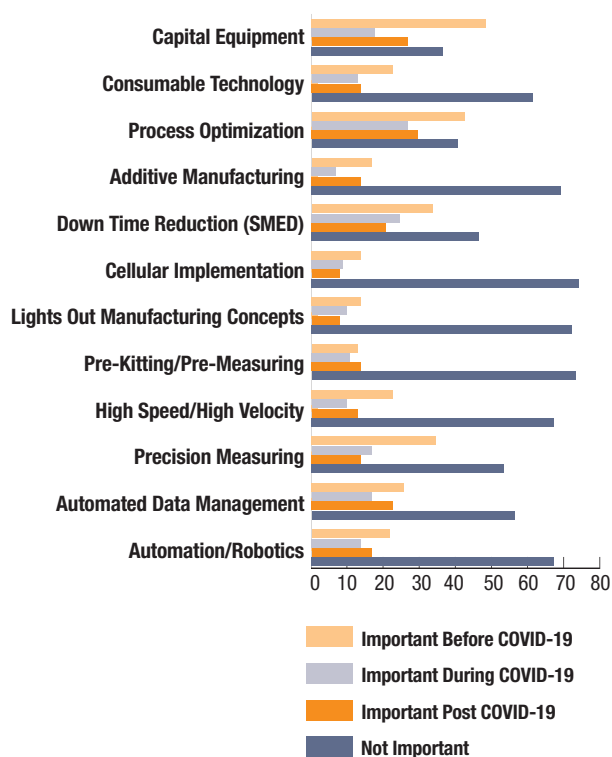
Investing in Technology

Looking into the future at possible technology investments, businesses see only a few areas in which they currently plan any short-term or long-term investment, most notably capital equipment. They also report that the pandemic has diminished the importance of virtually all these areas of investment in their overall strategy.

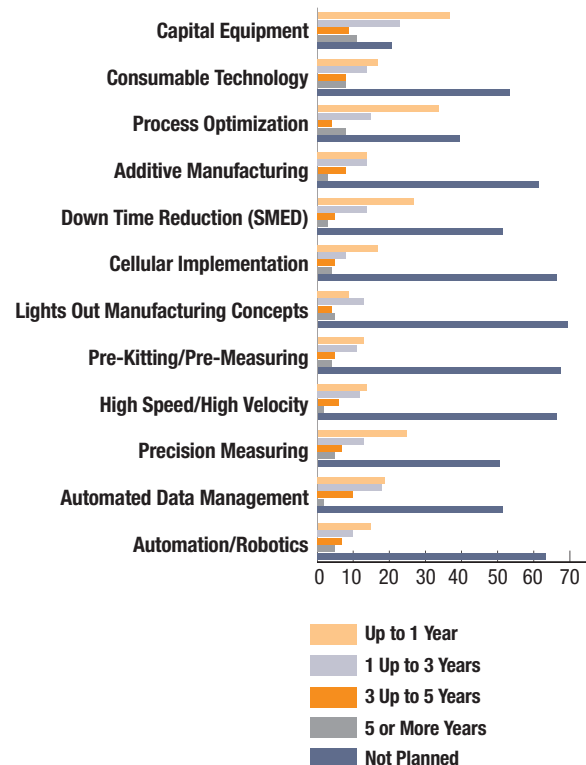
However, businesses see potential in some emerging technologies. In particular, a substantial portion of respondents, more than 40%, saw the potential for positive impact within three years from these technologies:

- Additive Manufacturing
- Quick-Change Tooling and Fixturing
- CAD/CAM File Revision Control and Management Tools

How has the pandemic impacted your investment strategy for each of those technology investments?



Which of the following types of technology investments are planned for your company in the future?



Grainger Insights:

Getting Creative

When the pandemic was just getting started, some companies thought they could wait it out and hibernate until things got back to normal. They didn't think you could do remote work in manufacturing.

But as the disruptions went on, people got more creative, finding ways to handle more work in the virtual world.

The semiconductor and electronics industries were ahead of the pack, having had more exposure to virtualization before the pandemic. Companies that want to stay one step ahead in 2021 can learn a lot from what high-tech manufacturing sectors are trying out—things like mechatronic sensors and headsets that allow engineers to troubleshoot equipment without being on site.

—Randeep Arneja
Corporate Metalworking Field
Senior Manager



Investing in People

Throughout the manufacturing sector, there's widespread concern about the challenge of identifying, recruiting and retaining skilled labor. Finding and developing employees was a perennial challenge for metalworking businesses before the pandemic, and the events of 2020 have not made it any easier.

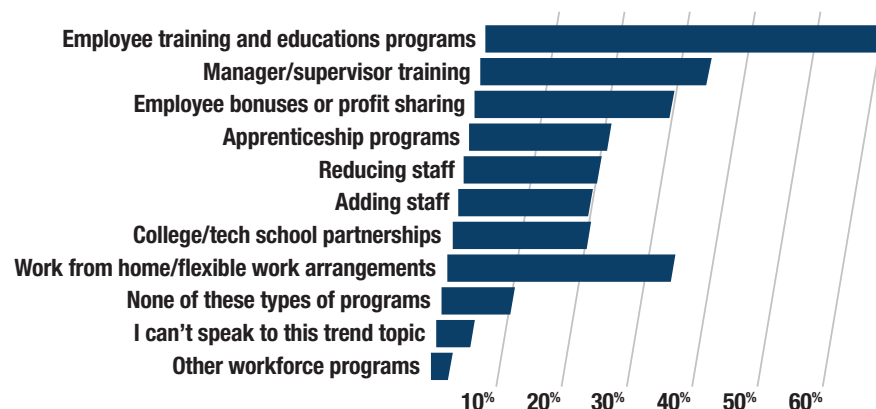
Many solutions have been proposed, and some have been widely implemented: **61% of metalworking businesses report using employee training and education programs, and 82% predict a positive impact from such programs over the next three years.** Employee bonuses or profit-sharing programs are less widely implemented but still fairly common, with almost a third (30%) reporting them. They're also widely seen as a promising measure to support employee development and retention, with **72% of businesses seeing the potential for positive impact from such programs in the next three years.**

Meanwhile, 2020 saw a major unanticipated change to workplace operations with the rise of more flexible work arrangements, including remote work, necessitated by the pandemic. **A third of metalworking companies now have flexible work arrangements in place. However, a relatively large proportion of businesses, 39%, see this flexibility as having little or no positive effect within the next three years, while 43% predict a positive impact.**

Finding and Developing Employees



Thinking specifically of finding and developing employees, which of the following workplace programs have you seen put into place at your company?



Grainger Insights:

Diversification, Training and Automation

Since the pandemic began, companies have been working hard to achieve their production goals while having fewer people on site. We're seeing a lot of different responses to this, but looking to the future I think we can expect at least three trends:

> Companies are diversifying their workforces, hiring from a bigger pool of potential employees than ever and looking beyond employees that have traditionally worked in manufacturing.

> Companies are taking a fresh look at how their staffing and operations fit together. One strategy is to focus on training and retaining a core workforce of highly skilled employees to handle critical work on the shop floor, while offloading other functions to a contractual workforce or to dependable, resilient partners.

> Companies are looking at automation. Technologies exist that can help a small staff maintain a high throughput, but they often require large capital investment. Today, more companies believe that investing now will set them up to take advantage of a post-pandemic economic rebound.

—Brad Laux
Director, Grainger Metalworking
Segment Strategy



Planning for 2021 and Beyond

As the economy continues to recover from the pandemic, metalworking businesses are looking to opportunities on the horizon. By refocusing their technology investments and continuing their efforts to adapt to the new conditions of the labor market, businesses can position themselves for success.



Grainger Insights:

Reshoring and Resilience

The pandemic is really changing how companies look at things. The events of 2020 showed how fragile the global supply chain can be.

In response, more companies are looking to work with domestic manufacturers and suppliers, looking for reliable, consistent partners within the U.S., locally when possible, to give them more visibility and more control. Before the pandemic, reshoring efforts were making real progress, restoring manufacturing capacity in the U.S. But what's happening now really feels like something new. There's a new attitude. The lessons of 2020 may change how business look at supply chain for years to come.

— Erica Lonn
Grainger Senior Metalworking
Portfolio Strategist





||||| FOR THE ONES WHO GET IT DONE

About Grainger

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