

# 5 Things You Should Know About Your First Cylindrical Grinding Machine



For machine shops, cylindrical grinding grants exciting capability boosts. While there are some hurdles, including a higher price point for capital equipment (more on that in just a bit) and new things to learn for operators (ditto), welcoming a [cylindrical grinding machine](#) to your shop floor is a business- and reputation-booster that you will not come to regret.

At UNITED GRINDING North America, we've seen the growth that can happen when your talented operators and savvy leadership intersect with our premium machinery and next-level support and service. We have helped shops all over the continent go from cylindrical grinding newbies to cylindrical grinding experts and evangelists. You'll hear from some of them in this piece.

We know it's a significant decision to buy that first cylindrical grinding machine. Today, we'll cover a handful of things you should know before you make the final call. Whether you ultimately decide to go with UNITED GRINDING or someone else, we wish you all the best on the journey. To us, it's one of the highest forms of manufacturing on earth. You will no doubt be surprised by all that you'll soon be capable of.

*Let's get into the list.*

## 1. There are many reasons to buy that first cylindrical grinding machine.

Everyone's origin story is a little bit different. In many cases, people finally get fed up with being at the mercy of their vendors' turnaround times. Bringing cylindrical grinding capability in-house is a surefire way to make customers happier with your on-time delivery rates—and to make yourselves happier with the improved profitability.

Or, you might simply desire a level of quality and efficiency that you just can't achieve with your current equipment. Cylindrical grinding, and [STUDER](#) machines in particular, certainly help you level up in that regard.

Finally, there may be a new business opportunity that you couldn't turn away that requires a cylindrical grinding machine to be on the floor.

Whatever the reason, at some point, you realize you're ready to enter into the world of cylindrical grinding. Congratulations! Immediately, there's a new hurdle to clear: the sticker price.

## 2. Cylindrical grinding machines are an investment that brings surprising ROI.

If you've done some casual shopping for cylindrical grinding machines, you know that the higher levels of rigidity, precision, reliability and efficiency aren't free.

But here's the thing: packed into the price point of a STUDER cylindrical grinding machine is productivity you'll be able to set your watch to for years. Plus, there's one more ROI-boosting asset: the team at UNITED GRINDING North America.

Not only will you work with our application engineers and sales team to find the absolute best machine for the job, you'll also get our renowned [Customer Care](#) team for the install, training and anything else you need after the sale. It's a hugely underrated and wildly valuable perk.

The thing we really want to talk about in this section is the return on investment you'll see. You have downright absurd improvements in quality and cycle time on the horizon, so in all honesty, quick ROI is pretty much inevitable.



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**"You'd be surprised how fast you recoup that money. Your ROI is going to satisfy you. I deal with that hesitation all the time. We don't finance at Milan Tool. We pay cash for our equipment, so those are big checks we write. I hemmed and hawed over our latest purchase, but it was obvious that we had no chance of efficiently making the part without the STUDER S121r. We knew it because of the test grind UNITED GRINDING did. We knew what our cycle time would be before we issued the purchase order."**

**"Frankly, there's a lot of work to be done that you just can't do without a STUDER. If you're grinding hardened steel and need to hold close tolerances and finishes with perpendicularity, you can't beat it."**

*- Mark Milan, owner of Milan Tool ([read full case study](#))*

## 3. There's a cylindrical grinding learning curve. Choose your partner wisely!

Before grinding joins the party on the shop floor, the types of manufacturing being done are typically turning, milling and EDM. Grinding is often the last manufacturing capability that shops bring in, which means there's a perception that grinding is hard to learn—hard enough to avoid completely.

While it's true that buying your first cylindrical grinding machine introduces new challenges and new things to learn, working with the right partner is like taking the stairs instead of falling four stories. This is an area where UNITED GRINDING North America excels—because of the vast expertise inside our building, and the importance we place on support after the sale.

**"UNITED GRINDING helped us get up to speed quickly with the STUDER S33. They came into our facility and trained us for a week up front. Then, after we ran the machine for a while, they came back for another week once we knew more about what we were doing and had more questions."**

*- Jon Labrie, General Manager of J&E Precision Tool ([read full case study](#))*



## 4. If precision and productivity is the goal, cylindrical grinding is the way.

We can't stress it enough: you simply can't beat the accuracy and repeatability you get when you use a cylindrical grinding machine. It's a level of precision you won't find anywhere else.

**"We run parts that require we hold both tight overall tolerance as well as even tighter roundness tolerance. On top of that, they may have an interrupted grind surface. To handle this, everything has to be right. It's impossible to grind over a milled flat and hold 0.000050" part roundness unless you have a strong, solid machine. That's why we went with STUDER grinders. Their mineral-casting Granitan bases are very rigid and provide optimum thermal stability. At 18,000 pounds, the machines just do not move."**

*- Travis Copen, President of Copen Machine ([read full case study](#))*

And on top of that, going with a STUDER universal grinding machine gives you the benefit that customers might love most of all: flexibility. If you're a job shop, it's fair to say you don't know what you'll be bidding on next week. But like clockwork, you'll get all sorts of bids that require a universal grinder to get the job done. You'll be thankful you have it on the floor.

**"All the work we do is very high-end," he said, "and STUDER is the only machine that can consistently deliver the quality we require and our customers expect. They are the most accurate machines in the world. And the real genius is the flexibility. A STUDER machine can be retooled very easily, delivering the flexibility needed to accommodate the evolution of applications over time."**

*- Beat Maurer, Owner of Complete Grinding Solutions ([read full case study](#))*



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## 5. Cylindrical grinding can be a little like Field of Dreams.

There's a brand-new sentence no one has ever written before. But it's true! When it comes to cylindrical grinding, if you buy it, they will come.

Now, are we advising you to purchase a STUDER machine without a good reason for it? Of course not. That would be reckless. Admirable, but still reckless.

What we are saying is that cylindrical grinding is such a significant and noticeable step up that you very well might generate all kinds of new business—and break into new industries—without intending to do so.

**"Since its installation, our STUDER favorit CNC has run five days a week from 5 a.m. to 5:30 p.m. and on weekends as needed. With one particular application, we were running three batches of 98 pieces per batch per month. Before the STUDER, the cycle time for this application was 16 minutes per part, and after the installation of the STUDER, we were able to reduce that cycle time to five-and-a-half minutes. The 66% reduction in cycle times has opened up new service offerings and more business."**

- Doug Tracey, VP of Engineering at Tracey Gear & Precision Shaft [\(read full case study\)](#)

The vastly reduced cycle times that cylindrical grinding often brings translate to a new block of time you can devote to additional projects. And the capability of CNC grinding—and the quality that comes with it—is something that the most precise industries in the world (aerospace, automotive, defense) demand. When you have a consistent, provable superiority in quality, it's something that the most demanding customers notice.

**"In OD/ID grinding, STUDER is really ahead of the competition. To maintain our 1/10,000ths of an inch tolerances, especially with the form that we're grinding into the die, that's where our customers see the difference between our parts and others."**

- Yves Proteau, Senior VP of Manufacturing at APN [\(read full case study\)](#)



## For your first cylindrical grinding machine, you won't find anything better than UNITED GRINDING.

There are no sure things in manufacturing, but STUDER cylindrical grinders and UNITED GRINDING North America's expertise is as close as you'll get. The machines are known to last decades, and our people tend to stick around for just as long.

As you continue to browse for your next (or first) cylindrical grinding machine, keep STUDER in mind. When you're ready to experience the precision and productivity firsthand, [talk to us.](#)

