TIGHT–TOLERANCE
PRECISION COMPONENTS

FOR NO–TOLERANCE
APPLICATIONS.

profiles inc.
PRECISION COLD ROLLED & DRAWN SHAPES
Our customers cannot tolerate the lost opportunity and lost revenue that come with a supplier that cannot deliver on its promises. At Profiles, we specialize in manufacturing tight-tolerance precision components for the most demanding applications in the world.
SAVE MONEY, RETAIN ACCURACY

If you are machining or using powdered metal components, you could **save up to 60%** by switching to Profiles’ precision cold forming process. Turnaround times will be shorter and the precision and repeatability of the components will **meet or exceed machining quality**. In fact, with Profiles cold drawing and rolling, the scrap rate in many cases is virtually zero. Our engineers can help you recreate an existing component or even improve your design so that switching manufacturing processes will be seamless.

REPEATABLE PERFORMANCE

From initial engineering to final inspection, Profiles’ expertise follows your product every step of the way. Our **prototype review** service allows your engineers to instantly verify that the product conforms to all specifications, including dimensions, hardness, tensile strength, surface quality and more. Moreover, our tightly managed process also ensures exceptional repeatability — even over miles of profile, we can meet customer tolerances within 3 microns.

In-line laser inspection allows Profiles to ensure quality without slowing production. This unit can inspect over 963 dimensions per minute.
DEAD-ON DEADLINES

There is nothing worse than having to call a customer and tell them that you are unable to meet their deadline. And when you work with suppliers, receiving that call means you will have to make one yourself. That’s where Profiles’ proven track record for performance comes into play. With a manufacturing capacity of more than 500,000 pounds per month, quick turnaround is one of the things we do best — but meeting tight deadlines while maintaining quality is what sets us apart.

If you source:

- precision screen wire
- linear motion guides and bearings
- aerospace or automotive sprag
- architectural precision profiles
- medical device components
- any precision application components, including value-added machining

call our Sales and Marketing Department at 1-800-959-3171 to see how Profiles can lower your costs and improve your product.

Profiles engineers can assist you in recreating a component for cold drawing, or can even improve an existing profile. With 45+ years of industry experience and the latest technology, Profiles provides custom components for the most demanding applications.
TOUGH-CUSTOMER TESTED

You will find Profiles components in the most demanding applications for the world’s most demanding companies: Lockheed, ExxonMobil, BorgWarner powertrains, and engines for high-performance racing vehicles. Here are just a few examples of how Profiles works with customers to save money, meet deadlines and exceed expectations.

SHIFTING INTO OVERDRIVE

A heavy equipment manufacturing supplier called with a crisis. Their current component supplier just increased their lead time to 16 weeks coupled with a 40% price increase. They needed a huge order of precision-shaped stainless steel profile within six weeks to avoid defaulting on a contract.

Profiles immediately leapt into action, locating critical raw materials and designing a delivery schedule with weekend shifts to meet the deadline.

The customer received their products in four weeks and averted disaster. Profiles is now their go-to supplier for precision wire components.

BARRELS OF SAVINGS

A firearms manufacturer needed a precision alternative to machining to cut costs and support mass production of a new double barrel shotgun. Orders were already pouring in after introduction at their first trade show, so turnaround time became critical.

Profiles’ engineering team worked with the manufacturer to cold draw the critical component from a higher grade of steel (52100 bearing). The surface finish and temper exceeded customer expectations at a cost dramatically less than machining.

With a tight schedule, the component was engineered, produced and delivered in less than four weeks.

In the first order alone, the customer saved over $198,000 vs. machining.

LEADING THE FIELD

A manufacturer for the oil and gas field recovery industry had been searching for five years for an alternate source for their ultra-high precision stainless wire. So far, only one manufacturer in the world had been able to produce the component successfully, but long lead times and increased demand meant they needed a domestic supplier.

Profiles designed an inline process to manufacture the massive metric ton spools of stainless steel screen wire. Tolerance held in the particular application is less than 3 microns standard deviation over 11 miles of wire.

SKY-HIGH EXPECTATIONS

A premier supplier to the aerospace industry was experiencing an unacceptable high rejection rate for high-precision sprag profiles used in helicopter transmissions. With their reputation for quality on the line, they refused to lower their tolerance demands. Instead they came to Profiles.

Profiles’ engineering group designed a process and quality assurance system to produce products with tolerances double standard automotive requirements.

The customer reported the samples as “the best we have ever received for first-piece approval.”
**Profiles Capabilities**

Customized delivery formats to meet your needs:
- Coils up to 2400 lbs. (Options include level wound spools, reels and catch weight)
- Straightened bars to 21’ (packaged to your specifications)
- Cut or stamped pieces packaged in crates, boxes, tubs or as specified
- Available bar code tracking

Expertise working with the following materials:
- Carbon steels
- Tool steels
- Stainless steels
- Free machining steels (engineered alloys)
- Aluminum
- Copper
- Brass
- Other non-ferrous materials

Additional in-house capabilities include:
- Custom process engineering and die creation
- Heat-treating (annealing and hardening, tempering)
- Burnishing
- Stamping
- Etching
- Stress testing
- Metallurgical testing
- Hardness testing

**Five and Six Sigma** delivery and quality performance for customers (99.8% – 100% error-free)
- ISO 9001:2000

Profiles continuously updates and customizes equipment. This furnace is custom-designed for stainless, allowing for tight tolerances over miles of wire. Profiles ensures rigorous testing of every order, including Vickers or Rockwell hardness testing and in-line laser inspection.

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