

Precision Form

Cold Forming, CNC Swiss, Multi-Spindle & Finish Machining | Lititz, PA

PrecisionForm is a vertically integrated precision parts manufacturer based in Lititz, Pennsylvania, serving automotive, firearms, aerospace, electrical, and industrial programs. Cold forming, CNC Swiss, multi-spindle, and finish machining all under one roof – prototype through automotive-scale production without changing suppliers.



CNC Swiss	Multi-Spindle	Cold Heading	Finish Machining
<ul style="list-style-type: none"> ● Bar dia 0.040"–1.50" (1–38 mm) ● Cross/axial holes, slots, threads ● Tolerance $\pm 0.0005"$, tighter on review ● Prototype through production ● Strong fit for design iteration 	<ul style="list-style-type: none"> ● Multiple tools cutting simultaneously ● Drill, mill flats/slots, cutoff forms ● Thread roll & cut inline ● Cost-efficient at mid-high volume ● Multi-spindle to 57 mm bar 	<ul style="list-style-type: none"> ● Wire 0.060"–0.625" typical ● Up to 6-die progressive forming ● Heads, collars, ribs near-net-shape ● Coin, size & grind for precision ● Best value at 25k+ pcs/run 	<ul style="list-style-type: none"> ● Critical OD/ID, grooves, faces ● Secondary drill, slot, broach ● Thread rolling & cutting ● Centerless & OD grinding ● Blends headed + machined to print

SPECIFICATIONS

<i>Processes</i>	CNC Swiss, multi-spindle automatic, cold heading (up to 6-die), finish machining, grinding, thread rolling
<i>Size Ranges</i>	Swiss/multi-spindle bar 0.040"–1.50". Cold heading wire 0.060"–0.625" typical.
<i>Tolerances</i>	Machining $\pm 0.0005"$ common. Cold heading ± 0.002 – $0.004"$; coin, size & grind for critical surfaces.
<i>Materials</i>	Carbon/alloy steels (10xx, 11xx, 12L14, 41xx), SS 300/400 series, brass, bronze, aluminum, copper
<i>Volumes</i>	Prototype through million-plus (machined). Cold heading best value at 25k+ pcs/run.
<i>Lead Times</i>	NPI: 2–4 wks. Machined production: 4–8 wks. Headed programs: 8–12+ wks incl. tooling.
<i>Finishing</i>	Heat treat, passivation, plating & coatings, shot peen, cleaning/packaging, laser & ink marking
<i>QA / Docs</i>	In-process SPC, CMM/vision, PPAP Level 1–3, FAI, Certificate of Conformance, lot traceability

KEY EQUIPMENT

- Cold Forming: 1-stroke to 5-die multi-blow
- Citizen Cincom A20 VII & C16 IX Swiss
- Multi-spindle screw machines to 57 mm
- EuroTech Trofeo Elite 8465 SY2 / Rapido
- Haas UMC-500 5-axis; Doosan HP4000 II

MARKETS SERVED

- Automotive OE & Aftermarket
- Firearms & Defense
- Aerospace & Industrial
- Medical & Flow Control
- Commercial Fasteners & Specialty

IN-HOUSE CAPABILITIES

- Toolmaking & Gage Shop
- Cold Forming
- Rotary Transfer
- Thread Rolling
- Centerless Grinding
- Vibratory Finishing
- Parts Cleaning
- AI Heat Treat
- Assembly & Kitting
- SPC / CMM Lab
- PPAP Services

