



SEE THE STRENGTH BEHIND PCC ROLLMET.

PCC Rollmet's unique Cold Roll Extrusion techniques provide Defense and Missile assemblies advantages over conventional manufacturing methods.

PCC Rollmet has been a leader in the development and manufacture of Defense and Missile related products since the 1960's. Our years of experience combined with state-of-the-art capabilities enable us to transform raw materials to high level Defense/Missile assemblies.

PCC ROLLMET BENEFITS

- Single source supplier for precision cylindrical welded assemblies
- Precision GTAW welding to 34 feet.
- Close tolerance, thin-walled cylinders unattainable by machining are routinely Cold Roll Extruded in materials such as:
 - Aluminum alloys, stainless steels, high strength steels, nickel-based alloys, and other high weight-to-strength ratio materials
- Ability to vary wall thicknesses resulting in:
 - Localized thickened areas for attachment points and weld joints
 - Thinner areas to maximize structural weight efficiency

PRODUCTS INCLUDE:

- Missile launch tubes and assemblies
- Rocket motorcases
- Machined components & closure assemblies
- Pressure vessels & pressurant tank liners
- Nuclear submarine piping
- Propulsion tank assemblies
- Trainer shapes and assemblies
- Nozzle bodies
- Airframe components
- A variety of unique cylindrical shapes

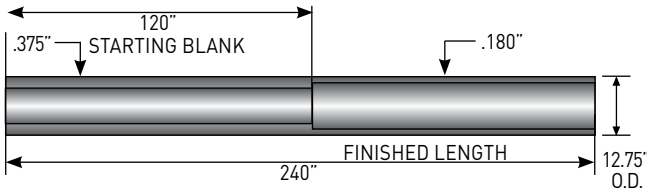
CURRENT AND RECENT CUSTOMERS INCLUDE:

- Raytheon Missile Systems
- Aerojet Rocketdyne
- General Dynamics
- The Boeing Company
- Huntington Ingalls – Newport News Shipbuilding
- Lockheed Martin
- U.S. Navy
- ATK
- AAR Corporation
- United Technologies



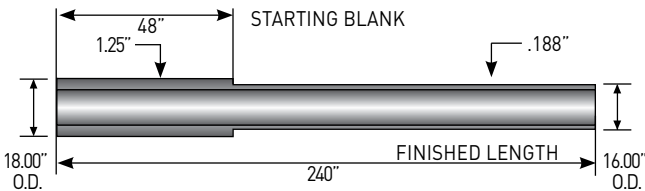
PCC Rollmet, Inc. manufactures seamless pipe using two methods of Cold Roll Extrusion.

INTERNAL COLD ROLL EXTRUSION. The starting hollow is placed inside a one piece, cylindrical die ring. The rollers inside the starting hollow are displaced radially outward until they bite into the inside diameter of the hollow surface a controlled amount. The hollow outside diameter remains constant while the rollers produce a thinner wall with a corresponding increase in I.D. and hollow length in a single pass.



Internal Cold Roll Extruded cylinder typical starting blank, demonstrating material economy and axial growth in length while keeping the O.D. constant during Internal Cold Roll Extrusion.

EXTERNAL COLD ROLL EXTRUSION. External Cold Roll Extrusion utilizes a mandrel over which the hollow is placed. Two (2) annular die rings are brought into position on the hollow. The mandrel and hollow are rotated while the die rings progress axially through a series of passes. This simultaneously reduces wall thickness and O.D. while the hollow grows in length. The I.D. remains constant.

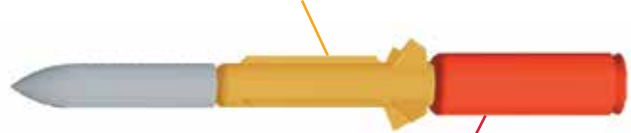


External Cold Roll Extruded cylinder typical starting blank, demonstrating material economy and axial growth in length while keeping the I.D. constant during External Cold Roll Extrusion.



AMRAAM motorcase
Material: D6AC

MK 104 Mod 2 & 3 motorcase
Material: 300M



MK 72 booster case & closure
Material: 4330 V Mod



Patriot motorcase & nozzle
Material: D6AC



PCC ROLLMET for over 50 years, has delivered high quality, precision tubular assemblies to the defense industry. Backed by the global support of the PCC Energy group of companies, we provide on time delivery and material that meets all critical specification requirements, coupled with practical solutions for all your seamless piping needs.

FOR MORE INFORMATION CONTACT:

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