

The Mechanics of Cold Steel: Drawn vs. Rolled

RATHBONE is one of the largest and most respected producers of cold-drawn and cold-rolled metal profiles in North America, primarily serving power generation, defense, medical, water distribution, aerospace markets and a variety of others.

Cold DRAWN Steel

Process

Metal is pulled through a shaped die at ambient temperature.

Finish

Provides a high degree of uniformity for complex shapes requiring precision dimensional tolerances with a standard surface finish of 125 Ra or better.

Strength

Superior strength by rearranging the crystalline structure. This process is known as strain hardening.

Typical Application

Delivers a final or near-net-shape that reduces the machining process making it ideal for high precision profiles with tight tolerances.

VS



Cold ROLLED Steel

Process

Metal is passed through a set of shaped rolls at ambient temperature.

Finish

Delivers a finished look, including clearly defined corners and edges with a smoother surface finish of 63 Ra or better.

Strength

Improves mechanical properties through work hardening. This process improves strength and hardness.

Typical Application

Delivers a durable finished or semi-finished metal shape with excellent dimensional stability making it ideal for precision profiles.

The choice between drawn and rolled can impact your production speed, tool wear, and final product durability. Contact us today for a detailed comparison and custom quotation.