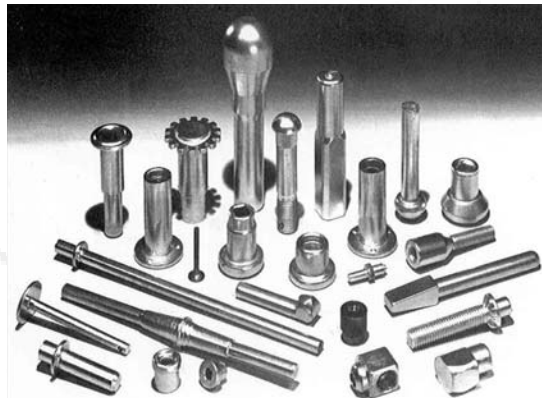


## NELSON STUD WELDING

### MANUFACTURING SPECIFICATION: Cold Formed Parts

The primary method used by Nelson to produce stud welded fasteners is the Cold Forming process. Utilizing the same cold heading production equipment, Nelson produces an extensive line of non-welded, cold-formed parts. These parts can be custom designed to satisfy the specific requirements of individual to a particular customers.

Pictured at right are just some of the many different cold-formed parts and shapes that Nelson is capable of producing. If you are currently purchasing cold-formed or screw-machined parts, Nelson may be able to offer cost savings and quality improvements.



To understand Nelson's capabilities and to determine if cold forming will benefit you, consult the following specification.

#### Should You Inquire about Nelson's Cold Forming Capability? The answer is YES if:

- Your part is 1" or less in diameter, and the shank diameter is 1" or less, and the length does is less than 15".
- Your part is assembled from several components.
- Your annual part volume is 100,000 pieces or more.
- You currently experience substantial material waste.
- You require closer tolerances.
- You need greater process control capability (higher CPK).
- You desire greater part strength and/or better surface finish is desired.
- You have not shopped your part cost in several years.

#### Nelson's Capabilities:

- Wire diameter ranging from 1/8" (0.125") through 1". Upset forming diameters up to 225% of wire diameter.
- Cut-off length up to 15".
- Up to five dies and hammers can be used to progressively form complex shapes.
- Upsets, forward and backward extrusions, punched and through holes, flanges, collars, heads, and other forming techniques can be accommodated
- Production rates from 45 to 450 pieces per minute.
- Complete secondary operations.
- In-house tool and die design and fabrication.

#### You should submit the following information for a FREE Cost Quotation:

- Part drawing with critical dimensions.
- Order quantity and annual volume.
- A sample of the part you are currently purchasing.
- Your target pricing.

Visit our website [www.NelsonStudWelding.com](http://www.NelsonStudWelding.com) for a list of our standard stock products.