High Performance Replacement Screw Shafts

CPM EXTRUSION GROUP
Your Partner in Productivity

Century Extrusion Advanced Technology

- Century Extrusion has responded effectively and consistently to the expanding needs for high torque, high speed extrusion products.
- Century Extrusion is a leader in high torque, rolled shaft technology producing shafts that can withstand significant increases in load, torque, and temperature.
- Working with leading materials suppliers, Century Extrusion has developed materials with the highest torque capacity and hardness properties to manufacture superior extruder shafts.

The Cold-Formed Advantage

- Cold-formed shafts have improved surface finish that increases fatigue life.
- Dimensional stability with respect to required tolerances is greatly enhanced with the cold-forming process. A single tool setting is used during manufacturing which diminishes spline variation ensuring a perfect shaft element fit.
- The cold-forming process generates compressive stress within the spline form. Materials in compression will not crack, whereas materials in tension will elongate and eventually fail.

Shaft Capabilities

- Spline, hex, keyed
- High Performance alloy steels selected to match specific applications
- Configurations for most major twin screw manufacturers including:
  - Coperion/Werner and Pfleiderer
  - Berstorff
  - Clextral
  - Davis Standard
  - APV
  - And many more...

Materials

- H-11
- 300 M
- 17- 4 Ph
- 4340
- And many more...

Coatings for extreme environments

- Surface treatments to aid in corrosion resistance
- Surface treatments to assist in the easy assembly of elements

Century Extrusion Testing and Results

- In a controlled environment, Century Extrusion conducted comparative tests of the cold-formed shaft and the competitive shaft on the market.
- Subjecting both shafts to uniform unidirectional torsion load cycles, these tests measured the fatigue life of each shaft at elevated temperatures.
- Century Extrusion rolled shafts outperformed the highest-rated shaft on the market by 25%. See these outstanding results in the plot below.