



# Cold Forming and Machining Comparison Quick Reference

	<b>Cold Forming</b>	<b>Screw Machining</b>
<b>Material Yield</b>	Excellent (approx. 100%)	Poor (40-45% typical)
<b>Part Cost (non-precious metal)</b>	\$	\$\$\$
<b>Part Cost (precious metal or pm alloy)</b>	\$\$ (no scrap to reclaim)	\$\$\$\$\$ (reclamation of metal scrap)
<b>Production Run Rate</b>	30 - 250 parts per minute	2 - 10 parts per minute
<b>Range of Materials</b>	Wide range	More limited
<b>Stock Material Additives</b>	No additives required	Additives may be required to improve machinability (Pb, S, etc)
<b>Ease of Shaping Gummy Metals</b>	Excellent	Difficult (Tendency to produce stringy chips)
<b>Part Strength</b>	Forming results in a work hardened part	Final part is no harder than feedstock material
<b>Part Finish</b>	Excellent Smooth finish, no burrs	Average (tool marks, deburring needed)
<b>Commercial Feasibility</b>	Typically 3K units/year or more	Depending on part design, 0 to 3K units/year
<b>Tooling Investment Needed</b>	\$300 to \$10,000 depending on part complexity	Little to no up-front tooling cost

Contact Deringer-Ney @ 860-286-6101 or [www.DeringerNey.com](http://www.DeringerNey.com)