

# Quality parts start at the ends

**F**or large-scale between centers turning applications, end working generates accurate reference points for producing quality parts.

And according to Seneca Falls Machines ([www.senecafallsmachines.com](http://www.senecafallsmachines.com)), a maker of technologies

for enhancing turning applications, being able to simultaneously work both part ends saves time and improves concentricity, roundness and squareness of machined surfaces. In addition, these more accurate centers lead to more uniform stock

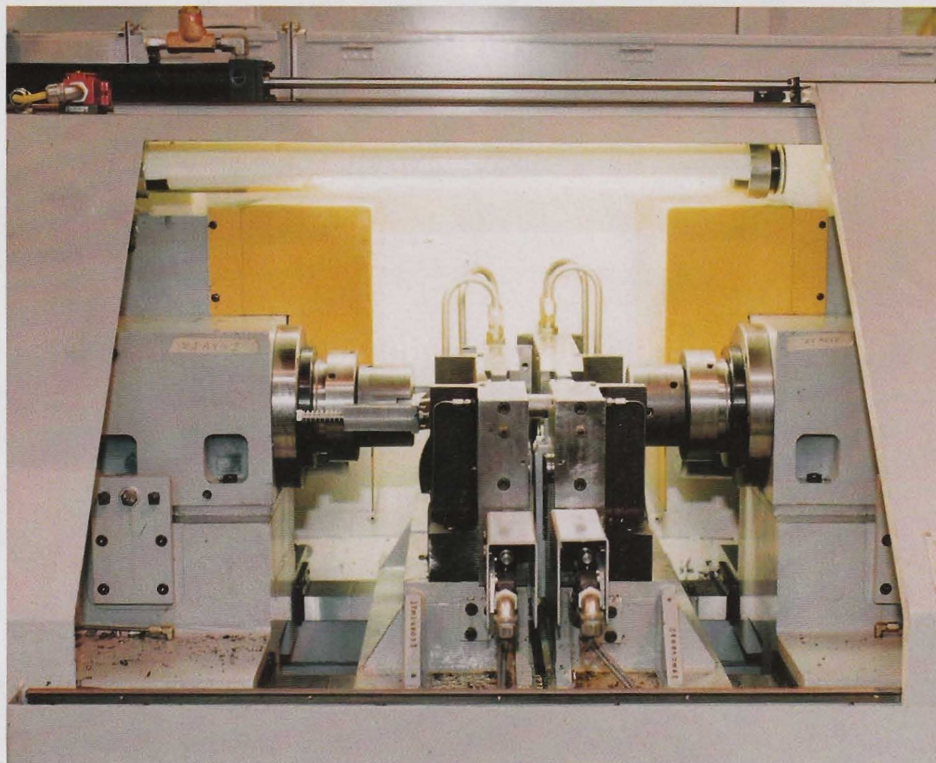
removal and less cutting pressure variation, especially when turning stock off a part's O.D. later in the machining process.

End working machines from Seneca Falls Machines, for example, are CNC double-end tool-rotating machines that perform

work on both ends of a stationary part gripped in an automatic fixture. The rotating tools face each other on the same centerline for good concentricity, roundness and squareness between machined surfaces on both part ends.

End working is usually the first or second operation in the machining process and is intended to prepare parts for subsequent operations, or it can be the only turning, facing, centering and threading done on a part. As such, these machines can eliminate subsequent machining operations, increase productivity or help decrease the part process scrap rate.

While end working typically is used for centering and facing a part to be loaded on a lathe between centers for turning, today's end working machine technology allows shops to do many other operations, such as machining I.D.s, faces and O.D.s of a tube at both ends concentrically at the same time or face, turn, drill and thread both ends of a shaft simultaneously. <<



*End working machines can eliminate subsequent machining operations by cutting both part ends simultaneously.*