

## BENEFITS OF POLYURETHANE SPINDLE LINERS

1. Better control and protection of bar stock during feeding
  - a. Precise turning
    - i. Protect part finishes (quality control)
    - ii. Hold tight tolerances (quality control)
    - iii. Limit scrap rates
  - b. Vibration dampening qualities /reduces vibration
    - i. Improves machine performance
    - ii. Reduces maintenance
    - iii. Extends life of tooling package (cutting tools)
    - iv. Extends machine life—less wear and tear on spindle bearing/motors
    - v. Reduced noise levels – improve operator productivity/work environment
  - c. Turn at increased or maximum speed, feed rates
    - i. Higher productivity—faster cycle times equals more parts per hour
      1. Can improve service to customers
    - ii. Shorter lead time on jobs
    - iii. Generate more sales per hour with lathe
2. Durable material characteristics (hot cast polyurethane)
  - a. No burrs over time (protects bar stock)
  - b. Will not rust
  - c. Resistant to coolants, oils, and heat generated during machining
  - d. Typically outlasts the life of machine
3. Short lead time for manufacture of polyurethane liners—quick turnaround on orders
  - a. Less machine downtime
  - b. Better positioned to take short-notice work
    - i. Better service to customers
4. Custom engineered solutions – polyurethane liner designs for special machine set up, applications and/or material profiles
  - a. Maintain proper orientation of stock profile during feeding of shaped extrusions, hex, square, rectangle stock, etc. - full length liner ID can be cast to match profile of stock.
  - b. Liner IDs can also be custom made with off center adjustments in liner and/or the rotational center of material
  - c. Multi piece liners with locking design feature available
  - d. Liners with extensions and design solutions available
    - a. Up to 4.00” extension beyond the flange. Longer extensions if there is support for the bar.