



POLYURETHANE - CUSTOM CAST PRODUCTS

POLYURETHANE:

Outperforms metal, rubber or plastic in many applications.

Special formulations are available to meet your needs:

- High or low friction grades
- Noise reduction grades
- UV resistant grades
- Anti static grades
- Abrasion resistant grades with enhanced lubricity of UHMW or Moly additives

Polyurethane offers a variety of part design options for difficult applications. When improved performance and lower costs are the focus, the ability to cast different hardnesses of urethane to mating materials, like metals, allows the inclusion of performance additives for extended wear components. Whether the working environment involves wet or dry conditions, high impact or heavy wear challenges, low friction or self-lubricating concerns, urethane formulations are available for special requirements.

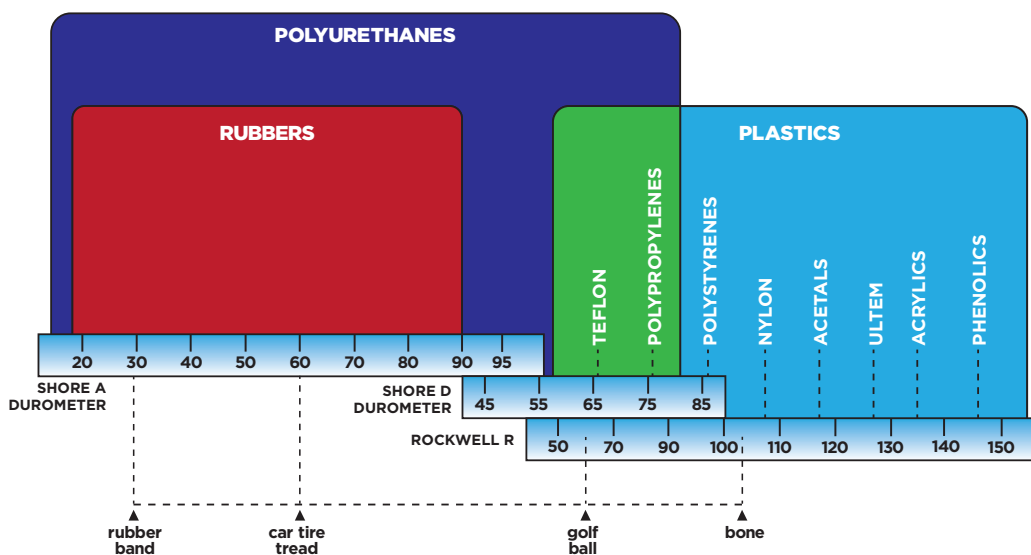
HARDER THAN A GOLF BALL...OR SOFTER THAN A RUBBER BAND. See the comparison chart on the back page, polyurethane offers a wide hardness range (far wider than conventional rubbers).

RESILIENCE RANGE. Unlike rubbers, polyurethanes can be made resiliently soft or hard. For shock absorbing applications, polyurethanes can be formulated with rebound values as low as 10% to 25%. For quicker recovery, or where high-frequency vibrations are a factor, they can be formulated with rebound values up to 40% to 70%.

CUSTOM URETHANE PARTS - INCLUDING IMPACT PADS, WHEELS, ROLLERS, SPROCKETS, BUMP-STOPS, VIBRATION CONTROL COMPONENTS ...



HARDNESS SCALE DUROMETER COMPARISON OF MATERIALS



URETHANE RESINS CHOSEN FOR CUSTOM CAST PARTS WILL VARY, DEPENDING ON THE WORKING ENVIRONMENT

POLYETHER BEST FOR:

WET CONDITIONS
CHEMICALS
HIGH REBOUND
HIGH DUROMETER HARDNESS

POLYESTER BEST FOR:

DRY CONDITIONS
IMPACT AND TEAR STRENGTH
LOW REBOUND
LOW DUROMETER HARDNESS

*HYBRID - FOR UNIQUE SITUATIONS

*Armorglide Filled Urethane adds the benefits of UHMW in reducing the coefficient of friction and increasing the wear properties and abrasion resistance of custom cast urethane parts.

POLYURETHANE BENEFITS:

- Resistant to severe abrasion
- Impact resistant standing up to repeated impingement
- Urethane grades available that will remain flexible at low temperatures (-30°F to -40°F)
- Continuous use up to 85° C (185° F)
- Ether urethane grades that won't swell or deteriorate in water (0.3% to 1% absorption by weight)
- Excellent electrical insulator for potting or encapsulating applications
- Urethane grades available for resistance to oil, grease, and chemicals
- Will resist mold, mildew, or fungus growth
- Casts to wood, metals, and many plastics
- Low tooling/mold costs for small or large quantity production runs