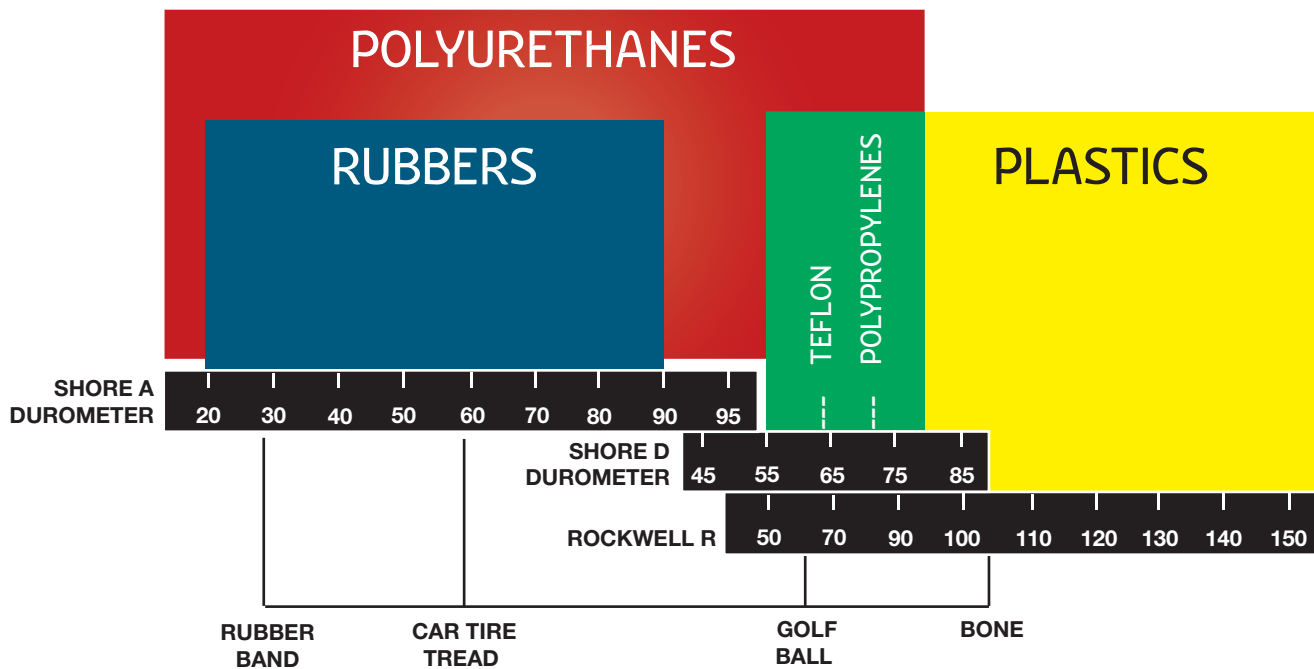


DUROMETER

What is a Durometer?

Durometer is one of several measures of the hardness of a material. Hardness may be defined as a material's resistance to permanent indentation. In the world of polyurethane pipeline pigs, the hardness scale used is "Shore A". Our polyurethanes typically range from 60 to 90 on the Shore A scale, but we can expand that range for special applications if required.

Compared to Rubber, Polyurethane is a harder and stronger product, giving it the ability to handle harsher conditions, higher load and greater impact. The below chart illustrates the unique properties of Polyurethanes:



In regards to pipeline pigs, each Durometer has its advantages and disadvantages. The description headings below also indicates our standard color for each Durometer:

- 60-63 Durometer:** Very soft and pliable; good for passing through restrictions or turning tight radius bends; can be used in non-steel pipelines (Fibreglass, HDPE or lined pipe); less effective at cleaning and scraping due to softness; shortened pig life span due to increased wear; lower resistance to extreme conditions such as high hydrogen sulfide gas or chemicals.
- 70-75 Durometer:** Somewhat firm but quite flexible; moderate cleaning and scraping effectiveness; medium wear resistance.
- 80-85 Durometer:** Most common Durometer used for solid cast pigs; firm with fair flexibility; very effective at cleaning and scraping; high level of wear resistance; also moderate resistant to hydrogen sulfide gas or chemicals.
- 90-95 Durometer:** Very hard with little to no flexibility; uncommonly used in solid-cast pigs; used mostly for custom urethane applications (i.e. rollers, bumpers & spacers)

