

Looking for Cost Savings?

We Continually Strive to Meet Customers' Needs.

MELONITE™ Process offers a significant cost savings and alternative option to Stainless Steel



- Increased surface Hardness
- Lower coefficient of friction
- Enhanced surface lubricity
- Improved running wear performance
- Enhanced corrosion resistance

ATRA-FLEX® is proud to Offer MP. The MP stands for MELONITE™ Process. This process is available as an option with our complete coupling line to provide corrosion and wear resistance. This process has been proven in the field to prevent corrosion caused from applications in wet or chemical environments as well as wear and fretting due to misalignment and vibration. It is a low cost alternative to stainless steel suitable for marine applications.

MELONITE™ is a thermochemical treatment for improving surface properties of metal parts. It exhibits predictable and repeatable results in the treating of carbon steels resulting in superior corrosion and wear properties as well as increasing rotating fatigue strength. During the process, which takes place between 900F and 1075F, the metal surface is enriched with nitrogen and carbon. A two-part nitride layer consisting of a monophasic compound layer and diffusion layer is formed. Total depth ranges from .008-.040". Hardness in the compound layer is increased to an average of 57.6 Rockwell C. The end result of this process creates a black matte finish that unlike black oxide will never wear off.