Pallube process is Nihon Parkerizing company's trademark for a comprehensive solid lubrication treatment system in several substrate.

**Process flow**

- Pre-treatment: Gas heat treatment, Isonite, Phosphate
- Degreasing
- Pre-heating
- Coating of Pallube: Tumbling, Rotary Dipping, Conveyor
- Baking

**Characteristics**

- Low friction coefficient under high load
- Lubricate under wide range of temperature
- Lubricate under dry condition; oil free
- Long life of lubricated film
- Improve corrosion resistance

**Advantages of our process**

- High lubricated performance with small particle size and thin film only 3 micron thickness. Ex. Swash plate in compressor.
- Pallube can apply for many kinds of material and also only specific position.

**Pallube Film**

Performance: Wear Test Result By Ball on Disk

- Solid Lubricant (MoS₂, PTFE, Graphite type)
- Phosphate layer
- Material

- Tester: Ball on Disk Type Slide Wear Tester
- Material: Disk SUS23 (024 Surface Roughness Ra 0.5 Finished) Ball SUS304 (06)
- Test Method: Non Oiling Slide Speed 314mm/s Slide Distance 376m Loading 5N