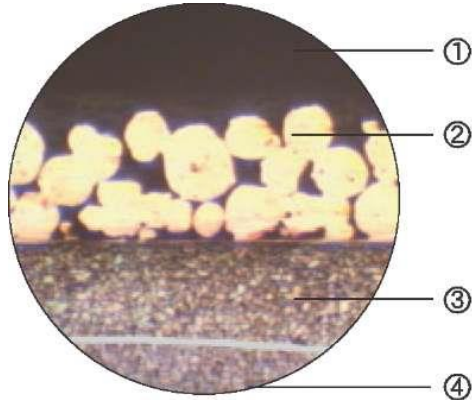


MATERIAL

AST-50 Steel Bronze Powder with PTFE/Fiber Dry Bearings

RoHS



Structure

1. The 0.01-0.03mm thick PTFE/polymer fiber mixture and lead-free bearing layer provide an excellent initial transfer film which effectively coats the mating surfaces of the bearing assembly to form an oxide type solid lubricant film.
2. The sintered bronze powder thickness of 0.20-0.35 mm, provides maximum conductivity of heat away from the bearing surface and acts as a reservoir for the PTFE/Fiber mixture.
3. The steel backing, provides high load carrying capacity and excellent heat dissipation.
4. The 0.002 mm thick Copper/Tin plating provides good corrosion resistance.

Features

Suitable for dry running with a low coefficient of friction, low wear rate, good sliding characteristics, the transfer film created will protect the mating metal surface. Suitable for rotary and oscillating movement, high chemical resistance, lower absorption of water and reduced swelling. Also performs well with lubrication.

Technical Data

Max. load	Static	250N/mm ²	Friction coefficient	0.03~0.20		
	Very low speed	140N/mm ²		Max. speed	Dry running	2m/s
	Rotating oscillating	60N/mm ²			Hydrodynamic operation	>2m/s
Max. PV dry running	Short-term operation	3.6N/mm ² *m/s	Thermal conductivity		42 W(m*K) ⁻¹	
	Continuous operation	1.8N/mm ² *m/s	Coefficient of thermal expansion		11*10 ⁻⁶ *K ⁻¹	
Temp. limit		-195°C~+280°C				

Typical Applications

AST-50 meets the demanding criteria for long life and trouble-free performance with or without lubrication in various industries.

Automotive, Construction, Agriculture: tractors, combines, crop sprayers, earth movers, graders, power steering, brake calipers and pistons, shock absorbers, governor linkages, windshield wiper motors, tilt gear assemblies.

Business machines: photocopiers, mail sorting and processing, postage meters, computer printers and peripheral equipment

Hydraulics: pumps and motors (gear, rotary, water, piston), valves (ball, butterfly, poppet, steam, and others).

Home appliances: refrigerators, air conditioners, polishers, sewing machines, ovens, dishwashers, clothes washing machines.

And materials handling, marine engine, packaging, textile equipment, tools...etc.