

● Dry Coating

Dry film, a film mixed solid lubricant such as MoS₂ with organic or inorganic binder, forms a dry coating film on the pretreated materials (such as chemical conversion treatment) to increase film adhesion property and carries out lubrication action with solid lubricant in this film. Making each sliding part dry coated and using grease and oil there are very effective to further maintenance free and energy saving. In addition to dry coat processing, we can do pretreatment (phosphate treatment, black oxide finish) and sell dry coating liquid.

【 Major Use 】

1. Dry lubrication (areas where oil is disliked)
2. Areas where oil films break due to high load
3. Initial seizing and cling
4. Areas with lots of dust
5. Fretting and corrosion prevention
6. Lubrication at high temperature and under vacuum conditions

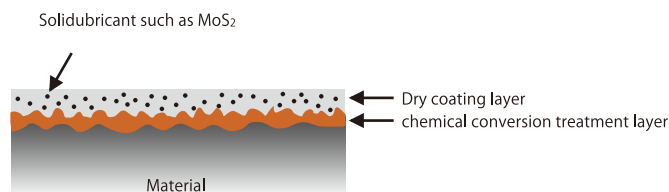


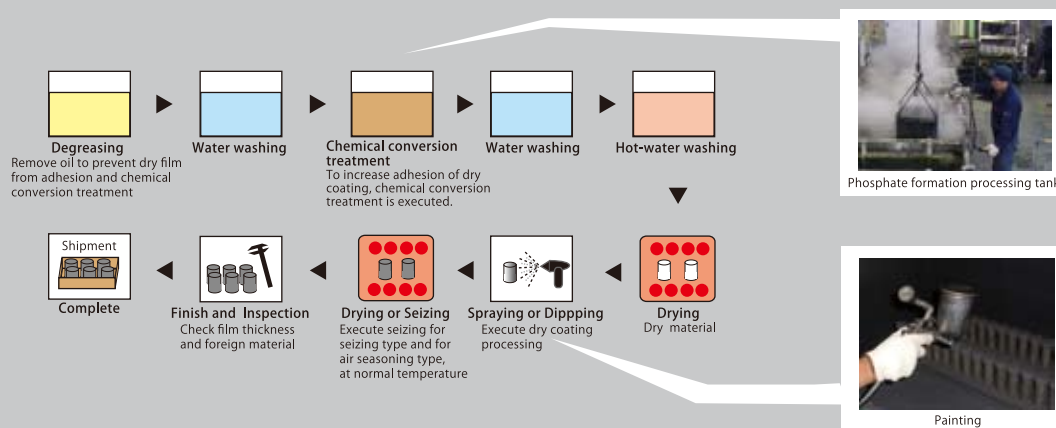
Figure : image of dry coating

Product Number Product Name	Color	PV Value	Pressure resistance load	Friction coefficient	Heat resistant temperature	Component	Package
LM-23 Concentrate	Grayish black	10	147	0.03	-60 ~ 450°C	Disperse MoS ₂ to viscosity SAE #30 volatile solvent . JRS 64099-2E-15AR-1D Air seasoning type	500g (1L angular can) / 12cans
LM-26 Molynamel B	Grayish black	-	245	0.05	150°C	Disperse MoS ₂ to acrylic medium. A combined solvent of 2 liquids is used as a thinner. Air-seasoning type	150g / 6 cans 1kg (1L poly container) / 4 2.5kg (3 poly container) / 6 16kg / pail can
LM-52 Molynamel C	Grayish black	20	294	0.04	200°C	Disperse MoS ₂ and special lubricant agent to phenol medium. Alcohol is used as a thinner. JRS 64099-2E-15AR-1D Seizing type	1kg (1L poly container) / 4 2.5kg (3L poly container) / 6 16kg / pail can
LM-53 Molynamel D	Grayish black	21	294	0.04	260°C	Disperse MoS ₂ to silicon medium. Xylol is used as a thinner. Seizing type	1kg (1L poly container) / 4 2.5kg (3L poly container) / 6 16kg / pail can
LM-55 Molynamel G	Black	20	294	0.04	200°C	Disperse MoS ₂ to epoxy medium. Xylol is used as a thinner. Seizing type	1kg (1L poly container) / 4 2.5kg (3L poly container) / 6 16kg / pail can
LM-56 Molynamel Z	Grayish black	-	245	0.05	200°C	Disperse MoS ₂ and PTFE to epoxy medium . Xylol and MEK are used as a thinner. Seizing type	1kg (1L poly container) / 4 2.5kg (3L poly container) / 6 16kg / pail can
LM-62 Molynamel F	Grayish black	-	294	0.03	200°C	Disperse MoS ₂ and special lubricant agent to organic resin medium . A combined solvent is used as a thinner. Air-seasoning type for cold forging	1kg (1L poly container) / 4 2.5kg (3L poly container) / 6 16kg / pail can

All dry coating products including liquid concentrate and processing are made by order. Please contact us for the delivery time and quantity (lot size).

Pretreatment process

Pretreatment suited for each material of processed goods is executed.
Following diagram shows a typical process of articles



● WPC Treatment

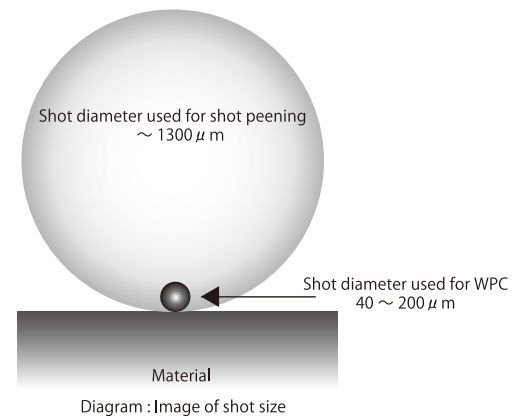
WPC is the patent (patent number:1594395) and the registered trademark of Fujikihan Corporation.

It was known that smashing plates with a hammer could improve their strength and durability. WPC treatment is the one to improve the surface of material by applying this technology.

This is a surface treatment process for the purpose of improving "fatigue strength" by spraying and hitting 40-200 μm size of shot materials to materials to be treated at high speed of 100m/sec and over. By this, some effects including improvement of sliding performance and slip resistance can be expected depending on the size of shot materials. Compared with the normal shot-peening treatment (200-1300 μm size of shot), this treatment doesn't cause roughness on the surface but forms a very delicate dimple (irregularity). And as the processing depth is shallow and shot load is small, fatigue crack and surface change by shot rarely happen. Therefore, the surface is treated shot densely.

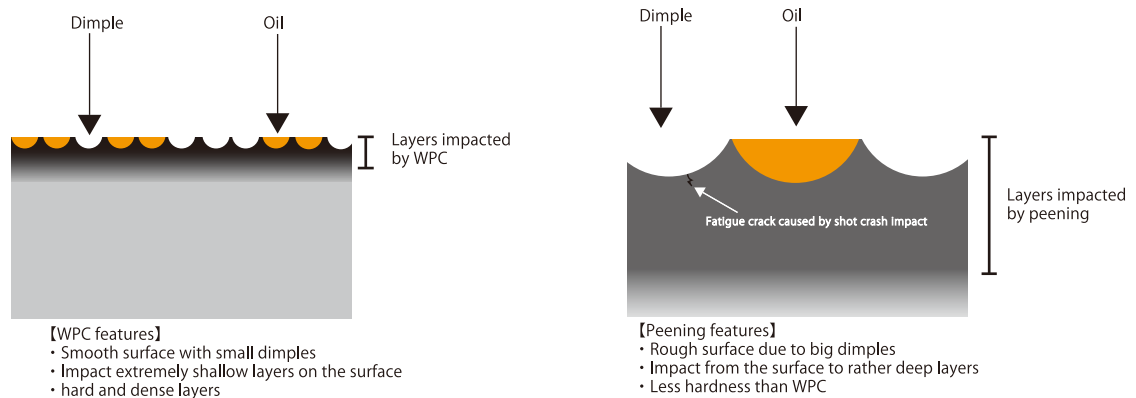
Following are three typical roles of WPC treatment:

- ① Increase hardness of shot surface and improve its strength and wear-resistance
- ② Store residual stress on the material surface by shot and improve fatigue strength
- ③ Keep lubricant in dimples made on the surface and improve sliding performance



【Use application】

Metal component, metal processing, cutting tool and machine tool processing



● Other surface processing

IPVD, CVD, PTFE coating, nonviscous coating, etc. We can process and execute general surface processing with lubricity.

As all these products are made by order, please contact us for the specification and the delivery time.