

State of the Art Coating Facilities of TAKENAKA MIDDLE EAST LLC

Jan. 25, 2017



Original Surface Treatment by TAKENAKA

1. NANOTECT®

World's first carbon nanotube contained anti corrosion coated film with great mechanical properties for impact, abrasion and hardness.

2. TAKECOAT-1000®

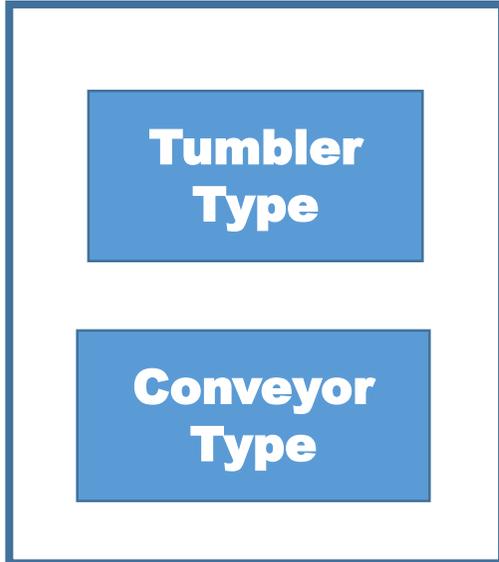
No.1 leading PTFE coated film in the world with long term anti corrosion durability

3. TAKECOAT-CERAMIC1®

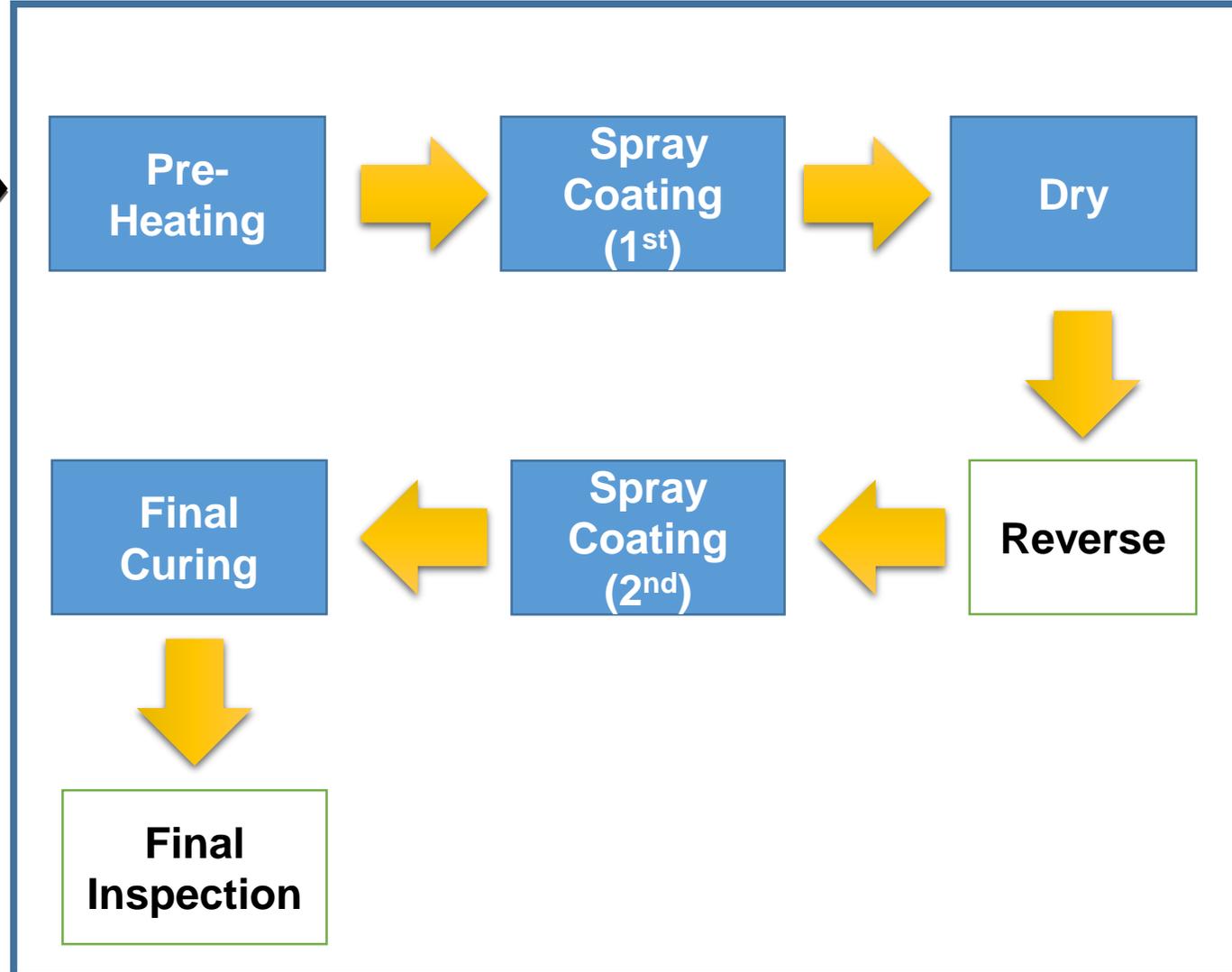
Ceramic anti corrosion coated film with great heat resistance up to 450Deg.C

Coating Flow Chart

【Under Treatment】



【Top Coat System】



Under Treatment

☆Outline

Treatment by shot blasting with Zinc-Al contained media to form 2-5µm of metallic film on metal surface

☆Feature

1. Strong adhesion between metal surface and top coating
2. High anti corrosion property
3. Great hardness and ductility

Under Treatment	DFT	Salt Spray
TME LLC UNDER-Treatment	2 to 5 µm	1500 hrs. No Corroded

A) Tumbler Type

For small materials (Bolt for up to M30 Dia., Nut for up to M42 Dia.)

B) Conveyor Type

For large and heavy materials (Max capability up to 7M length)



(Conveyor Type)



(Tumbler Type)

Top Coating

1. Pre-heating

This process is to heat materials in oven in order to form stable coated film on thread and other metal surface



2. Spray Coating (1st)

This process is to perform coating by fully automatic coating robot programmed to apply the best condition depending on the shape and dimension of materials. Due to the fine atomized spray to be discharged, precise coated film can be treated.



3. Dry

This process is to dry the coated half surface and maintain the surface temperature of the other side while coating in next process.

Top Coating

4. Reverse

This process is to reverse materials in order to coat the other side.

5. Spray Coating (2nd)

Same coating process is applied to the other side.

6. Curing

By holding the materials in oven at 200-250Deg C for approx.30 min., the coated film can be cured completely.

