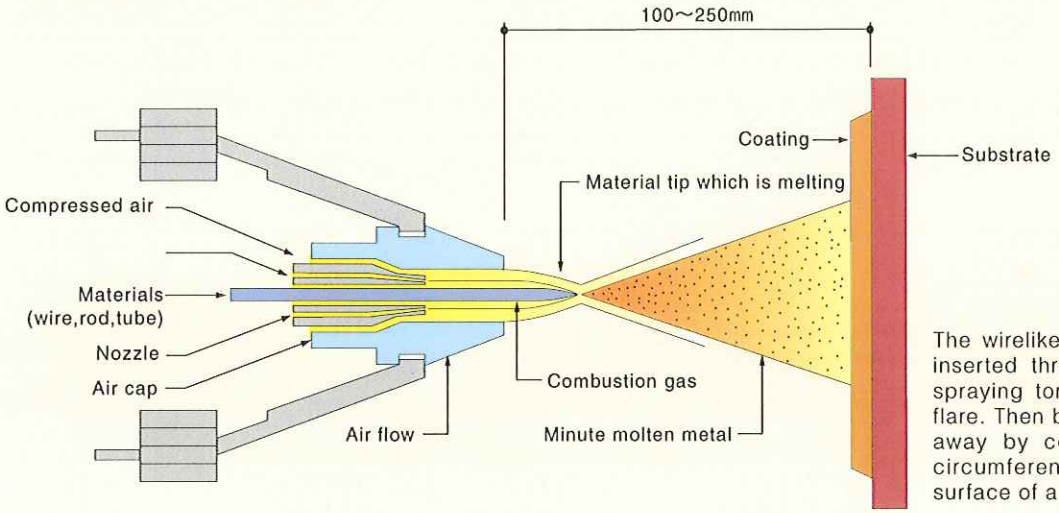
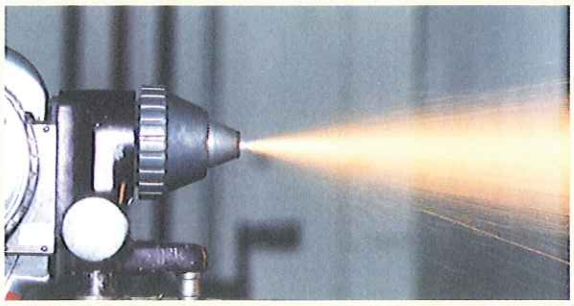
Flame spraying (wire,rod)



The wirelike or rodlike spraying material inserted through the center hole of the spraying torch is melted by 0xygen-fuel flare. Then being made minute and blown away by compressed air jet from the circumference, it is sprayed on the surface of a raw material.

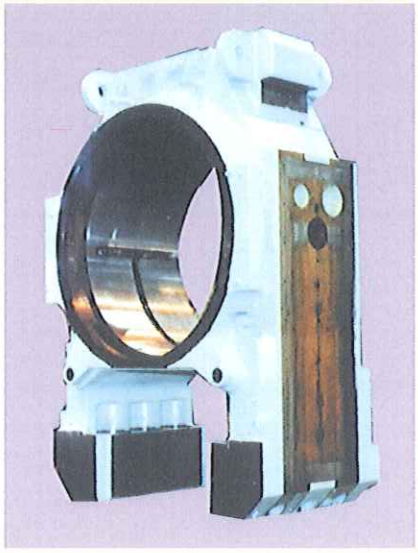


General characteristics

- No deterioration and changs found on materials to be sprayed. because of the low temperature spraying.
- Sprayinfg of ceramics with acomparatively low melting point possible according to the shape of rods or tubes.
- Films withfiner surface roughness and higher hardness obtained whith arc spraying.
- Smaller loss of chrome and carbon compared with arc spraying.

Characteristics of ofic

- OFIC has many achievements of rust preventve spraying for alumium and zinc as the main force of on-the-spot spraying by a business trip.

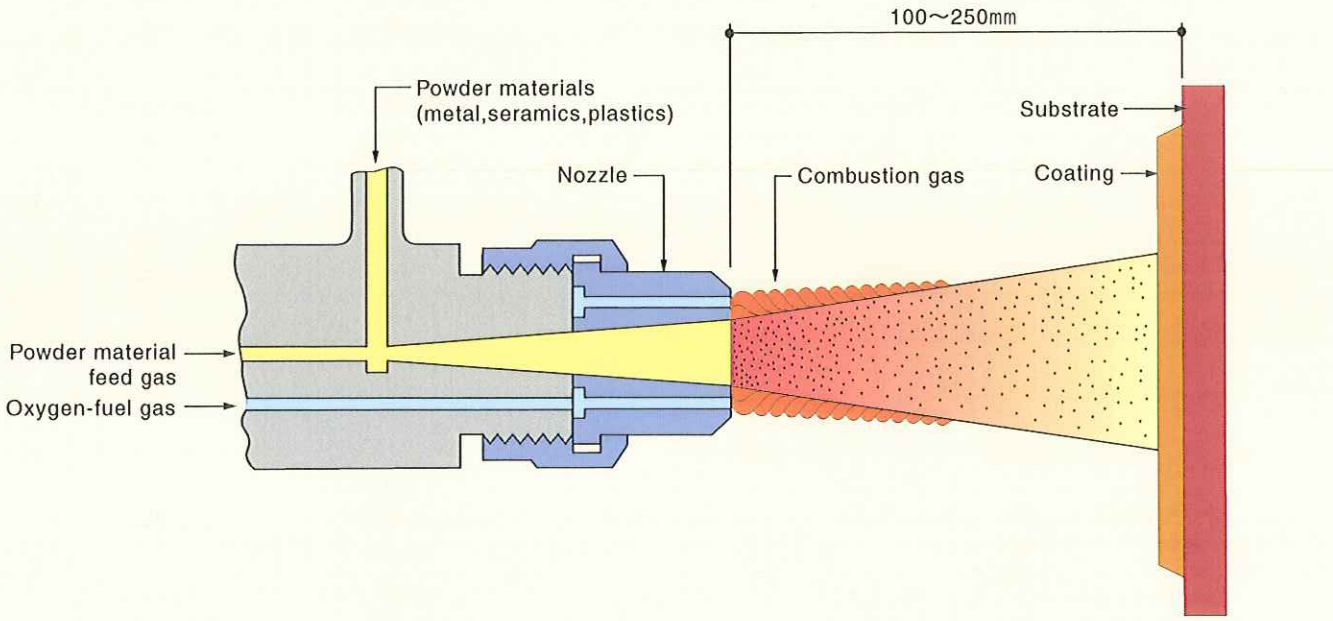


- Backup roll chuck
  size:1700×1100×2700(38ton)

- electromagnetic waves pot
  size:φ550×250H

Spraying material : SUS 410
(13% Cr stainless steel)(200 maqnifications)

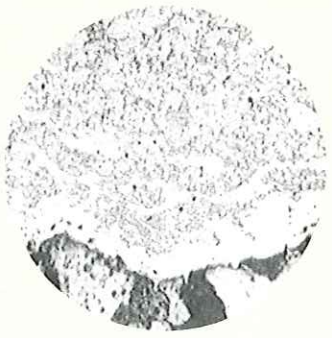
Flame spraying (powder)



The spraying powder material fed into the spraying torch by feed gas through the feed inlet is melted by oxygen-fuel flare and sprayed on the surface of a raw material.
This spraying method is used especially for spraying a fluxing alloy. It can also spray ceramics and plastics ※1 as well as general metals.

■ Self-fluxing alloy spraying

A poreless deposit metal layor is formed by applying a remelting processing ※2 after the spraying of the self-fluxing alloy powder material according to the above-mentioned gas powder spraying method.



Spraying material : self-fluxing nickel alloy (remelting processing, 200 maqnifications)

■ General characteristics

- A low wear rate and high wear resistance.
- Corrosion resistance higher than that of the 18-8 stainless steel and equivalent to high nickel alloys.
- High hardness at high temperatures.
- Does not need a thick padding and gives uniform hardness because of its deposit filling without penetration of a raw material which appears in build up welding.
- Brings added values such as high wear resistance by dispersing carbides and ceramics.

■ Characteristics of ofic

- OFIC enables spraying of even a raw material such as cast iron for which a welding method is not suitable.
- On-the-spot spraying by a business trip possible.
- Spraying of large members also possible.

※1 Nylon 11, polyethylene, epoxy resin and denatured EVA can be used as plastic spraying materials.

※2 Remelting processing is to combine the sprayed film whith the parent material matallurgically by putting the film in a semi-molten state at 1,000~1,100℃.
Boron and silicon in the alloy reduces oxides in the film and they chang to slays which rise to the surface, consequently making the structure of the film poreless.
At that time boron and carbon in the alloy precipitate as boride and carbide,resultingly improving the wear resistance.