



## thermal coating technology

### 1. Coating capabilities

When one engineering problem is raised, the first should be clear is to accept the construction of the part of the work-piece by spraying (usually work surfaces of equipment or facilities) in what kind of working conditions, and the function of coating is to identify the main features spraying process and materials basis, while also considering whether to allow the economy.

#### 1.1 Coating diversity

Due to the diversity of spraying coating material of a variety of choice, the process parameters controlled variable and spraying methods. Spraying powder material over then one hundred species, wire and rods are also with dozens, different variations spraying methods and process parameters, enabling the formation of the same material different coating. So, the combination of these variables can get a "menu" type of coating series, when you need to have some kind of coating properties, just take from that is OK.

#### 1.2 Coating category

Spray coating material sprayed can be divided 10 series according to their composition

- (1) iron, nickel and cobalt-based coatings;
- (2) self-fluxing alloy coating;
- (3) non-ferrous metal coatings;
- (4) oxide ceramic coating;
- (5) tungsten carbide coating;
- (6) chromium carbide and other carbides coating;
- (7) refractory metal coating;
- (8) oxide ceramic coating;
- (9) plastic-based coatings;
- (10) cermet coating.