



## Titanium carbide production process quality

### 1, raw materials testing (ingredients before detection)

Sampling methods: a barrel sampling, get 10 points of samples in the iron drum of material by sampling tube, to do testing respectively

Sample Name: TiO<sub>2</sub>, carbon black, and additives

Test items: chemical composition (including moisture, Fe, S, K, Na, Ca, Ni, Co and other trace elements detected), and particle size

### 2, The detection after the ingredients (mixed powder after mixing)

Sampling methods: a barrel sampling, get 10 points of samples in the iron drum of material by sampling tube. to do testing respectively

Sample Name: (TiO<sub>2</sub> + black carbon+ additives) mixed powder

Test items: the chemical composition, particle size, total carbon

### 3, The detection after the ingredients (mixed powder into the graphite ware before pressure)

Sampling Method: Each ware must be checked

Sample Name: (TiO<sub>2</sub> + black carbon+ additives) mixed powder

Test items: Check whether it have been pressing or not with naked eye, and if there are impurities in the material surface.

### 4, after sintering carbonized test ( test the titanium carbide caking after carbonized)

Sampling Method: Each ware must be checked

Sample Name: TiO<sub>2</sub>, carbon black, additives,

Test items: Check the ware surface whether there are impurities, checking whether the massive cross-section of titanium carbide uniform color, were observed with the naked eye.

### 5, the detection after milling crushing (detection of titanium carbide powder after milling crushing )

Sampling methods: a barrel sampling, get 10 points of samples in the iron drum of material by sampling tube, to do testing respectively

Sample Name: titanium carbide powder after crushing

Test items: Chemical composition (including moisture, Fe, S, K, Na, Ca, Ni, Co and other trace elements in the detector), the titanium content, total carbon, free carbon, oxygen content, nitrogen content, and particle size

### 6, Detection after sieving (detection the titanium carbide after the sieving, test the titanium carbide powder)

Sampling methods: get 10 points of samples in the iron drum of material by sampling tube, to do testing respectively

Sample Name: sieving titanium carbide powder

Test items: Chemical composition (including moisture, Fe, S, K, Na, Ca, Ni, Co and other trace elements in the detector), the titanium content of the total carbon, free carbon, oxygen content, nitrogen content, particle size

### 7, mixed batch of finished products after testing (to detect titanium carbide together after batch testing of finished titanium carbide powder )

Sampling methods: a barrel sampling, get 10 points of samples in the iron drum of material by sampling tube, to do testing respectively

Sample Name: After mixing together batches of finished titanium carbide powder

Test items: Chemical composition (including moisture, Fe, S, K, Na, Ca, Ni, Co and other trace elements in the detector), the titanium content of the total carbon, free carbon, oxygen content, nitrogen content, particle size

Note: each small batch is 200 kgs, After 1000 kg ( 5 batch ) mixing

### 8, The detection of qualified, labeling, packaging, delivery!