The Main Types and Characteristics of CNC Tools in China(2)

The production tool can be divided into the materials used:

①high-speed steel cutting tool:HSS is parison material,with better tenacity than carbide,and worse hardness,wear-resistance and red hardness than carbide,not suitable for cutting materials with high hardness, nor high cutting speed.Please grind the edges before application, and it is very suitable for non-standard tools with special needs.

② carbide cutting tools: of excellent performance, widely used in CNC turning machines. Carbide inserts have standard products, specific technical parameters and cutting performance can be provided by manufacturers. Carbide cutting tool in accordance with international standards (ISO) cutting their different nature , into P, M, K categories , respectively, in blue , yellow and red colors to identify :

P class suitable for cutting steel, there are P01, P10, P20, P30, P40, P50 six , P01 for the high-speed precision lathe , the number of small , high abrasion resistance , P50 for the low speed rough turning, large numbers, high toughness , painted blue to identify the holder .

For machining long chip forming common materials like plain carbon and low alloy

Steels; (equivalent to YT class)

M class - suitable for machining austenitic stainless steel, cast iron, high manganese steel, alloy cast iron (equivalent to our YW classes)

M-S class - suitable for processing heat-resistant alloys and titanium alloys

Class K - suitable for machining cast iron, chilled cast iron, malleable iron scrap short, non-titanium alloy

(equivalent to our YG classes)

K-N class - suitable for machining aluminum, non-ferrous alloys
K-H class - suitable for machining hardened materials
③ ceramic tool
④ cubic boron nitride cutting tools
⑤ Diamond Tool