



# T-A<sup>®</sup> Insert Grades

## HSS (CPM-M4)

This tool steel grade possesses the highest material toughness to resist shock and vibration loading. It will drill the majority of steels and cast irons in the industry that are below 280 BHN.

## Super Cobalt (CPM-T15)

This tool steel grade exhibits midrange wear resistance and toughness. It is more wear resistant, but slightly lower in toughness (more brittle) than standard M4 HSS. This grade will provide increased wear resistance in any ferrous or non-ferrous application, especially materials within the 280-359 BHN range.

## Premium Cobalt

This is the most wear resistant tool steel AMEC offers. It possesses reduced material toughness making it more susceptible to fracture from shock and vibration. It is recommended for hard materials (350-500 BHN) as well as abrasive materials. High machine tool and fixture rigidity are required in order to consider premium cobalt as a reliable cutting material.

## C5 Carbide

This carbide grade is for general use in steel applications. It offers exceptionally high wear resistance. High machine tool rigidity is required.

## C1 Carbide

This carbide is another option that is available primarily for steel applications. This carbide offers wear characteristics similar to C-5 carbide. In addition to its wear characteristics C-1 carbide is considerably more durable when compared to other carbide grades. This higher toughness will allow this grade to function in applications not suitable for other carbide.

## C2 Carbide

This carbide grade is for use in non-ferrous applications (high temperature alloys, stainless steels, aluminums, cast irons). It offers exceptionally high wear resistance. High machine tool rigidity is required.

## C3 Carbide

This carbide grade is for use in gray cast iron applications. Inserts made from C3 carbide are stocked with AMEC's CI geometry and TiAlN coating. It offers exceptionally high wear resistance. High machine tool rigidity is required.