WEAR versus TOUGHNESS

When selecting a grade of cutting tool material for your application, both wear resistance and grade toughness should be considered. The higher the wear resistance a cutting tool material exhibits, the more likely chipping or fracture is to occur, thus require more RIGID machining conditions. On the other hand, to effectively machine some materials, cobalt or carbide grades of cutting tool material may be required. The graph below will aid you in the selection of a cutting tool material with the right combination of wear resistance and toughness to make your application both efficient and cost effective.