

# **UPC810 & UPC845**

# PVD grade with ultra coating technology for turning & milling

#### **UPC810 · UPC845**

Advanced workpiece materials like Inconel, Titanium (alloys) and Hastelloy can be well used at high temperatures from 700°C. Heat-resistant super-alloys feature exceptional resistance to heat and corrosion. These characteristics makes them commonly being used in the aerospace industry and other industries with the highest requirements to the used workpiece materials. While offering a wide range of benefits in view of the construction, HRSA massively challenges the tools for machining it.

It is not only the low heat conductivity but also the work hardening which causes rapid wear, built-up edges and chipping to conventional cutting tools. This might lead to shorter tool life and even unexpected tool breakage which negatively effects the process reliability and tool cost.

To overcome these obstacles, KORLOY developed the new Ultra coating grade UPC810 & UPC845 with improved resistance to wear, welding and chipping.

The UPC810 is a grade for turning optimized for high-feed machining and highly-interrupted cut.

The UPC845 is a grade for milling in various applications such as high-feed, slotting, ramping but also when it comes to unstable conditions or highly-interrupted cut.

Both grades are offering excellent process reliability as well as a superior productivity in machining heat-resistant super-alloys.





# **Characteristics**

• Optimized substrate for highly productive machining heat-resistant super-alloys.

• High-performance Ultra-PVD coating made by advanced coating technology.

# **Application area**

Cutting speed, vc (m/min)











Milling: S45 grade

Feature

### Super tough substrate

Strengthend WC-Co binding for improved chipping and breakage resistance. Ensures stable tool life and high process reliability.

## High-performance Ultra-PVD coating

Outstanding tool life through the high hardness of the coating. Optimized chip evacuation thanks to the highly lubricative coating.

Turning: S10 grade

### For further information, please contact our Sales Representatives!

KORLOY EUROPE GmbH Gablonzer Straße 25 – 27 D-61440 Oberursel (Germany) Tel. +49 (0) 6171 27783-0 Fax +49 (0) 6171 27783-59 Mail: info@korloyeurope.com Web: www.korloyeurope.eu