

BIGAAN XC

THE SECOND GENERATION OF A SUCCESSFUL BIGAAN COATING INNOVATED BY A BORON BASED LOW FRICTION LAYER WITH HIGH CONTENT OF h-BN

As with the first generation, BIGAAN XC coating is also prepared using our unique patented technology that combines concurrent magnetron sputtering and arc evaporation of the material in one process.

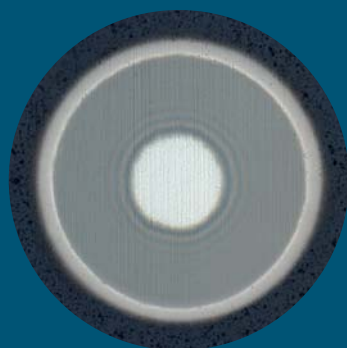
The BIGAAN XC coating excels not only in ordinary cutting conditions but is capable of handling extremely demanding applications with high thermal and chemical stability requirements. It is also characterized by elimination of cutting-edge chipping and reduction of sticking of workpiece material.

Applications:

- cutting,
- gear cutting,
- shearing and forming,
- hot forging.

Coating properties:

- thickness 2 - 8 μm ,
- thermal stability 1100°C,
- deposition temperature 450°C,
- black color.



INDUSTRIAL
PVD COATINGS



APPLICATION

side milling of Inconel

WORKPIECE MATERIAL

Hastelloy C22

CUTTING TOOL

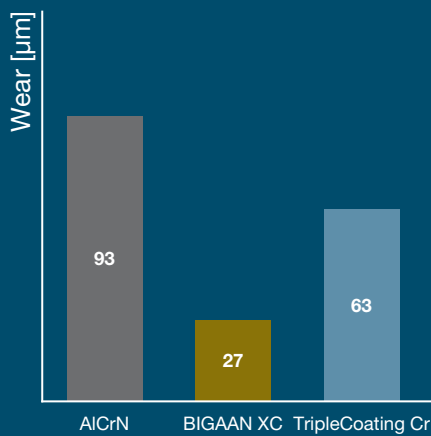
four-edged HM mill d 12

CUTTIGN CONDITIONS

vc = 50 m/min, vf = 530 mm/min,
ap= 16 mm, ae = 1,2 mm,
internal cooling, water soluble
emulsion

PERFORMANCE CRITERIA

flank wear width after 195 mins
of continuous milling



APPLICATION

slotting of stainless steel

WORKPIECE MATERIAL

Toolox 44

CUTTING TOOL

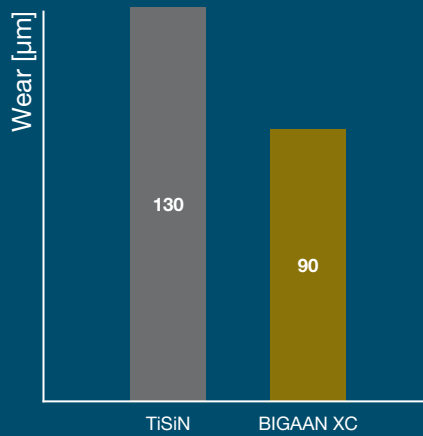
four-edged HM mill d 12

CUTTIGN CONDITIONS

vc = 70 m/min, vf = 370 mm/min,
ap= 12 mm, ae = 12 mm,
external cooling, cold air blast

PERFORMANCE CRITERIA

flank wear width after 120 mins of
continuous slotting



**INDUSTRIAL
PVD COATINGS**

SHM, s.r.o. Šumperk SHM Slovakia, s.r.o. Rajec

