BALIQ for Reamers
Precise coatings for high quality machining

BALIQ ALCRONOS
BALIQ TISINOS
BALIQ coatings for reamers
Innovative reaming with high process reliability

The technological progress
- Revolutionary smooth and defect-free coatings with outstanding adhesion
- High coating thickness precision of ultra-sharp cutting edges
- Low susceptibility to sticking of BALIQ® coatings
- Precise coating of ultra-sharp cutting edges
- High abrasive wear resistance of BALIQ® coatings
- Outstanding wear resistance of BALIQ® even at extreme service temperatures

The hands-on advantages
- High bore precision and surface quality thanks to top-quality coating surface
- Ultimate tool precision
- No adhesion and built-up edge formation even with difficult-to-machine materials such as titanium and stainless steels
- Significant performance gains primarily with ultra-small chip thicknesses and optimised component surface quality
- Long tool life with noticeably fewer tool changes
- Very high thermal stability and oxidation resistance for long tool life, especially for difficult-to-cut materials

Superior cutting performance with BALIQ for Reamers

**BALIQ® ALCRONOS**
Reaming stainless steel

- Tool: Solid carbide reamer Ø 10.0 mm
- Workpiece: Steel 1.4301 X5CrNi189 (AISI 304, SUS 304)
- Cutting parameters: \( v_c = 48 \, \text{m/min} \)
- Source: Automotive industry supplier

**BALIQ® ALCRONOS**
Reaming hardened steel

- Tool: Solid carbide reamer Ø 3.0 mm
- Workpiece: Steel 1.7147 20MnCr5 (AISI 5120)
- Cutting parameters: Confidential
- Source: European tool manufacturer

All given data are approximate values and they depend on application, environment and test conditions.
Superior cutting performance with BALIQ for Reamers

Precise, high-performance coating for superior manufacturing quality

Reliable final machining of critical and expensive components

High tool reliability for tangible cost savings

High surface quality with high process reliability and efficiency

BALIQ® TISINOS
Reaming hardened steel

Tool
Solid carbide reamer
Ø 11.1 mm

Workpiece
Steel 1.2379
X155CrVMo12
(AISI D2, SKD11)
HRC 62

Cutting parameters
Confidential

Source
Enduser in the aerospace industry

Tool life [parts]

0
1
2
3
4

BALINIT® ALCRONA PRO
BALIQ® TISINOS

+ 200%

BALIQ® TISINOS
Reaming hardened steel

Tool
Solid carbide reamer
Ø 2.99 mm

Workpiece
Steel 1.4540
20X4CrNiCuNb164MnCr5
(AISI S15500)
Blade housing/Aerospace

Cutting parameters
v<sub>c</sub> = 10 m/min
a<sub>p</sub> = 4 mm
Wet

Source
Enduser in the aerospace industry

Tool life [1000 parts]

0
20
40
60
80
100
120
140

Uncoated
BALIQ® TISINOS

+ 180%
Discover a new world of possibilities with BALIQ for Reamers
Get in touch with us today!

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