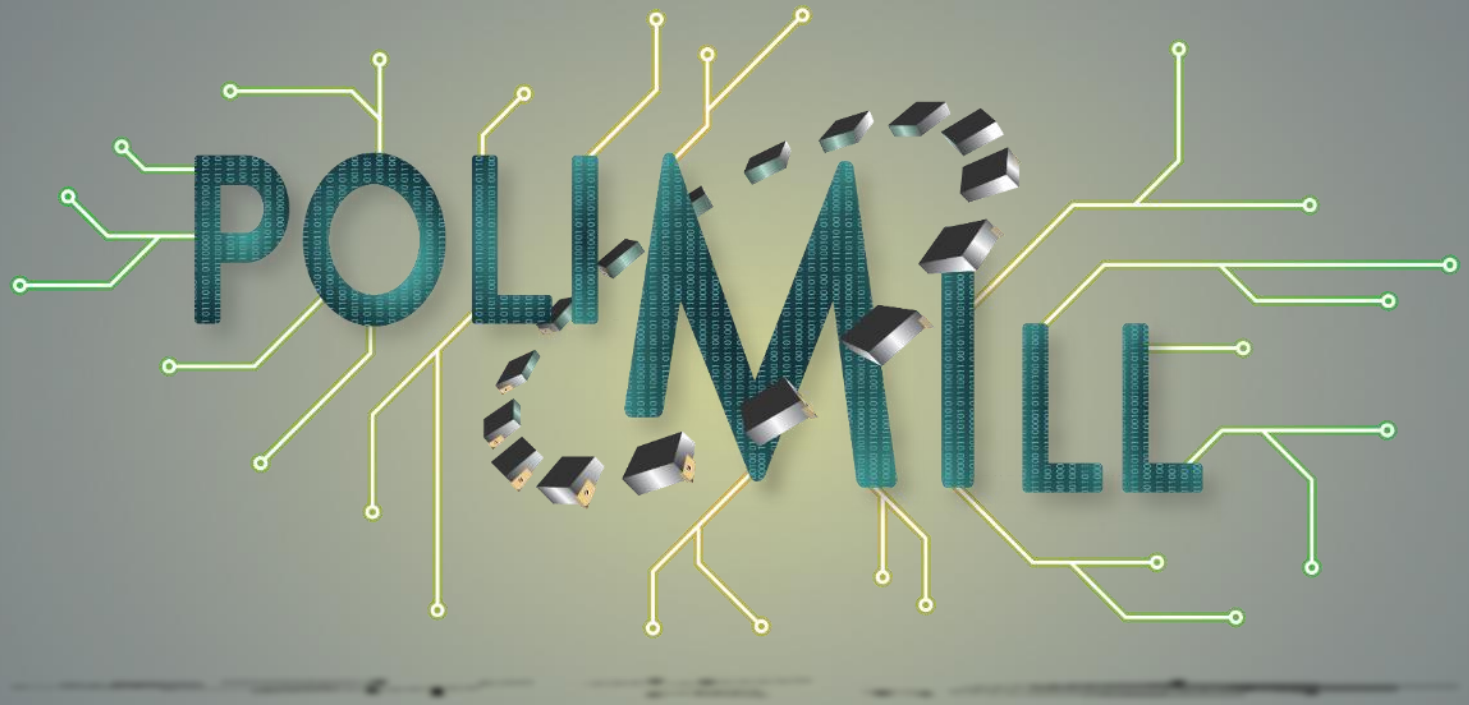
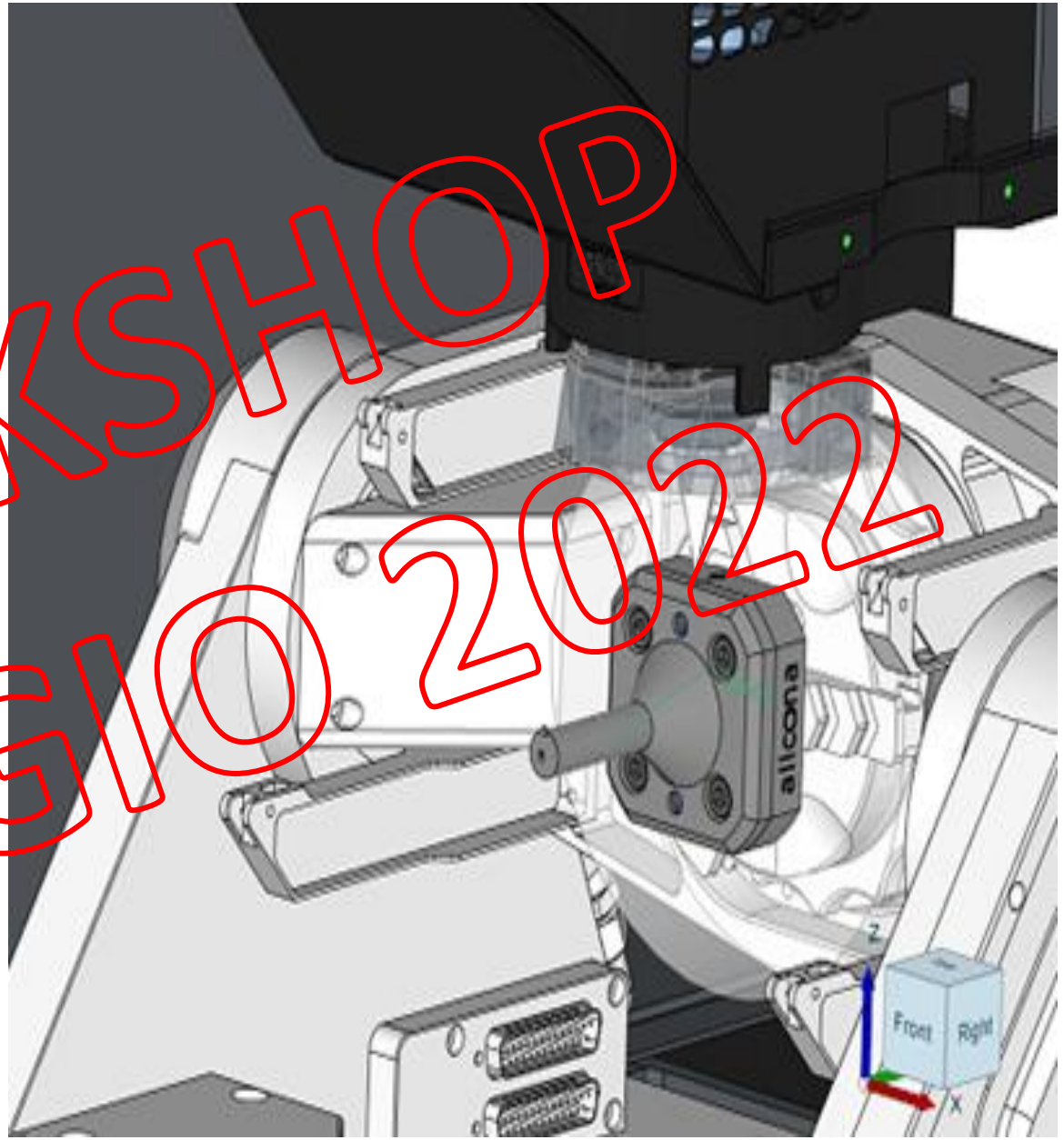
POLITECNICO
MILANO 1863

BRUKER
ALICONA



DIGITAL TWIN



WORKSHOP
MAGGIO 2022


WORKSHOP
NOVEMBRE 2022

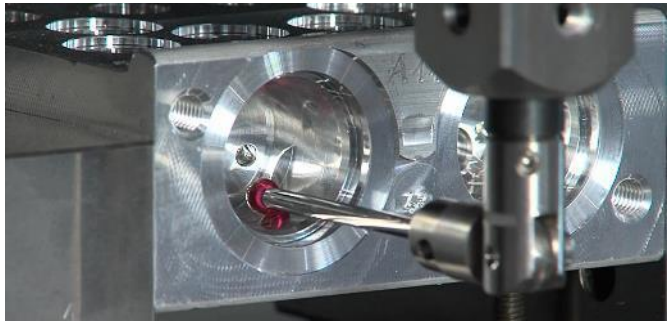
COME MISURARE PEZZI IPER PRECISI?

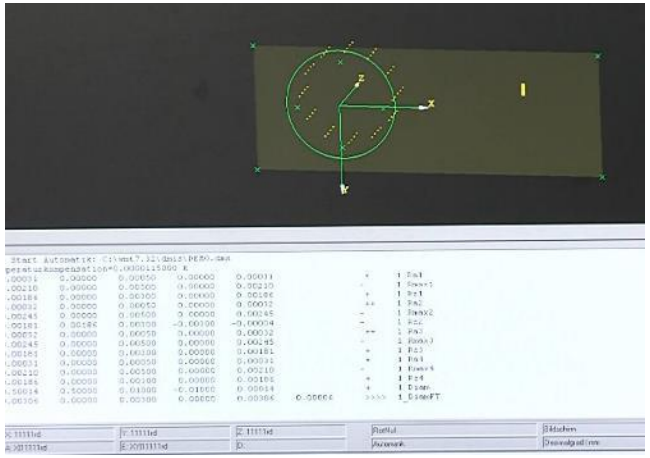
PRECISIONE ASSOLUTA DELLO STRUMENTO e del SET UP

MODELLO, INTERPOLAZIONE, INTERPRETAZIONE

PROFONDITA' 1

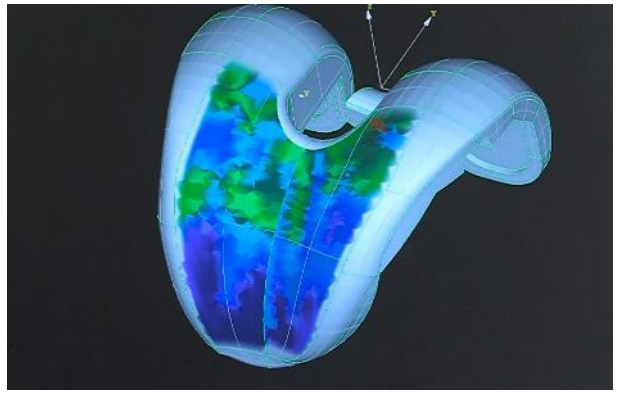
Misura **quantitativa** per punti





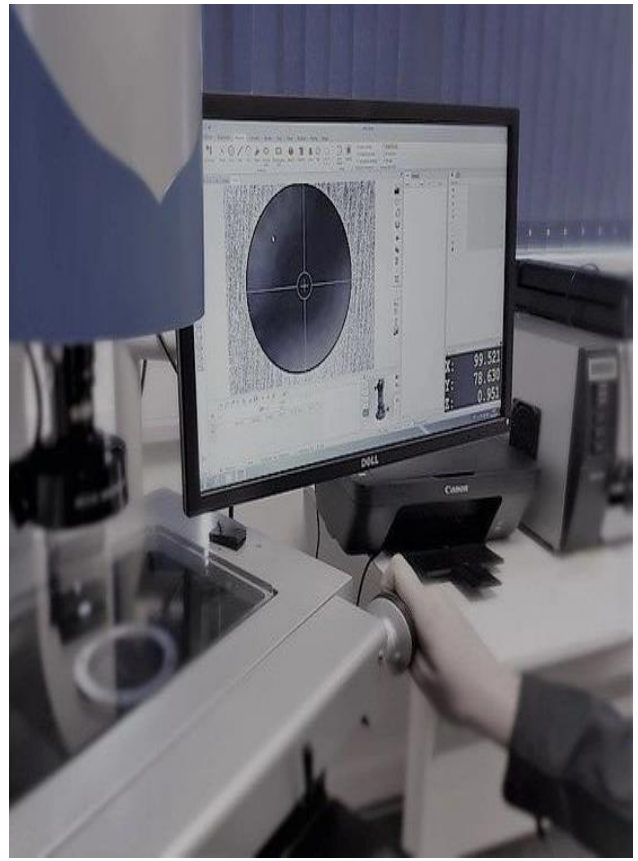
PROFONDITA' 2

Misura **quantitativa** per punti
e comparazione CAD



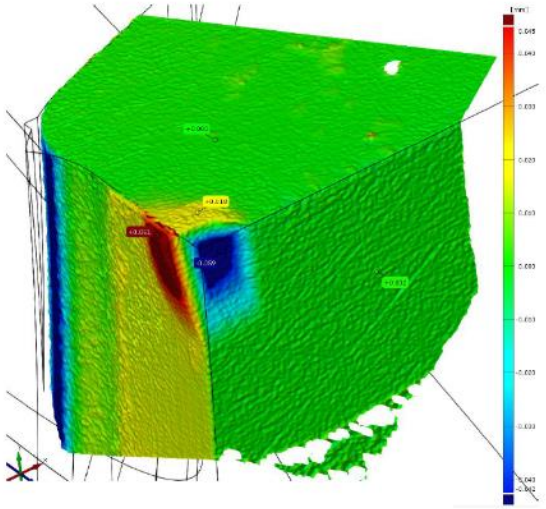
PROFONDITA' 3

Profilo Ottico

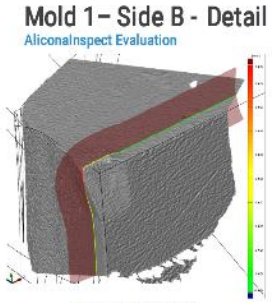


PROFONDITA‘ BRUKER ALICONA

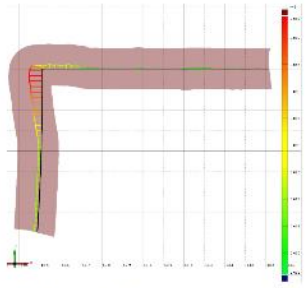
2,8 MIL



CAD comparison at detail



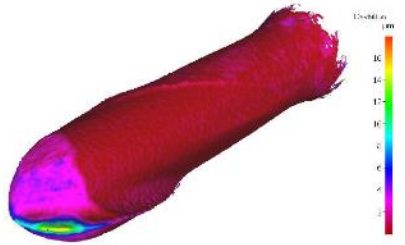
Inspection Section - overview



Inspection Section – Detail with CAD contour

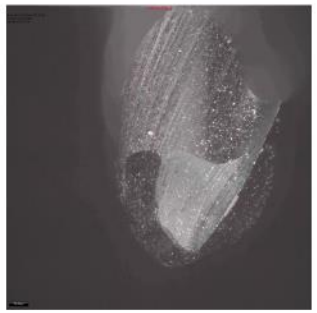
FRESA Ø0,2mm
4 MIL

2-Flute Long Neck Ball End Mill
Difference Measurement

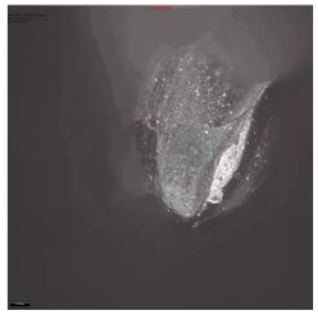


The maximum deviation is in the order of 15 µm which occurs on the cutting edge.

2-Flute Long Neck Ball End Mill
Edge wear evident on the 2D images

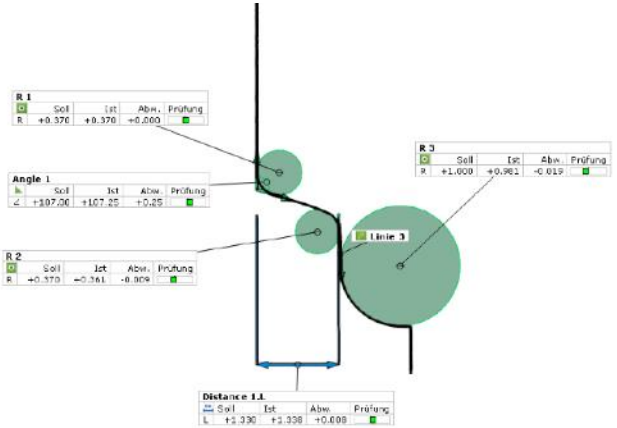


2D image, new tool



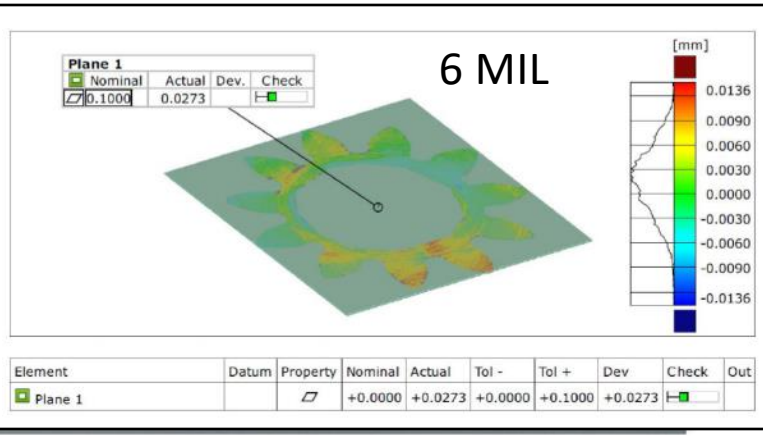
2D image, used/worn tool

18 MIL



Dimensional measurements on profile

6 MIL

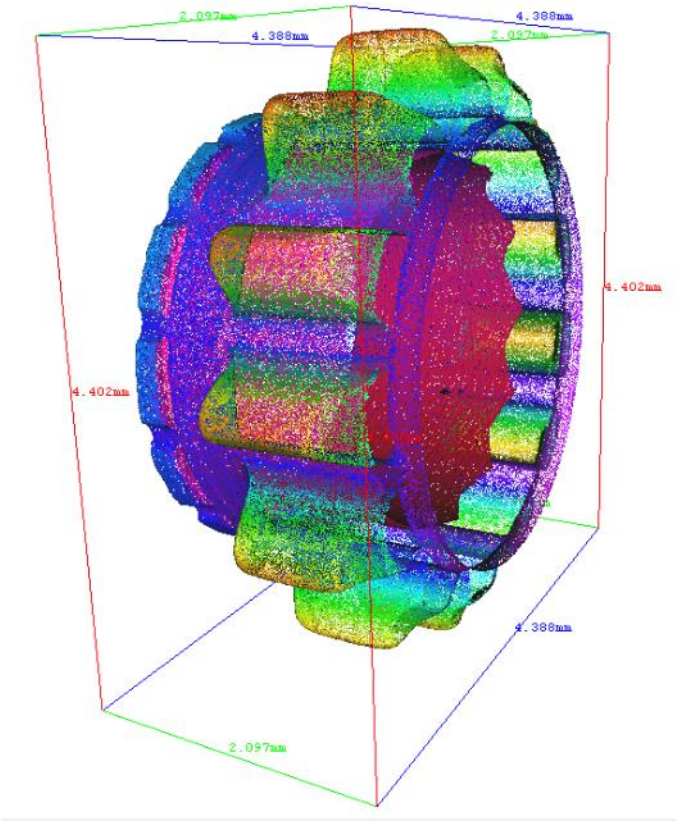


Element	Datum	Property	Nominal	Actual	Tol -	Tol +	Dev	Check	Out
Plane 1			+0.0000	+0.0273	+0.0000	+0.1000	+0.0273		

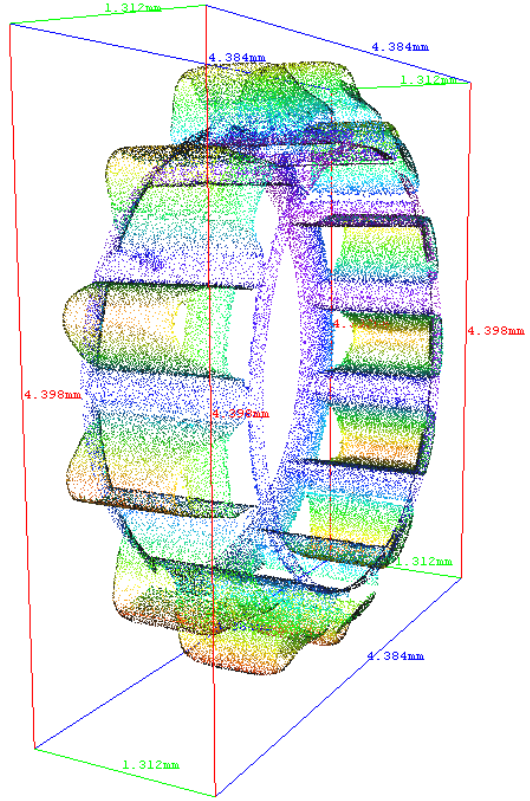
NO OVERKILL

SIAMO IN METROLOGIA DI PRODUZIONE
VOGLIAMO PRECISIONE
MA DOBBIAMO ESSERE PIU' VELOCI

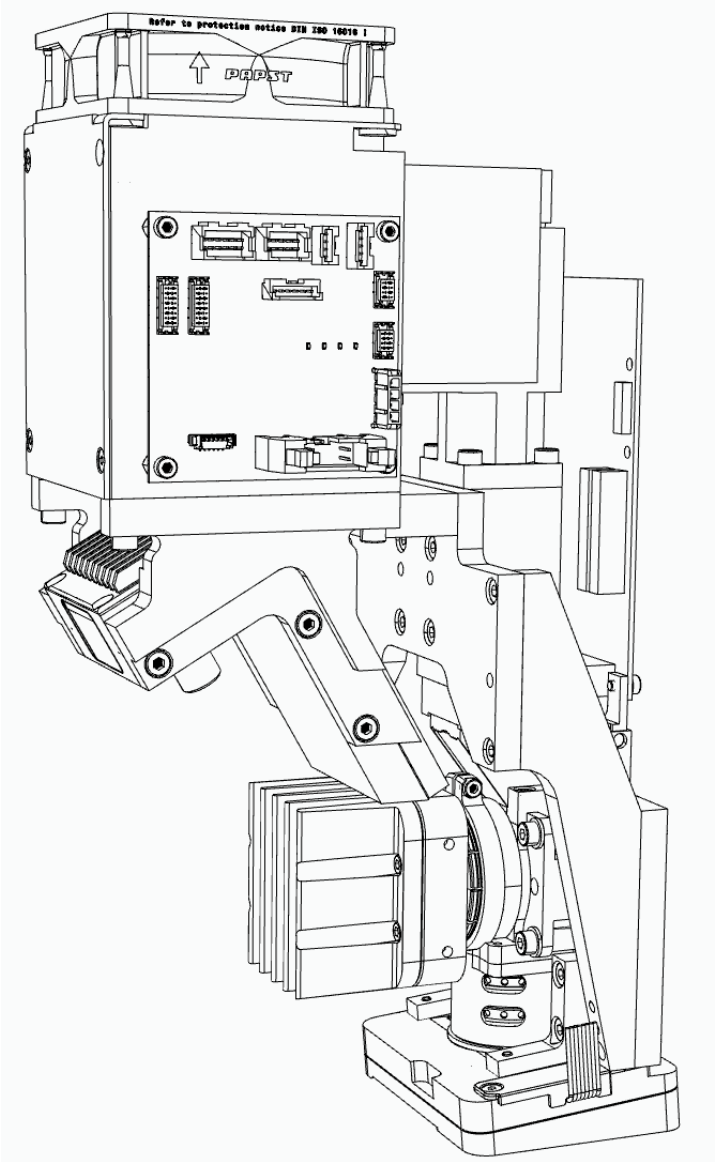
1 ora di misurazione
1 mil punti



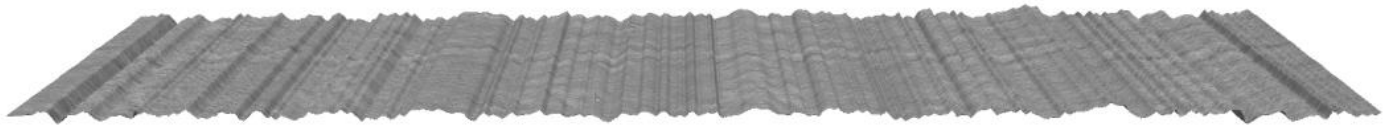
3 min
100k punti



IL TEMPO E' PREZIOSO

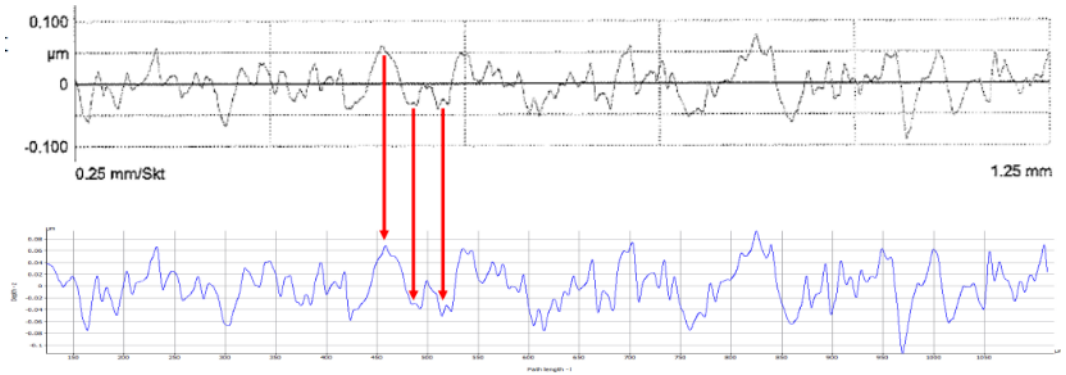


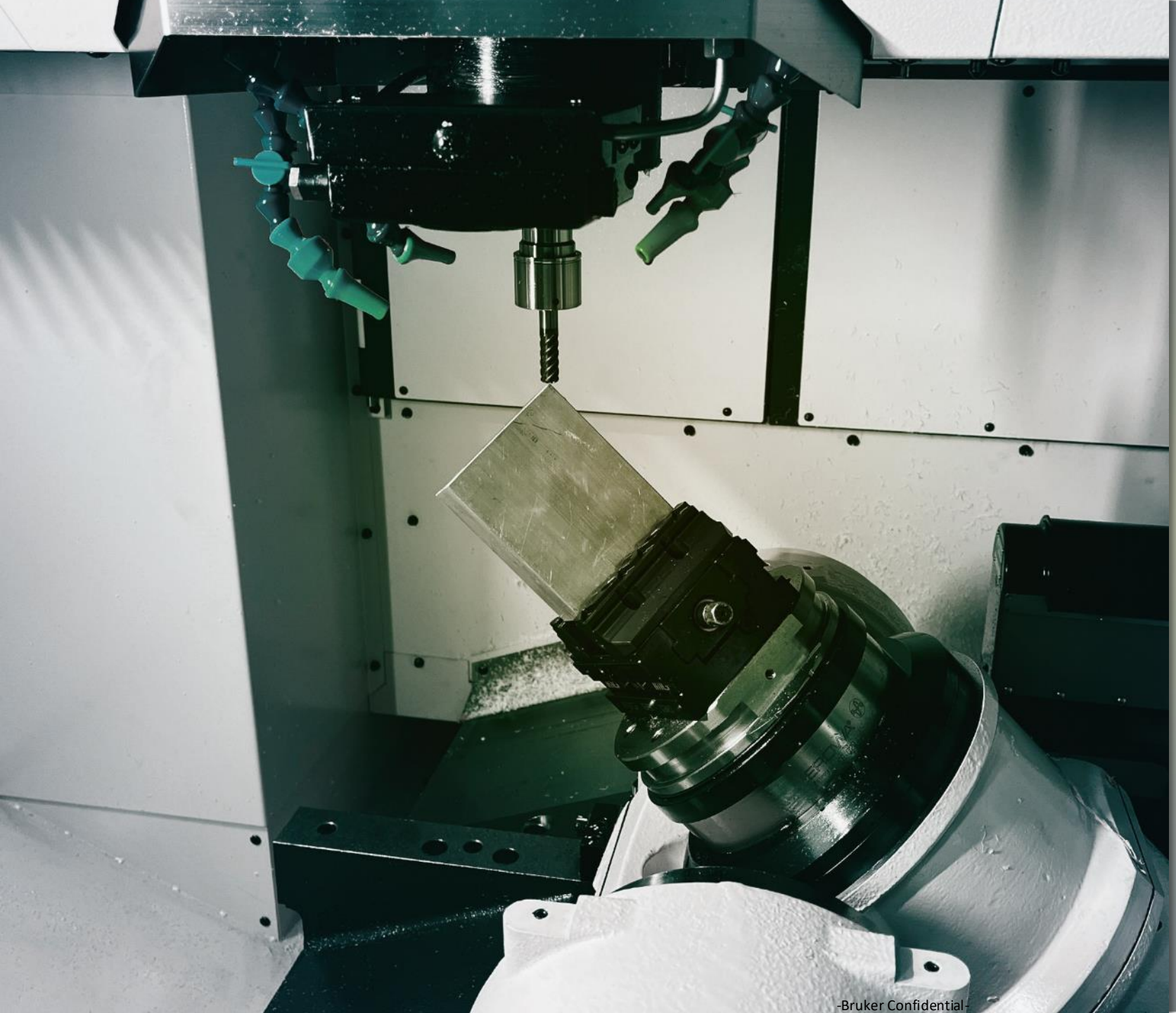
EagleEye + AdvFocusVariation



3D Model

Ra= ~25nm





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POLITECNICO
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