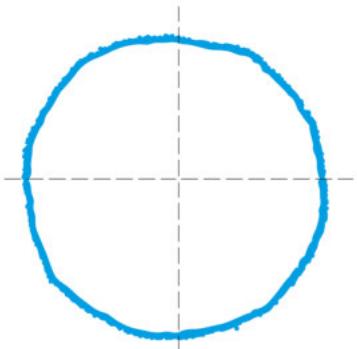


spike®

Verschleiß
auf 360°

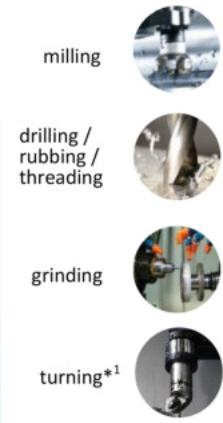
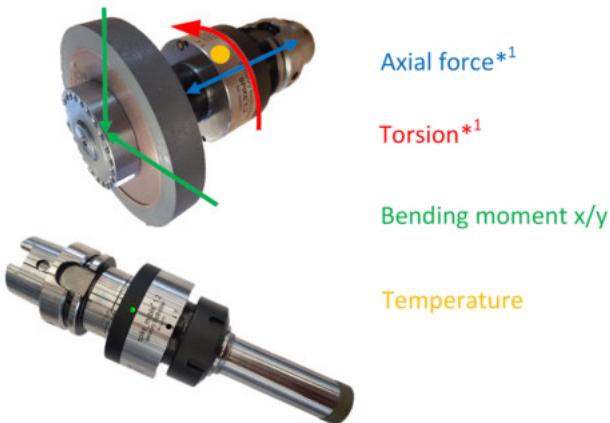
wear on 360°



CONTROL
THE FORCE

www.pro-micron.de

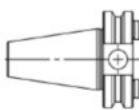
Cutting force measurement directly on the tool



*1 passive force & cutting force display during turning

Tool holder configuration:

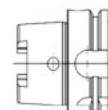
SK/CAT/BT



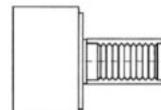
Capto



HSK



VDI



PowRgrip

Hydraulic chuck

Milling chuck

Collet chuck

Synchro chuck

Adapter

Grinding arbor

Drilling bar

Weldon

spike® setup / options:

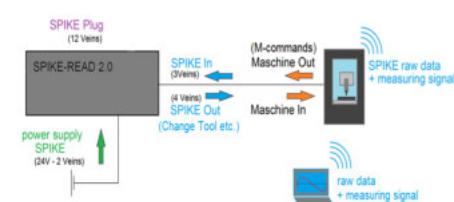
spike®_connect basic:

- spike® operating system basic version 2017
- tool measurement software version 2017
- read 1.2



spike®_connect advance:

- spike® operating system advanced version 2018
- tool measurement software version 2018
- smart read 4.0 with machine interface
- Connection to tool control center
- Autom. detection of up to 16 spike® holders
- Double spindle capability (2 spike® simultaneously)
- Parameterizability (energy, data rate, sampling rate)
- Autom. radio channel search (network capability)



8 x digitale &
8x analoge I/O
Profibus / Profinet
Analog Output:
4..20mA oder 0-10 v

Technical data:

sampling rate	up to 2,5 kHz	battery life — activity	16 h
delay	2 – 4,375 ms	battery life — standby	4 weeks
data transmission frequency	ISM at 2,45 GHz	charging time	4 h
signal transmission range	up to 5 m	max. rpm ^{*3}	18.000
number of wireless channels	4 + temp.	balancing weight at 25.000 rpm	2.5 G
measurement resolution	up to 16 bit	cooling system compatibility	inside/outside
firmware update	possible	raw data output	.txt file
measurment accuracy ^{*2}	3 % MBE	resolution	dep. on holder
repeat accuracy ^{*2}	1% MBE	measuring ranges	dep. on holder

^{*2} for HSK-A 63 PG25 at defined ambient conditions, ^{*3} at a sleeve diameter of 62.5 mm



As diagnostic tool

- Offline process analysis
- Process optimisation
- Problem diagnosis
- Mobile use with case

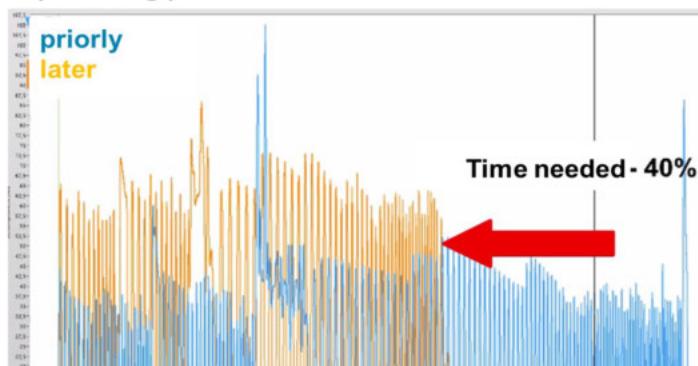
As monitoring tool

- Online process analysis
- Monitoring with spike®_kpi
- Machine connected
- Industry 4.0 integrable

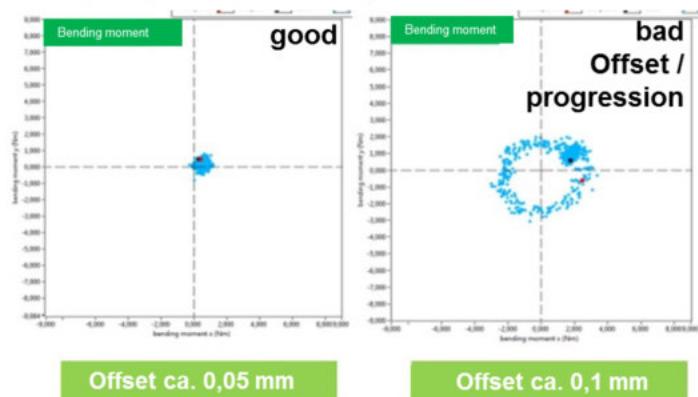


Examples of benefit

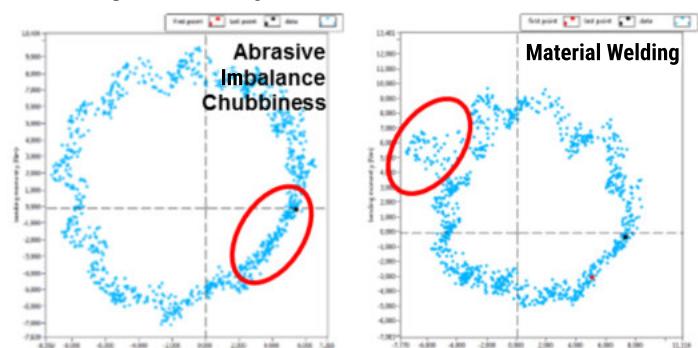
Optimizing processes:



Analyzing quality of drilling holes:



Grinding wheel comparison



Detection of chip leathers:

