BALANCING
+
GRINDING

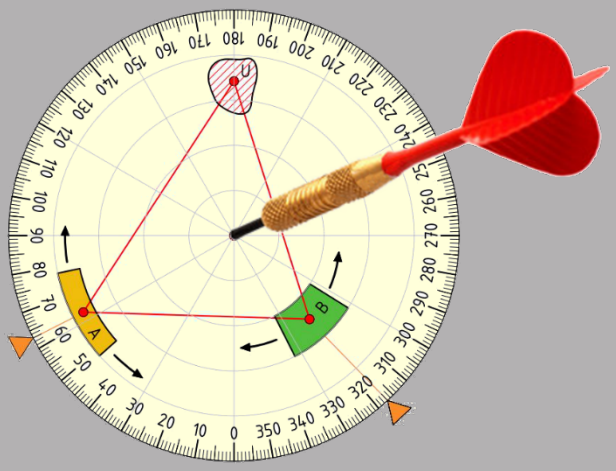
…that everything runs smoothly

MPM Micro Präzision Marx GmbH ● D-91056 Erlangen ● +49-9131-9056-0 ● verkauf@mpmgmbh.de

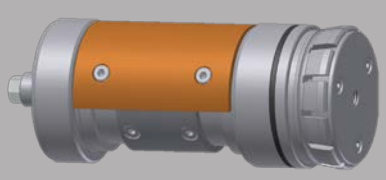
Balancing in HighTech-Precision

Where 45 years of experience and progress meet…

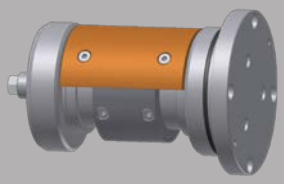
Automatic digital balancing
Within seconds – on spot
with high precision



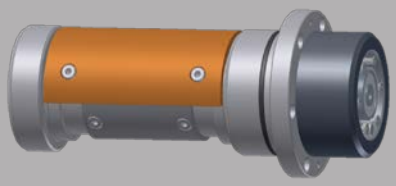
ISB-D for each machine with spindle hole



Type “A“

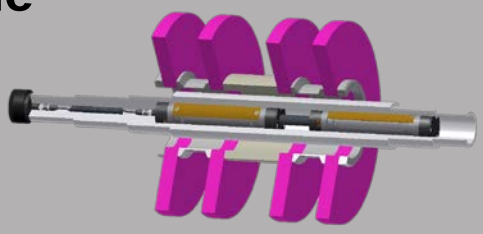


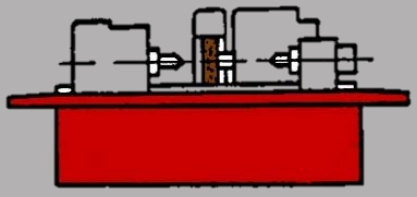
Type “B“

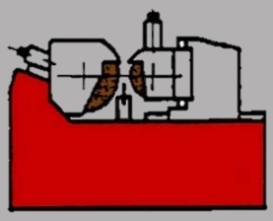


Type “C“

Also for an extreme balancer length
In 1- and 2-plane







Efficiency and competence at grinding machines!

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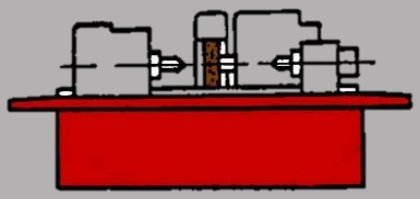
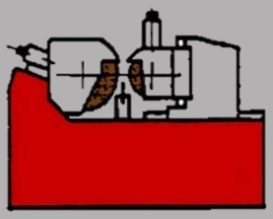
Where 45 years of experience meet…

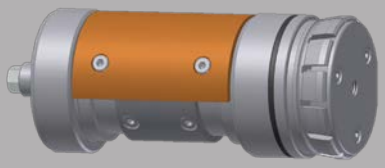
Precise, efficient and cost-effective balancing

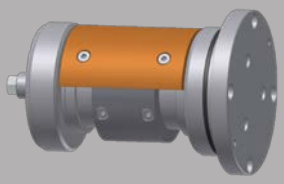


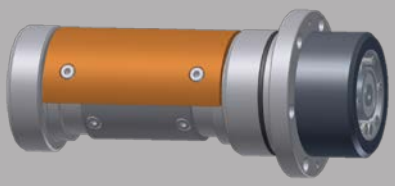


Proven competence at grinding machines

ISB - for each machine with spindle hole

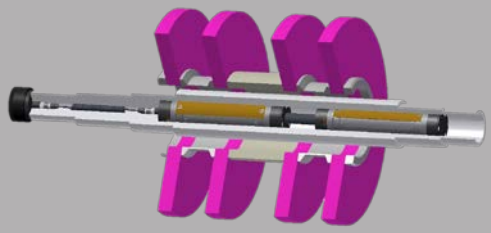






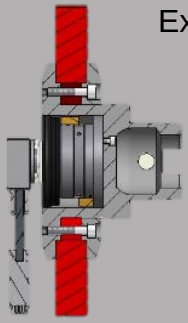
Type “A“ **Type “B“** **Type “C“**

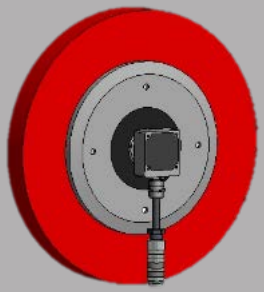
Also for extremely long balancers

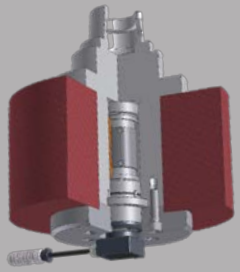


and for grinding wheel flanges with HSK

Examples

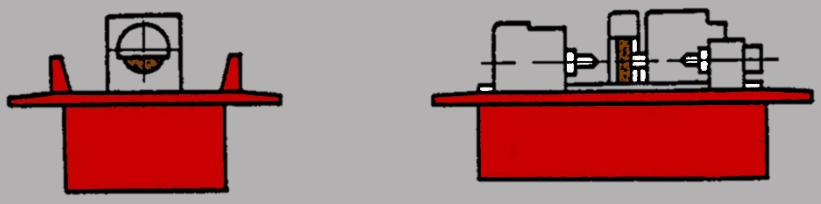






Balancing in HighTech-Precision

Automatic balancing
at flat surface and circular grinding machines

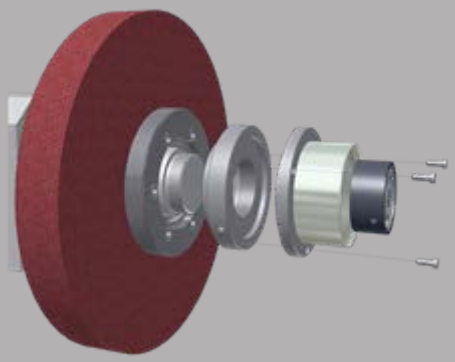


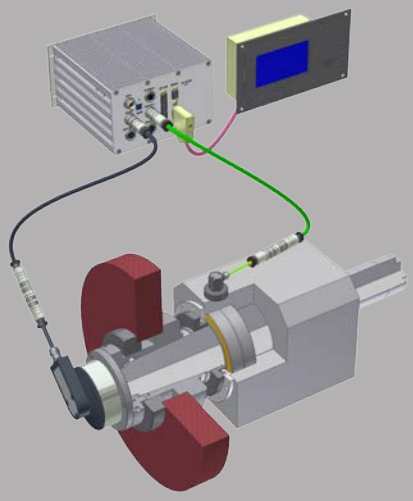
Type ESB for flange mounting

Type “F“ – extra flat

Type “A“

For each size of grinding wheel
the perfect balancer





Easy mounting - attractive prices -
prompt availability

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Housing designs
for electronic display and control units

Mobile housing
with carrying handle

W x H x D =
305 x 190 x 70mm

Table housing
with carrying handle

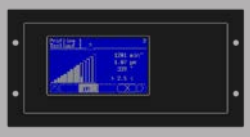
W x H x D =
200 x 120 x 250mm

Table housing
with carrying handle

W x H x D =
314 x 260 x 114mm

Special front plate (P06)
173 x 128mm

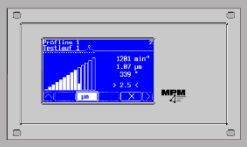
Installation dimension
W x H x D =
163 x 120 x 58mm



Special front plate (P09)
270 x 134mm

Installation dimension

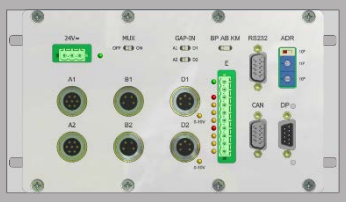
W x H x D =
163 x 120 x 58mm



½ 19“ front plate (P02)
241 x 134mm

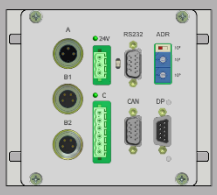
Installation dimension

W x H x D =
200 x 120 x 250mm



Cabinet module SM3

W x H x D =
200 x 120 x 250mm



Cabinet module SM4

W x H x D =
120 x 120 x 206mm

19“ front plate (P01)
483 x 134mm

Installation dimension
W x H x D =
200 x 120 x 250mm

The perfect housing for your application!

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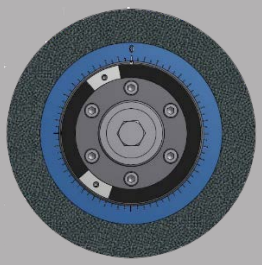
Balancing in HighTech Precision

Easy and precise balancing of surface grinding machines without disassembly of grinding wheels!

Is automatic or manual balancing required?
With or without AE function?

Manual, mobile balancing: success in nearly no time!



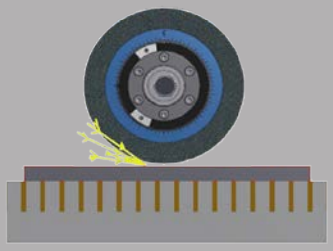
BMT150M
incl. sensors.

Usable at each machine

μ-precise contact one spark is enough

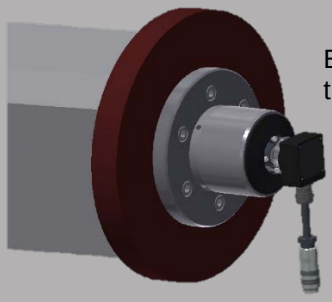
with AE acoustic emission sensors

For contact control, wheel dressing and crash-avoidance



For manual and automatic balancing systems

Automatic balancing at the touch of a button



ESB with transmitter

AB50

AB300

Extra flat balancer!

Equipment package #1: 3.ESB040F.096.C / 3.AB50 / 3.S.42G.03 / 3.PU.M5.4.3.V2.1

Equipment package #2: 3.ESB040F.096.CA / 3.AB300 / 3.S.42G.03 / 3.PU.M5.4.3.V2.1

Circular grinding. 100% additional profit with the original RAPID

4.RS01.F
Grinding at cantilever support

4.RS02.R
Grinding between centres

4.SG01
Control unit

For single production and small series

Proven and immediately ready for use

- **Functional**
- **Precise**
- **Cost effective**

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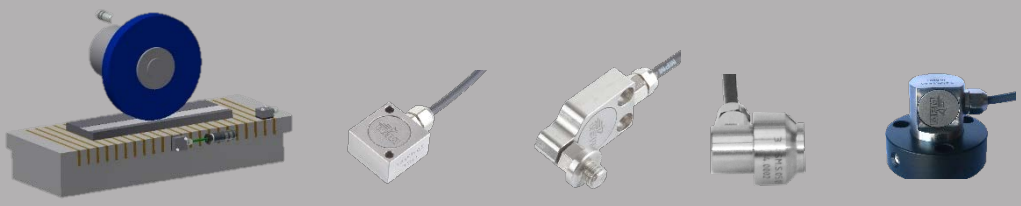
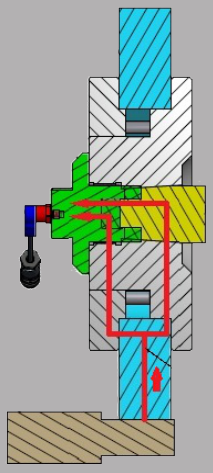
Grinding in HighTech Precision

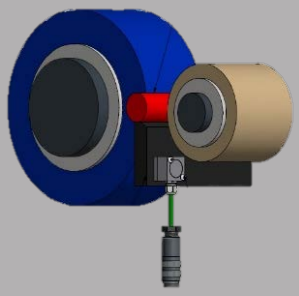
Risk reduction plus 30% gain of time when grinding using acoustic emission sensors



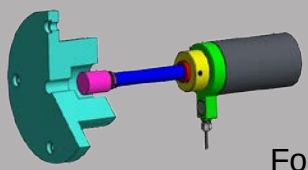


For flat surface and circular grinding machines, types **ASK** and **ASM-R/S**

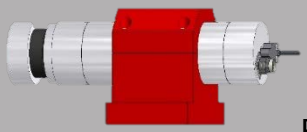
All sensors are suitable for ContactScope “CS“



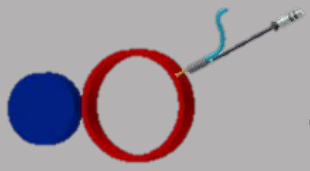
For centerless grinding machines type **ASK**



For internal grinding machines type **ASR**



For dressing spindles type **ASD.RA/RB**



For ring grinding machines (internal / external) type **F**

For all flat surface, circular and centerless grinding machines the proper and cost effective solution!

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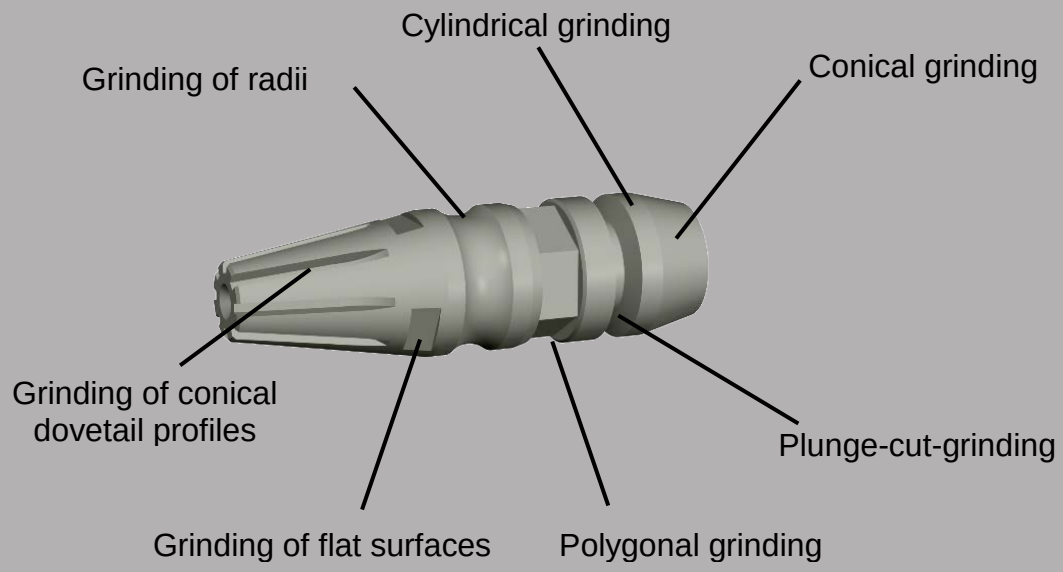
Is it possible to grind this workpiece at your surface grinding machine?

Yes, with the RAPID mini



RAPID mini

4.RS01.F
(grinding at cantilever support)

4.RS02.R (with tailstock,
grinding between centres)

Electronic controller:

4.SG01

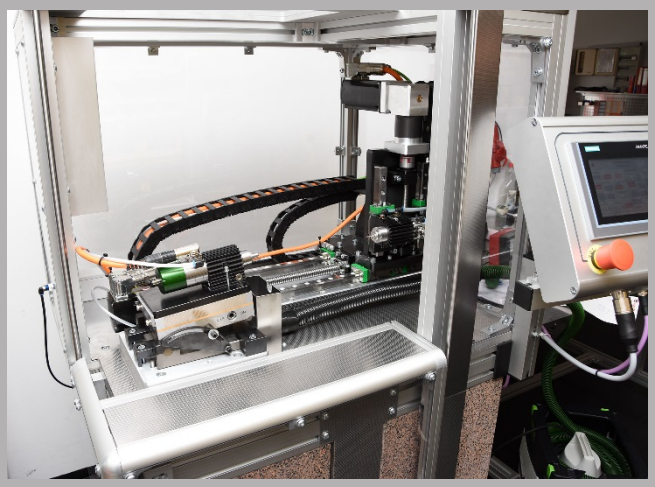
Grinding in HighTech-Precision

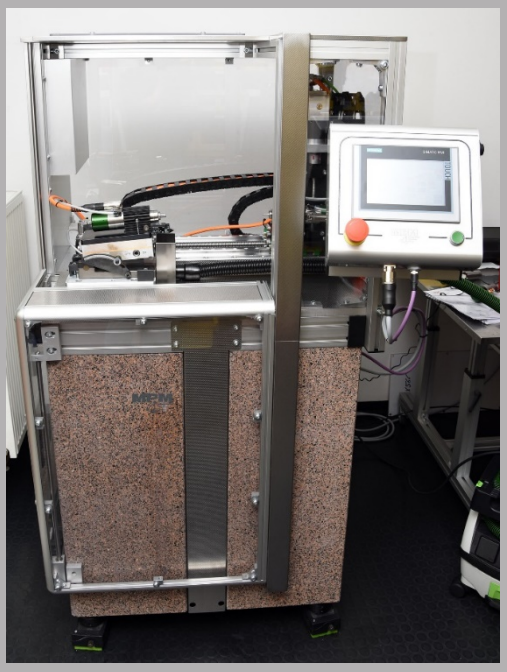
Internal grinding machine BSM

Easy grinding of small cylindrical or conical bores!

Example: **Grinding spindle**

- Bore diameter 6 mm
- Cone 9°
- Working speed 80 000 min^{-1}





- Clear view of the work piece
- Easy operation
- Attractive price
- Spindle speed from 6000 to 100 000 rpm
- Economic and fast changeover and adjustment of new work pieces
- Compact unit
- Only about 1 m^2 space required

Range of functions:

- Individual data sets for different work pieces
- Automatic grinding process including adjustment, feed, oscillation
- Roughing and finishing cycle, in-feed rate and speed, freely adjustable
- Conventional use is alternatively possible
- Grinding process can be customized
- Optional data output of the process parameters:
  working speed, movement path in X/Z axis, feed via Ethernet/USB

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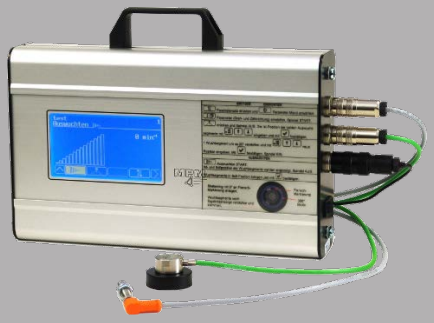
Easy balancing at turning lathes

Uneven running, low speeds and poor surfaces caused by eccentric, unbalanced workpieces?

MPM balancing ring with balancing segments: 3.WRS.xxx
Patented

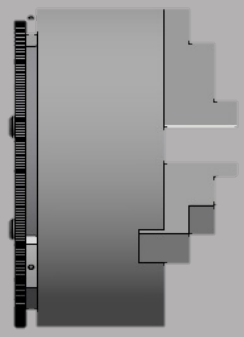
No problem with MPM balancing rings!

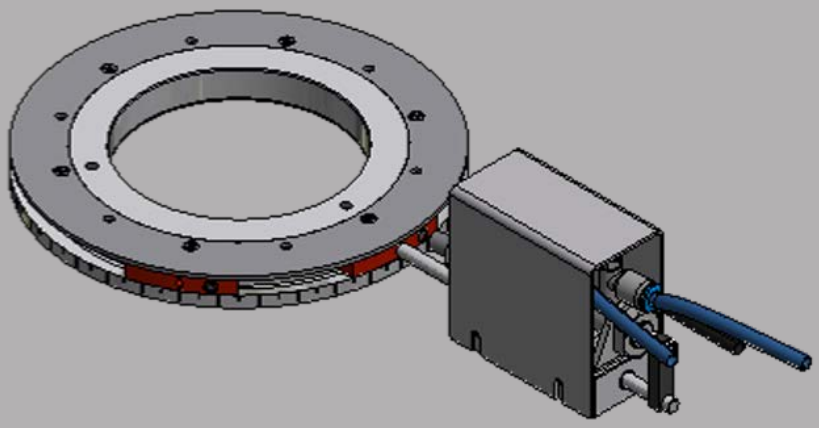
For unbalance compensation just move the balancing segments or move them to the angle positions shown in the BMT150M display.



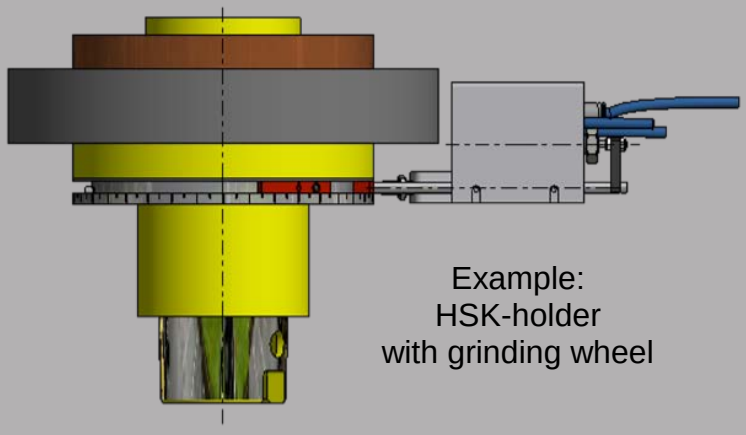
Complete balancing electronics with sensors:
3.BMT150M

Automatic balancing at machine tools with spindle positioning





Example:
Balancing of chucks
(with/without work piece)
at turning lathes



Example:
HSK-holder
with grinding wheel

Balancing ring:
3.WRS.xxx

Actor:
3.WRS.A001

Software module:
3.WRS.S7.01

patented

90% gain of time, low costs, prompt availability!

Balancing in HighTech precision

BMT200-TS

Stand-alone table units for highest balancing precision ≤ 0,5 gmm

Operation either with tablet, notebook, PC (Windows 10) or with integrated display

„Everything at a glance, everything under control“

open / close canopy

clamp / open

start/ enter/ proceed

spindle stop back

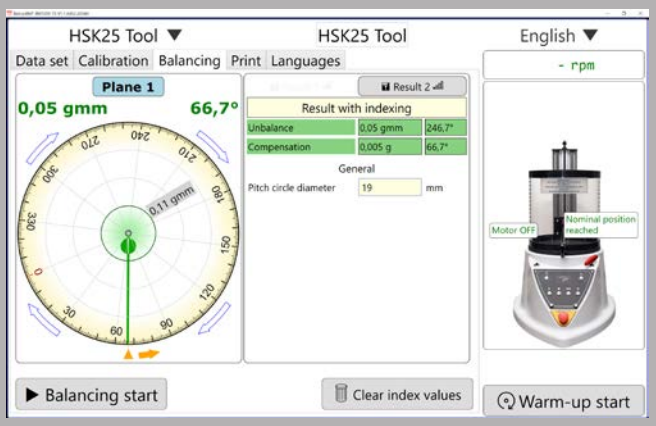
spindle positioning

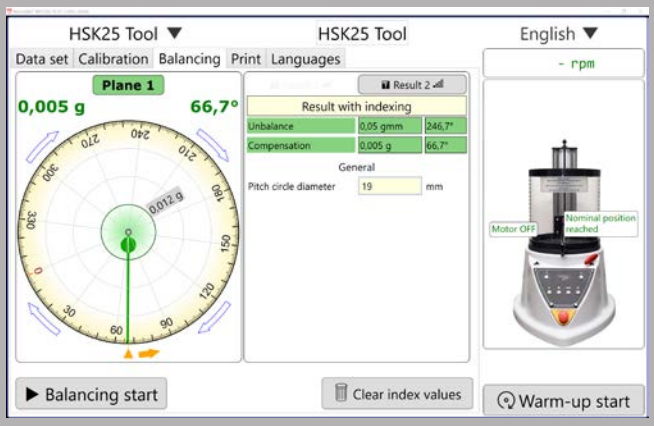
log printout

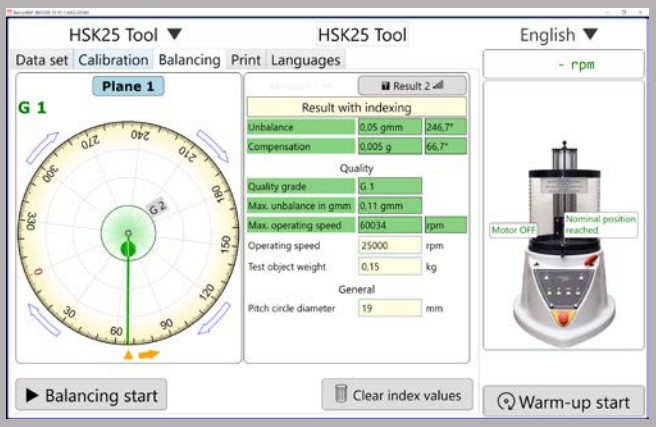
For tool holders:
HSK25 to HSK100 / SK/BT 10 to SK50 / ER 16-32

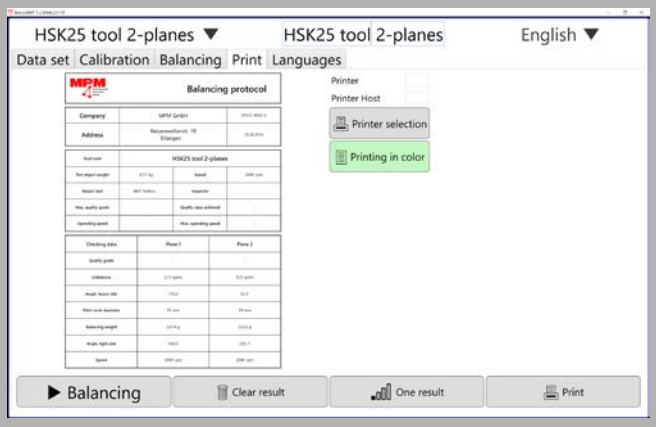
Sooo simple – not only for professionals!

Your tasks will be solved in an accurate manner with the clear and dialog-led software. Convince yourself:









This is only a small selection of your possibilities.
Whether you would like to balance in 1- or 2- plane, all balancing programs and formats are available, including log printout with a simple click!

Balancing in HighTech Precision

For process optimization:

Precise and efficient balancing of grinding arbors!

BMT200-TS20
Especially designed for high speed applications

Balancing quality < 0,5gmm/kg can be easily reached

- Visual operation via WINDOWS 10 software
- For tablet, notebook or PC connection
- Test report by one-button-activation
- Ready to use directly next to the grinding machine

Adapter for interfaces with:
HSK up to 32 and SK/BT up to 30, short taper and cylindrical shaft, cylindrical internal resp. external thread available.

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Balancing in HighTech-Precision

Vertical balancing machines for all requirements

Highest balancing accuracy ● easy operation ● small space consumption

3.BMT200-TS20

HSK-E 20/25/32
SK/BT 10/30
Grinding wheel arbors

3.BMT200-(T)S40

HSK25/32/40/50/63
SK/BT30/40/45
Special work holders

3.BMT200-(T)S100

HSK25/32/40/50/63/80/100
SK/BT30/40/45/50
Special work holders

- **Everything from one source**
- **100% made in Germany**
- **Attractive prices!**

3.VMS.01.S100

HSK32/40/50/63/80/100
SK/BT30/40/45/50

Perfect for large dimensions and serial parts

Special work holders available

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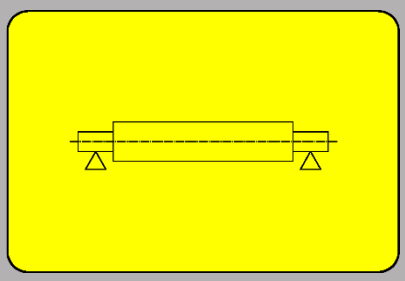
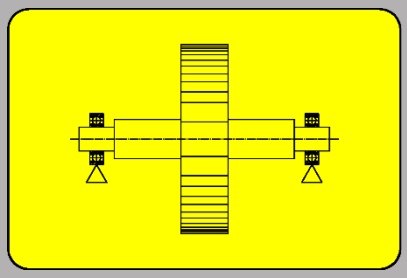
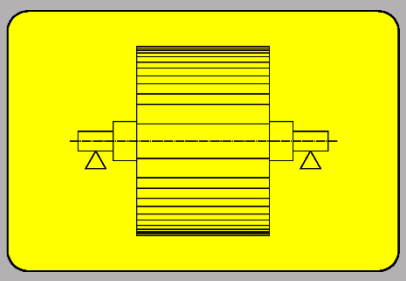
Balancing in HighTech-Precision

Easy balancing of cylinder rolls and shafts in 1- or 2-plane

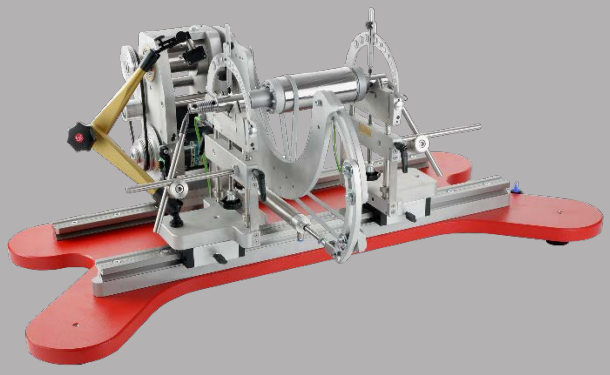




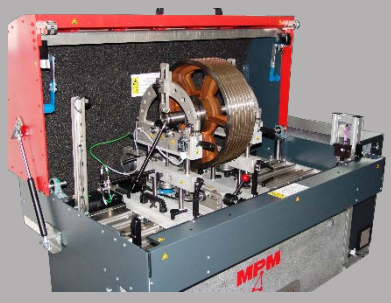


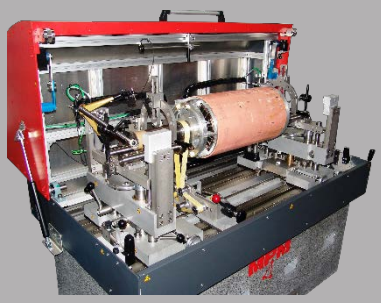
Type HM5 from 10g to 500g

Type HM50 up to 20kg



For each rotor the perfect machine size





Type HM 1500 up to approx. 250kg **Type HM 3500 up to approx. 350kg**

Also for high magnetic rotors
Easy operation – attractive prices

MPM Micro Präzision Marx GmbH ● D-91056 Erlangen ● +49-9131-9056-0 ● verkauf@mpmgmbh.de

Automatic Balancing

with material removal + part changeover with robot

Type:
3.ABZ.050-2.
V01.R

…the most effective and economical solution for workpieces and tool holders