Gageline AG100

Air tooling for measurement in through-bores and blind-hole bores

The picture shows special air tooling with four nozzles.

System features

- Easy and convenient operation
- Static or dynamic measurements of out-of-roundness, conicity and optionally triangulation
- High reliability and quality with a repeat accuracy below 0.25 µm
- Mounted or mobile operation
- Simple calibration using minimum and maximum reference rings of known dimensions
- Adaptation of air jet length and position according to the requirements
- Use with displays (e. g. Pneutamic) or measuring computers (e. g. Vega)
- Standard or customized air tooling

Advantages of the pneumatic measuring principle

- Non-contact measurement
- High sensitivity and accuracy
- Extremely robust and dirt resistant, therefore suitable for measurement in harsh workshop conditions
- Self-cleaning of measured surfaces
- Short response times

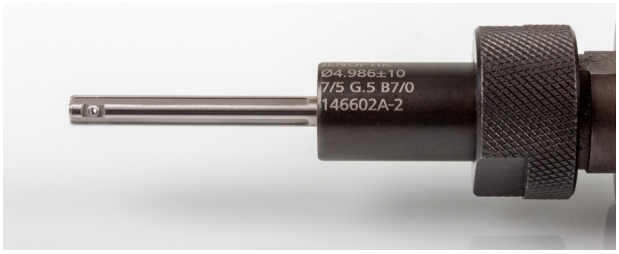
Universal application

- Manual measurement in production lines
- Semi-automatic or automatic measuring stations
- Quality lab (subgroups or 100 % monitoring)
- Manual air tooling with handle or on base

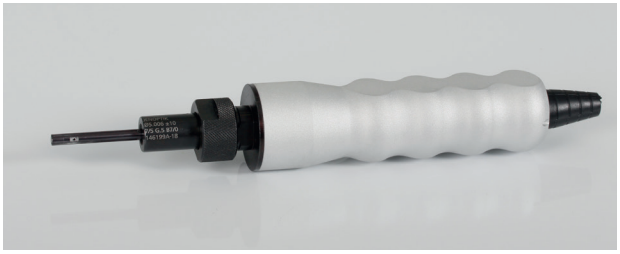
HOMMEL ETAMIC

A member of the JENOPTIK Group

Gageline AG100
Air tooling for measurement in bores



Air spindle AG100


AG100 with handle for manual measurements

Measuring range

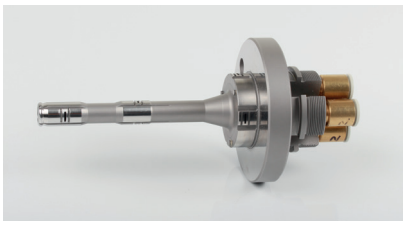
Diameter [mm]	Round air jet #1	Round air jet #2	Elongated air jet #2	Elongated air jet #5
3 < ØN ≤ 6	max. 0.060 mm	–	–	–
6 < ØN ≤ 12	max. 0.080 mm	max. 0.160 mm	max. 0.040 mm	max. 0.080 mm
12 < ØN ≤ 25	max. 0.080 mm	max. 0.160 mm	max. 0.040 mm	max. 0.080 mm
25 < ØN ≤ 80	max. 0.080 mm	max. 0.160 mm	max. 0.040 mm	max. 0.080 mm
80 < ØN ≤ 150	max. 0.080 mm	max. 0.160 mm	max. 0.040 mm	max. 0.080 mm

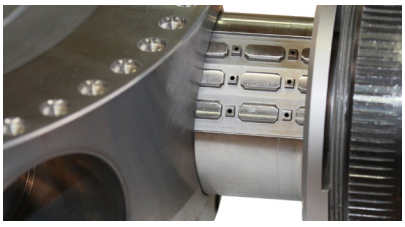
Precision and performance

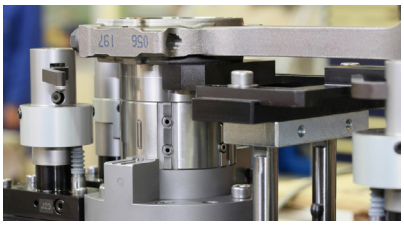
Measuring range [mm]	Precision	Accuracy GR&R type 2	Accuracy CMC
0.010 (±0.005)	< 0.00025	< 10 %	2
0.020 (±0.010)	< 0.0005	< 10 %	2
0.040 (±0.020)	< 0.001	< 10 %	2
0.060 (±0.030)	< 0.0015	< 10 %	4
0.080 (±0.040)	< 0.002	< 10 %	4
0.120 (±0.060)	< 0.003	< 10 %	4
0.160 (±0.080)	< 0.004	< 10 %	4

Versatile application

Our air spindles are used for a variety of applications. Number and size of nozzles can be adapted to your needs.
We develop and manufacture part-specific air tooling (1–600 mm).


Part-specific air spindle


Special air spindle with 12 nozzles for measurement of hydraulic distributor bores


Special air tooling for con-rods

HOMMEL ETAMIC

JENOPTIK Industrial Metrology Germany GmbH | Drachenloch 5 | 78052 Villingen-Schwenningen | Germany
P +49 7721 6813-0 | F +49 7721 6813-444 | metrology@jenoptik.com | www.hommel-etamic.com