

Ear Measuring Instrument Model 126 Plus

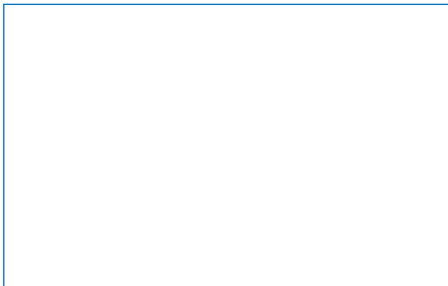


testing equipment for quality management



Technical Description

Test Evaluation according to DIN EN 1669 and ISO 11531



Measuring Instrument for Deep-Drawn Cups and Raw Cans

Purpose and Application

The **Ear Measuring Instrument, Model 126 Plus**, is designed for the axial measurement of deep-drawn cups and raw cans. Typical standards are DIN EN 1669 and ISO 11531.

Design

The device consists of a turntable and a vertical gauge head with a roller.

By a jaw chuck, the cup is centered and fixed.

The gauge head can be positioned to different cups heights and diameters.

While revolving around its own axis, the gauge head is measuring the shape of the cup's edge. This waveform of the cup's edge is called earring.

Measurement process

The operator starts the measurement process by PC or directly at the device. Pneumatically activated, the gauge head will move towards the cup. The turntable will rotate by 360°. After completion, the measurement head will move to idle position. This facilitates a rapid cup exchange.

All measurement results are displayed on a screen. Results can be archived as files. Export files can be created as .pdf and .txt. For MS Excel import, .txt files are pre-formatted.

The measurement protocol will show the following results (among others):

- He_(mm)= Average Earring height
- He,max(mm)= Maximum Earring height
- H_(mm)= Average Cup height
- Z(%)=Average Earring %
- Number of earrings
- Date, lot, operator...

Sheet metal anisotropy and deep drawing parameters will result in different earring values.

The detailed determination of parameters discloses tool wear and the quality of the deep-drawing material used.

Due to its flexible concept this instrument is also applicable for all similar tasks.

Operation software is included.

A PC is to be supplied by the customer.

Technical data:

Cup diameter:	15-44 mm (other diameters on request)
Cup height:	12-100 mm
Centering and fixing:	Jaw chuck
Measurement values per revolution:	>5000
Sensing device:	M2,5 roller
Measurement force:	approx. 2,5 N
Measurement stroke:	50 mm
Sensor resolution:	0,00005 mm
Sensor accuracy:	±0,0001 mm
Display accuracy:	0,02 mm
Indicated digits:	0,01 mm
Time per measurement process:	approx. 15 s
Test start:	PC or from device
Results display:	PC screen
Power supply:	110-240 AC 50 Hz
Electrical power:	60 VA
Compressed air:	Plug 6x1 mm 2-6 bar dry, degreased
Data connection:	USB
Housing:	Steel, powder coated
IP code:	IP20
Working temperature:	10 - 40 °C
Dimension:	350 x 250 mm, Height max. 550 mm
Weight:	Approx. 12 kg
Required:	PC, min. WIN XP SP3 Compressor or compressed air connection

Order information	
Ord.-No.	Product Description
21230132	Ear Measuring Instrument, Model 126 Plus

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