

# CERTIFICATE OF CALIBRATION

ISSUED BY TESA REFERENCE STANDARDS DIVISION

DATE OF ISSUE 16TH AUGUST 1996

SERIAL NUMBER 42956



CALIBRATION  
No. 0001



**Tesa Reference Standards Division  
Tesa Metrology Ltd.**

Bradgate Street,  
Leicester, LE4 0AW  
England.

Telephone: (0533) 629012 Telex: 341333

Fax: (0533) 514762

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APPROVED SIGNATORIES

M. WILLISCROFT  
P. WALSH

**CUSTOMER :** SCHUT GEOMETRISCHE MEETTECHNIEK BV

**ADDRESS :** Duinkerksstraat 21  
9723 BN Groningen  
Netherlands

**ORDER No. :** 20.118

**DESCRIPTION :** A set comprising 88 Tungsten Carbide gauge blocks  
manufactured by TESA - RSD

**SERIAL No. :** Case marked 11336 M88 Grade : 1

**REPORT :** The measured deviations from nominal size at  
20 degrees C. have been determined by comparison  
with laboratory standards.

The results are shown on page two together with  
their associated uncertainties of measurement.

The gauges were tested for flatness and variation  
by measurement at five points.

Traceability to National Standards is provided via  
the following NAMAS certification :

Ref number

Certificate number

M1T

0105 / 17832

Signature

**The uncertainties are for a confidence probability of not less than 95%**

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ISSUED BY TESA REFERENCE STANDARDS DIVISION  
NAMAS ACCREDITED CALIBRATION LABORATORY No. 0001

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SET TYPE : M88

SERIAL NO : 11336

BASIS OF TEST : DIN.861

GRADE : 1

The central measured length of the gauges satisfy the requirements of the basis of test. The gauges were found to satisfy the basis of test for flatness and variation.

Measured deviation from nominal size at the centre in units of 0.001 mm at 20° C.

Serial No	Size marked	Dev	Ref	Serial No	Size marked	Dev	Ref	Serial No	Size marked	Dev	Ref
11336	0.50	+ 0.18	M1T	11336	1.19	- 0.13	M1T	11336	1.49	- 0.11	M1T
11336	1.0	0.00	M1T	11336	1.20	- 0.01	M1T	11336	1.5	- 0.01	M1T
11336	1.0005	- 0.05	M1T	11336	1.21	- 0.01	M1T	11336	2.0	+ 0.06	M1T
11336	1.001	- 0.03	M1T	11336	1.22	- 0.04	M1T	11336	2.5	+ 0.15	M1T
11336	1.002	- 0.06	M1T	11336	1.23	+ 0.17	M1T	11336	3.0	+ 0.11	M1T
11336	1.003	+ 0.09	M1T	11336	1.24	+ 0.05	M1T	11336	3.5	- 0.09	M1T
11336	1.004	+ 0.04	M1T	11336	1.25	- 0.01	M1T	11336	4.0	- 0.12	M1T
11336	1.005	- 0.01	M1T	11336	1.26	+ 0.11	M1T	11336	4.5	- 0.03	M1T
11336	1.006	- 0.08	M1T	11336	1.27	+ 0.12	M1T	11336	5.0	+ 0.04	M1T
11336	1.007	+ 0.03	M1T	11336	1.28	- 0.06	M1T	11336	5.5	+ 0.05	M1T
11336	1.008	+ 0.02	M1T	11336	1.29	- 0.04	M1T	11336	6.0	+ 0.10	M1T
11336	1.009	- 0.11	M1T	11336	1.30	+ 0.11	M1T	11336	6.5	+ 0.05	M1T
11336	1.01	- 0.03	M1T	11336	1.31	+ 0.04	M1T	11336	7.0	- 0.02	M1T
11336	1.02	- 0.13	M1T	11336	1.32	+ 0.08	M1T	11336	7.5	+ 0.02	M1T
11336	1.03	- 0.10	M1T	11336	1.33	+ 0.03	M1T	11336	8.0	- 0.12	M1T
11336	1.04	- 0.01	M1T	11336	1.34	- 0.12	M1T	11336	8.5	+ 0.18	M1T
11336	1.05	+ 0.04	M1T	11336	1.35	- 0.10	M1T	11336	9.0	+ 0.18	M1T
11336	1.06	+ 0.04	M1T	11336	1.36	+ 0.09	M1T	11336	9.5	- 0.09	M1T
11336	1.07	+ 0.12	M1T	11336	1.37	+ 0.02	M1T	11336	10.0	- 0.08	M1T
11336	1.08	+ 0.06	M1T	11336	1.38	+ 0.04	M1T	11336	20	+ 0.12	M1T
11336	1.09	- 0.09	M1T	11336	1.39	0.00	M1T	11336	30	- 0.11	M1T
11336	1.10	- 0.12	M1T	11336	1.40	+ 0.10	M1T	11336	40	+ 0.16	M1T
11336	1.11	+ 0.10	M1T	11336	1.41	+ 0.06	M1T	11336	50	- 0.19	M1T
11336	1.12	+ 0.11	M1T	11336	1.42	- 0.08	M1T	11336	60	- 0.18	M1T
11336	1.13	+ 0.04	M1T	11336	1.43	+ 0.07	M1T	11336	70	+ 0.05	M1T
11336	1.14	+ 0.14	M1T	11336	1.44	+ 0.04	M1T	11336	80	+ 0.21	M1T
11336	1.15	+ 0.07	M1T	11336	1.45	+ 0.09	M1T	11336	90	+ 0.25	M1T
11336	1.16	+ 0.17	M1T	11336	1.46	+ 0.05	M1T	11336	100	- 0.35	M1T
11336	1.17	+ 0.12	M1T	11336	1.47	+ 0.09	M1T				
11336	1.18	+ 0.06	M1T	11336	1.48	+ 0.04	M1T				

Uncertainty of measurement, Unit 0.001 mm

Size-up to  
& including

- 10 mm +/- 0.08
- 25 mm +/- 0.10
- 50 mm +/- 0.12
- 75 mm +/- 0.15
- 100 mm +/- 0.18

Signature

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