







Malta Standards Authority
National Metrology Services



 Malta Standards Authority - National Metrology Services	 21661794 , 23980176/7
Kordin Business Incubation Centre,	 23980178
Kordin PLA 08. Malta	 nms@msa.org.mt
CATALOGUE OF SERVICES & PRICES OF MSA-NMS	Page 1 of 12



Malta Standards Authority
National Metrology Services



MSA-NMS pricing policy	3
1. Introduction to services	4
2. Contact information	4
3. Organisation of services	4
4. Mass Calibration (CAL-MAS)	5
(CAL-MAS-100) Calibration of weight standards OIML class M1/M2	5
(CAL-MAS-110) Calibration of weight standards OIML class M1/M2	5
(CAL-MAS-200) Calibration of weight standards OIML class F1/F2	6
(CAL-MAS-210) Calibration of weight standards OIML class F1/F2	6
(CAL-MAS-300) Calibration of weight standards OIML class E2	6
(CAL-MAS-400) Calibrations of weight standards which do not meet OIML standards.....	6
5. Calibration of temperature devices (CAL-TEM)	7
(CAL-TEM-100) Calibration of liquid-in-glass and digital thermometers by comparison.....	7
(CAL-TEM-200) Calibration of Thermocouples (Base Metals – K,J,N,...) by comparison	7
(CAL-TEM-300) Calibration of Thermocouples (Noble Metals – R, S, B, T ...) by comparison.....	8
(CAL-TEM-400) Calibration of Thermocouples (Noble Metals–R,S,B,T...) directly to fixed points .	8
(CAL-TEM-500) Calibration of Platinum Resistance Thermometers (PRT – Pt100-Pt25).....	8
(CAL-TEM-700) Calibration of Standard Platinum Resistance Thermometers (PRT – Pt100- Pt25)	9
.....	9
directly to the fixed points of ITS 90	9
(CAL-TEM-800) Furnaces, Baths, Heaters, Autoclaves, Incubators (on site calibrations).....	9
6. Calibration of temperature hygrometers (CAL-HUM-100)	10
7. Calibration of Dimension (CAL-DIM)	10
(CAL-DIM-100) Calibration of Gauge Blocks	10
(CAL-DIM-200) Calibration of micrometers and vernier calipers	10
8. Additional cost for clients	11
9. Terms and conditions.....	11

Malta Standards Authority - National Metrology Services	21661794 , 23980176/7
Kordin Business Incubation Centre,	23980178
Kordin PLA 08. Malta	nms@msa.org.mt
CATALOGUE OF SERVICES & PRICES OF MSA-NMS	Page 2 of 12



Malta Standards Authority
National Metrology Services



MSA-NMS pricing policy

MSA-NMS, provides services in the framework of the objectives of its policy according to LN 312 , 2001 and The Metrology Act (CAP 454 2006). The prices of services are assigned according to the following principles:

- 1) MSA-NMS should support the Maltese National Measurement System and cover its calibration needs.
- 2) MSA-NMS intends to provide services of calibration for measurement equipment.
- 3) MSA-NMS should promote metrology in Malta and fully support the National Accreditation Body, as well as the National Quality System, through specialised services.
- 4) MSA-NMS should not compete with local calibration laboratories in the field of calibration services.
- 5) MSA-NMS does not have profit as its main objective. Income from services should cover part of its operating expenses. Therefore, MSA-NMS provides services to laboratories and to any interested party.
- 6) MSA-NMS defines the prices of its services in a way and in a level, which represent the level of quality, accuracy and expertise of the services by making best use of its infrastructure, resources and know-how.
- 7) MSA-NMS should provide services of high quality level by the implementation of a quality system according to the requirements of the ISO 17025:2005 and ISO 9001:2000 standards.
- 8) MSA-NMS by implementing its price policy should promote and reinforce the conditions for fair competition in the calibration market in the country. The prices of calibration services of MSA-NMS should be the reference for prices of calibration laboratories , contribute to the continuous improvement of quality and the growth and competitiveness of Industry.
- 9) MSA-NMS, through its price policy promotes the transparency of its operation and co-operations.
- 10) Price listings are *exclusive* of value added tax.

Malta Standards Authority - National Metrology Services	21661794 , 23980176/7
Kordin Business Incubation Centre,	23980178
Kordin PLA 08. Malta	nms@msa.org.mt
CATALOGUE OF SERVICES & PRICES OF MSA-NMS	Page 3 of 12



Malta Standards Authority
National Metrology Services



1. Introduction to services

Groups of Services

The services of MSA-NMS include calibration of measuring instruments/standards and issue of the relevant calibration certificates.

Classification of Services

The services are classified per group and field of measurement as follows:

CAL	For calibration services	
	CAL-DIM	Dimensional measurements
	CAL-MAS	Mass
	CAL-TEM	Temperature
	CAL-HUM	Humidity

2. Contact information

Information on services can be provided by phone, fax or email or access to our web-site as follows:

MSA – NMS

Kordin Business Incubation Centre

Kordin. PLA 08

Tel.: 21 661794 / 23980176 / 7

Fax: 23980178

e-mail: nms@msa.org.mt

www.msa.org.mt/metrology

3. Organisation of services

All services are covered by the quality system, which meets the requirements of ISO standard, as well as legal requirements according to laws and regulations applied to the operation of MSA-NMS.

Handling of single requests for services

Clients' requests are submitted in writing and reviewed with respect to their technical requirements, time for implementation other additional requirements. The outcome of the review is the submission of

Malta Standards Authority - National Metrology Services	21661794 , 23980176/7
Kordin Business Incubation Centre,	23980178
Kordin PLA 08. Malta	nms@msa.org.mt
CATALOGUE OF SERVICES & PRICES OF MSA-NMS	Page 4 of 12

a relevant financial offer, which states the prices and the terms & conditions. It is recommended that clients use the codes and descriptions as presented in this catalogue in their requests .

The acceptance of the financial offer of MSA-NMS should be completed, by filling-in and sending the terms and conditions form, which is part of the financial offer.

Services are planned according to the time-schedule of the work and the commitments of the laboratories of MSA-NMS.

Contracts for services

Contracts signed between MSA-NMS and a client define the subject, the time, the prices and the terms of co-operation.





4. Mass Calibration (CAL-MAS)

(CAL-MAS-100) Calibration of weight standards OIML class M1/M2

RANGE	For 1-3 pieces		For 4-10 pieces		For more than 11 pieces	
	Code	Price	Code	Price	Code	Price
1mg –1kg	CAL-MAS-101	27.25	CAL-MAS-104	18.86	CAL-MAS-107	17.00
2kg - 10kg	CAL-MAS-102	33.07	CAL-MAS-105	23.52	CAL-MAS-108	20.73
20kg	CAL-MAS-103	46.35	CAL-MAS-106	30.28	CAL-MAS-109	27.25

(CAL-MAS-110) Calibration of weight standards OIML class M1/M2

RANGE	For 1 piece	
	Code	Price
20kg – 50kg	CAL-MAS-111	46.35
100kg	CAL-MAS-112	56.09
200kg	CAL-MAS-113	67.87
500kg	CAL-MAS-114	82.11

 Malta Standards Authority - National Metrology Services	 21661794 , 23980176/7
Kordin Business Incubation Centre,	 23980178
Kordin PLA 08. Malta	 nms@msa.org.mt
CATALOGUE OF SERVICES & PRICES OF MSA-NMS	Page 5 of 12

1000kg	CAL-MAS-115	99.37
--------	-------------	-------

(CAL-MAS-200) Calibration of weight standards OIML class F1/F2

RANGE	For 1-3 pieces		For 4-10 pieces		For more than 11 pieces	
	Code	Price	Code	Price	Code	Price
1mg – 1kg	CAL-MAS-201	32.14	CAL-MAS-204	23.52	CAL-MAS-207	19.79
2kg – 10kg	CAL-MAS-202	42.39	CAL-MAS-205	28.41	CAL-MAS-208	24.45
20kg	CAL-MAS-203	54.74	CAL-MAS-206	39.59	CAL-MAS-209	33.07

(CAL-MAS-210) Calibration of weight standards OIML class F1/F2

RANGE	For 1 piece	
	Code	Price
20kg – 50kg	CAL-MAS-211	54.74
100kg	CAL-MAS-212	69.22
200kg	CAL-MAS-213	87.56
500kg	CAL-MAS-214	110.78
1000kg	CAL-MAS-215	140.13

(CAL-MAS-300) Calibration of weight standards OIML class E2

RANGE	For 1-3 pieces		For 4-10 pieces		For more than 11 pieces	
	Code	Price	Code	Price	Code	Price
1mg – 1kg	CAL-MAS-301	46.35	CAL-MAS-304	36.80	CAL-MAS-307	33.07
2kg – 10kg	CAL-MAS-302	61.26	CAL-MAS-305	52.87	CAL-MAS-308	38.66
20kg	CAL-MAS-303	83.15	CAL-MAS-306	63.12	CAL-MAS-309	54.74

(CAL-MAS-400) Calibrations of weight standards which do not meet OIML standards

The price per piece is defined according to CAL-MAS-100 increased by 10%.

Malta Standards Authority - National Metrology Services	21661794 , 23980176/7
Kordin Business Incubation Centre,	23980178
Kordin PLA 08. Malta	nms@msa.org.mt
CATALOGUE OF SERVICES & PRICES OF MSA-NMS	Page 6 of 12

5. Calibration of temperature devices (CAL-TEM)

(CAL-TEM-100) Calibration of liquid-in-glass and digital thermometers by comparison

CAL. POINTS	RESOLUTION							
	0,1° C		0,05° C		0,02° C		0,01° C	
	Code	Price	Code	Price	Code	Price	Code	Price
1	CAL-TEM-101	54.62	CAL-TEM-106	59.58	CAL-TEM-111	92.82	CAL-TEM-116	186.34
2	CAL-TEM-102	64.54	CAL-TEM-107	71.51	CAL-TEM-112	83.43	CAL-TEM-117	228.27
3	CAL-TEM-103	74.49	CAL-TEM-108	82.43	CAL-TEM-113	97.34	CAL-TEM-118	270.20
4	CAL-TEM-104	84.41	CAL-TEM-109	94.36	CAL-TEM-114	111.25	CAL-TEM-119	312.13
5	CAL-TEM-105	94.36	CAL-TEM-110	104.28	CAL-TEM-115	124.15	CAL-TEM-120	349.40

Note: For calibration of a batch of similar items at the same points with the same range, the price is reduced according to the following scheme:

- The first item of the batch is priced according to the unit price of the above table.
- The next 1 – 3 items of the batch are priced with a discount of 10% of the unit price.
- The next 4 – 7 items of the batch are priced with a discount of 20% of the unit price.

(CAL-TEM-200) Calibration of Thermocouples (Base Metals – K,J,N,...) by comparison

CAL. POINTS	UPPER LIMIT OF MEASURING RANGE			
	300° C		550° C	
	Code	Price	Code	Price
1	CAL-TEM-201	49.66	CAL-TEM-206	64.54
2	CAL-TEM-202	64.54	CAL-TEM-207	82.43
3	CAL-TEM-203	79.45	CAL-TEM-208	100.32
4	CAL-TEM-204	94.36	CAL-TEM-209	118.19
5	CAL-TEM-205	109.24	CAL-TEM-210	136.08

CAL-TEM-211: Calibration with upper limit of 300° C at additional points: extra €11.90/point

CAL-TEM-212: Calibration with upper limit of 550° C at additional points: extra €14.90/point

Note: For calibration of a batch of similar items at the same points with the same range, the price is reduced according to the following scheme:

Malta Standards Authority - National Metrology Services	21661794 ,23980176/7
Kordin Business Incubation Centre,	23980178
Kordin PLA 08. Malta	nms@msa.org.mt
CATALOGUE OF SERVICES & PRICES OF MSA-NMS	Page 7 of 12

- The first item of the batch is priced according to the unit price of the above table.
- The next 1 – 3 items of the batch are priced with a discount of 10% of the unit price.
- The next 4 – 7 items of the batch are priced with a discount of 20% of the unit price.

(CAL-TEM-300) Calibration of Thermocouples (Noble Metals – R, S, B, T ...) by comparison

CAL. POINTS	UPPER LIMIT OF MEASURING RANGE			
	300°C		550°C	
	Code	Price	Code	Price
1	CAL-TEM-301	59.58	CAL-TEM-306	69.53
2	CAL-TEM-302	81.43	CAL-TEM-307	97.34
3	CAL-TEM-303	103.28	CAL-TEM-308	125.15
4	CAL-TEM-304	125.15	CAL-TEM-309	152.96
5	CAL-TEM-305	148.98	CAL-TEM-310	180.78

CAL-TEM-311: Calibration with upper limit of 300°C at additional points: extra €16.86/point

CAL-TEM-312: Calibration with upper limit of 550°C at additional points: extra €21.84/point

Note: For calibration of a batch of similar items at the same points with the same range, the price is reduced according to the following scheme:

- The first item of the batch is priced according to the unit price of the above table.
- The next 1 – 3 items of the batch are priced with a discount of 10% of the unit price.
- The next 4 – 7 items of the batch are priced with a discount of 20% of the unit price.

(CAL-TEM-400) Calibration of Thermocouples (Noble Metals–R,S,B,T...) directly to fixed points

Price: €109.24 / fixed point of ITS 90 (Hg,TPW,Ga)

(CAL-TEM-500) Calibration of Platinum Resistance Thermometers (PRT – Pt100-Pt25)

CAL POINTS	Calibration by comparison in –80° C to 550° C	
	Code	Price
1	CAL-TEM-501	99.32
2	CAL-TEM-502	124.15
3	CAL-TEM-503	148.98
4	CAL-TEM-504	173.81
5	CAL-TEM-505	198.64

Malta Standards Authority - National Metrology Services	21661794 , 23980176/7
Kordin Business Incubation Centre,	23980178
Kordin PLA 08. Malta	nms@msa.org.mt
CATALOGUE OF SERVICES & PRICES OF MSA-NMS	Page 8 of 12



Malta Standards Authority
National Metrology Services



(CAL-TEM-700) Calibration of Standard Platinum Resistance Thermometers (PRT – Pt100- Pt25) directly to the fixed points of ITS 90

Price: €129.11 / fixed point of ITS 90 (Hg,TPW,Ga,Sn,Zn)

Notes

The fixed points of the ITS 90 scale correspond to the phase equilibrium temperature values of specific elements as follows:

Hg	H ₂ O	Ga	Sn	Zn
-38°	0°C	29°C	230°C	420°C

The calibration of SPRT directly to the fixed points of ITS 90 is carried according to following scheme, depending upon the range of SPRT:

- H₂O – Zn: calibration in the fixed points of H₂O, Ga, Sn, Zn
- H₂O – Sn: calibration in the fixed points of H₂O, Ga, Sn
- H₂O – In: calibration in the fixed points of H₂O, Ga
- H₂O – Ga: calibration in the fixed points of H₂O, Ga
- Hg – Ga: calibration in the fixed points of Hg, H₂O, Ga

(CAL-TEM-800) Furnaces, Baths, Heaters, Autoclaves, Incubators (on site calibrations)

Calibration at one temperature to determine temperature profile at different points (positions).

Price: €59.58 / first point + €27.81 / additional point

Malta Standards Authority - National Metrology Services	21661794 , 23980176/7
Kordin Business Incubation Centre,	23980178
Kordin PLA 08. Malta	nms@msa.org.mt
CATALOGUE OF SERVICES & PRICES OF MSA-NMS	Page 9 of 12

6. Calibration of temperature hygrometers (CAL-HUM-100)

This calibration exercise would be carried out at a fixed temperature and different humidity levels, or at a fixed humidity level but different temperatures. In both cases cost is computed on the number of differential calibration points requested.

CAL POINTS	Code	Price
1	CAL-HUM-101	38.13
2	CAL-HUM-102	76.26
3	CAL-HUM-103	48.68
4	CAL-HUM-104	152.52
5	CAL-HUM-105	190.65

7. Calibration of Dimension (CAL-DIM)

(CAL-DIM-100) Calibration of Gauge Blocks

Calibration at different levels of uncertainty by mechanical comparator for central length

Number of pieces in set	Five point measurement (3 readings) ($U=0,1 \mu\text{m}+0.5L \cdot 10^{-6}$)	
	Code	Price per set
1	CAL-DIM-101	11.41
5	CAL-DIM-102	45.18
10	CAL-DIM-103	78.26
20	CAL-DIM-104	125.55
40	CAL-DIM-105	191.47
88	CAL-DIM-106	327.50
122	CAL-DIM-107	391.56

Note: For sets not complying with the indicated ranges, calibration prices are assigned according to the following scheme:

Range of additional pieces	Price of closest set + price / additional pieces Five point measurement (3 readings) $U=0,1 \mu\text{m}+0.5L \cdot 10^{-6}$
2-4	8.50
6-9	6.61
11-19	4.72
21-39	3.30
41-87	2.84
89-121	1.88

(CAL-DIM-200) Calibration of micrometers and vernier calipers

Price: from € 29.79/piece depending upon resolution

Malta Standards Authority - National Metrology Services	21661794 , 23980176/7
Kordin Business Incubation Centre,	23980178
Kordin PLA 08. Malta	nms@msa.org.mt
CATALOGUE OF SERVICES & PRICES OF MSA-NMS	Page 10 of 12



Malta Standards Authority
National Metrology Services



8. Additional cost for clients

The client has to pay for extra cost related to :

1. Transport of items for calibration to and from MSA-NMS.
2. Insurance cost, if there is any, to cover his equipment during transport and calibration.
3. Extra cost of calibration for on-site calibration, which is fixed at € 39.71/man-day.

These costs are not included in the prices. In this respect, they are stated separately in the financial offers of MSA-NMS.

9. Terms and conditions

A. Assignment of service prices

1. The price of each calibration service is assigned according to the Official Service & Price Catalogue of MSA-NMS.
2. Prices for services, which are not reported in the Official Service & Price Catalogue of MSA-NMS, are assigned according to MSA-NMS costing and price policy. The unit price of MSA-NMS services for 2010 is € 56.60 /man-hour of service.

B. Payment of cost of calibration by the client

The time and the method of payment for each calibration service are determined in the respective financial offer of MSA-NMS according to a mutual agreement between MSA-NMS and the client.

C. Additional costs for the client

1. Transport of equipment for calibration to and from the facilities of MSA-NMS.
2. Daily compensation for on-site calibrations at a fixed rate of € 39.71/man-day.
3. Insurance cost, if there is any, for coverage of client's equipment.

D. Additional responsibilities of the client

1. Information and data related to equipment and required for calibration.
2. Resources available in on-site equipment, if they are needed.

Malta Standards Authority - National Metrology Services	21661794 , 23980176/7
Kordin Business Incubation Centre,	23980178
Kordin PLA 08. Malta	nms@msa.org.mt
CATALOGUE OF SERVICES & PRICES OF MSA-NMS	Page 11 of 12



Malta Standards Authority
National Metrology Services



E. Planning and time for calibration and completion of service

1. As time of completion of the service is considered the time of receipt of the calibration certificate by the client.
2. Planning of service with respect to the time of start and completion is stated in the financial offer of MSA-NMS.
3. Priorities are assigned according to a FIFO system (first in – first out).

Malta Standards Authority - National Metrology Services	21661794 , 23980176/7
Kordin Business Incubation Centre,	23980178
Kordin PLA 08. Malta	nms@msa.org.mt
CATALOGUE OF SERVICES & PRICES OF MSA-NMS	Page 12 of 12