

Nederlands Meetinstituut

Member State
The Netherlands

OIML Certificate No
R76/1992-NL-94 .11

OIML CERTIFICATE OF CONFORMITY

Issuing authority

Name: NMI IJkezen B.V.
Address: Hugo de Grootplein 1, Dordrecht
Person responsible: M. Charité

Applicant

Name: CAS Corporation
Address: CAS Building #440.1 Sungnae-Dong, Kangdong-KU, Seoul, Korea

Manufacturer of the certified pattern

Name: Cas Corporation
Address: CAS Building #440.1 Sungnae-Dong, Kangdong-KU, Seoul, Korea

Identification of the certified pattern

Type: AD
Classe (III)
 $3 \text{ kg} \leq \text{Max} \leq 30 \text{ kg}$
 $e = d$
 $n \leq 3000$ divisions

This certificate attests the conformity of the above-mentioned pattern (represented by the samples identified in the associated test report, the EC type-approval certificate and the description with number T2486 and the documentation folder number T2486-1) with the requirements of the following Recommendation(s) of the International Organization of Legal Metrology (OIML):
R76
edition 1992
for accuracy class (III)

This certificate relates only to the metrological and technical characteristics of the pattern of the instrument concerned, as covered by the relevant OIML International Recommendation(s).

This certificate does not bestow any form of legal international approval.



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OIML Certificate N°
R76/1992-NL-94.11

The conformity was established by tests described in the associated test report
N° R76/1992-NL-94.11, that includes 54 pages.

The issuing authority
M. Charité

M/lo

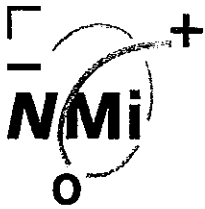
19 December 1994

The OIML president
G.J. Faber

19 December 1994

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Important note: Apart from the mention of the certificate's reference number and the name of the OIML Member State in which the certificate was issued, partial quotation of the certificate or of the associated test report is not permitted, though they may be reproduced in full.



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EC type-approval certificate

Number T2486 revision 5
Project number 10138528
Page 1 of 4

Issued by NMI Certin B.V.
Hugo de Grootplein 1
3314 EG Dordrecht
The Netherlands

Notified Body Number 0122

In accordance with The Council Directive 90/384/EEC on non-automatic weighing instruments.

Applicant CAS Corporation
CAS Building
#440.1 Sungnae-Dong, Kangdong-KU
Seoul
Korea

In respect of A class **III**, graduated, self-indicating, single-interval, electronic, **non-automatic weighing instrument**.

Manufacturer : CAS Corporation
Type : AD

Characteristics $n \leq 3000$ divisions
 $3 \text{ kg} \leq \text{Max} \leq 30 \text{ kg}$
 $T \leq - \text{Max}$

In the description number T2486 revision 5 further characteristics are described.

Valid until 19 December 2004

Description and documentation The instrument is described in the description number T2486 revision 5 and documented in the documentation folder T2486-5, appertaining to this EC type-approval certificate.

Remarks This revision replaces the earlier version, including its documentation folder.

Delft, 29 October 2001
NMI Certin B.V.

P.P.M. van Enckevort
Manager Certification Delft

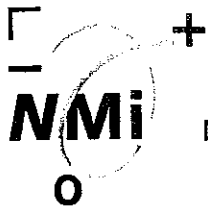
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1 General information about the non-automatic weighing instrument

All properties of the non-automatic weighing instrument, whether mentioned or not, may not be in conflict with the legislation.

1.1 Essential parts

| Description | Drawing number | Rev. | Remarks |
|------------------|----------------|------|------------------------------------|
| Indicator | -- | -- | |
| AD Exploded view | 94.9.16 | 0 | Mechanical assembly with load cell |

1.2 Essential characteristics

The non-automatic weighing instrument is to be connected to a 110-120 V or 220-240 V AC, power supply with a frequency of 50/60 Hz.

1.3 Essential shapes

The non-automatic weighing instrument is built according to drawings:

- "AD exploded view", drawing number 94.9.16;
- "Baby tray", drawing number 2001-A00-0062.

The data plate is secured against removal by sealing or will be destroyed when removed.

To secure components that may not be dismantled or adjusted by the user, the non-automatic weighing instrument has to be secured in a suitable manner on the locations B6 indicated in the drawing "AD exploded view", number 94.9.16 and drawing "Sealing method", number 3005-AD0-0001.

The securing component has to bear either:

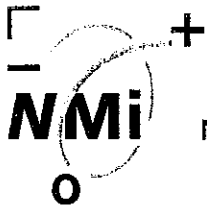
- a mark of the manufacturer laid down in a notified body approved quality system (Annex II of the directive 90/384/EEC), or
- an official mark of a Member State of the EEC, or an other party to the EEA agreement.

Inside the cabinet is a calibration lock, located behind the sealed plastic cover under the load receptor of the non-automatic weighing instrument, see position U10 on drawing AD exploded view, number 94.9.16.

1.4 Conditional parts

The non-automatic weighing instrument may be equipped with peripheral equipment which is used for the applications listed in article 1(2)(a) of the EC Directive (90/384/EEC), if the peripheral equipment is certified to be connected to an EC type-approved non-automatic weighing instrument by a Notified Body appointed to certify non-automatic weighing instruments according to paragraph I of Annex II of the EC directive on Non-Automatic Weighing Instruments.

A level indicator with a sensitivity of at least 2 mm for a tilt of 2/1000.



2 Information about the main constituent parts of the non-automatic weighing instrument

2.1 The electronics

2.1.1 Essential parts

| Description | Drawing number | Rev. | Remarks |
|--|----------------|------|--------------|
| D series Wired Diagram | 6054-A01-0701 | 0 | |
| AP-1 ver. AD Main PCB Location diagram | 6014-A01-0700 | 0 | |
| AD Series Full part list | 1 | - | OCT.19.'94 |
| AD Series Full part list | 1 | A | OCT.26, 2001 |

2.1.2 Essential characteristics

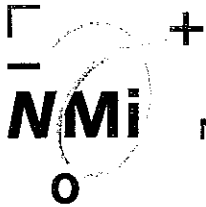
List of devices:

- determination stability of equilibrium;
- zero indicator;
- semi-automatic zero-setting;
- initial zero-setting;
- zero-tracking;
- semi-automatic subtractive tare balancing;
- semi-automatic calibration device;
- acting upon significant faults;
- checking the display;

2.1.3 Conditional parts

The interface section is located on the main board. The non-automatic weighing instrument may be equipped with one or more of the following protective interfaces that has not to be secured:

- CAS top printer interface;
- RS-232C.



2.2 The mechanical assembly with load cell

2.2.1 Essential parts

| Description | Drawing number | Rev. | Remarks |
|------------------|----------------|------|------------------------------------|
| AD Exploded view | 94.9.16 | 0 | Mechanical assembly with load cell |

2.2.2 Essential characteristics

$$e \geq E_{\max}/5000$$

Utilization of the load cell is $\geq 60\%$

Excitation power supply 12 V DC.

3 Approval conditions

See chapter 1.3, essential shapes

4 Seals and verification marks

See chapter 1.3, essential shapes

5 CE-mark of conformity and inscriptions

The marks, facilities for the marks and the inscriptions on the non-automatic weighing instrument fulfil the requirements of article 1 of Annex IV.