Generalitat de Catalunya
Departament de Treball i Indústria
Direcció General d'Energia,
Mines i Seguretat Industrial
Subdirecció General de Seguretat Industrial
Servei d'Automòbils i Metrologia
Secció de Metrologia

TEST CERTIFICATE

Third addition to number E-97.02.C10

LOAD CELL TYPE CO

Issued by: Direcció General d'Energia, Mines i Seguretat Industrial - Generalitat de Catalunya
(notified body number 0315)
Avinguda de la Diagonal, 405 bis
E-08008 BARCELONA SPAIN

In accordance with: Paragraph 8.1 of the European Standard "Metrological aspects of non-automatic weighing instruments" EN 45501:1992(+AC:1993). The applied error fraction p_i with reference to paragraphs 3.5.4 and 4.12 of this standard is 0,7. Following paragraph 4.12 of this standard, the tests have been performed according to the OIML International Recommendation, OIML R 60 (2000).

Issued to: SENSOCAR, S.A.
Carrer Géminis, núm.77, nau 2, P.I.Can Parellada
E-08228 TERRASSA SPAIN

In respect of: The model of a **load cell**, tested as part of a non-automatic weighing instrument.
Manufacturer: SENSOCAR, S.A.
Type: CO.
This third addition complements the test certificate number E-97.02.C10, relating to addition of new metrological characteristics in version CO-1.

Characteristics:

Version		CO-1						CO-2				
Classification		C4↓										
Maximum number of verification intervals	n_{LC}	4000										
Maximum capacity	E_{max}	250	300	500	750	1000	1500	2000	3000	4000	5000	kg
Minimum verification interval	$Y = E_{max}/v_{min}$	15000						10000				

additional marking	temperature limits	rated output	impedance input	minimum dead load	safe overload
--	-10°C/+40°C	C = 2 mV/V	R_{LC}= 350 Ω	E_{min}= 0 kg	E_{lim}/E_{max}= 150%

The main characteristics are shown in the descriptive annex, which is an integral part of the test certificate and consists of 3 pages.
The type is described in the submitted technical documentation, identified with number 13/97. The first addition is described in the submitted technical documentation, identified with number 39/00. The second addition is described in the submitted technical documentation, identified with number 01/05. The changes covered by this addition are described in the submitted additional technical documentation, identified with number 05/05.

For delegation of Director General
d'Energia, Mines i Seguretat Industrial's signature
THE HEAD OF THE SERVICE OF AUTOMOBILES AND METROLOGY

Joan Pau Clar i Guevara

Barcelona, 2 February 2005

Generalitat de Catalunya
Departament de Treball i Indústria
Direcció General d'Energia, Mines
i Seguretat Industrial
Servei d'Automòbils i Metrologia
Barcelona

This document shall not be reproduced except in full, with the annex.
This test certificate refers only to metrological requirements.
This test certificate cannot be used without aplicant's authorization.

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Descriptive annex to third addition to the test certificate number E-97.02.C10.

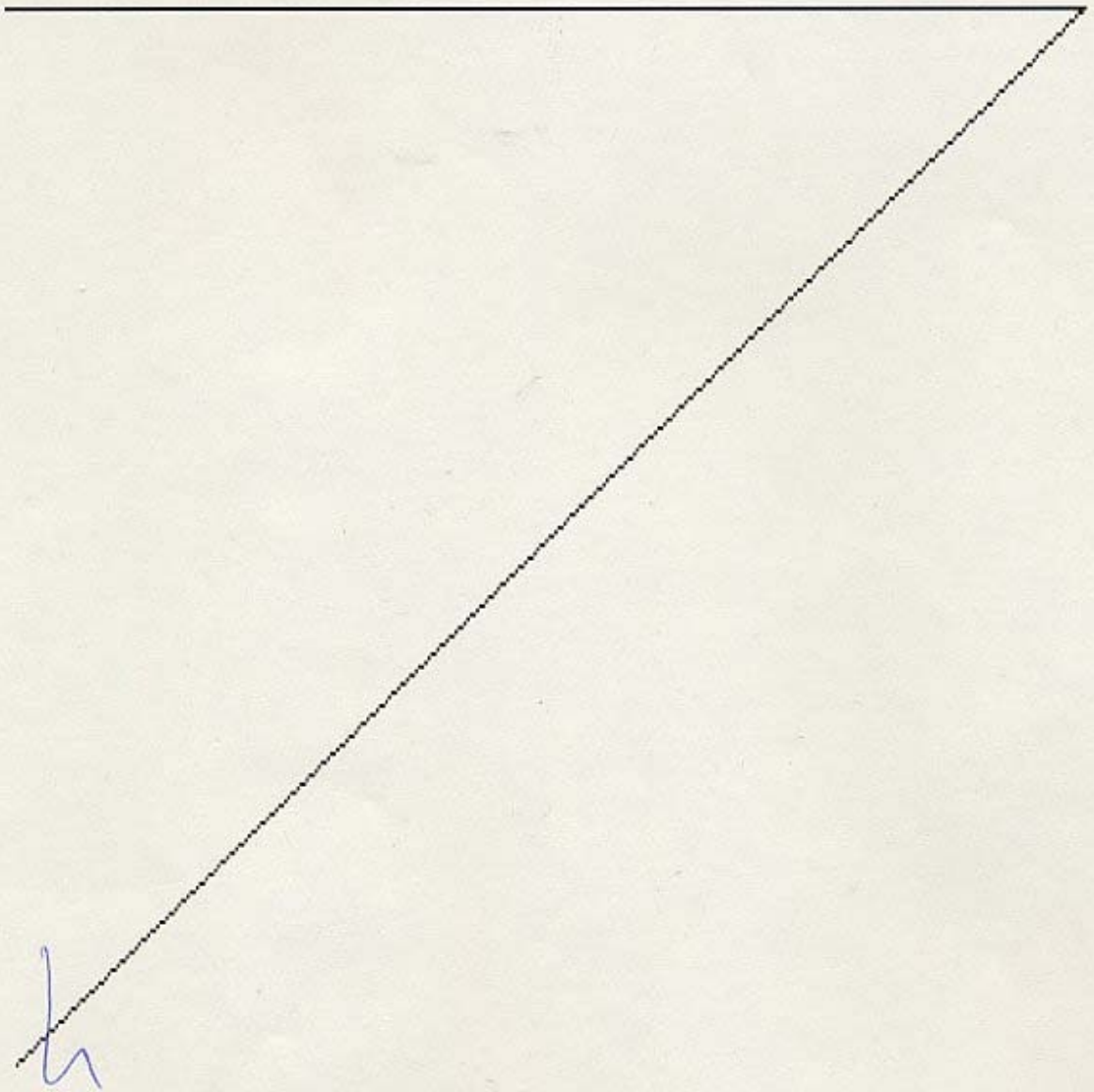
0.- Index.

1.- Name and type of the instrument. 2

2.- Description of the modification. 2

3.- Text after modification. 3

3.1.- Metrological characteristics. 3



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Descriptive annex to third addition to the test certificate number E-97.02.C10.

1.- Name and type of the instrument.

Load cell type CO.

Manufactured by:

SENSOCAR, S.A.
Carrer Géminis, núm. 77, nau 2, Polígon Industrial Can Parellada.
E-08228 TERRASSA SPAIN

Using the mark:

SENSOCAR.

2.- Description of the modification.

This annex to third addition to the test certificate number E-97.02.C10 describes a modification of the type CO.

This third addition to the test certificate number E-97.02.C10 is relating to:

- Addition of a new number of load cells verification intervals in version CO-1.
- Addition of a new minimum dead load output return in version CO-1.
- Addition of a new ratio of minimum load cell verification interval in version CO-1.

This addition affects paragraph 3.1 of the annex to the test certificate number E-97.02.C10, paragraph 3.2 of the annex to first addition to the test certificate number E-97.02.C10 and paragraph 3.1 of the annex to second addition to the test certificate number E-97.02.C10.

Paragraph 2 of the annex to the certificate of the test certificate number E-97-02.C10 was modified and replaced for paragraph 3.1 of the annex to first addition to the test certificate number E-97.02.C10.

Paragraph 3.1 of the annex to the certificate of the test certificate number E-97.02.C10 and paragraph 3.2 of the annex to first addition to the test certificate number E-97.02.C10 were modified and replaced for paragraph 3.1 of the annex to second addition to the test certificate number E-97.02.C10.

Paragraph 3.2 of the annex to the certificate of the test certificate number E-97.02.C10 was modified and replaced for paragraph 3.3 of the annex to first addition to the test certificate number E-97.02.C10.

Paragraph 4 of the annex to the certificate of the test certificate number E-97.02.C10 was modified and replaced for paragraph 3.2 of the annex to second addition to the test certificate number E-97.02.C10.

Paragraph 7 of the annex to the certificate of the test certificate number E-97.02.C10 and paragraph 3.4 of the annex to first addition to the test certificate number E-97.02.C10 were

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Descriptive annex to third addition to the test certificate number E-97.02.C10.

modified and replaced for paragraph 3.3 of the annex to second addition to the test certificate number E-97.02.C10.

Figure 3 of the annex to the certificate of the test certificate number E-97.02.C10 was modified and replaced for Figure 3 of the annex to second addition to the test certificate number E-97.02.C10.

3.- Text after modification.

Paragraph 3.1 of the annex to the certificate of the test certificate number E-97.02.C10, paragraph 3.2 of the annex to first addition to the test certificate number E-97.02.C10 and paragraph 3.1 of the annex to second addition to the test certificate number E-97.02.C10 are modified and replaced by paragraph 3.1 of this descriptive annex.

3.1.- Metrological characteristics.

Load cell type CO has the following metrological characteristics and information for compatibility of modules:

Version		CO-1	CO-2	---
Classification		C4↓		--
Additional marking		---		--
Maximum number of LC verification intervals	n_{LC}	4000		--
Maximum capacity	E_{max}	250 300 500 750 1000 1500	2000 3000 4000 5000	kg
Minimum dead load, relative	E_{min}/E_{max}	0		%
Ratio of minimum LC verification interval	$Y = E_{max}/v_{min}$	2		mV/V
Minimum dead load output return	$Z = E_{max}/2DR$	15000	10000	--
Rated output	C	4000	5000	--
Input impedance	R_{LC}	350		Ω
Minimum limit temperature rating	T_{min}	-10		°C
Maximum limit temperature rating	T_{max}	+40		°C
Safe overload	E_{lim}/E_{max}	150		%
Fraction maximum permissible error	p_{LC}	0,7		--

Load cell type CO can have other maximum capacities from 250 kg to 1500 kg in version CO-1, and from 2000 kg to 5000 kg in version CO-2, respecting always its metrological characteristics according to OIML R60.

Another characteristics are:

Material de construcción	Steel or stainless steel	--
Tolerance of nominal sensitivity	± 0,1	mV/V
Tolerance of input impedance	± 5	Ω

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