European directives MID (Measuring Instruments Directive 2004/22/EC):

Unified standards for Europe – HBM leads the way:

In Europe, there are regulations and directives governing methods of measurement and test procedures for measuring instruments. MID (Measuring Instruments Directive 2004/22/EC) is a directive that assists technical harmonization and standardization. HBM take this directive as its basis in product planning. Some of the key points of the directive are given below.

1

Measuring Instrument Directive 2004/22/EC (MID)

MID regulates...

... requirements and procedures up to marketing and initial startup:

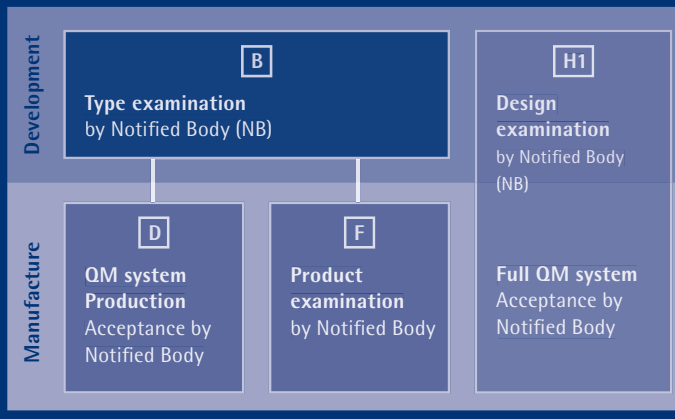
- Modular conformity assessment procedures including measuring instrument type allocation,
- Manufacturer obligations,
- Measuring instrument marking,
- Manufacturer declaration of conformity,
- Notified Body requirements.

MID 2004/22/EC

Directive 2004/22/EC of the European Parliament and Council dated March 31, 2004 concerning measuring instruments. An example for automatic weighing instruments as per Annex MI 006 is shown (2).

2

MID conformity assessment procedures for (MI006)



The conformity procedures shown are applicable to the MID (MI006), in accordance with the new concept of the European Commission, better known as the Blue Guide. Modules B + F, B + D and H 1 are relevant to automatic weighing instruments.

3

MID conformity assessment procedures

Production phases on the manufacturer's premises	Conformity procedures		
	Modules B + F	**Modules B + D**	**Module H 1**
Development: Design Type	Type examination (B)	Type examination (B)	Design examination
Mass production		QM system production (D)	Full QM system
Final product	Initial verification (F)		
	Declaration of conformity and marking		

The B + F combination is usually preferred by manufacturers who play a restricted role. In Germany, the weights and measures office is also involved in the statement of conformity.

With the B + D combination, the manufacturers themselves are able to validate the statement of conformity. In Germany, the statement of conformity used to be known colloquially as "verification".

4

Type examination (Module B)

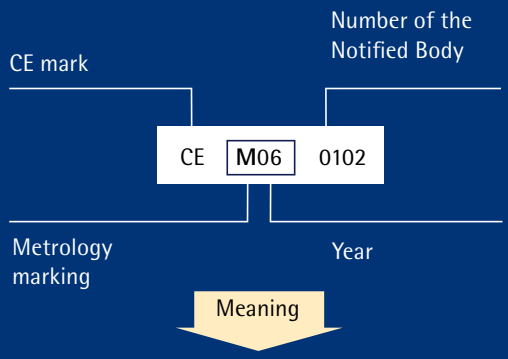
Procedures specified by a Notified Body

3 alternatives:

1. Examination of the prototype of the complete measuring instrument,
2. Examination of one or more parts of the prototype and assessment of the design of the remaining parts by means of technical documentation and additional evidence (such as measurement results),
3. Assessment of the design of the complete measuring instrument by means of technical documentation and additional evidence (such as measurement results), without examining the prototype.

5

Measuring instrument conformity marking



The measuring instrument meets the requirements of all applicable directives and may be freely sold in Europe.

Full measuring instrument marking in accordance with statement of conformity and marketing.

Currently about 90 % of all conformity assessment procedures are performed with the aid of module B (type examination). The main emphasis here is on procedures 1 and 2.

Components that have already been examined are useful for the required type examination. For example, digital load cells that in addition to EN 45001; OIML R60, are also examined for EMC requirements as per OIML D11/2004 and for software-related requirements, as per Welmec guide 7.2*.

*) Welmec 7.2: Software Guide for Measuring Instruments Directive 2004/22/ EC)

Test certificate

Nederlands Meetinstituut

Number TC6000 revision 4
Project number 802007
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Issued by: NMi Certin B.V.
Hugo de Grootplein 1
3314 EG Dordrecht
The Netherlands

Notified Body Number 0122

In accordance with: Paragraph 8.1 of the European Standard on Metrological aspects of non-automatic weighing instruments EN 45501:1992/AC:1993, OIML document D11:2004, by application of the OIML International Recommendation R60 (Edition 2000) and Welmec guide 7.2: May 2005. The applied error fraction p_i, meant in the paragraph 3.5.4. of the standard is 0.8.

Applicant: Hottinger Baldwin Messtechnik GmbH
Im Tiefen See 45

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more ...

www.ptb.de/index_en.html
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