



**RM, CRM, Accredited
CRM...
Definitions and
differences**

Definitions (1)

RM : Reference material (ISO guide 30)

Material or substance with certain properties that are sufficiently homogeneous and well defined to allow them to be used for calibration of a device, evaluation of a measurement method or attribution of values to materials

CRM : Certified reference material (ISO guide 30)

Material accompanied by a certificate whose properties are certified by a procedure validated with uncertainty at a known level of confidence

Definitions (2)

PMR : Producers of reference materials (ISO 17034)

Reference materials (RM) are used at all stages of the measurement process, including for method validation, calibration and quality control. They are also used in the framework of interlaboratory comparisons for method validation and proficiency assessment from the laboratory.

The demonstration of the scientific and technical skills of the producers of reference materials (PMR) is a basic requirement to guarantee the quality of the RM. Requirement in new, higher quality RMs is constantly growing due to the increased loyalty of measuring equipment and the need for more accurate and reliable data in the sciences and technology.

PRMs should not only provide information about their materials in the form of MR documents, but they must also demonstrate their competence in the production of appropriate quality MR.

ISO 17034 specifies general requirements for RM producers, including Certified Reference Materials (CRMs).

ISO 17034 REQUIREMENTS

Among all those requirements about the production of RM and CRM, we can find :

- **General requirements** : Contracts, impartiality and confidentiality
- **Structural requirements** : legal, organization, management, ...
- **Resource requirements** : Personnel, subcontracting, purchasing, infrastructure...
- **Technical and production requirements** : planning, production, storage, measurement, traceability, homogeneity, stability, characterization, values, documents, labels, distribution, non-compliant, complaints...
- **Management system requirements** : comparable to ISO 9001 requirements



ROFA Products

ROFA FRANCE is providing :

- Certified Reference Material (CRM) accredited ISO17034
- Certified Reference Material (CRM) not accredited ISO17034



You can recognize them by the * mark on our product list available on our website :
<http://www.rofafrance.com/produits-de-reference/>

All our CRM are produced accordingly ISO 17034 requirements, but for some of them the accreditation can not be reached due to lack of ISO 17025 laboratory for example...

There is no Reference Material (MR) in the catalogue of ROFA FRANCE, but they could be provided on demand.