Density determination of weights 2 kg up to 20 kg

B u s i n e s s   A r e a   M e t r o l o g y

P20 Density

Economical density and volume determination

For high – accuracy mass determination, the density of the weights must be known. With the density and volume determination system P20 Density, weights from 2 kg to 20 kg are measured with a fast and simple process. The accuracy achieved fulfils OIML Class E1 requirements.

P20 Density software makes it easy

The P20 Density software guides through the efficient measurement process and performs density calculations including uncertainty budget and analysis.

The software was developed in collaboration with Swedish National Testing and Research Institute.

Features

- Guided process for accurate and fast method
- Automatic data acquisition
- Detailed and comprehensive report
- Uncertainty budget with analysis
- Parameter and equipment database
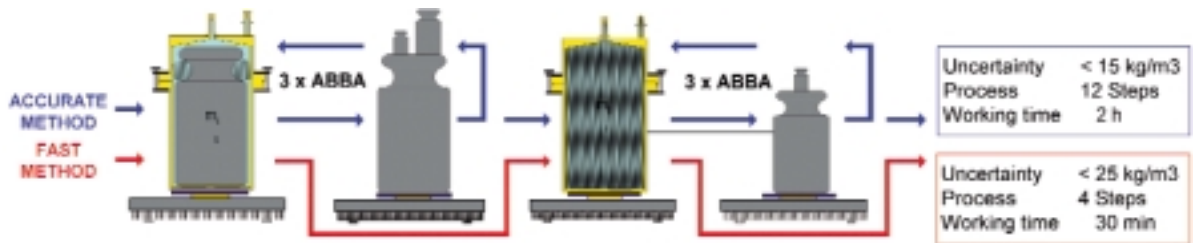- Swivel station for reliable filling

METTLER TOLEDO

□ Economical solution according OIML R111 method D

□ Conform for OIML E1 weights

□ Software guided process including results calculation

Process
With two measurement methods, the accuracy is adapted to the specific requirements.

Delivery content
• Constant volume vessel,
• Density determination software (MS Windows-based)
• Reliable swivel filling station
• High accuracy temperature sensor
• Syringe
• Leather gloves

Following equipment is required for operation
• Mass comparator with resolution <10 mg (e.g. KA30-3/P)
• Special, stackable disc weights 2 x 10 kg F1
• PC for software

Optional
For secure handling, stackable weights are recommended
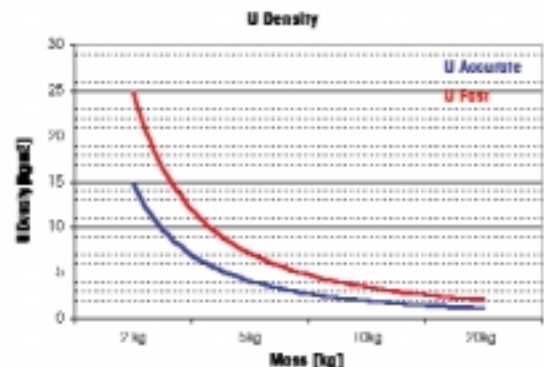• 2 x 10 kg Reference disc weights of OIML F1 class

System requirements
Computer with Pentium processor 500 MHz, min. 64 MB RAM, one serial
interface RS232, hard disc space >10MB, Windows 98SE, Me, NT4.0,
2000 or XP

Specification

Accurate method (12 Steps)
Density uncertainty (k=2)   1…15 kg/m^3
Process time   <2 hours

Fast method (4 Steps)
Density uncertainty (k=2)   2…25 kg/m^3
Process time   <30 min