Standards & Certification

Product standards define:
- ❑ Requirements, pass/fall criteria, performance parameters
- ❑ Test methods:
  - ❑ How to check if requirements are fulfilled
  - ❑ How performance is determined

Product certification states compliance with standards

Standards & Certification

Product standards are private/society/national/international agreements on:

- ❑ Requirements, pass/fall criteria
- ❑ Test methods: How to check if requirements are fulfilled

When **a sample of a product** type is tested according to a standard the result of the test will be **the performance** of **the specific sample tested** and/or **pass/fall statement for the specific sample** according to criteria in the standard

Society Standards:

- ❑ ASHRAE
- ❑ VDI
- ❑ …

National Standards:

- ❑ SABS
- ❑ BSI
- ❑ DIN
- ❑ ANSI
- ❑ …

International Standards:

- ❑ ISO → ISO Standards
- ❑ CEN → EN Standards

Test labs do the testing according to the standard

Standards & Certification

Product certification states compliance with defined standards:

❑ **All products produced** of same type fulfils the requirements in standard(s).

Certification schemes are private/society/national/international agreements on how to assure that the products sold are fulfilling the standard(s); typically by:

❑ Type testing
❑ Factory production control / quality management system / regular inspections at production lines (to assure that products sold are same as the product sample tested)

OR

❑ by manufacturers signature (declared conformity)

When a product type is certified, the certificate is valid for all **products sold** of this type

National Certification Schemes:
❑ DIN Geprüft
❑ CSTBat
❑ AU RECS
❑ Golden Sun
❑ ...

International Certification Schemes:
❑ **Solar Keymark**
❑ **SRCC**

Certification bodies engage test labs and inspectors to do the testing and inspection
Certification bodies checks if all requirements in standards and certification scheme are fulfilled

GLOBAL CERTIFICATION

Industry representatives

 - appointed by major industrial associations from different regions of the world

Certification Board

 - for the certification scheme has representatives from:
- ❑ industrial associations
- ❑ certification bodies
- ❑ test labs

Test labs

 - approved/recognised by the certification body (accreditation needed)

ISO standards

Certification Scheme

 - is made based on the ISO standard(s) and normal practise for product certification. The Certification Scheme describes in detail "the rules" for certification of the specific product group including requirements. The Certification Scheme is approved by the Board (could be drafted by a smaller group)

Certification bodies

 - do the certification according to the certification scheme (accreditation needed) (approval by the Board needed ?)

Manufacturer

 - produce products – and mark them

Certificate / licence

 - allowing the manufacturer to mark his products is given by the certification body

Product

User

Mark / Label