Laboratory of Construction Materials

ÉCOLE POLYTECHNIQUE FÉDÉRALE DE LAUSANNE

AUTOGENOUS SHRINKAGE AND CREEP FRAMES

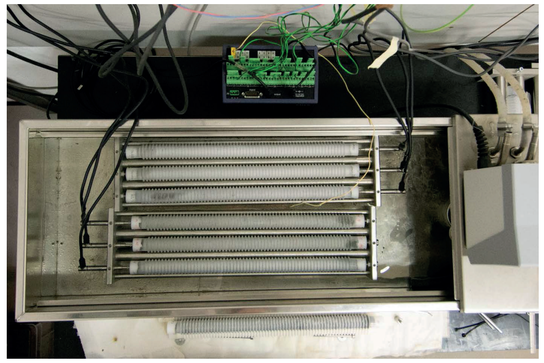
Julien STON – MXH 919 and MXH 942.1

What are they used for?

- ❑ **Measure autogenous shrinkage on paste using the corrugated tubes method (ASTM C1698-09)**
- ❑ **Obtain the compressive or tensile creep strain on paste or concrete specimens**

Applications

- ❑ **Study of the viscoelastic properties and their kinetics**
- ❑ **Inputs for modelling**
- ❑ **Suited to long-term studies**
- ❑ **Complemented by relative humidity monitoring and follow-up of the degree of hydration**



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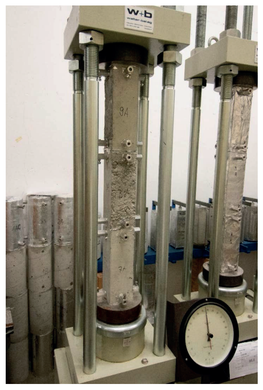

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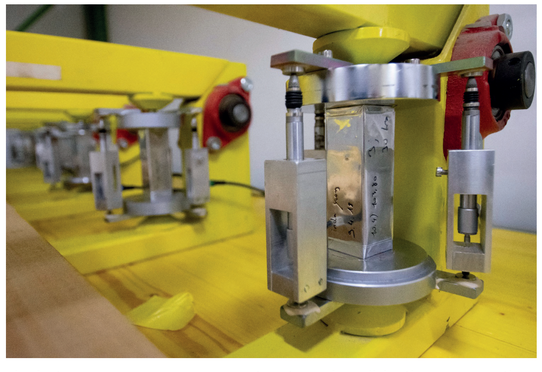

4.

1. Autogenous measurement setup. An oil bath ensures the system remains at 20°C.
2. Tensile creep frame for concrete sample
3. Compressive creep frame for concrete samples. Can also be used with automated monitoring
4. Compressive creep frames for cement paste samples. Three LVDTs around each sample monitor its length automatically.

Typical results