

CEMENT ADMIXTURES ASSOCIATION

38a Tilehouse Green Lane, Knowle, West Midlands B93 9EY Tel/Fax: 01564 776362 www.admixtures.org.uk



the Sign of Quality

SECRETARY: JOHN DRANSFIELD

ADMIXTURE INFORMATION SHEET AIS 6 GUIDANCE ON DISPENSING LIQUID ADMIXTURES

Introduction:

To ensure full benefit is obtained from admixtures it is essential that the quantity added is measured precisely. For batch mixing, commercially available equipment can be pre-set to measure by volume or weight the dose for each batch. It can be linked to the batching/mixing control system so that the admixture is automatically discharged at the appropriate time in the cycle and recorded on the batch printout.

It is recommended that the following points should be considered when dispensing equipment is selected:

- The admixture supplier should be invited to recommend suitable equipment and any special requirements for particular admixtures.
- The accuracy should be better than ± 5% as required by BS 5328 and ENV 206. This should include any error in pre-setting the quantity to be delivered.
- If the dispensing equipment measures flow, a sensing system is fitted to ensure only liquid is measured.
- A fail safe device is included to prevent overdosing or double dosing.
- The operating range is such that the quantity to be dispensed is not less than 10% of this range.
 Manual multiple dosing of one type of admixture in one batch is not advisable.
- A calibrated sight glass can help the operator to check correct functioning.
- There is provision for drawing off the measured quantity for calibration.
- Provision is included for flushing with water.
- The supplier's installation and maintenance service.

- When more than one admixture is used in a batch, a separate measuring operation is used for each material.
- Total discharge time does not exceed the time taken to add the mix water.
- If liquid remains in the system after dosing, it does not drain away.

When using dispensing equipment:

- Calibrate at installation and thereafter at three monthly intervals, or more frequently.
- Flush thoroughly at least at the end of each shift or when changing to another admixture.
 Different admixtures may coagulate, foam or precipitate solids when mixed.
- Make arrangement for routine inspection, safety checks, cleaning and repair. If this is by contract ensure a maximum time between call out and repair is agreed.
- Ensure dispensers are labelled with:

Serial number
Name, address, phone and
fax number
of supplier and maintainer
if different.

Dates of installation and next

- calibration due.
- Either a visible sight glass or a signal indicating faulty operation is provided for the operator.
- Any pre-setting level device is fixed at eye level or where there is no risk of parallax errors
- If foaming makes accurate measurement difficult, consult the admixture supplier.
- Ensure each dispenser line is labelled with the type of admixture at the dispenser and feed point.

Information on admixtures:

For general information on admixtures contact: John Dransfield, CAA Secretary







This information is provided for guidance only. CAA cannot accept responsibility for its practical application.