EUROMAP 6

Injection Moulding Machines

Determination of the duration of the dry cycle

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(5 pages)

This recommendation was prepared by the Technical Commission of EUROMAP.

First edition 1971.

Edition 1994: Nozzle movements deleted.

Version 2.0: Note added in clause 2.3 for clarification reasons.

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1 Scope

This recommendation defines the determination of the duration of the dry cycle for comparison reasons.

2 Definitions

2.1 Duration of the dry cycle

During the dry cycle, the injection moulding machine is operated without injection and/or plasticizing. The duration of the dry cycle is the time needed for one cycle of the clamping unit which comprises: mould opening time, mould closing time and switching times.

2.2 Mould closing time

The mould closing time is the time from the beginning to the end of the closing movement of the moveable platen, including the time for the application of 70 % of the max. clamping force.

2.3 Mould opening time

The mould opening time is the time from the beginning to the end of the opening movement of the moveable platen.

NOTE: The clamping force release time is not included in the dry cycle.

2.4 Switching times

Switching times include all idle time occurring during the dry cycle.

3 Measuring method

A test block according to EUROMAP 7 shall be mounted on the fixed platen. 70 % of the max. clamping force shall be applied.

The measurement shall cover a moveable platen stroke of 70 % of e_1 (see EUROMAP 2). If this value cannot be achieved the stroke shall be indicated.

Waiting times between movements might be necessary. However, these times shall not be included in the dry cycle.

The measurement shall be effected during not less than 10 dry cycles at normal working temperature. The duration of the dry cycle is determined by the overall time for all dry cycles divided by the number of dry cycles.

4 Indication of values

The dry cycle shall be indicated as follows:

Dry cycle (EUROMAP 6) time [s] – stroke [mm].

Example: Dry cycle (EUROMAP 6) : 6,5 s – 700 mm.

5 Constructional tolerance

The value measured shall not exceed the value indicated in technical documents by more than 10 %.

EUROMAP

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