

**Withdrawn; however may be applied on
special agreement !**

**EUROMAP
15**

**PROTOCOL FOR COMMUNICATION BETWEEN INJECTION
MOULDING MACHINES AND A CENTRAL COMPUTER**

Part 7

Time Stamping

Draft Version 1.0, Apr. 1992
Document Release Apr. 1992

This recommendation was prepared by the Working Group "Electronic Control of Injection Moulding Machines" of EUROMAP.

It is part of the complete EUROMAP 15 recommendation.

Contents

1. Introduction
2. Types of Telegrams
 - 2.1 Definition of Telegrams from the Central Computer
 - 2.2 Extension of the List with Standard Answers
 - 2.3 Definition of Telegrams from the Machine Controller
3. Communication Flow
 - 3.1 Activate Time Stamping
 - 3.2 Deactivate Time Stamping
 - 3.3 Receive Request with Time Stamp
 - 3.4 Error Detection

1. Introduction

Part 7 of the EUROMAP 15 recommendation defines the telegrams and data structures necessary for time stamping, i.e. obtaining time and date belonging to the selected responses of the machine controller. If time stamping is activated it must be used for every standard answer of part 1 and 2 excluding "000".

2. Types of Telegrams

2.1 Definition of Telegrams from the Central Computer

Telegram 014: ACTIVATE TIME STAMPING

Byte	cont.	Description
05	-N01-	activate time stamping
	"0"	- no (default)
	"1"	- yes

Telegram 015: REQUEST FOR TIME STAMP

contains no data bytes

2.2 Extension of the List with Standard Answers

Telegram 100: STANDARD ANSWER

Byte	cont.	Description
05..08	-N03-	request number
	"015"	- request for time stamp

2.3 Definition of Telegrams from the Machine Controller

Telegram 114: TIME STAMPING ACTIVE

Byte	cont.	Description
05	-N01-	time stamping active
	"0"	- no
	"1"	- yes

Telegram 115: TIME STAMP

Byte	cont.	Description
05..07	-N03-	request number
08..09	-N02-	seconds [00 .. 59]
10..11	-N02-	minutes [00 .. 59]
12..13	-N02-	hours [00 .. 23]
14..15	-N02-	day [01 .. 31]
16	-N01-	day of week [1 = Monday ... 7 = Sunday]
17..18	-N02-	month [01 .. 12]
19..20	-N02-	year [00 .. 99]

3. Communication Flow

3.1 Activate Time Stamping

"014"+"1"		- activate time stamping
"114"+"1"		- time stamping active

3.2 Deactivate Time Stamping

"014"+"0"		- deactivate time stamping
"114"+"0"		- time stamping not active

3.3 Receive Request with Time Stamp

"000"		- standard question
"100"+"015"		- standard answer with request for time stamp
"015"		- request for time stamp
"115"+"xyz"+data		- time stamp
"xyz"		- request of telegram to which the time stamp belongs
"abc"+data		- telegram to which the time stamp belongs

3.4 Error Detection

If the slave receives telegram "015" although it did not send a standard answer "100"+"015", it will send "196".

EUROMAP

Europäisches Komitee der Hersteller von Kunststoff- und Gummi-
maschinen

European Committee of Machinery Manufacturers for the Plastics and
Rubber Industries

Comité Européen des Constructeurs de Machines pour Plastiques et
Caoutchouc

Comitato Europeo Costruttori Macchine per Materie Plastiche e
Gomma

See you again

<http://www.euromap.org>