

# MOOG

## 4 Channel 400 Point Modular Parison Controller



## HALF OF A CENTURY OF EXCELLENCE IN MOTION CONTROL

Moog is globally recognized as a market leader in advanced motion controls for Blow Molding applications. Our hydraulic servo and servo-proportional valves and actuators, parison programmers and total machine controllers are respected throughout the world. Our know-how in total axis closed-loop control realized performance improvement in the parison axis. Parison wall thickness control was recognized when the industry was young and Moog is proud to have been involved since early days. Moog's Parison Controller product line provides improved part quality, higher production rates, and increased profits.

## SYSTEM OVERVIEW

### User Interface

- TFT color LCD, 640x480 pixel
- Rotary control knob for a rapid and accurate set-up of functions
- Limited number of keys for an easy navigation
- LEDs to monitor the main states of the machine
- Scalable structure of screen maps to optimize each map upon machine configuration (e.g. number of channels, closed-loop/open-loop, etc.)
- 3 access levels for data protection
- Removable memory for recipes (calibration and process data)

### System Architecture

- Logos IEC61131-3 standard programming system for Windows, ST language based on the Moog Plastic Controller, 400 Series.
- Modular structure (e.g. Fieldbus connectivity, Blow Pin management, etc.) for additional expansion modules.

## BENEFITS

With 30 years experience designing and building many successful parison programmers and total machine control, (TMC, analog 25 point, digital Bloc 64, DigiPack) Moog has now developed a more advanced software platform in the new 4 Channel 400 Point Modular Parison Controller. This product enables machine manufacturers to control multiple heads and more points, with less material consumption and reduced scrap. In addition to the already known features of Moog's proven Parison Controllers, the 4 Channel 400 Point Modular Parison Controller offers the following benefits:

- Simple to install and easy to use for any operator
- Fully-featured menu
- Next generation equipment with TFT color LCD for an easy data type identification
- Multilanguage support (Asian and European languages)
- 4 independent channels
- From 10 point up to 400 point parison profile
- A number of analog and digital markers equal to the profile points
- Customizable software and hardware architectures
- Ability to easily add open-loop control for hydraulic and electric blow pin velocity and positioning, and temperature, due to modularity of controller

## FEATURES

- 4 independent channels for:

### Head Parison Control (from 1 up to 4)

- Parison profile programmable from 10 to 400 points, selectable via software
- One single profile for all heads or independent profile
- Up to 400 marker points
- 5 interpolation modes (even in the same profile)
- Up to 400 analog and digital markers (from 1 to 400)
- Open-loop or closed-loop manual and automatic calibration
- Handling of standard actuators and servoactuators with integrated electronics (hydraulic and electric)
- Different molds on the same head can be used in successive turns (alternate parison mode)
- Graphic feedback profile
- 2 independent starts for special machines
- Fixed or self-adjustable parison cycle time

### Position Base Accumulator Heads (from 0 up to 1)

- Accumulator profile programmable from 10 to 400 points, selectable via software
- Open-loop and velocity closed-loop pushout control (in velocity closed-loop pushout mode you can set the pushout time).

### Extruder Control

- Digital or analog extruder velocity control
- Parison length control can be used for continuous extrusion machines and accumulator position base.



Moog is a registered trademark of Moog Inc. and its subsidiaries. Unless expressly indicated, all trademarks as indicated herein are the property of Moog Inc. and its subsidiaries. For complete disclaimers, see [www.moog.com/literature/disclaimers](http://www.moog.com/literature/disclaimers).

©Moog Inc. 2004. All rights reserved.  
All changes are reserved.



**FUNCTIONALITY**

- Users input data (numeric, profile, navigation) by rotary control knob for ease of operation
- Removable memory for recipes management
- LEDs indicating the configuration and the status of the machine
- Keys for direct command of purge, tooling



**MAIN MENU PAGE**

- User-friendly main menu
- Password level management



**HEAD OPERATION PAGE**

Editor for parison axis that shows these profiles:

- Working
  - Editing
  - Feedback
- Manages Synchronism
  - Manages analog and digital markers
  - Shows the working current point
  - It allows inserting master and interpolation without limitations
  - Handles purges and tooling commands



**HEAD SETUP PAGE**

Easy calibration, with the ability to select:

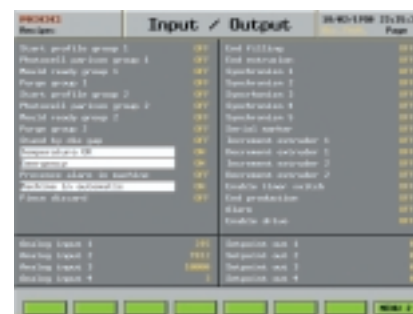
- Manual calibration in open-loop
- Manual calibration in closed-loop
- Automatic calibration in closed-loop

Easy head selection

Profile length correction

Choice of different actuators:

- Hydraulic/Electro-mechanical
- With or without feedback



**INPUT/OUTPUT PAGE**

Real time diagnostic of all digital and analogic I/O



**Argentina  
Australia  
Austria  
Brazil  
China  
Finland  
France  
Germany  
India  
Ireland**



**Italy  
Japan  
Korea  
Luxembourg  
Norway  
Russia  
Singapore  
South Africa  
Spain  
Sweden  
United Kingdom  
USA**

# MOOG

Moog Italiana S.r.l.  
Microset Division  
Via Quinzano 23/A-25020 Flero (BS) - Italy  
Telephone: (+39) 030 2729.611  
Fax: (+39) 030 2681.890  
For the location nearest to you, contact  
[www.moog.com/worldwide](http://www.moog.com/worldwide)

4 CHANNEL 400 POINT MODULAR PARISON CONTROLLER  
CAS-024 EN 0904