BUCHER
emhart glass

Technical News Bulletin

September 2000

555 AC Servo Feeder

Introduction

The 555 AC Servo Feeder is the core component of Emhart Glass' gob forming products. The 555 AC Servo Feeder is designed to form gobs of precise weight, shape and temperature at speeds up to 250 cuts per minute. The AC Servo motor in combination with a Pentium based Microprocessor provides gob forming

control with unsurpassed operational performance. The microprocessor control permits easy configuration of feeder parameters, with quick saving and recall of critical job information. The low inertia AC Servomotor provides the high torque needed to make custom Feeder Plunger motions.

The AC Servo Feeder is available with the Metering Spout System, Versa-Cam Software and 565 AC Servo Shear.

Product Description

The 555 AC Servo Feeder can be easily configured for low, medium and high tonnage applications. The mechanism can be configured for Single, Double and Triple gob operations. The mechanism for the 555 AC Servo Feeder was developed from the proven 555 DC Servo Feeder. The major change to the mechanism is the AC Servo Motors for Plunger and Tube height. The plunger height transducer has been removed, since the AC Servo Motor has position feedback to the control. Otherwise the mechanical design remains the same. Plunger installation & adjustment as well as self-centering tube requirements are unchanged.

The new AC Servo Control is modular and compact. The control uses a PC motherboard as the primary data processor. The modular design permits component compatibility with other Emhart Glass Servo Devices. The standard Emhart Glass Hand Held Terminal can now be used to configure and diagnose the AC Servo Feeder. The new AC Servo feeder control is composed of three (3) modules. They are the General Purpose Control Module, Amplifier Module, and Data Storage Module. These modules provide fast controlled feeder motion with direct motion feedback. The direct motion feed back eliminates the need for the linear transducer inside the plunger mechanism.

The 555 AC Servo Feeder is available as an integrated forming control or a standalone control system making it easy to apply to most applications. In addition, a conversion kit will be available to "upgrade" existing DC Servo Feeders to the new AC Servo Feeder systems.

555 AC Feeder Range:

Small Feeder:	81 Shallow & Deep Spout	5 – 35 TPD
Medium Feeder:	81 Deep or 503 Spout	20 – 75 TPD
Large Feeder:	503 or 515 Spout	50 – 150 TPD
High Capacity Feeder:	585 Spout	120 – 200 TPD

Features of the 555 AC Servo Feeder

Spout Casings for all Series:

- Selectable Spout Refractories
- Including Metering Spout System
- Steel Casings: 81/555
- Orifice Equipment
- Spout covers for all tube sizes

Tube Mechanism for all Series:

- AC Servo Tube Height Drive
- Self Centering Tube Holder
- Tube Quick Release Mechanism
- Tube Height Mechanism
- Selectable Tube Diameter

Plunger Mechanism:

- AC Servo Plunger Motion
- Single, Double, Triple Gob Operation
- High Torque Servomotor

AC Servo Shear Mechanism for all Series

- Parallel Shear Action
- Auto Retractor
- Selectable Accessories

AC Servo Control Modules

- Modular Compact Design
- Interchangeable with other AC Products
- Interfaces with all Emhart Glass Forming Controls

Benefits of 555 AC Servo Feeder

- Versatile tonnage range
- Wide range of Applications
- Reduced spare parts inventory
- Reduced long-term maintenance costs
- Makes use of latest Control module designs
- Flexible Versa-Cam features.
- Integrated into VLAN Forming Controls
- Available in standalone versions.

	Major Component	Low Tonnage	Medium Tonnage	Large Tonnage	High Tonnage
Equalizing Section	Front Plates	Type 81 Detachable Front Plate	Type 81 or 510 Detachable Front Plate	Type 540 Detachable Front Plate	Type 540 Detachable Front Plate
	Channel Widths	16″ and 26″	26″ and 36″	36″, 42″ and 48″	42″, 48″ and 54″
555-56 Servo Plunger Mechanism	Plunger Chucks	SG – 2″ DG – 2-3/4″	SG – 2-3/4″ 3-1/8″ DG – 2″ TG – 1-3/4″ 2″	SG – 2-3/4″ DG – 2″ 2-3/4″ TG – 2″	DG – 2″ 2-3/4″ TG – 2″
Spout Assembly	Steel Casing	Type 81	Type 81 or 503	Type 503, 515 or 555	Type 585
	Spout Refractory	14″ wide (shallow or deep)	18″ wide (shallow or deep) 22″ wide (10″ glass depth)	22″ wide (10″ glass depth) 24″ wide (12″ glass depth)	28″ wide (12″ glass depth)
	Orifice Equipment	5″ – SG DG (3″)	7″ – SG DG(3″) DG(4-3/8″) 8″ – TG(3″)	10″ – SG DG(4-3/8″) TG(3″) 11″ –DG(5″)	12″ – TG (4-3/8″)
	Spout Sizes	14″ Wide 144 Comparable	18″ and 22″ wide	22″ and 24″ wide	28″ wide
555-55 Tube Mechanism	Tube Diameters	5″ or 6″	7″ or 8″ 9″ TG Metering Spout	8″, 10″, 11″, 12″ *10″ or 11″ with Metering Spout	13″
561-1 Servo Shear Mechanism	Orifice Diameters	SG DG – 3″	SG DG – 3″ DG – 4-3/8″ TG – 3″	SG DG – 4-3/8″ DG – 5″ TG – 3″	DG – 4-3/8″ TG – 4-3/8″

BUCHER
emhart glass

Ordering Information

Documents needed for AC 555 Servo Feeder

Sales Questionnaires:

555-55-AC	AC Revolving Tube Mechanism
555-56-AC	AC Servo Feeder, Plunger Mech.
555-99-M	Advanced Spout Assembly
565-1 565	AC Shear
700-1-M	AC Servo Standalone Controls for Feeder and Gob Distributor

Other Technical News Bulletins:

TNB 71	Metering Spout System
TNB 73	565 AC Servo Shear

Reference Drawings

555-55	Revolving Tube Mechanism
555-56	AC Servo Feeder, Plunger Mechanism
81-438	81 Spout Assembly
503-245	503 Spout Assembly
503-48	515 Spout Assembly
555-99	555 Spout Assembly
555-209	Metering Spout Assembly
565-1	565 servo Shear Master List
565-3	565 Shear Mechanism
565-90	Shear Spray Heads
565-301	Shear Spray System