

... of

the two systems will be housed
in the same cabinet.

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A395-5-...



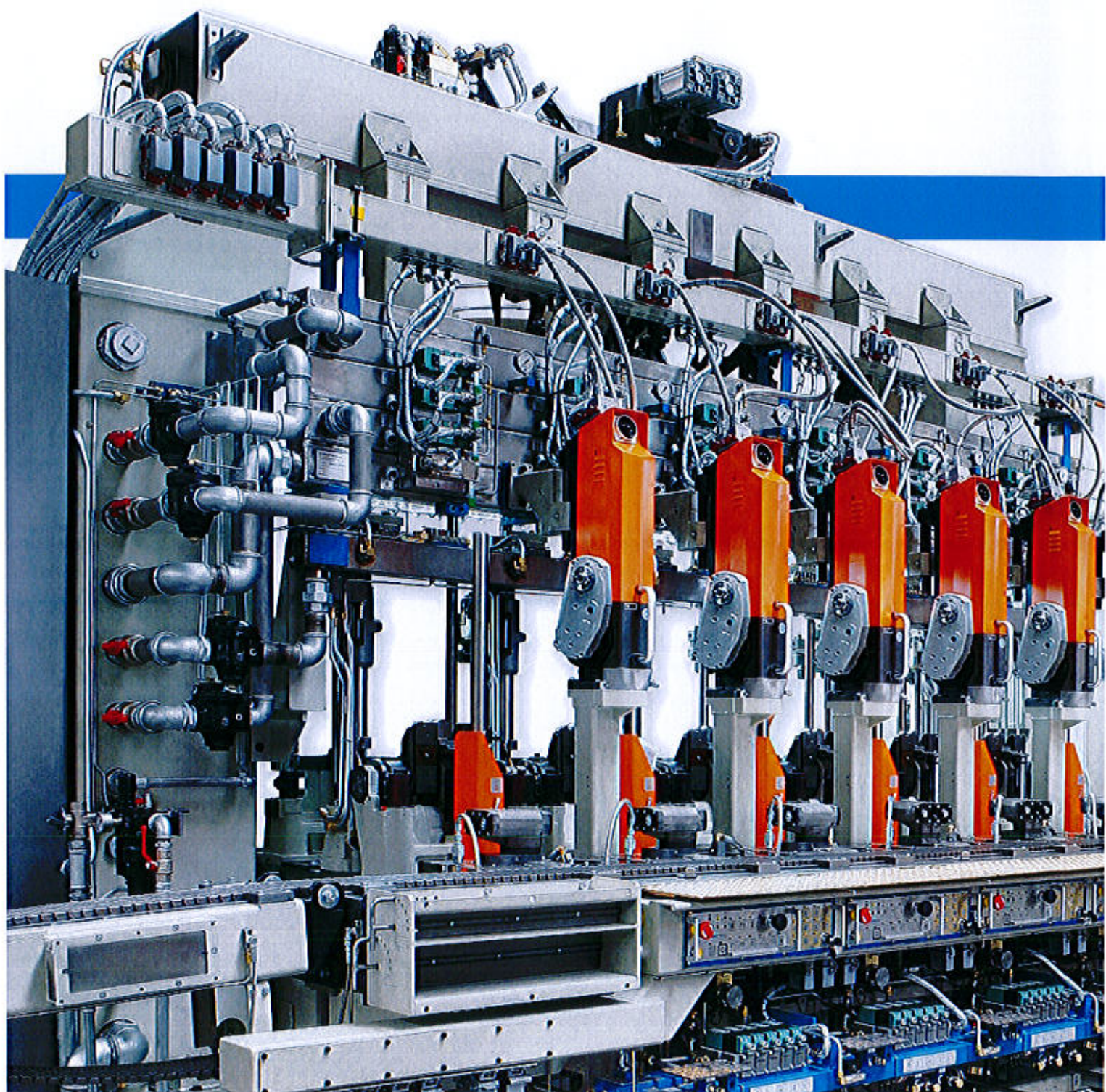
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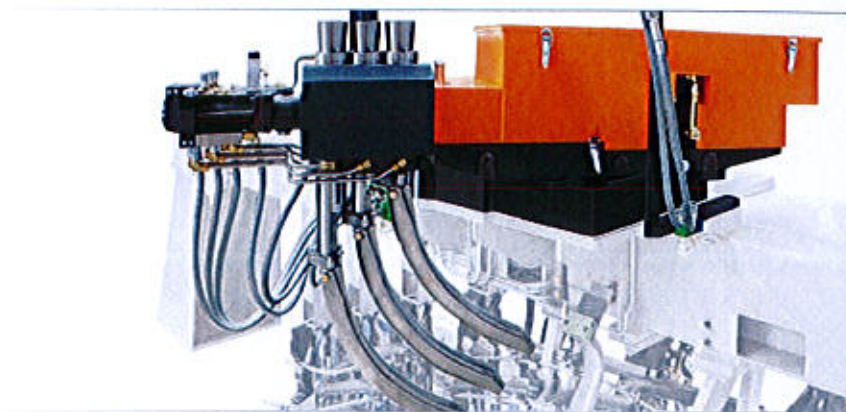
IS Machine

- Available from 2 to 20 sections configuration
- Blow & Blow, Press & Blow and NNPB process
- Variable equipment and accessories to cover any production range for single, double and triple gob
- Servo mechanisms available as option
- Advanced forming technology through proportional valves
- Engineering team available to discuss tailored solutions
- Consulting and advisor service for glass containers and special projects



Electronic gob distributor

- Retrofittable on any existing IS Machine
- Fully programmable firing order
- Dwell time and scoop positioning adjustable by Hand Held Terminal
- Automatic homing in case of power failure.



Coaxial delivery system

- Consistent trough deflector alignment ensures effective gob loading
- Complete range of trough and deflector sizes are available
- Available for single, double and triple gob
- Delivery aligned with laser fixture to ensure correct gob loading into the blanks.



Roller coaster system

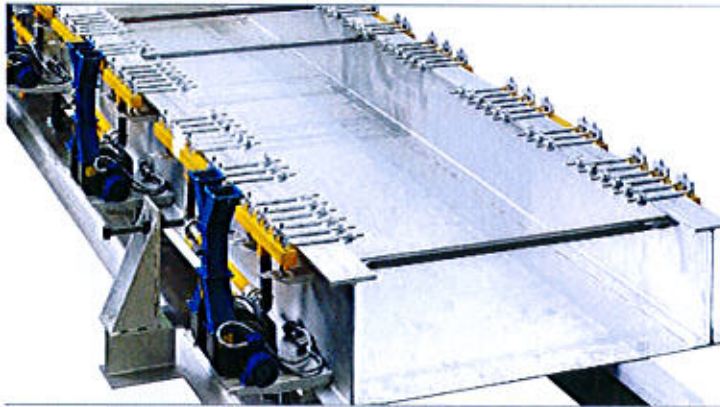
- The roller coaster system is developed for larger size section machines (from 10 to 12 sections)
- The trough design reduces the gob friction, increasing the speed and improving the heat balance of the gob.



based on Wiegand-Glas technology

E-Forehearth

- Newly designed combustion and cooling equipment pre-assembled on board of the overhead steel structure for drastic reduction of field installation activity.
- Automatic control system based on redundant CPUs for back-up in case of failure.
- Dual CAN BUS connection between main cabinet and local panels.
- Proprietary design of refractory superstructure with dual interactive direct and indirect cooling.

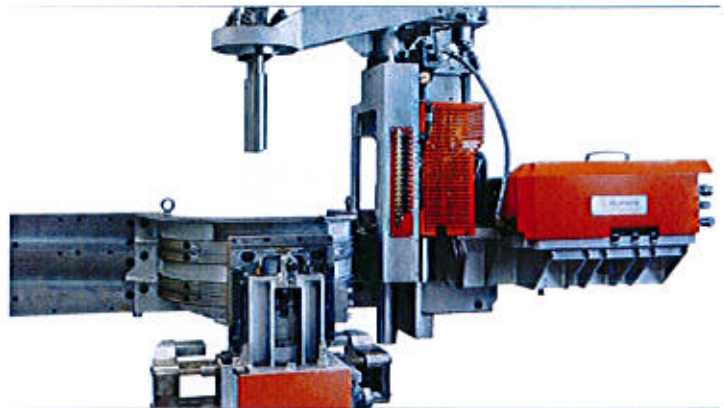


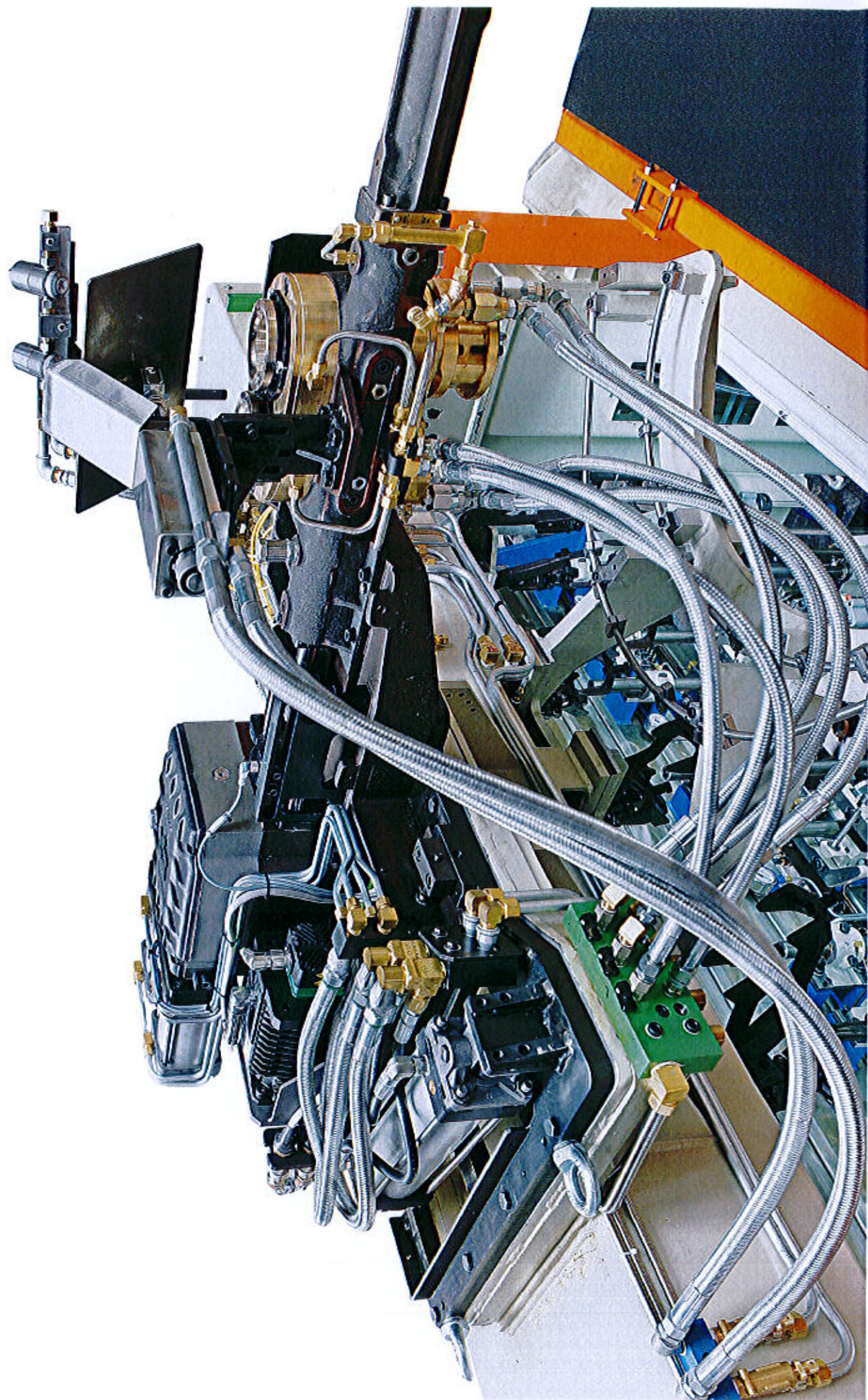
Mechanical feeder

- Spouts available: 281 Standard and Deep, 703, 715 in single double or triple gob
- Maximum flexibility of shearing angle: standard from 30° right to 90° left, symmetric from 30° left to 90° right
- Improved mechanical feeder: bearing type 7° stroke plunger linkage, oil bath shear mechanism, pneumatic spring
- Stand alone tube rotation inverter control (RTC) and electrical tube height adjustment (THD) are available.

Servo feeder mechanism

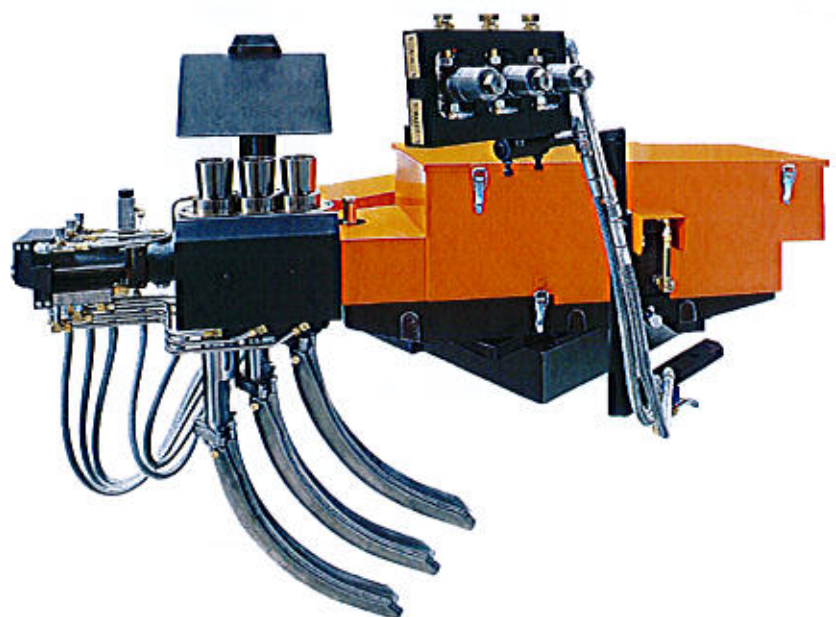
- Easy replacement of existing mechanical feeders for 281, 703 and 715 spouts
- The servo motor ensures consistent and repeatable operation up to 240 cuts/minute
- Oil bath gearbox granting longer life of mechanical components
- Multiple weight operation for sampling or for different gob weight production.



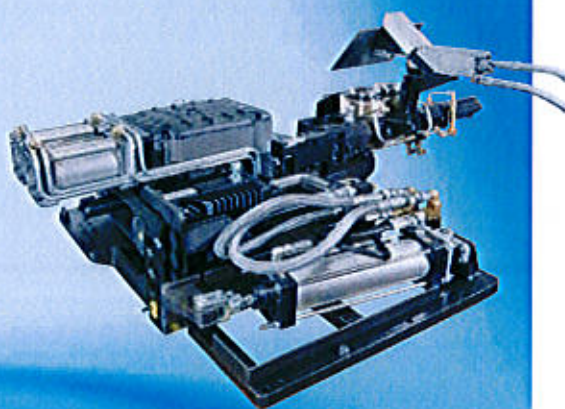


Bottero
Glass Technologies

**ELECTRONIC
GOB
DISTRIBUTOR**



Hollow glass



Electronic Gob Distributor

The Electronic Gob Distributor system is based on high precision ball screw mechanism operated by a brushless motor which guarantees high movement speeds and precise positioning of the scoop. The desired production conditions are simply obtained by entering few variables (speed, number of section, etc) and the firing order available is a separate program. The EGD system is available in "stand-alone" or integrated in the drive system.

Control Features

- Dwell-time can be set during operation
- On-the-fly adjustment of the position
- Programmable gob firing order
- Fully programmable gob delivery positions
- Data memory with system shut-off
- Complete Gob interceptor unit
- Automatic distributor synchronization
- Machine speed range: 240 cuts/ min

Mechanical Features

- Compact mechanism box housing the high precision ball screw mechanism in oil bath
- Scoop holder rack and gears in oil bath
- The emergency throw out cylinder removes the gob distributor from under the feeder during a failure procedure
- Incorporated air ride system
- Stationary scoop cooling system in stainless steel without flexible hoses
- Supplementary central section of gob chute
- Available in single, double and triple gob
- Retrofittable to any existing IS machine

Advantages

- Long life of mechanism components
- Low maintenance during operation
- Easy operation
- High speed and accurate scoop positioning
- Improved gob loading

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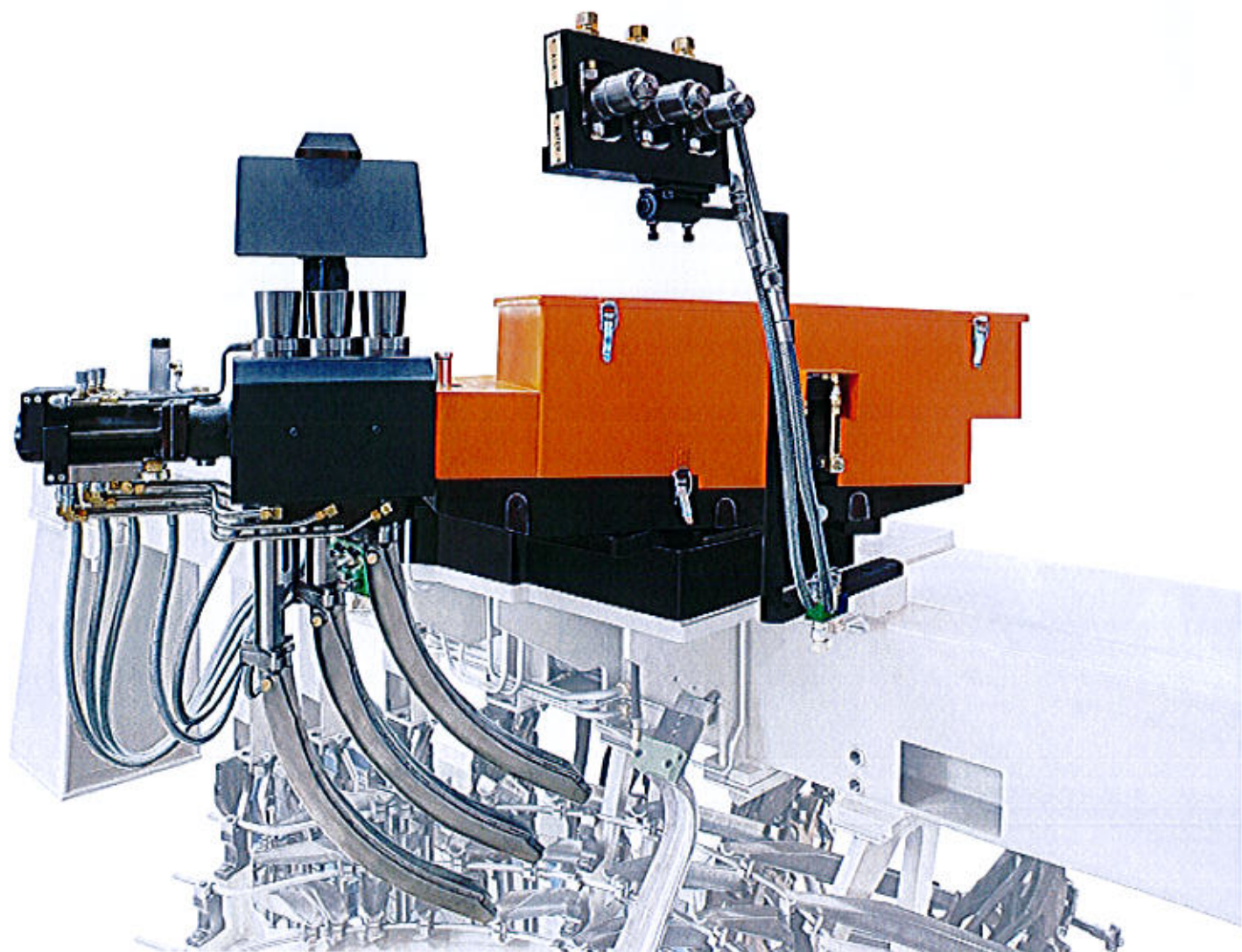
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 hollowglass.sales@bottero.com

✓ CONTROL FEATURES

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- On-the-fly adjustment of the position
- Programmable gob firing order
- Fully programmable gob delivery positions
- Automatic distributor synchronization

✓ MECHANICAL FEATURES

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ELECTRONIC GOB DISTRIBUTOR

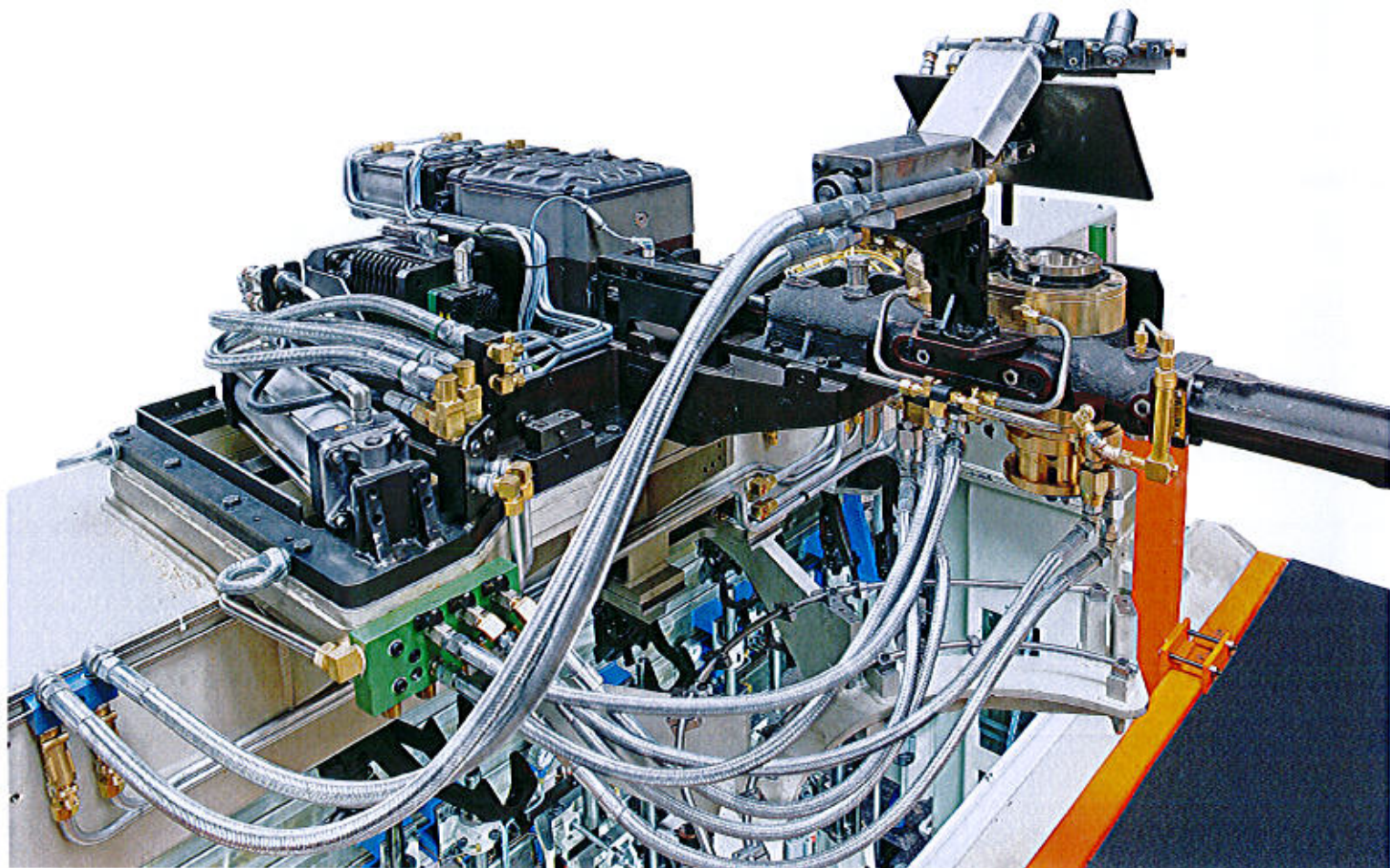
The Electronic Gob Distributor system (EGD) is based on high precision ball screw mechanism operated by a brushless motor which guarantees high movement speeds and precise positioning of the scoop. The desired production conditions are simply obtained by entering few variables (speed, number of sections, etc.) and the firing order available is a separate program. The EGD system is available in "stand-alone" or integrated in the drive system.

TECHNICAL FEATURES - ELECTRONIC GOB DISTRIBUTOR

Data memory with system shut-off

Complete gob interceptor unit
Machine speed range : n240 cuts/min

Compact mechanism box housing the
high precision ball screw mechanism
in oil bath



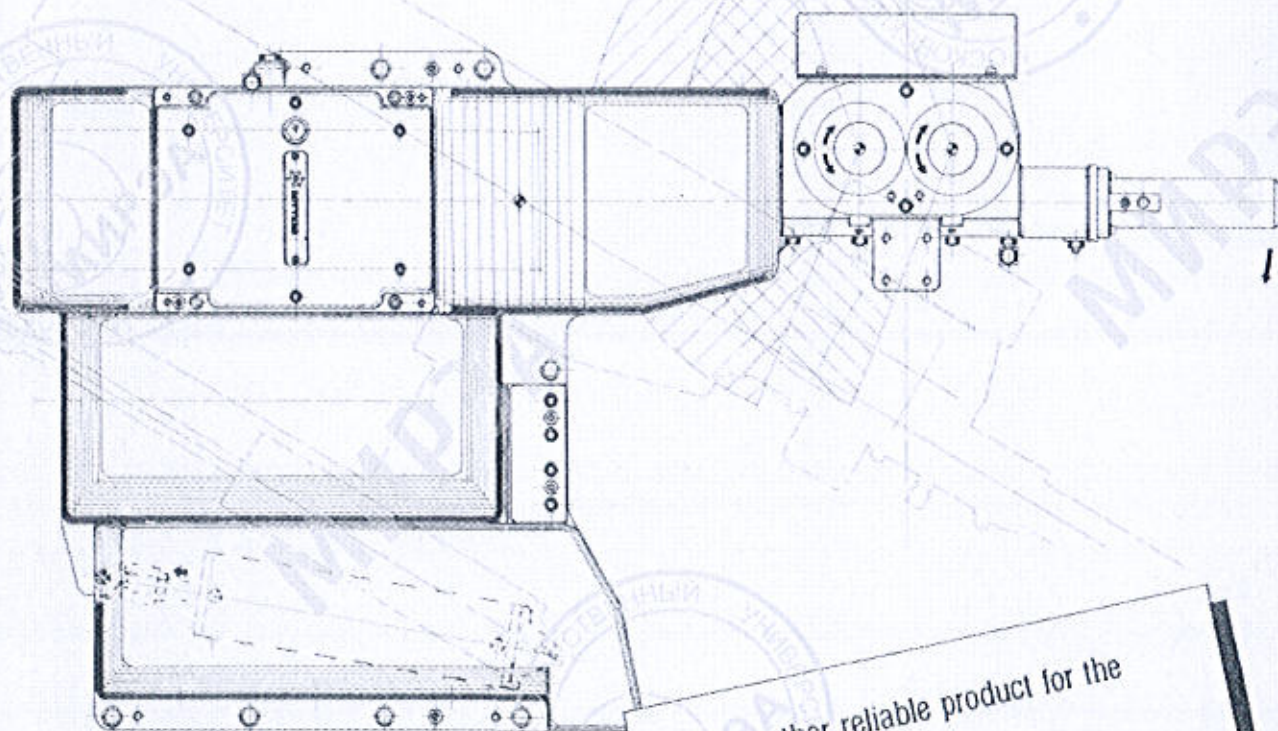
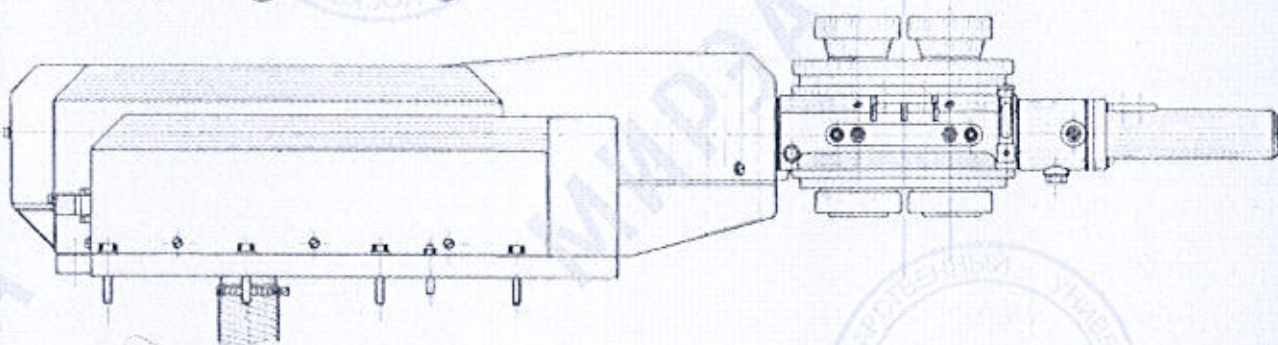


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СТДБА
ПРФ-СЛДЖЕПНУСХ
МАТА ДОСТУП. 13.11.1981

Electronic Gob Distributor

06-0082-0 Уману
666.1.03 мс. 1



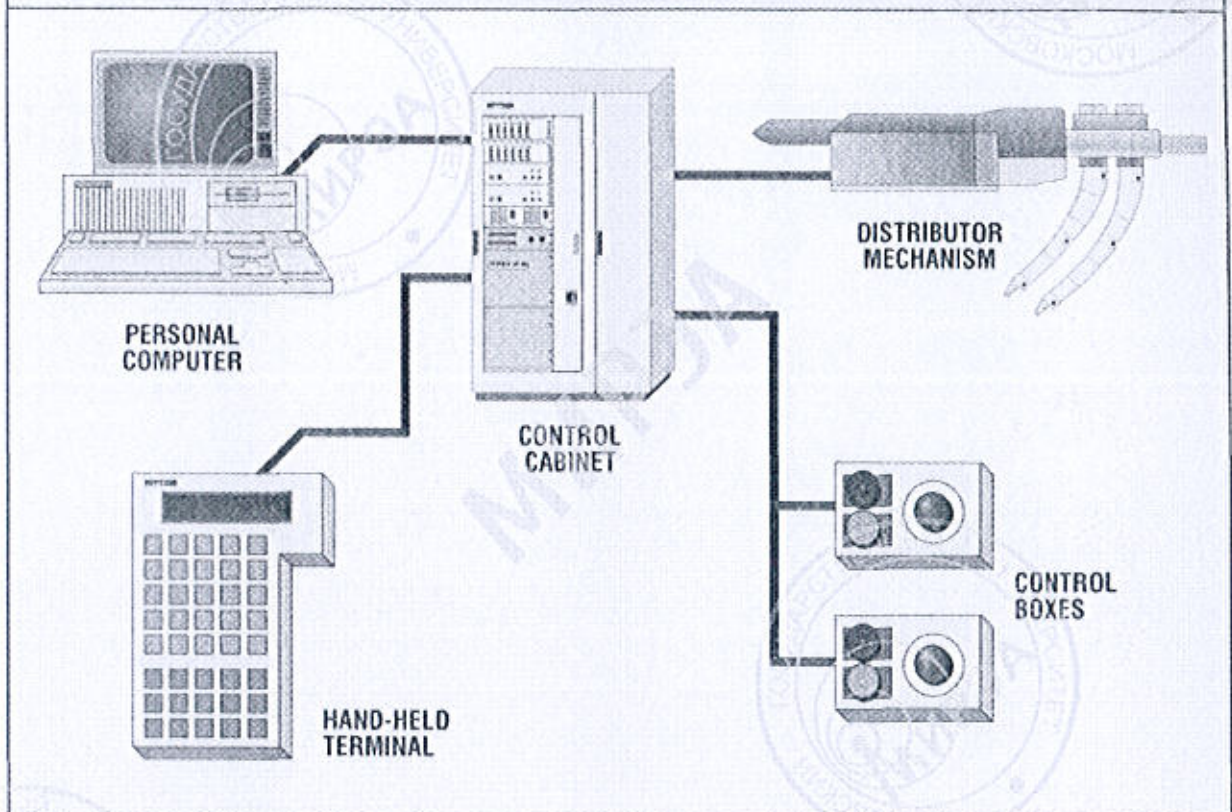
Another reliable product for the
glass industry.

From  **BOTTERO**

Мер. 13.11.81 - 99

EGD

Electronic Gob Distributor



MECHANICAL FEATURES

- THE SMALL, LIGHTWEIGHT, AND COMPACT unit can be retro-fitted to any existing machine.
The programme covers SG, DG 4-3/8" and 5"; TG 3" center distance.
- THE HIGH PRECISION SCREW and threaded bushing (with preloading to eliminate backlash) operating in oil bath.
- THE SCOOP HOLDER RACK and gears operate in oil bath. A smooth running rack on self-aligning ball bushing allows a zero setting backlash between rack and gears.
- THE EMERGENCY THROW OUT CYLINDER removes the gob distributor from under the feeder supply during a failure procedure.
- THE BRUSHLESS - DC MOTOR drives the mechanism and its position is continuously monitored by an encoder.



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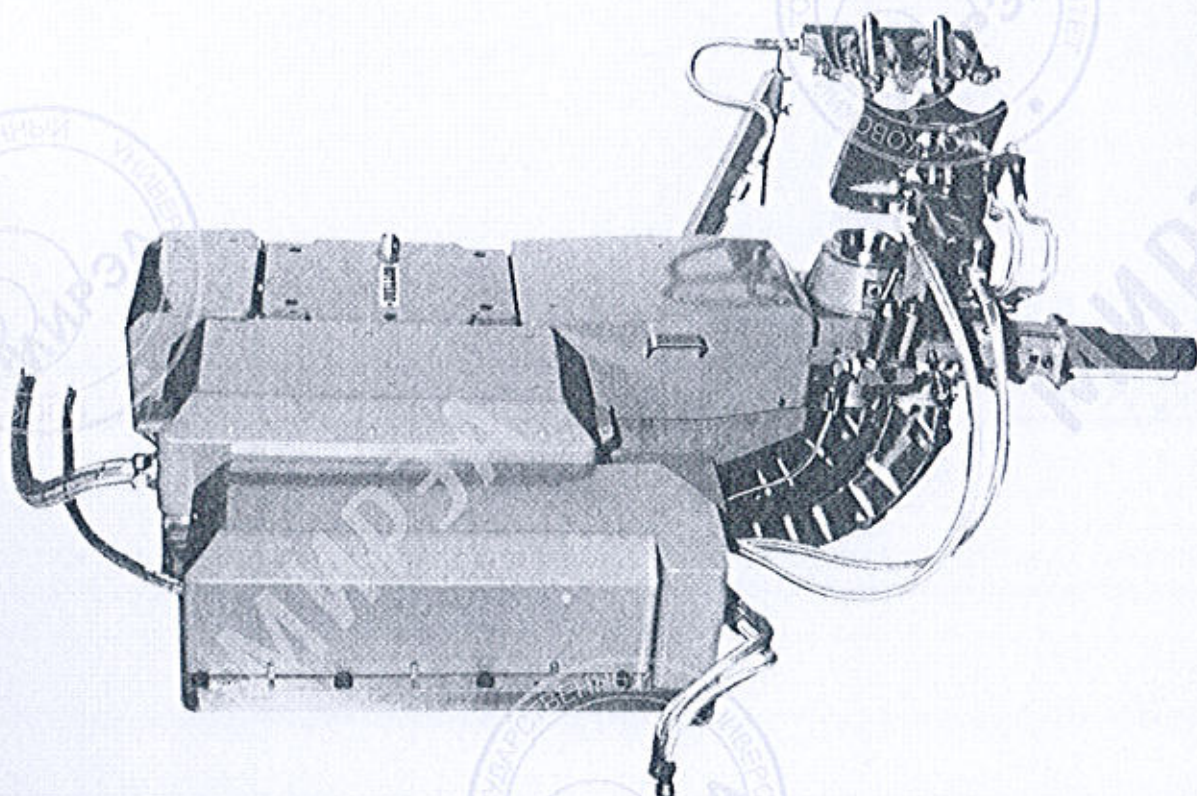
ELECTRONIC FEATURES

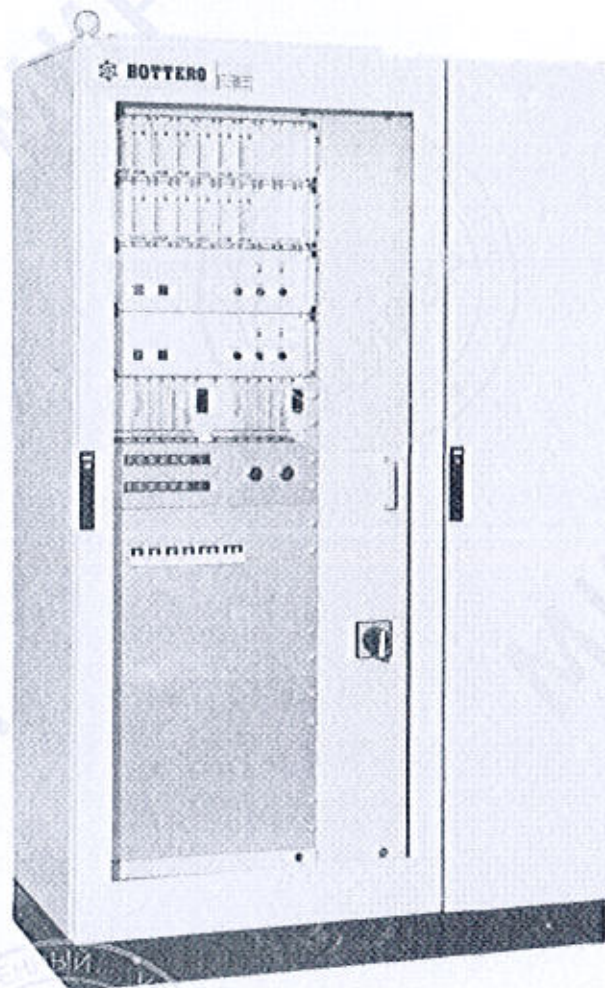
- QUICK CHANGE board replacement system using completely modular design allowing up to 12 section to be controlled.
- FIRING ORDERS are easily selected. Parameters for different jobs are stored in a computer memory and can be changed by loading a floppy-disc or by changing parameter values at a computer terminal or hand held terminal.
- A RUGGED AND TIGHT hand held terminal allows on-board operator interface.
- DIAGNOSTIC SYSTEM is an integral part of the electronic board design. LED indicators provide continual information at the logic cabinet and a quick visual inspection leads to rapid fault finding.

SYNCHRONISATION

The Electronic Gob Distributor system can be synchronised with the machine by means of:

- A static encoder unit which receives a cycle pulse from a proximity pick-up mounted at the feeder shear mechanism.
- An electrical signal coming from the Timing system.
- An electrical signal coming from the Bottero Syndrive system.





THE BOTTERO CONTROL CABINET is positioned in a clean air conditioned room.

Technical features:

max number of sections	12
max speed	240 cuts/minute
max cables length	50 mt
Physical dimensions	1200x600x2000 mm
Required power supply	1 KVA

CONTROL AND SAFETY FUNCTIONS

- Center dump position safety feature.
- Safety switch for immediate motor stop.
- Automatic gob distributor swing out in case of compressed air or electric failure.
- Electric motor overload and temperature control.
- Photoelectric cell to detect belt position.

COMPACT CABINET INCORPORATING TWO SERVO-GOB DISTRIBUTOR AND TWELVE SECTION PUSHER CONTROL FOR TANDEM MACHINE.

STANDARD FUNCTIONS

- Programmable firing order.
- Fine positioning of the scoop delivery alignment with troughs.
- Dwell-time can be set during operation.
- Data storage and retrieval system.

SPECIAL FEATURES

- Automatic synchronization with gob by means of an infrared sensor.
- Serial link with line supervisor and/or Factory computer network system.



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