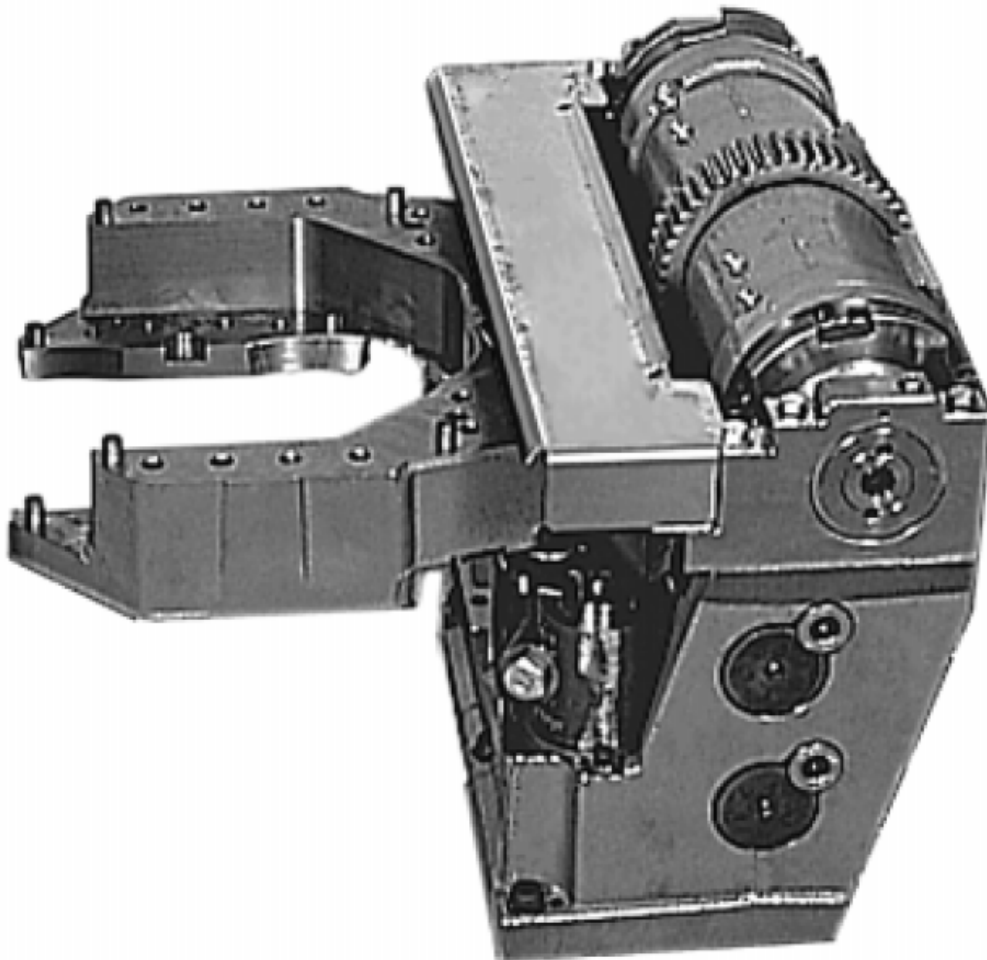


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AIS Blow Mold Support Mechanism



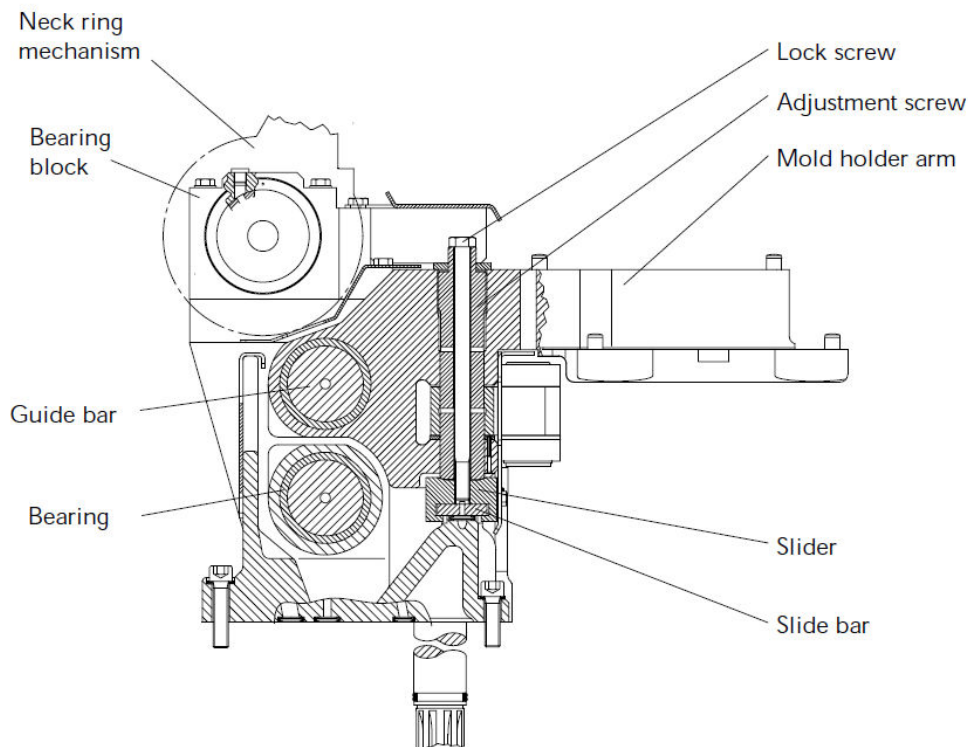
1. System Description

The Emhart AIS Blow Mold Support Mechanism has been subject to further extensive research and development, resulting in a new mechanism. This new mechanism replaces the previous version which was used for both, Forced Convection and Verti-Flow cooling application.

The Blow Mold Support Mechanism consists of a bracket with two arms. A pair of insert holders mounted on the arms support the mold holder inserts. The neck ring mechanism rests on the bracket itself. The new design permits quick and easy conversion from DG to TG or vice versa as well as fast job changes.

Significantly lower friction between the moving parts results in longer service intervals. The compact design also permits better access to the section and hence easier handling of the accessories and mold equipment.

Increased rigidity of the Blow Mold Support Mechanism enables it to withstand static and dynamic forces better, resulting in a prolonged service life.



Blow Mold Support Mechanism

2. Product Description

The new Blow Mold Support Mechanism provides the same application range as the previous mechanism with Verti-Flow operation. The many advantages incorporated in the new design significantly improve the operating performance of the mechanism and reduce mold equipment wear.

2.1 Blow Mold Supporting Mechanism 210-295

The mold holder arms are an integrated part of the mechanism. They slide on individual guide bars by means of two bearings. These bearings are easily exchangeable and are sealed in the receiving bores of the arm by O-rings. The annular space between the bearings serves as an oil reservoir. Lubrication oil supply to this reservoir is via portings in the guide bars and bracket.

The arms are supported by sliders running on a flat slide bar. The sliders are connected to adjustment screws which also serve as link pins. The fine thread of the adjustment screws allows precise levelling of the arms, thereby minimizing mold seams.

The neck ring mechanism is supported by two bearing blocks mounted on top of the rigid bracket. To ease meshing the gears of neck ring and invert mechanisms at installation, the bearing blocks can be slid horizontally. Precise positioning on the bracket is achieved by the mounting screws with integrated aligning bush.

2.2 Insert Holders 210-285

With the mold holder arms being an integral part of the mechanism they must no longer be exchanged when converting from DG to TG or vice versa, thus eliminating the manipulation of the heavy arms. They are now replaced by insert holders, which serve as the mounting platform for the mold holder inserts.

The insert holders consist of a lower and an upper plate and each is located on the arms by two pins. The upper plates act at the same time as a means of reinforcement for the arms. The inserts are mounted on the holders by a pivot pin.

DG 6-1/4 Application

Insert Holder Assembly 210-285-3 covers the application range of the previous Mold Holder Arm Assemblies 191-9197, used for Verti-Flow cooling.

TG 4-1/4 Application

Insert Holder Assembly 210-285-4 covers the application range of the previous Mold Holder Arm Assemblies 191-9195, used for Verti-Flow cooling.

2.3 Mold Holder Inserts

Existing mold holder inserts are used on the new insert holders, requiring no modification. The range of standard inserts is listed below.

DG 6 1/4 Mold Holder Inserts				
Part Number	Mold Diameter		"H" Dimension	Insert Width
191-9198-9	6"	152.2	57.2	187.3
191-9198-20	6"	152.2	9.5	82.6
191-9198-21	6"	152.2	9.5	139.7
191-9198-22	6"	152.2	57.2	130.2
191-9198-23	6 5/8"	168.1	57.2	130.2
191-9198-24	6 5/8"	168.1	9.5	82.6
191-9198-25	6 5/8"	168.1	9.5	139.7
191-9198-26	6 5/8"	168.1	57.2	187.3

TG 4 1/4 Mold Holder Inserts				
Part Number	Mold Diameter		"H" Dimension	Insert Width
191-9194-1	5"	127.0	41.3	127.0
191-9194-2	5"	127.0	15.9	88.9

Mold holder inserts of different configuration as listed above can be supplied on special request.

2.4 Mold Equipment

Blow molds, designed and manufactured for Verti-Flow cooling according to the current Emhart Mold Design Data, are applicable on the new Blow Mold Support Mechanism without alteration.

3. Availability

As of June 1997, the Blow Mold Support Mechanism 210-295-3 will be supplied as standard on the AIS machines of DG 6-1/4 and TG 4-1/4 center distance, replacing the previous mechanism 23-1101 and related mold holder arms. Spare parts for the replaced equipment will be supplied until 2006.

4. Installation Requirements

For field conversion only minor alterations are required.

The new Blow Mold Support Mechanism is bolted to the section frame by means of eight screws. This requires drilling and tapping two additional 1/2-13 NC screw holes, using Drilling Fixture 94-5037.

The installation of two additional lubrication supply lines may be required on frames which are not prepared for operating mold holder arms with guide supports.

5. Features and Benefits

Features

- Improved rigidity
- Integrated mold holder arms
- Accurate levelling of arms
- Precise mechanism movement

Benefits

- Reduced job change time
- Easier conversion from DG to TG and vice versa
- Improved maintenance convenience
- Less mold equipment wear
- Prolonged mechanism service life
- Reduced spare parts inventory
- Compatible with existing mold equipment