

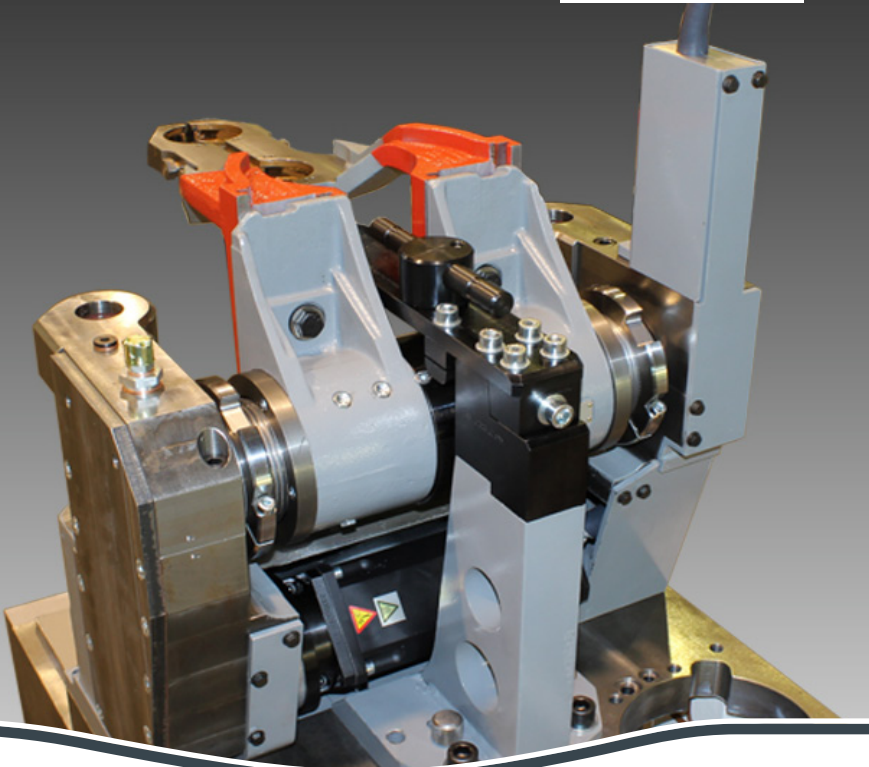
WE ARE GLASS PEOPLE

# HEYE

# SERVO INVERT

Type 2331

HiPERFORM



**h** heye  
international

## HEYE SERVO INVERT

The Heye Servo Invert serves to transport parisons from the blank mould to the blow mould. It has been designed as retrofit unit. Existing „Variables“ such as neck ring holders, blow mould holders etc. can still be used.

### Function

The Heye Servo Invert can be used for 5" and 6 ¼" DG and 4 ¼" TG as well. It is driven by an electrical servo motor which is situated inside the bracket. The motor drives the neck ring holder via a nearly backlash-free planetary gearing with spur gear connected in series.

The synchronisation of the functions is made by a signal coming from the IS-Machine's E-Timing.

The motion profiles are freely selectable. For example: without parison quickly back to the blank mould, with parison smoothly to the blow mould.

All settings (times and angle positions) are kept reproducibly. Programmable position above the blow mould and blank mould.

### Features

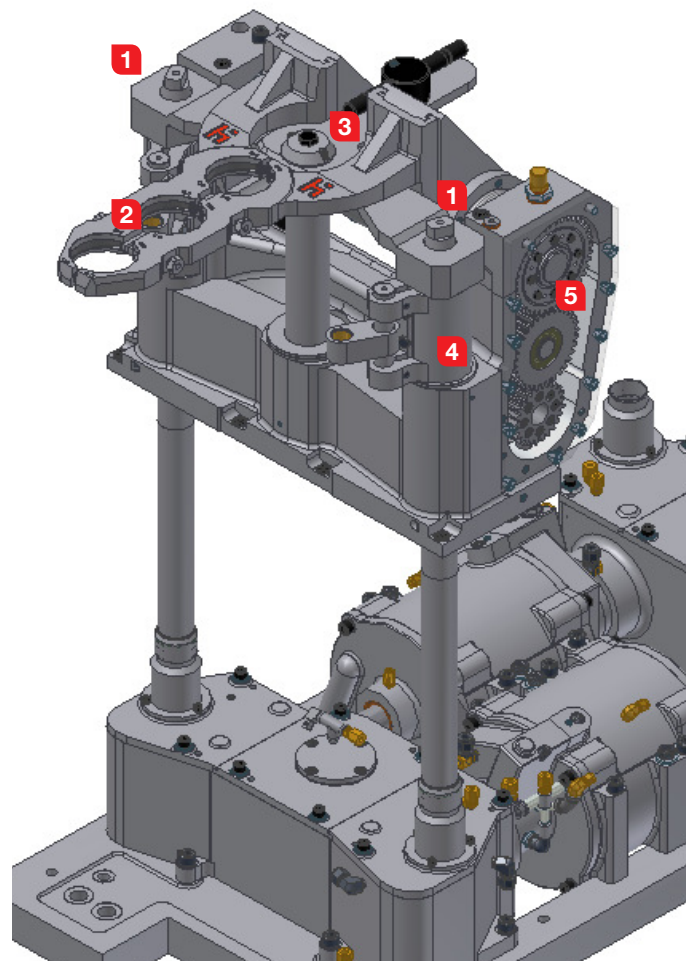
- Applicable in IS-Machines from 4 ¼" DG to 4 ¼" TG.
- Optimised motion profiles by a servo electric drive.
- Motion times up to 450 ms possible.
- Bracket with optimised stiffness.
- Easily accessible motor.
- Maintenance-free spur gearing.
- Simple oil level control by dipstick.
- Hinge pin retainer to compensate dynamic forces acting on the blow mould holder.

- 1 Upper blow mould shaft support
- 2 Neck ring holder
- 3 Retainer for hinge pin
- 4 Hinge pin for blow mould holder
- 5 Servo motor with spur gearing

## EASILY ADAPTABLE TO EXISTING MACHINES

Instead of pneumatically driven inverts the Servo Invert can be easily adapted to existing machines.

The fixing holes, air and lubrication connections are taken over from the pneumatical system. Conventional neck ring holders can still be used.



## HEYE MODULAR SERVO TECHNOLOGY (HMST)

The HMST is a trend setting drive concept to control servo drives in the IS-Machine and their periphery.

### HMST

The modular system design allows a system-specific solution including the option to be upgraded.

The standard system consists of:

- An infeed cabinet and a module cabinet
- A PC with process visualisation and the option to link several Heye Hot End Drives

### HMST main menu

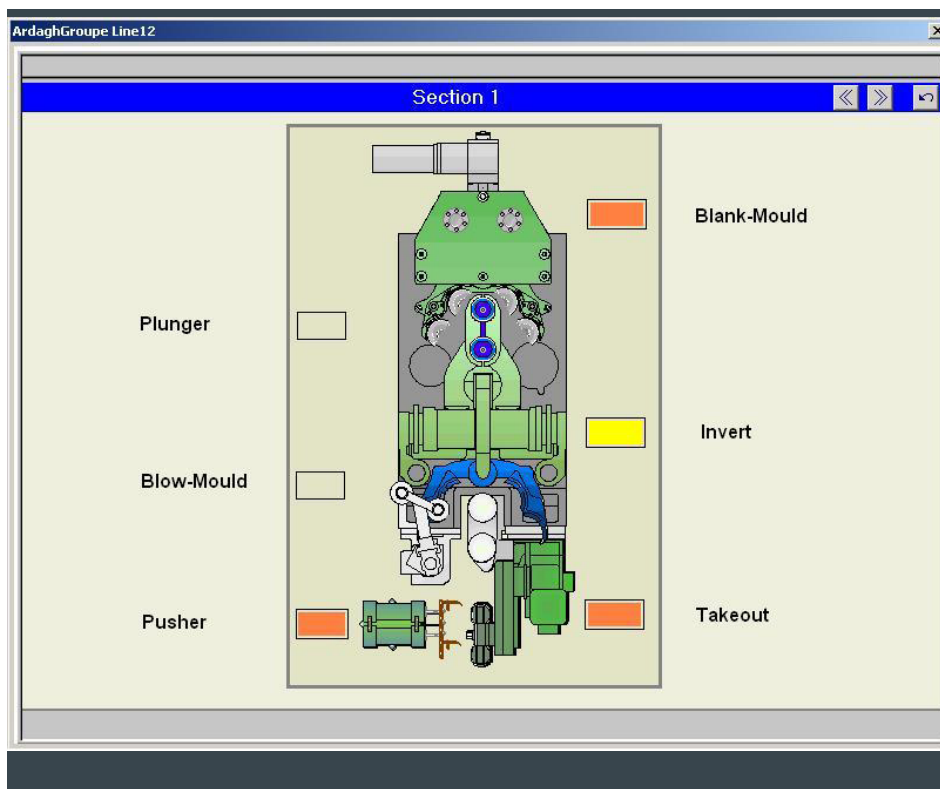
You can reach the menu level of a section or of a peripheral device by clicking on the relevant display in the main menu.

### Menu of a Machine Section

The menus of the individual servo mechanisms can be opened by clicking on the corresponding display.

### Advantages of the process visualisation

- High availability by an independently operating visualisation and real time control.
- Easy access on all parameters.
- Article administration for all process parameters allows short job change times.
- Error report for all systems connected.
- Option to link several Heye Hot End Equipment via CAN-Bus / Ethernet makes the entire system easy-to-follow.
- Use of Windows® as operating system on a standard PC.



# OVERVIEW

## Advantages

- Driven by an electrical servo motor
- Freely selectable motion profiles
- All settings (times and angle positions) are kept reproducibly
- Programmable position above the blow mould and blank mould
- Conventional neck ring holders can still be used
- Maintenance-free spur gearing
- Easily adaptable to existing machines
- Already existing HMST control cabinets can be upgraded

## Scope of Delivery

The Heye Servo Invert is either a component of a complete IS-Machine or is supplied as conversion kit for an IS-Machine. A conversion kit comprises:

- Blow mould bracket
- Neck ring mechanism
- Mould shafts
- Drive crank for the blow mould holder
- Motor cable set
- Connection box „motor and resolver cable“
- Cable set „control cabinet – connection box“

For the initial equipment the following components are required:

- HMST control cabinet
- Visualisation PC

## Technical Data

- Control up to 32 drive modules possible in one control cabinet
- Dimensions of the control cabinet width/height/depth 800 / 2000 / 800 mm
- Weight of the control cabinet 200 kg for 32 drive modules
- Input voltage 400/230 Volts, 50/60 Hz, three-phase, with neutral conductor
- Connected rating per module approx. 1 kVA at nominal current
- Control air neck ring mechanism 2.5 bar
- Adjustment range of the neck ring holders standard

## Emissions

- The A-weighted permanent sound pressure level of this system is below 70 dB(A)