



Casting System

APPLICATION

Filling a mould by continuous casting without moulding the natural upper surface aims at three different target productions:

First, for billet-casting – providing improved glass quality and better working conditions for manual production, since high-quality glass in precisely defined quantities is provided by the feeder.

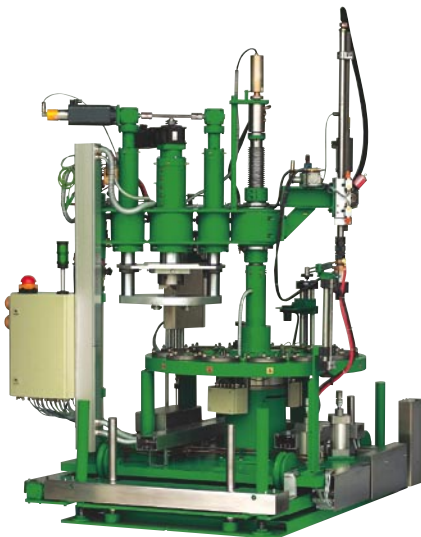
Second, for casting solid glass raw material which is re-heated and moulded in a second production step (glass rods and gobs, i.e. for lenses for automotive lighting) or high-intensity colour glass rods for feeder-channel colouring

Third, for heavy, plain-shaped glass items which integrate the plain (natural) surface into their design. The casting system may be combined with gob feeding and continuous casting (in combination with the horizontal movement of the telescope unit and the base lifting system/roundtable).

Füller Glastechnologie
Vertriebs-GmbH
Industriestraße 1
D-94518 Spiegelau

T +49-(0)-85 53-518
F +49-(0)-85 53-514
info@f-gt.de
www.f-gt.de

GLASS ITEMS	<ul style="list-style-type: none"> • paper weights, book ends, clocks, candleholders, plates • gobs, glass rods and semi-finished products for further processing (i.e. lenses) or colour glass rods for feeder-channel colouring • billets for manual processing
TYPES OF GLASS COMPOSITION	lead glass, soda-lime glass, recycling glass, borosilicate glass
GLASS QUANTITY / WEIGHT OF GLASS ITEM	standard-version: up to 10 kg XXL-version: up to 16 kg
PRODUCTION RATE	<ul style="list-style-type: none"> • single station linear system: up to 2 pieces/min. • two-station linear system: up to 4 pieces/min. • roundtable system: less than 1 piece/min. (heavy items) up to 40 pieces/min.



ROUNDTABLE SYSTEM



LINEAR SYSTEM

MODE OF OPERATION

With regard to the capacity of the production system, two alternative casting systems are available:

- the linear system
- the roundtable system

The telescope unit or the roundtable moves the empty water-cooled mould under the orifice of the feeder. The glass stream is received by the raised base of the mould and is filling the mould, while the base of the mould is lowered slowly. After the glass stream is sheared, the mould containing a precisely defined quantity of glass moves to the take-out position. The finished glass item may be taken out or the billet may be processed by the glass-blower. Unused billets are automatically disposed of.

FEATURES

very high quality	<ul style="list-style-type: none"> • because the glass is drawn from beneath the surface of the molten glass by the feeder, where the furnace provides the best glass quality • due to consistent weight and temperature conditions
very high quality for increased gob weights	<ul style="list-style-type: none"> • because the lower servo-motor unit (linear system) / the frame (roundtable system) is fully electronically controlled as well as height adjustable and reduces the distance between the orifice of the feeder and the mould to a minimum – allowing individual filling by slowly lowering the base while the glass is filling the mould • because the telescope unit (linear system) / roundtable moves the mould under the orifice of the feeder and the glass is fed into the mould directly
very high productivity	<ul style="list-style-type: none"> • due to easy job-changes since the MMC-software provides an efficient product management tool which stores the adjustments of all production parameters under the specific name of the glass item and provides optimal production parameters for later resumption of production <p>linear system:</p> <ul style="list-style-type: none"> • because up to three casting units fit under the feeder, while each may provide different weights <p>roundtable system:</p> <ul style="list-style-type: none"> • because the quantity of glass for every station may be individually determined via the electronic control and the glass-blowers may be supplied with altering billet weights
very high flexibility	<ul style="list-style-type: none"> • because glass-blowers may be supplied with altering billets in turns
optimal production conditions and extremely user-friendly	<ul style="list-style-type: none"> • due to an electronic control system based on the MMC-software (please refer to the advantages of the MMC-software on the separate data-sheet „electronic control“)

THE PACKAGE INCLUDES

MOULD TABLE

AUTOMATIC TAKE-OUT DEVICE (FOR UNUSED BILLETS)

CONTROL PANEL FOR CASTING SYSTEM

Linear System

- telescope unit carrying the mould and base lifting system

Roundtable System

- roundtable carrying the moulds and base lifting system



OPTIONS

MACHINE LAYOUT

- linear system (single-station)
- linear system (double-station)
- roundtable system: 2 to 20 stations

MOULD EQUIPMENT

- air-cooled moulds
- water-cooled moulds

FUNCTIONAL STATION EQUIPMENT

- station for re-heating the shearmark
- mould-checker (control system which assures that the mould is ready to be re-filled)
- fully automatic take-out device (for unused billets)

EXTENSIONS

- increased number of fully equipped stations
- Four-in-One Combi-System (combination of injecting, pressing, spinning and/or casting manufacturing mode)

ELECTRONIC CONTROL

- external control panel, when there is insufficient space to install the control panel close to the press