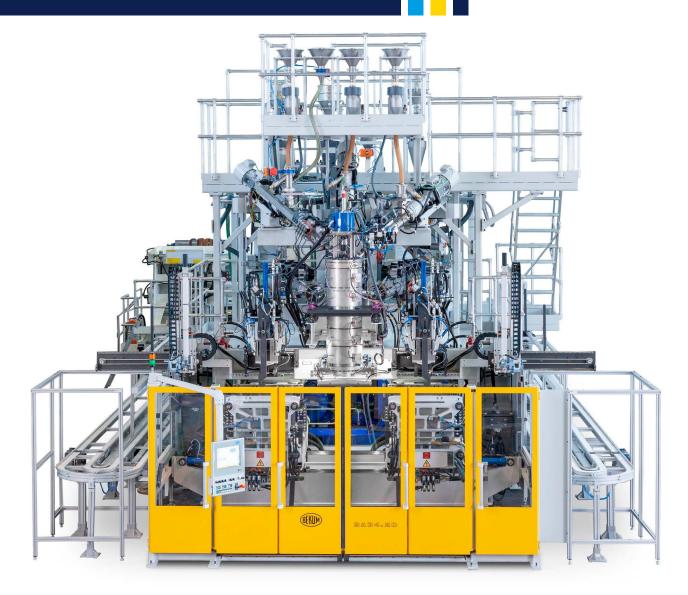


Industrial Machines

High Performance Blow Moulding Machines







HIGH-SPEED PRODUCTION OF INDUSTRIAL BLOW MOULDED PRODUCTS

COMPACT MACHINES FOR FLEXIBLE CONFIGURATION

The Industrial Machines of Bekum are considered the most reliable industrial packaging machines available worldwide. They form the benchmark with their output capacity and production flexibility for canisters, small drums, liners and water containers. With an energy-efficient drive technology, Bekum offers its customers the optimum conditions for high-performance production of industrial blow moulded products. In particular, these machines are distinguished by diverse and reliable production options such as monolayer and co-extrusion with recycled materials and fillers such as chalk

CANISTER MACHINES

These machines are available with energy efficient electric or classic hydraulic drive technology. Both drive technologies offer optimum conditions for the high-performance production of canisters. The compact machines are available in continuous and discontinuous extrusion - also as double-station systems. For excellent production reproducibility, Bekum uses a state-of-the-art control system that provides full machine diagnostics capability via remote maintenance. With our own well-coordinated and high-performance extrusion system, blow molding standard materials such as HDPE as well as sensitive and fast-curing materials such as PP, PC, PET are processed without difficulty. To increase the output rates, an external cooling section and punch can be optionally used.



Electric blow moulding machine with external cooling chain and punching unit



20 L canister produced with chalk (Tri-Extrusion)

The advantages of the electric EBLOW 37 at a glance:

High energy efficiency

- Up to 50 % energy savings on the blowing machine compared to conventional hydraulic systems
- No energy required to maintain the clamping pressure
- Variable setting of clamping movement and speed on the operating panel

Unique flexibility

- Large range of varying mould depths possible
- Fully automatic adjustment to mould depths for reduced set-up times

Convenient and easy to use

- Fully automatic calibration run of different mould depths
- Shorter times for changing moulds and no manual adjustment of the mould depths
- Low-noise machine with maintenance-free clamping unit
- Improved accessibility thanks to large safety gates



BA 34.2D Tri-Extrusion of canister with view strip

Features of both drive concepts for EBLOW 37 & BA 34.2/D:

Increased Productivity

Up to 15 % increase in output, which yields production of up to 240 canisters per hour 20 litre lightweight

Excellent Product Quality

- Perfect weld seams
- Single and double-sided view stripe optional
- Correction stations for neck and bottom
- Testing station with leak and handle waste test as well as scales with feedback for automatic weight adjustment optionl

One-of-a-kind flexibility

- Top and bottom calibration for the production of external and internal threads
- Minimal maintenance due to automatic central lubrication
- Designed to be accessible and for quick production changest

Reliable. Flexible. Fast.

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FLEXIBLE BLOW MOULDERS FOR TWO OPERATIONS FOR HOLLOW BODIES UP TO 120 L AND TECHNICAL PARTS

The BA 62S large blow moulding system is a veritable all-rounder for most popular applications range from 60 litre canisters to 120 litre wide-neck drums, special parts for air conveyance and spoilers for the automobile industry, as well as a diverse range of technical parts. It is available in a range of designs such as single and double-station and shuttle-machines with mobile clamping units and offers equipment to enable the optimal changing of moulds and dies. The combination of tie rods (bars) and a centrally positioned punch ensure perfect clamping force distribution throughout the entire blow moulding process.



The BA 62S large blow moulding machine is a veritable workhorse!



Bottom calibration with parison spreading device

Key advantages of the BA 62: Excellent flexibility

- Article take-out can be done to the left or right, both across and along the extruder axis
- Coupled tiebars for long parts and engineering plastics with low material viscosity
- Generous clamping plates for a double production



Bekum Control 8.0

Other features

- Continuous and discontinuous (accumulator head) extrusion
- Production options with view stripe
- Monolayer, tri-and co-extrusion with regrind material and chalk processing
- Interface for process robots for insertion and removal
- Good accessibility for process setting and maintenance
- Modern control for excellent reproducibility
- Compact design with a particularly small footprint



Large clamping unit for long technical parts



Road barrier produced on BA 62



L-ring drum 220 Litre producable on BA 100

EXTRUSION SYSTEM ACCORDING TO YOUR NEEDS FROM A SINGLE SOURCE. MATCHED. REPRODUCIBLE PRODUCT QUALITY.

Bekum is one of the technology leaders in extrusion blow moulding. For this reason, it is important to us to have the core competencies of extrusion for mono, bi-ex and co-extrusion heads and extruders in-house. We develop.

design, manufacture and assemble the core components independently. Thus, as with the blow moulding machine, we have a direct influence on the rheological design and manufacturing quality of these components. Standard and special materials can be processed superbly - and in the extrusion blow moulding of PET, we are the exclusive supplier of wellknown packaging manufacturers. Using resource-saving

and regrind processing capabilities

processes and technologies, our machines can

achieve material savings and process recycled

plastics to produce sustainable packaging and containers and contribute to the circular economy. Bi-Ex/De-Co Tri-Ex/Re-Co 1. Outer Laver - Virgin and Color 1. Outer Laver - Virgin and Color 2. Inner Layer - Virgin and Regrind 2. Middle Layer - PCR and Regrind 3. Inner Layer - Virgin Co-Ex 3 Co-Ex 4 1. Outer Layer - Barrier (EVOH/PA) 1. Outer Laver - Virgin 2. Adhesive Laver 2. Virgin and Regrind Laver 3. Inner Layer - Virgin and Color 3. Adhesive Laver 4. Inner Layer - Barrier Co-Ex 5 Co-Ex 6 1. Outer Laver - Virgin 1. Outer Laver - Virgin and Color 2. Adhesive Layer 2. Virgin and Regrind Layer 3. Barrier Layer (EVOH) 3. Adhesive Layer 4. Barrier Layer (EVOH) 4. Adhesive Layer 5. Inner Layer - Virgin 5. Adhesive Laver 6. Inner Layer - Virgin Co-Ex 7 1. Outer Layer - Virgin and Color 2. Adhesive Layer 3. Barrier Layer (EVOH) 4. Adhesive Layer 5. UV Barrier Layer - Virgin and black Color Multi-layer co-extrusion technology with barrier properties

7. Inner Layer - Virgin

HiPEx - High Performance Extruder

The name HiPEx 36 conceals a completely redeveloped more powerful extruder generation. The main focus lay in the efficiency of the system as a whole. The new HiPEx generation of extruders for the future packaging machine series are characterised by their exceptional process stability, their high maximum throughput capacities and their excellent melt homogeneity. When designing extruders, Bekum places particular emphasis on a high degree of energy efficiency, as extruders are the main energy consumer of blow moulding machines. Thanks to the installation of extruder screw lengths of 36D in combination with improved mixing zones, the screw constantly supplies homogeneous material and better colour mix.

Standard Grooved Barrel Extruder

A well-matched extrusion system contributes significantly to ensuring product quality. The extruder drive is electromechanical and speed controlled using an energy efficient direct drive from the motor and transmission. The extruder screw and the feed zone geometry are coordinated so that many blowable plastic materials can be processed with high melt strength, low melt temperature and good homogeneity. This extruder generation with extruder screws of the length of 24D have been proven and tested for many years.

Bekum Extrusion Heads

The Bekum extrusion heads for continuous and discontinuous extrusion are constantly undergoing further development. They are a decisive factor for production success. Bekum's Mono, Bi-Ex and Co-Ex spiral mandrel extrusion heads offer short, less shearing and uniform flow channel design with consistent melt and temperature homogeneity. Its big advantage is the uniform wall thickness distribution over 360° around the article. The reproducible production results lead to improved quality and reduced weight, as no thin spots and weld seams have to be compensated for. The big advantage of this technology is the reduced material and colour change times. There is no temperature-related influence on the die position, which reduces the setting times and the adjustment effort when starting production and reduces material usage.





Benchmark for Blow Moulding Machines



Technical Specification						
Single- and Twin-Station	BA 25	BA 34.2/D	EBLOW 37/D	BA 50	BA 62(S)	BA 100
Mould width, max. (mm)	350	700	700	800	900 (1.000)	1.300
Mould length, max. (mm)	530	700	700	1.200	1.200 (1.400)	1.500
Mould depth, max. (mm)	2 x 250	2 x 250	2 x 250	2 x 350	2 x 350	2 x 400
Day light opening (mm)	390	590	550	1.400	1.400	1.800
Clamping force (kN)	200	330	350	500	620 (750)	1.000
Article Production Possibilities, max. (L)	35	35	35	120	160	220
Technical Parts				on requiest	on request	on request

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Bekum Maschinenfabriken GmbH Kitzingstraße 15/19 12277 Berlin

Phone: +49 30 7490-0 Fax: +49 30 7490-2441 sales@bekum.com www.bekum.com