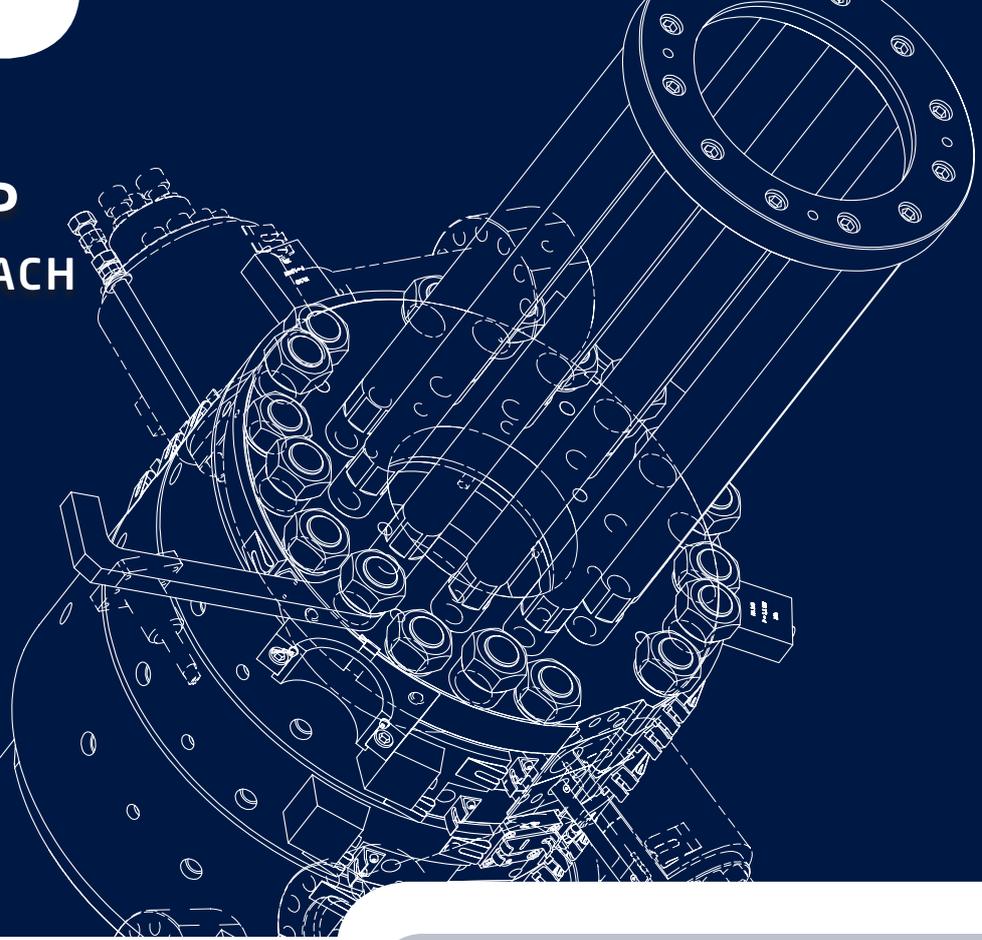


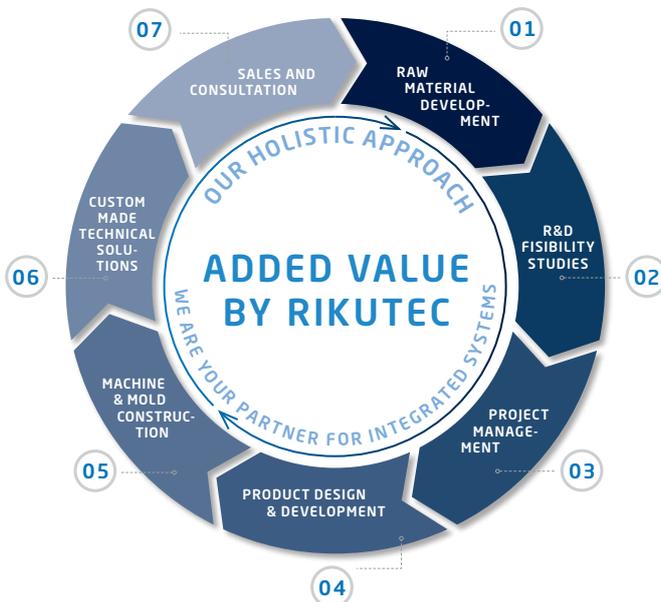
# RIKUTEC GROUP

## OUR HOLISTIC APPROACH



### RIKUTEC GROUP

The RIKUTEC Group stands for an innovative and internationally orientated Group of companies in blow-molding technology. The core competence lies in the production of technical blow molded articles for industry and trade as well as mechanical and plant engineering.



### RIKUTEC GROUP CORE COMPETENCIES

#### MACHINE & PLANT CONSTRUCTION

- Core capability
- Complete turnkey facilities
- Service, maintenance, consulting

#### WORLDWIDE SUPPLIER OF LARGE BLOW-MOLDED PRODUCTS

- Industrial packaging
- Habitat
- Custom molding



**RIKUTEC  
GERMANY**



**RIKUTEC  
FRANCE**



**RIKUTEC  
IBERIA**



**RIKUTEC  
AMERICA**



**RIKUTEC  
ASIA**

## RIKUTEC AROUND THE GLOBE:

- Germany
- France
- Spain
- America
- Korea

## SALES, DISTRIBUTION AND PARTNER NETWORK:

- Australia
- India
- UAE
- Switzerland
- Austria
- Netherlands
- Slovenia
- Turkey
- Russia

## RIKUTEC GROUP

In more than 30 years, the RIKUTEC Group has developed itself to a leading company within the plastic industry and different market segments: As an innovation leader in the field of machine and blow molding technology, as a sustainable partner in the production of industrial packaging, storage tanks and technical blown parts.

The growing RIKUTEC Group currently produces at three European production sites in Germany, France and Spain. In addition, the company is also active in America and Asia. Technical know-how, many years of experience and innovative strength combine and complement each other in all areas of the company.

## ADDED VALUE BY RIKUTEC

„We are your partner for integrated systems – worldwide. At RIKUTEC you get everything from one source. From raw materials and product development, to machines and molds, up to large-volume container solutions and technical consultation for optimizing production lines and machineries.“



# RIKUTEC ENGINEERING

## ENGINEERING MADE IN GERMANY

### SERVICE WORLDWIDE

#### RIKUTEC ENGINEERING

The German service company RIKUTEC Engineering, based in Altenkirchen, Germany, designs, develops and produces high-precision large blow molding machines, high-quality blow molds for the production of innovative, large-volume hollow bodies up to 10,000 liters as well as turnkey production lines.

#### TECHNOLOGY WORLD MARKET LEADER

The RIKUTEC COEX BLOW MOLDING MACHINES stand for precision, innovation and cutting-edge technology from Germany. For more than 30 years, we have been developing passionately machines and molds with minimal downtime.

Our patented process enables us to produce innovative large-volume hollow bodies. we are able to produce products from 100 to 10,000 liters "in one shot". Our technical know-how covers the entire product range, the RIKUTEC blow molding machines, RIKUTEC blow molds as well as welding and testing systems. With our technical know-how and decades of experience, we are looking forward to support you in the realization of demanding machine and article projects. We are your contact when it comes to the production of machines and articles in blow molding technology. From compounding material to innovative product design, from tool making to production on our machines and services: with us you get everything from a single source – competent, reliable and of the highest quality.



#### RIKUTEC ENGINEERING

OUR TECHNICAL KNOW-HOW  
COVERS THE ENTIRE PRODUCT  
RANGE:

- *Blow-molding machines*
- *Product development*
- *Blow molds*
- *Welding systems*
- *Product handling  
& assembly systems*
- *Services*



## RIKUTEC COEXTRUSION BLOW-MOLDING PROCESS

The RIKUTEC COEXTRUSION BLOW MOLDING PROCESS is a technology with which promising markets can be opened. Intensive development makes it possible to manufacture large-volume as well as large-area plastic products with multi-layer wall construction according to the desired product requirements.

### WITH THE PROCEDURE DEVELOPED BY RIKUTEC, IT IS POSSIBLE TO:

- *Decisively improve the permeation characteristics against hydrocarbons*
- *Store and transport diffusing chemical products in large containers*
- *Increase the mechanical properties through multi-layer wall construction*
- *Enable the recycling of plastics in so-called recycling layers*

## RIKUTEC ENGINEERING CONSTRUCTION, DEVELOPMENT AND SERVICES

The manufacture of blow-molded hollow bodies involves a variety of different processes. Each has its peculiarities. The RIKUTEC R&D team is characterized by its comprehensive conceptual and constructive capabilities. Experienced employees such as designers and engineers with many years of experience set their focus on tool and mold technology since decades.

Running-in and running-on power, adapting to changes in the series, maintaining and protection against damage. The lifelong care of the machines and molds by us is a matter for us. It is also part of our customer service that every project - regardless of scope and duration - has a responsible project manager. This means that our customers always have a competent contact person. Our hotline also ensures that our customers can contact us at any time. In addition, we train our customers in the use of machines and molds on request, in order to familiarize them with the functionality and special features of the corresponding technology. This is another way in which our machines and molds ensure maximum reliability and thus added value for your processes.





# COEX-ACCUMULATOR HEAD

## COEX-ACCUMULATOR HEAD

The COEX-Accumulator Head is designed for 2 up to 5 layer discontinuous coextrusion. The COEX-Heads work to the „first in/first out“ system. The melt guides are free of any obstructions completely preventing flow marks. The melt channels are sized to meet the individual material specs. The layer thickness of the individual material melts are corrected and optimized by means of built-in-adjustment sleeves.

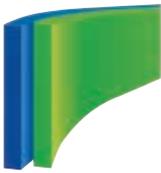
There are many other variations of wall designs. The ACCU-HEADS are available in sizes Type A 25 (25 Liters ≈ 6,6 gal.) up to Type A 400 (400 litres ≈ 106 gal.).

As an inherent feature of the discontinuous COEX technology, the extruded melt is stored in the accumulator head while constant pressure and temperature have an optimum effect on the bonding strength of the single plastic layers. Contrary to continuous co-extrusion techniques, RIKUTEC's COEX technology helps to keep the parison from stretching lengthwise by relatively short ejection time and by virtue of a constant melt temperature maintained in the process of forming and blow-molding of multilayer articles with length up to 7 m.

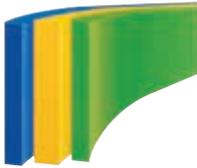
## RIKUTEC COEX PROCESS - THE FEATURES

- *Operator friendly control of the molding process; e. g. the individual layer thickness is corrected just by changing the extruder speed.*
- *The bonding between the various layers is optimized by the very long melt guides. After joining the various melt layers remain in the coex piston at least for the duration of the ejection cycle, with the melt pressure and the melt temperature influencing most favorably the bonding between the various layers.*

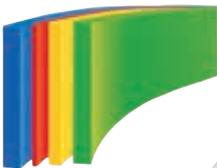
COEX 2



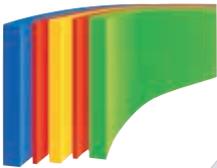
COEX 3



COEX 4



COEX 5



BIEX



## REDUCED MATERIAL COSTS

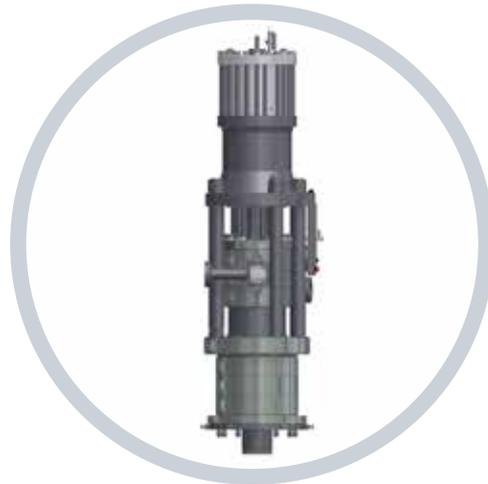
The RIKUTEC COEX technology offers savings in material costs because the container wall can be custom designed to meet specific product requirements. For instance, the outermost and innermost layers can be composed of virgin high molecular PEs, while cost effective recycled materials can be used for the intermediate layers.

Thus the RIKUTEC COEX technology is also environmentally friendly.

## APPLICATION EXAMPLES

- **ACCU-HEAD TYPE A COEX 2**  
for 2 layer coextruded wall designs e. g. internal layer – virgin material, external layer – pigmented colored material.
- **ACCU-HEAD TYPE A COEX 3/4**  
for 3/4 layer coextruded wall designs e. g. use of recycled materials contained in virgin material.
- **ACCU-HEAD TYPE A COEX 5**  
for 5 layer coextruded wall designs e. g. containers with barrier layers.

There are many other variations of wall designs.



ACCU-HEAD A150 COEX 3



# RIKUTEC GBM S1000 – S1250

## FOR THE PRODUCTION OF HOLLOW CONTAINERS FROM 200 UP TO 1,500 LITERS

### HIGH PERFORMANCE MULTI-LAYER COEXTRUSION BLOW MOLDING MACHINE

The machine type GBM S 1000 LD/ S 1500 LD covers the range of large-volume packaging vessels. Here it is not only possible to produce a 220 litre drum, but also a 1,000 litre IBC. In this volume range however, not only packaging containers can be manufactured, but even technical blow-mold articles such as fuel tanks or products for road safety can be created individually here.

#### RIKUTEC GBM S1000–S1250

#### Technical data

Product volume (l)	200 – 1,500
Output (pcs/h)	up to 35
Space requirement: Length × width × height (mm)	appr. 11,500 × 10,000 × 7,500
Clamping unit: Closing-force (kN)	1,000 (1,500)
Closing pressure (bar)	up to 210
Clamping area (mm)	appr. 1,800 x 1,800

#### CLAMPING UNIT

Both mold platens are guided by 4 runner blocks with a linear guiderails system on a closed frame. The closing and opening motions of the mold platens are done hydraulically with proportional valves, controlled via digital sensors and the machine control. The movement of each plate is controlled separately, which allows synchronous or asynchronous movements.

### OUR COEX AND BI-EX ACCU-HEADS FROM 25 UP TO 80 LITERS:

► Ideal for products used in the field of industrial packaging technology (drum, IBC).



## ACCU-HEAD

The RIKUTEC Coextrusion Accumulator Head works to the „first in/ first out“ system. The hydraulically driven injection piston is controlled by means of a proportional valve (speed control). The piston for controlling the wall thickness is controlled by means of a separate circuit including a control valve.

Upon product requirement different systems for partial wallthickness control can be offered.

ACCU-HEAD	A25	A45	A60	A80
Number of layer	1-3	1-3	1-3	1-3
Volume (l)	25	45	60	80
Shot weight (kg)	19	34	45	60
Die diameter (mm)	100-360	230-630	230-740	230-800

## EXTRUDER

Extruder with grooved and cooled infeed bushing and barrier screw with mixing tip. For processing HMW-HDPE as powder or pellets.

EXTRUDER	E45	E90	E100	E120	E140	E150
Screw diameter (mm)	45	90	100	120	140	150
Screw length (L/D)	> 24	> 30	> 30	> 30	> 30	> 30
Melting capacity (kg)	180	230	320	460	500	700



# RIKUTEC GBM S2000 - S3000

## FOR THE PRODUCTION OF HOLLOW CONTAINERS FROM 1,500 UP TO 3,500 LITERS

### HIGH PERFORMANCE MULTI-LAYER COEXTRUSION BLOW MOLDING MACHINE

With this type of machine, article sizes of up to 3,500 l can be manufactured. The machine is ideally suitable for products used in the field of water and environment (rainwater-, septic- or sewage-water-tanks), as well as in agriculture or watersports.

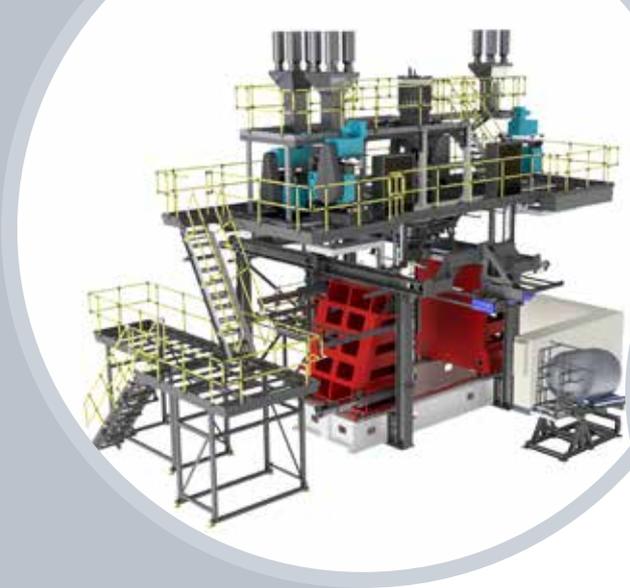
RIKUTEC GBM S2000-S3000	Technical data
Product volume (l)	1,500 - 3,500
Output (pcs/h)	up to 25
Space requirement: Length × width × height (mm)	appr. 13,500 × appr. 12,500 × appr. 9,000
Clamping unit: Closing-force (kN)	2,000
Closing pressure (bar)	up to 210
Clamping area (mm)	2,100 × 2,300

### CLAMPING UNIT

Both mold platens are guided by 4 runner blocks with a linear guide-rails system on a closed frame. The closing and opening motions of the mold platens are done hydraulically with proportional valves, controlled via digital sensors and the machine control. The movement of each plate is controlled separately, which allows synchronous or asynchronous movements.

### COEX AND BI-EX ACCU-HEADS FROM 80 UP TO 165 LITERS:

► Ideal for products used in the field of water & environment (heating oil, water, wastewater) or water-sports (kayak and kanu).



## ACCU-HEAD

The RIKUTEC Coextrusion Accumulator Head works to the „first in /first out“ system. The hydraulically driven injection piston is controlled by means of a proportional valve (speed control). The piston for controlling the wall thickness is controlled by means of a separate circuit including a control valve.

Upon product requirement different systems for partial wallthickness control can be offered.

ACCU-HEAD	A80	A125	A150	A165
Number of layer	1-3	1-3	1-3	1-3
Volume (l)	80	125	150	165
Shot weight (kg)	60	100	115	125
Die diameter (mm)	230-800	230-740	360-900	360-900

## EXTRUDER

Extruder with grooved and cooled infeed bushing and barrier screw with mixing tip. For processing HMW-HDPE as powder or pellets.

EXTRUDER	E90	E100	E120	E140	E150
Screw diameter (mm)	90	100	120	140	150
Screw length (L/D)	> 30	> 30	> 30	> 30	> 30
Melting capacity (kg)	180	320	460	500	700



# RIKUTEC GBM S4000 - S6000

## FOR THE PRODUCTION OF HOLLOW CONTAINERS FROM 3,000 UP TO 10,000 LITERS



### HIGH PERFORMANCE MULTI-LAYER COEXTRUSION BLOW MOLDING MACHINE

With this machine type, the world's largest multi-layer blow molding part was achieved. A blow-volume of up to 10,000 l, accumulator head up to 400 l as well as closing forces of up to 600 t are available. Especially in the field of jumb tank production for waste water technologie and water usage, this type of machine makes competitive product solutions possible. Cost reduction can be achieved trough a high usage of recycling materials.

#### RIKUTEC GBM S4000-S6000

#### Technical data

Product volume (l)	3,000 – 6,000
Output (pcs/h)	up to 20
Space requirement: Length × width × heigh (mm)	appr. 18,500 × appr. 16,500 × appr. 12,500
Clamping unit: Closing-force (kN)	6,000
Closing pressure (bar)	up to 210
Clamping area (mm)	3,000 × 4,500

### CLAMPING UNIT

Both mold platens are guided by 4 runner blocks with a linear guiderails system on a closed frame. The closing and opening motions of the mold platens are done hydraulically with proportional valves, controlled via digital sensors and the machine control. The movement of each plate is controlled separately, which allows synchronous or asynchronous movements.

### COEX AND BI-EX ACCU-HEADS FROM 150 UP TO 400 LITERS:

► Ideal for products used in the field of water & environment (heating oil, water, wastewater).



## ACCU-HEAD

The RIKUTEC Coextrusion Accumulator Head works to the „first in /first out“ system. The hydraulically driven injection piston is controlled by means of a proportional valve (speed control). The piston for controlling the wall thickness is controlled by means of a separate circuit including a control valve.

Upon product requirement different systems for partial wallthickness control can be offered.

ACCU-HEAD	A150	A165	A240	A300	A400
Number of layer	1-3	1-3	1-4	1-4	1-4
Volume (l)	150	165	240	300	400
Shot weight (kg)	115	125	185	230	310
Die diameter (mm)	360-900	360-900	450-900	500-1,000	500-1,000

## EXTRUDER

Extruder with grooved and cooled infeed bushing and barrier screw with mixing tip. For processing HMW-HDPE as powder or pellets.

EXTRUDER	E90	E100	E120	E140	E150
Screw diameter (mm)	90	100	120	140	150
Screw length (L/D)	> 30	> 30	> 30	> 30	> 30
Melting capacity (kg)	180	320	460	500	700



# PRODUCT DEVELOPMENT AND MOLD CONSTRUCTION

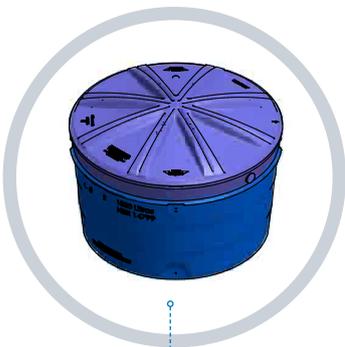
## PRODUCT DEVELOPMENT AND MOLD CONSTRUCTION

### MANUFACTURE OF BLOW-MOLDED HOLLOW BODIES KNOWS A LARGE NUMBER OF VARIOUS CHALLENGES

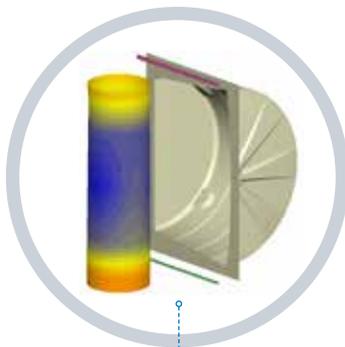
The development team at RIKUTEC Engineering has an outstanding conceptual and constructive capability in the process and in the construction of the matching molds. Experienced workers with many years of practical experience as well as constructors work alongside engineers.

Use of ultra-modern CAD systems and a CAD-supported data administration make efficient and unproblematic communication with our customers possible. In addition, we also have intensive cooperation with institutes and universities in research and development, for example in the fields of working materials and production methods.

- Feasibility studies
- Adaptations from other manufacturing processes and raw materials
- Layout production
- Drawing and construction of the product
- Product simulation and FEM computation
- Mold construction and mold building
- Technical documentation
- Mold validation methods
- Series production



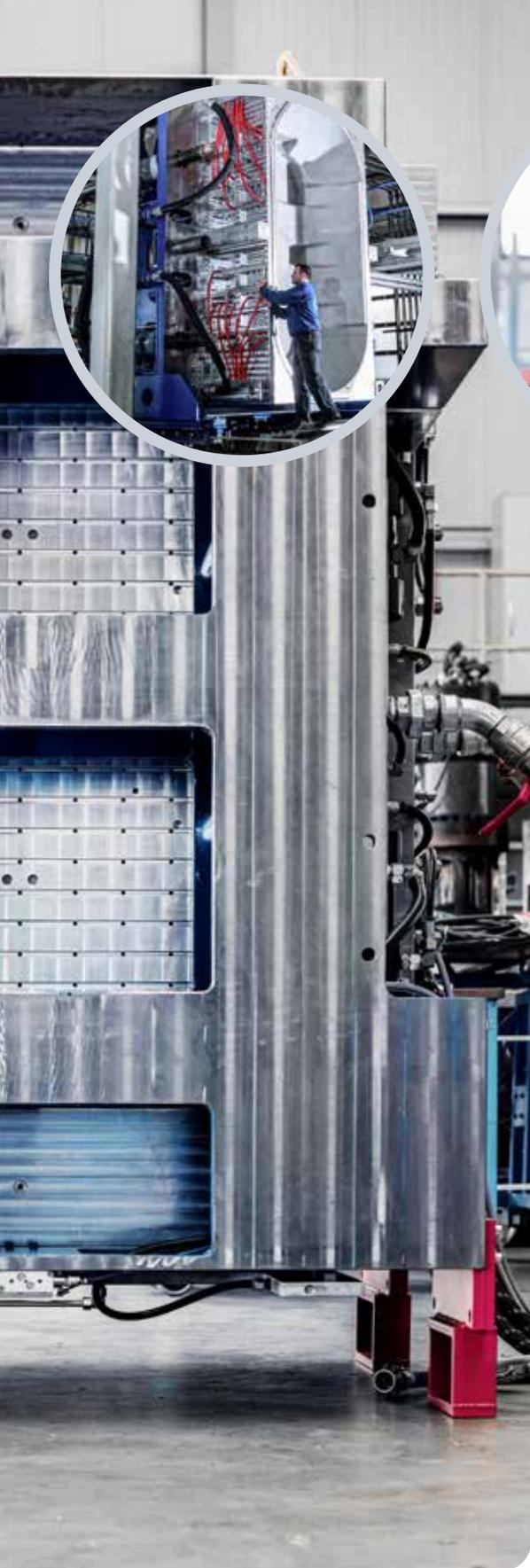
PRODUCT DEVELOPMENT



FEM SIMULATION



READY FOR MARKET LAUNCH



## TOOL AND MOLD CONSTRUCTION

Development times for new products are becoming shorter and shorter. Together with highperformance partners, we implement our customers' wishes in the shortest possible time.

## SERVICE

Mold validation and making things work, adaptation to changes in series, repairs for wear and tear and damage. Life-long support of the molds manufactured by us is a matter of course for us.

Our service for customers also includes the fact that each project – regardless of the scope and duration – has its own responsible project manager. In this way, our customers have a competent contact partner at all times.

# SERVICE

Give us a call and inquire about our services today. Call our Service

Number: **+49 2681 9546-698**



# RIKUTEC CUSTOM MOLDING DEVELOPMENT, PROJECT MANAGEMENT & ENGINEERING



MATERIAL



DEVELOPMENT AND DESIGN



PROJECTING & ENGINEERING



PRODUCTION AND SERIES  
MANUFACTURE



PARTNERSHIP

## THE SPECIALIST FOR CUSTOMIZED LARGE-SCALE PLASTIC BLOW-MOLDED ARTICLES

WE ACCOMPANY YOU FROM PRODUCT DEVELOPMENT  
RIGHT THROUGH TO SERIES PRODUCTION

Many users and manufacturers invest in a complete and integrated system from RIKUTEC and benefit from various advantages. It gives them the possibility of being able to produce the required product – in accordance with their own design – quickly, cost-efficiently, in high quality and independently. We are pleased to accompany you in this project.

### OUR PROJECT TEAM DEVELOPS THE FOLLOWING IN A SCOPE WHICH IS DEFINED JOINTLY:

- Feasibility studies
- Adaptations from other manufacturing processes and raw materials
- Layout production
- Drawing and construction of the product
- Product simulation and FEM computation
- Mold construction and mold building
- Technical documentation
- Mold validation methods
- Series production
- Internal and external logistics
- After-Sales

As a manufacturer of large-volume **COEXTRUSION BLOW-MOLDING SYSTEMS** with more than 50 years of experience, we are in a position to develop your product optimally and to the best possible standard for the manufacturing process and to lead it to series production. Innovative large-scale series of hollow bodies from 100 up to 10,000 liters "in one shot".



## AUTOMOTIVE SOLUTIONS



## WATER SOLUTIONS



## MARINE & SOLAR INDUSTRY



## EVENT AND OUTDOOR SOLUTIONS



## ROAD CONSTRUCTION

## PROJECT MANAGEMENT & ENGINEERING

We provide extensive and customer-orientated projecting work as well as the matching engineering which are connected with the development and the manufacture of your product. In the projecting of your concept, we base our work on our decades of experience in blow-molding technology and our patented manufacturing process. The objective of our projecting is the highest possible quality of technical implementation of your requirements with a simultaneous optimization of the investment and manufacturing costs. A close, partner-like and trusting cooperation in the project not only has the highest priority, but is also lived in practice by us.

**A difference which you will notice above all in joint work.**

## CASES

During recent years, we have implemented challenging projects with customers from all over the world from various branches such as automotive, transport and logistics, marine & solar industry or water & environment.

Our service does not end with the supply of the finished product. We look after customers and users across the entire product lifecycle. Thanks to this close cooperation in the development and manufacture of products individual to the customers, strategic partnerships have developed in recent years.

In our cooperations, the trust of our customers and a partner-like coexistence is above all in the foreground. We assure you that your technical idea is in safe hands with us and guarantee the highest possible quality to you, from the feasibility study via the product simulation right down to series production.



# RETROFIT



## RETROFIT

### THE MODERNIZATION OF BLOW MOLDING MACHINES

Profitability plays a key role in this decision. Often, the existing equipment and the automation and propulsion technology no longer match the required safety standard and the state of the art. In addition, procurement of spare parts proves to be extremely difficult and no longer possible in some cases.

In many cases, modernization (retrofit) of a machine is often more economical than a new purchase. Existing machines and systems can be adapted to modern standards by extensions or reconstructions. Thanks to our many years of experience in the field of system construction, we can produce a solution concept tailor-made to match your case of application.

**We bring your system up to the state of the art!**



**CLOSING UNIT GBM-S1500**

## RETROFIT SERVICES

- *Renewal of components*
- *Subsequent automation*
- *Complete overhauls incl. CE conformity*
- *Electrical overhaul*
- *Exchange closing unit*
- *Renewal of machine control*
- *Conversion to COEX ACCU-HEAD*



## YOUR BENEFITS FROM OUR SUPPORT

- Increase in efficiency and productivity
- Reduction of down times
- Optimization of production and process times
- Increase in system availability
- Lower investment costs than for a new purchase

## OUR RANGE OF SERVICES

- Extension of existing systems
- Fulfillment of current guidelines
- Recognition of saving potentials
- Renewal of key components
- Production of circuit diagrams
- Reduction of standstills to a minimum
- Elaboration of solution paths and alternatives
- Secured provision with replacement parts
- User-friendly operating surfaces
- Purposeful coaching of the operating staff

## WHY DISPOSE OF A TRIED AND TESTED BLOW-MOLDING MACHINE?

Make use of the possibilities of modernization with RIKUTEC. We have the matching solution and years of know-how.



# SERVICE

Give us a call and inquire about our services today. Call our Service

Number: **+49 2681 9546-698**



# SERVICE & MAINTENANCE



## PREVENTIVE MAINTENANCE

Machine standstills cause a lot of annoyance and frequently lead to arrears in supply. RIKUTEC recommends preventive machine maintenance as a supplement to a complete and high level blow molding system. Regular examination of the system by trained technicians prevents wear and tear and saves costs for repairs and replacement parts.

Many customers make use of this additional offer and regularly have fundamental mechanical as well as safety examinations done on site. In addition, our technician checks the blow-molding machine for worn or defective components and also with a view to the electrical functionality. Naturally, the system's filters are replaced at every inspection.



## REMOTE MAINTENANCE

You are on the safe side with the remote maintenance service from RIKUTEC. A server organizes the exchange of data between the blow-molding machine and the technician and thus avoids typical risks which customarily come about as a result of an external connection. Sensitive project data are stored locally. The technician merely selects the service inquiries intended for him. All the machine's control modules can be operated and influenced via the remote maintenance routines. This even applies to sequence controls and includes access to the PC of the extrusion blow-molding machine.





## REPLACEMENT PARTS AND ACCESSORIES FOR BLOW-MOLDING MACHINES

You need information  
about replacement parts  
or accessories for a  
blow-molding machine?

► Simply get in touch  
with us, we will be pleased  
to help you.

## SERVICE TECHNICIANS

If necessary, we send our experienced and highly qualified service technicians to your factory. With this service, we support you in the repair and maintenance of your production systems. All the defects and malfunctions are localized and remedied as quickly as possible. We provide short repair and down times and a fast availability of replacement parts.

## REPLACEMENT PARTS

Time is money, this also applies to replacement parts. We ensure a worldwide, professional and fast-reacting replacement part service. Replacement parts can be supplied in a very short time.



# SERVICE

Give us a call and  
inquire about our services  
today. Call our Service

Number: **+49 2681 9546-698**



# TRAINING & COACHING

## OUR CUSTOMERS' SUCCESS IS OUR OBJECTIVE

### HIGH-QUALITY STANDARD BY WORLDWIDE COORDINATION OF TRAINING

Making full use of the performance potential, economical use and disturbance-free operation of RIKUTEC blow-molding machines also depend on the qualification of the operating and maintenance staff.

### YOU HAVE RIKUTEC AT YOUR SIDE AS PARTNER FOR QUESTIONS OF TRAINING.

Following extensive consultation, the exact requirement of training is determined and a tailor-made coaching is put together. Each customer records the contents in his own personal seminar file. The exchange of experience with the trainer guarantees an optimum interaction and intensification of the contents which have been learnt. RIKUTEC guides the customers step by step to a successful production with the modular design of the coaching concept and secured quality standard.

### RIKUTEC ENGINEERING PROVIDES WORLDWIDE INDIVIDUAL COACHINGS FOR:

- Optimum machine operation and machine control
- Optimization of set-up time
- Process optimization
- Perfect machine maintenance = increased productivity



ON-SITE TRAINING



COACHING CENTER



## TRAINING & COACHING

Training and coaching provide the basis for knowledge and abilities to work with your blow-molding machine. With the know-how which you learn, you can ensure optimum production settings and maintenance of your blow-molding machine.

**Contact us in order to design a training program which is individual for you.**

At our coaching center, we offer machine and system coachings which are permanently updated.

Our individual coachings are held and designed by experienced specialists from blow-molding technology. Thanks to regular coaching, you ensure the optimum availability and greatest possible effectivity of your RIKUTEC blow-molding machines.

## SERVICE

Give us a call and inquire about our services today. Call our Service

Number: **+49 2681 9546-698**





# RECYCLING



## TAILOR-MADE HDPE AND PP RE-GRANULATES AND COMPOUNDS

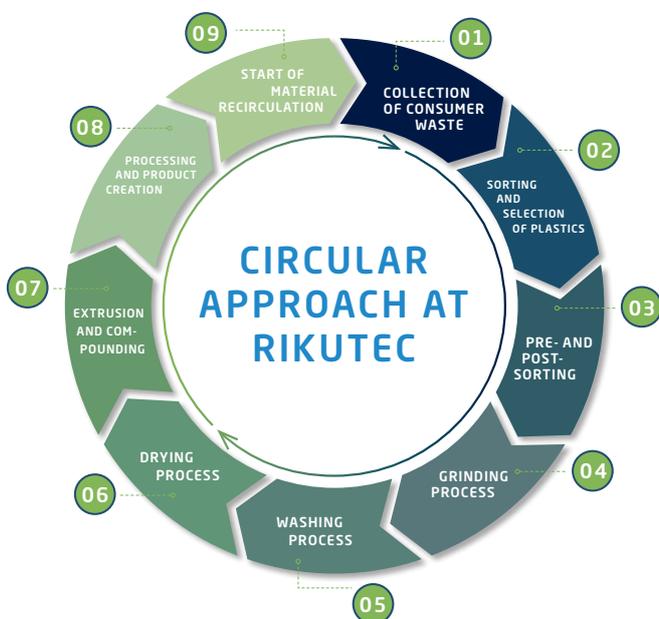
Re-granulates are well established on the market now, whether in blow-molded containers, tubes, refuse bins or other applications, and are enjoying increased acceptance by the consumers.

Alongside the **distinctly better eco-balance** compared with new goods, they have a high quality and are a favorably priced alternative.

RIKUTEC is well linked with manufacturers of HDPE and PP re-granulates and compounds with knowledge from more than 20 years of market experience.

## SERVICES

- Ecological in manufacture
- Favorably priced alternative
- High-quality demands
- Completely homogeneous granulate batches
- Individual formulations
- Tailor-made properties
- Dependability and security of supply



## HDPE AND PP RE-GRANULATES

### HIGH-QUALITY RAW MATERIALS MADE OF OLD PLASTIC – SUSTAINABLE MATERIALS FOR YOUR APPLICATION

#### WE OFFER YOU:

- An extensive range of various HDPE and PP re-granulates, purposefully adapted to customers' requirements in the processing and final properties
- A selection of alternatives to the materials which you have used up to now on the basis of our own measurements of the properties relevant for processing
- The possibility of minimizing your ecological footprint by being able to manufacture parts from secondary raw materials which have been produced as new goods up to now
- Completely homogeneous batches of granulate weighing up to 24 tons, also of inhomogeneous initial goods
- Material properties which come close to those of comparable primary plastics or sometimes even exceed them
- Adaptation of color, processing properties and mechanical properties in order, for example, to manufacture variants with higher impact-resistance or PE-PP mixtures which have been improved with compatibilizers
- Production with great flexibility in order to react to fluctuating initial qualities at short notice and to ensure that following batches have the same properties as the previous batches

