

ALCOM[®]

High
Performance
in Plastics

E-CONDUCTIVE
WEAR PROTECT
MECHANICAL PLUS
METALLIC EFFECT
LIGHTING
TAILOR-MADE

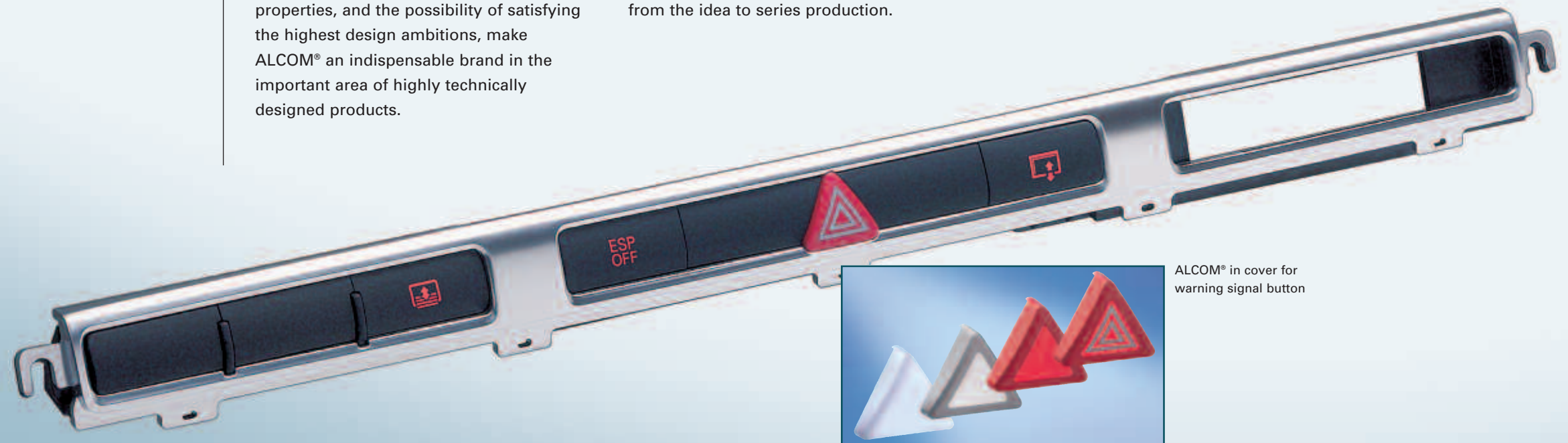
ALCOM® – the system for innovation.

Since the founding of the company in 1961, ALBIS PLASTIC GMBH quickly made a name for itself as a competent partner in the plastic processing industry, and established itself as a leading compounder of technical plastics. The present product range encompasses the broad distribution programme of major manufacturers, as well as versatile, high performance and technical thermoplastics. With its proven competence, ALBIS provides its customers with application-related consultation and central know-how for economic success and innovative product management in dynamic markets.

ALCOM® – the unlimited plastic portfolio

ALCOM® from ALBIS is the successful realisation that plastics of today have almost nothing in common with the plastics of yesterday. ALCOM® increasingly replaces traditional materials, with its innovative system compounds through high-tech plastic technology and almost unlimited possibilities. Exceptional technical properties, and the possibility of satisfying the highest design ambitions, make ALCOM® an indispensable brand in the important area of highly technically designed products.

Innovative pigmentations with a metallic impression or the revolutionary light diffusion technology were conceived, developed and made ready for patenting by ALBIS. These patented ALCOM® variants, and numerous other tailored modifications, make a contribution to ensuring the productivity and competitiveness of our customers – from the idea to series production.



ALCOM® in cover for warning signal button

ALCOM® – High-Tech Tuning in Plastics.

From an economic and ecological viewpoint, the successful substitution of conventional materials plays an increasingly important role. Whereas earlier, for example, metal coverings, spraying processes and complex designs were necessary for optical fibre processes, today a single moulded part, of ALCOM®, is enough.

With individually adjustable properties relating to wear, weight, electrical conductivity, and much more, today a single high performance plastic can provide better performance at less expense. That gives designers and engineers more space for creative and innovative developments and the management of improved cost savings.

Metallic Effect – refines your design ambitions

Patented pigmentation with an aesthetic appeal

The technology patented and developed by ALBIS enables sophisticated design and construction concepts without visible seams and flow lines. ALCOM® offers pigmented compounds with high quality metallic impressions, offers dyeing in all variations and is, in optical terms, amazingly similar to more cost-intensive metallic paints. With ALCOM® Metallic, the tedious spraying of plastic parts is a thing of the past. ALCOM® Metallic has proven itself successfully in the following areas of use: Household, automotive, electronics, furniture industry, cosmetic packaging, hi-fi, writing utensils.

Cost advantages through the removal of additional expenses in logistics, preliminary and subsequent handling, painting, protective measures.



ALCOM® in electrical devices and electronics

ALCOM® in writing utensils

Lighting – puts your objectives in the right light

ALCOM® satisfies important requirements of lighting technology to a very special extent

Light Blocking

With ALCOM®, high light blocking is achieved even with low wall thicknesses. The special compounds demonstrate a high degree of light reflection. Other properties include reduced tendency to warp, high heat resistance and a balanced mechanical value level. Customers in the automotive industry are increasingly relying on ALCOM®, because this system compound enables weight reduction and freedom of design.

Light Diffusion

With this product series, ALBIS has developed a patented, ground-breaking technology with fascinating possibilities for lighting technology. The innovative modification results in exceptional properties, such as homogeneous and nearly loss-free light dispersion, harmonisation of control elements in day-night design, perspective-neutral recognition of symbols or very good contour sharpness. Sophisticated requirements in accordance with the OEM climate change test with respect to paint adhesion are satisfied; laser imprinting and even colour variants are possible. ALCOM® Light Diffusion has already successfully positioned itself in numerous applications such as automotive entertainment, comfort and control, information and communication systems, and household appliances.

In addition to product advantages relating to light distribution and dispersion, or the sharply contoured reproduction of symbols and control elements, the noticeable cost savings through simpler system integration are very convincing.



ALCOM® in automotive interiors

ALCOM® – the system for more ideas.

With ALCOM®, ALBIS customers use a reference system for economical material solutions. On the basis of all commercially available thermoplastics, ALBIS offers system compounds with many different fillers and reinforcement materials and additives. The result is new properties, new applications, and new products. ALBIS participates in research projects of material concepts and system solutions for the future.

E-Conductive – to be on the safe side

Permanently anti-static to electrically conductive compounds with carbon fibres, conductive carbon black, steel fibres etc.

Conventional thermoplastics are very good insulating materials, which can charge electrostatically and cause functional disturbances due to sudden discharging, for example with electronic components.

ALCOM® E-Conductive avoids electrostatic charging through the addition of electrically conductive materials such as carbon fibres, conductive carbon black or steel fibres. The surface resistivity is thereby reduced to less than 10^8 Ohm and electrical charges are dissipated.

With the use of ALCOM® E-Conductive, sudden discharges are practically impossible. ALCOM® is therefore also ideal for use close to or in contact with flammable materials and substances at risk of explosion.



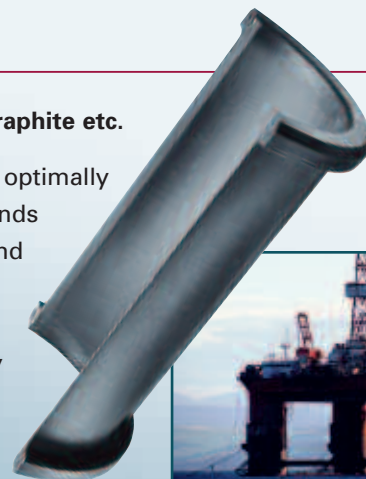
ALCOM® in franking machines

Wear Protect – for your smooth success

Lubrication-modified compounds with PTFE, silicone, aramid, MoS₂, graphite etc.

Through the defined use of specific lubricants, ALCOM® Wear Protect is optimally modified against wear, friction and noise development. These compounds are therefore ideal materials for slide bearings, bushings, cogwheels and much more. Reinforcement media such as carbon and glass fibres or fillers also ensure a high degree of mechanical resilience. Even friction pairings between plastic/plastic and metal/plastic are made possible by the use of lubricants.

The most important advantages: Cost and weight reductions, reduced energy consumption, longer lifespan with less maintenance.



ALCOM® in bearing shells for oil production



Mechanical Plus – moves your ideas

Highly rigid compounds with a high proportion of carbon fibres

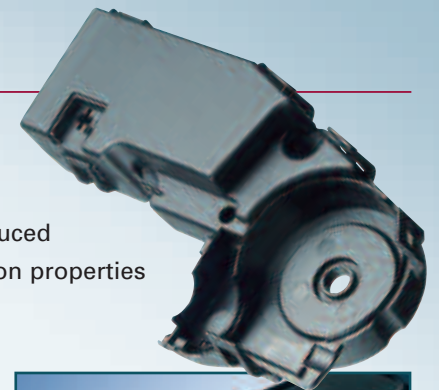
The compounding in of carbon fibres results in high quality construction materials with maximum values with respect to strength and elasticity modulus as well as reduced tendency to creep and flex. In addition, the electrical conductivity and the glide/friction properties are improved, and the thermal expansion coefficient reduced.

Carbon-reinforced ALCOM® is preferable to metals or glass fibre reinforced plastics for more demanding requirements of mechanical properties with a simultaneously low weight, e.g. for quick moving machine parts (moments of inertia) in apparatus and mechanical engineering.

Hybrid-reinforced compounds

With the ALCOM® hybrid types, ALBIS offers special customised properties with various reinforcement and filler combinations.

This makes it possible to manufacture parts with a high degree of dimensional accuracy, low deformation and optimal surface quality.



ALCOM® in housings for electrical automotive sunroof motors

Tailor-Made – tailored to suit you

Innovative solutions perfectly tailored for your needs

ALCOM® enables new developments that are tailored precisely to customer requirements. These include, for example, high performance plastics with a modified thermal conductivity, a reduced or increased specific weight etc. Plastics serving as acoustic insulation are also growing in importance. With ALCOM®, polymer materials can be manufactured with new properties for use in the most modern technologies in order to realise your concepts.

The realisation of previously impossible ideas due to new material properties and new areas of use through the replacement of many conventional materials.



ALCOM® in automotive engine compartments

Develop the future – in dialogue with ALBIS.

Create the trends of tomorrow with ALBIS today

Never before has the growth market of high performance plastics been greater than today. The areas of usage are expanding rapidly. Step-by-step, more materials, especially metals, are being replaced by more flexible and affordable plastic solutions. New application possibilities are being opened up that, until recently, appeared inconceivable. The pressure to innovate is increasing. ALBIS is a driving force in this dynamic market. We develop ground-breaking solutions of plastic and new generations of fascinating possibilities. ALBIS is establishing the trends of tomorrow today.

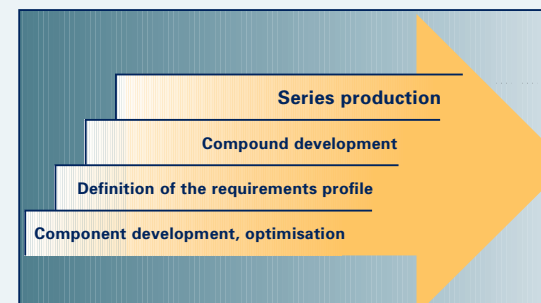
These results have many advantages for our customers. Together with us, they assume a leading role in technological developments and thus optimise:

- Product solutions,
- Material handling,
- System costs,
- Market position,
- Expenses.

From the idea to series production

In professional dialogue with our customers, we go through the individual steps in component development, all the way to the release and start of series production. On the basis of customer demands, prerequisites and influencing factors, we test the compliance of all plastic-related requirements. These also include strength and rigidity calculations, as well as the rheological tool design for the task. We bring many years of practical experience in the optimization of production conditions, the commissioning of production tools and on location service. An optimal result, tested in theory and practice stands at the end of the cooperative development process.

The intensive cooperation between end users, injection moulders and engineering offices with the ALBIS laboratory and the ALBIS application development and sales departments, leads to the optimal solution. Regionally and on location, you are supported by application technicians from ALBIS with many years of practical experience in all areas of plastic processing.



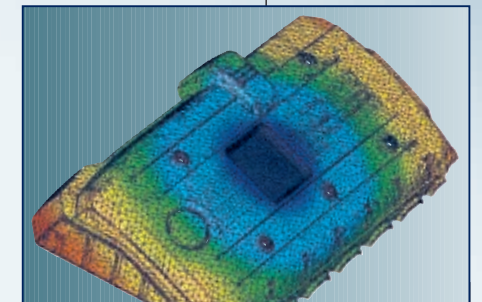
Strategic Account Management (SAM)

We offer our customers successful project management for product development and process optimisation with well-founded industry know-how.

Marketing + Sales



The detailed knowledge of national and international markets makes our marketing and sales professionals important dialogue partners. Our customers can evaluate and use opportunities in an easy exchange of know-how – in the respective domestic markets and beyond.



Technical Service and Development (TSAD)

Individual on-site attendance offers our customers competent support in issues ranging from optimal selection of materials to trouble-shooting – all the way to application development.

The Know-how Network

Central Know-how



The wide-ranging ALBIS know-how in product and process development, and the strategic market development carried out in our pilot plant, in marketing and product management – is all centrally situated in Hamburg, and available for all partners and customers.

ALCOM®

ALCOM® is always at your side

Particularly with Strategic Account Management (SAM), we maintain close contact with many renowned international companies, for example, the automotive industry, including its system suppliers. We support globally active customers and realise product developments together.

Through our internationally established network of experts, we are entirely familiar with complex, industry-specific requirements. In this way, we make a decisive contribution to ensure that our customers also remain competitive in their markets in the future.

We offer all customers personal contact, direct cooperation and proven quality. We are and remain as flexible as our customers.

Would you like to find out more about the possibilities that ALBIS offers with ALCOM® especially for your needs? Are you looking for plastic solutions for other requirements? Then talk to us. We would be pleased to help you with support and advice, and look forward to hearing from you!

Certification



Our customers' satisfaction with our products and services is supported by the performance and effectiveness of our quality management system established in all our European branches according to ISO/TS 16949:2002. The constant improvement in the effectiveness of the quality management system was certified for the first time in September 2005 by the Deutsche Gesellschaft zur Zertifizierung von Managementsystemen mbH (DQS). After a successful reappraisal, the certificate is valid until 2011.

Disclaimer

The information in this text is based on our current knowledge and experiences. However, due to the great variety of possible influences when processing and using our products, the processor remains responsible for carrying out his own tests and experiments. A legally binding assurance of certain properties or the suitability for a concrete usage cannot be derived from our information. The recipient of our products is responsible for observing any property rights, existing laws and regulations.

ALBIS. At home worldwide.

Offices in Germany

Sales office Berlin

Tel: +49/30/86 09 83-0

Sales office Bielefeld

Tel: +49/5 21/9 65 69-0

Sales office Duesseldorf

Tel: +49/2 11/56 84 30

Sales office Frankfurt a. M.

Tel: +49/61 02/71 35-0

Sales office Nuremberg

Tel: +49/9 11/5 45 49-0

Sales office Stuttgart

Tel: +49/7 11/7 37 81-0

ALBIS worldwide

Austria · Czech Republic · France · Germany
Great Britain · Hong Kong · Hungary
Netherlands · Poland · PR China · Russia
Spain · Sweden · Switzerland · Turkey · USA

Headoffice

ALBIS PLASTIC GMBH · D-20531 HAMBURG
TEL: +49/40/7 81 05-0 · FAX: +49/40/7 81 05-361
WWW.ALBIS.COM · INFO@ALBIS.COM

www.albis.com

