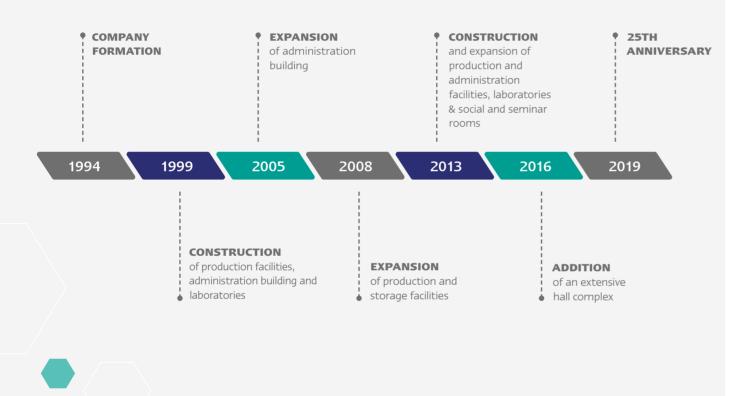




ARGUS -

Masterbatches since 1994



FOUNDED in 1994, the family business ARGUS has been true to its principles for more than 25 years now: to continuously produce future-oriented masterbatches with innovative procedures to set the highest quality standards both at national and international level. With success.

Our customers describe us as reliable and proficient, providing advice in a friendly manner. We're

grateful for that. And we constantly strive to keep up our image. We see ourselves as independent and flexible problem solvers for the challenges in the plastics market of today and the future.

By communicating openly and with utmost transparency and by managing orders fast and efficiently, we worked hard to gain the trust of our customers, suppliers and partners. And rightly so.



Over the past years, we expanded our facilities five times: first in 1999, then we increased the size of our administration building in 2005, in 2008 we enlarged our storage facilities and finally, in 2013, we built another production hall, a new administration building and a new laboratory. Finally, in 2016 we added another extensive hall to our plant complex.

In our laboratory facilities and technical center, we test all ingredients before they enter production to supply our customers with high-quality products and to reduce subsequent corrections.

All this would not be possible without the help of our highly skilled personnel. We respect and value them as members of our family. They are the heart and soul of our company. They bring our ideas to life. And we'd like to take the opportunity here and now to express our gratitude: Thank you!



PHILOSOPHY

Plastic in Perfection



PLASTIC is an integral part of our lives. In all its manifestations. Plastic is fantastic. It's recyclable. It's trendsetting and it's indispensible in so many ways – we simply cannot do without plastic. Once processed, you may find it in greenhouse film, industrial and food packaging, artificial turf, cars, interior design, toys... basically anywhere.

Only 160 years have passed since rubber was first presented in 1851, followed by celluloid (created in 1869), polyester, nylon and the German invention Perlon (from the 1930s), silicone (from the 1940s) and the sheer diversity of plastics that we have today. And the development is far from being completed. We'll make sure of that.

ARGUS masterbatches and compounds (on the basis of PE, PP, PA, PS, PET and EVA, among others) are enriched with selected high-quality additives and colours to provide the desired properties such as UV and thermal stability, high fire restistance, antistatic behavior or barrier properties, to name



just a few. In addition, combination batches, i.e. synergistic combinations of additives and colours, provide alternative properties, opening up completely new technological territory.

In our state-of-the-art plant in Büren, Germany, we constantly develop new formulations so we can continue to improve our results. How about a look behind the scenes of our production:

We shrink BOPP films controlled and increase the thermal stability of non-woven fabrics. We take care that packaging is more appealing to the eye and we give artificial turf its green colour. We make sure there's UV protection in your greenhouse and a high fire resistance in your building.

We are masterbatches. Welcome to ARGUS.

COMPANY PRINCIPLES

ARGUS gears its activities towards universally held ethical values and principles, in particular integrity, righteousness and human dignity.



By signing the Code of Conduct of the German General Association of the Plastics Processing Industry (GKV), ARGUS committed to comply with international standards such as the UN Charter of Human Rights, beyond the compliance of applicable laws. This Code of Conduct is the basis of our daily business.



ADDITIVE -

Adding Value to Plastics

BEFORE plastics can be used by our customers, we add tailored additives in order to provide our masterbatches with the desired properties. In customer-specific formulations. In renowned ARGUS quality.



ARGUVIN

Light stabilizers from sterically hindered amines or UV absorbers for various applications and polymer types to prevent ageing, yellowing and embrittlement and to protect characteristic performance and material properties.

ANTIOXIDANTS

ARGUTHERM

Slow down the oxidative degradation of polymers by improving thermal stability. Long-term heat and processing stabilizers (or combinations of these) protect plastics during processing and in the final application.

BOPP-MASTERBATCHES

ARGUBOPP

Different single and combination batches from e.g. additives or fillers provide BOPP films with the desired properties or open up new technological possibilities for applications with promising potentials.

UV/IR ABSORBERS

ARGUSORB

Various additives, which absorb special radiation and act as radiant barriers that use special wavelengths.

ANTISTATIC AGENTS

ARGUSTAT

Prevent and reduce the electrostatic charge of plastics.

FILLERS

ARGUFILL

Fillers define the mechanical properties to improve the material.

PROCESSING AIDS ARGUMELT

Improve the extrusion properties of the polymer melt (extrusion aid, rheology improver) and reduce the deposits on the extruder surface.

SLIP AGENTSARGUSLIP

Internal slip agents improve the rheology of the melt. External slip agents increase the smoothness and the surface gloss of the end product, reduce friction and improve the flow properties of the melt.

NUCLEATING AGENTS ARGUNUC

Are used to accelerate the crystallization of plastics for more transparency and stiffness, to reduce the cycle time and to create uniform fine foam structures.



FLAME RETARDANTS

ARGUFLAME

Halogenated or halogen-free combinations of additives reduce or prevent the flammability or combustion of plastics by intervening either physically or chemically in the combustion mechanism. They comply both with European and US-American fire standards.

CLEANING AGENTS

ARGUCLEAN

compounds for cleaning the extruder and tools when material and colour are changed as well as for machine shutdown.

ADDITIVE COMBINATIONS ARGUCOM

The combination of various groups of additives

in a batch increases profitability. Optionally, you can also combine colours with different additives. Customized formulations are possible.

ANTIFOGGING AGENTS

ARGUFOG

Antifogging agents prevent the formation of water drips on the surface of packaging and agricultural films during condensation. The surface remains largely transparent as the condensing water creates a coherent film.

ANTIBLOCKING AGENTS

ARGUBLOCK

Create a micro-rough surface on e.g. films and thus a paper-thin air layer as a separation layer when putting the films on each other. This reduces the adhesion of a material to itself or other materials and improves slippage.

HIGHTECH-MASTERBATCHES

ARGUTEC

- Anti-laminate
- Fiber-finishing agents
- Bio-degradable and compostable
- Tackifier
- Scents and flavours

- Drying agents
- Electrets
- Melt modifiers
- Hydrolysis protection
- Hydrophilics
- Hydrophobics
- Laser sensitisersMetal deactivators
- Optical brighteners

- Permanent antistatics
- Products conform to Pharmacopeia standards
- Photosynthesis selective systems
- Acid inhibitors
- Impact resistant modifiers
- Special compounds
- Foaming agent

COLOUR MASTERBATCHES ARGUCOLOR

Masterbatches for the colouring of a wide range of plastic products.



MASTERBATCHES

for your applications

OUR additive and colour masterbatches fulfill highest quality standards. They find application in different areas in everyday life and in many cases they are unique in their use.



- Agricultural films
- Packaging films
- Mono films
- Multilayer films
- Coex films
- Protection films
- Construction films
- Cast films
- Coatings
- Agricultural Medical
- Geo Filters
- Roofing sheets



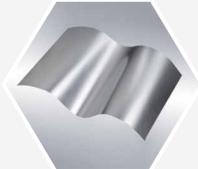


FIBERS / **NON WOVEN**

- Knitted fabrics Belts • Big Bags
- Nets
- Fillets Ropes
- Textiles
- Fabrics
- Yarns

MONO AND MULTI-**FILAMENTS / TAPES**

BOPP



- Food Packaging Films
- Non-Food
- Packaging Films • Label Films
- Lamination Films
- Tobacco Films
- Graphic Arts
- Specialty Films



- Protection pipes Blank casing
- Corrugated pipes Composed pipes
- Waste pipes
- Cross-linked pipes: PEX



PIPES

Profiles • Twin-wall sheet

BOARDS AND PROFILES

ARTIFICIAL TURF



- Backing
- Infill
- Lines / Logos



INJECTION MOULDING



- Cosmetics
- Household
- Automotive
- Electrical applications
- Technical applications



PRODUCTION

and Technical Center



IN CLOSE cooperation with our customers and suppliers, we produce colour, additive and combination masterbatches. Our products offer a much simpler and resource-optimized processing of plastics and increased process reliability to the customer.

Our experienced staff use the most modern facilities such as:

- State-of-the-art extrusion lines with various individually adjustable screw configurations
- Dosing technology of the latest kind from low to high viscosity
- FFS bagging unit
- Blown film extrusion lines
- Cast film extrusion lines
- Hot presses

- Roll mill
- Non woven fabric extrusion line
- Kneaders
- Extrusion filter test line
- Drying machines
- Different mixing systems
- Injection moulding technique
- Air separation line
- Heating furnace

Predetermined specifications of our products such as the production process, the different requirements and physiological properties of the plastics, pigments and additives are being agreed upon with our customers. Cutting-edge equipment guarantees homogeneous batches and a constantly high product quality thanks to regular checks and controls. For impressive results.





LABORATORY & COLOURIMETRY

and Application Technology

THROUGH our additive and colour masterbatches, the physical properties of plastics can be changed and upgraded. An integral part is the quality of the masterbatches!

Our laboratory is the keystone of our quality management. No product leaves us without being checked by the most modern methods and latest equipment in the laboratory.

Moreover, we are able to examine tailor-made products tested in our pilot plant. Amongst others, the following analysis techniques from the fields of chemical, physical and material analysis are available:

- Density (DIN EN ISO 1183-1)
- Bulk density (DIN EN ISO 60)
- MVR/MFR (DIN ISO 1133)
- Volatiles and residual moisture
- Thermo analyses (DSC, OIT, TGA)
- Quantitative nitrogen determination (Dumas combustion method)
- Gravimetric content analysis of inorganic substances in polymers

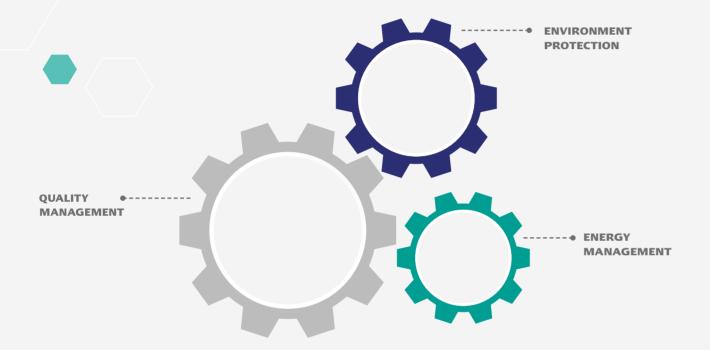
- UV/VIS/NIR spectroscopy
- FTIR spectroscopy
- COF (Coefficient Of Friction; ASTM D 1894)
- Haze (ASTM D 1003) and gloss (ASTM D 2457)
- RF.
- Artificial weathering in a QUV (UV-A and UV-B; ASTM G 154)
- Tensile testing (EN ISO 527-1 / 527-3)
- Surface resistance determination (according to DIN IEC 93)
- Laboratory heat seal tester
- Spectrometer
- Colour computers as well as colourimetry and formulation software

Upon request other standards can be realized.

ARGUS Additive Plastics GmbH only applies tested and approved raw materials from reputable suppliers. For all raw materials the latest documentation of our suppliers is available. With this documentation we are able to make sure that we are working strictly according to all regulations and laws.

THE THREE PILLARS

of our Success: Quality, Environment and Energy



YOU SURELY must have noticed that we attach great importance to quality. It all starts with our machines that we work on and with. Our highly qualified employees ensure a constantly high quality level of our products for our customers.

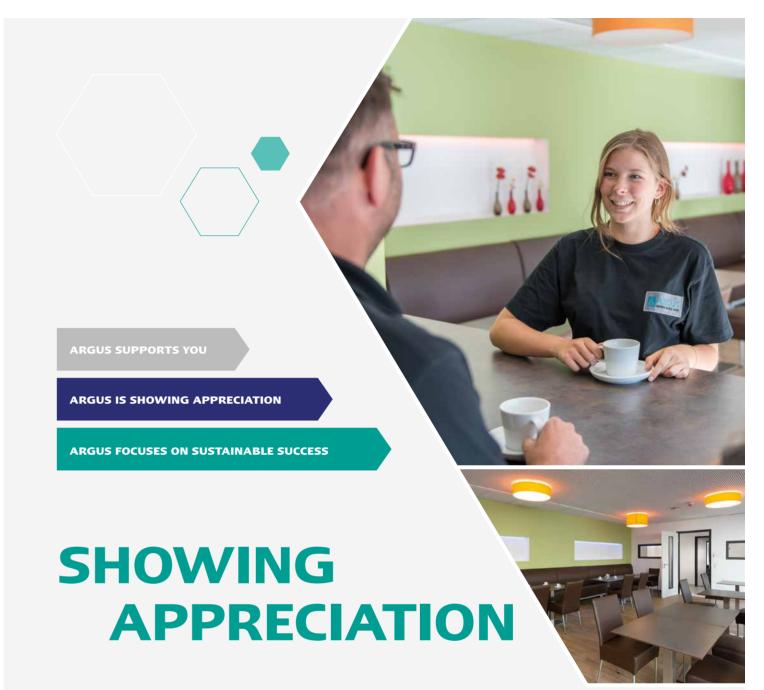
Since March 2018, the ARGUS quality management system for the development, production and distribution of plastic products is certified according to the latest ISO 9001;2015 standard.

But we're not resting on our laurels: We continuously improve our quality management by actively and responsibly involving our staff members.

In line with ISO 9001:2015, environmental protection (i.e. avoiding environmental pollution, reducing emissions and waste, saving energy and resources by using state-of-the-art technologies) is certified according to ISO 14001:2015 and anchored in our company principles, our process and work instructions, and our quality policies.

In addition, we have implemented and certified our energy management system according to DIN EN ISO 50001:2011.

That's quality that we feel committed to. That we gladly pass on to you.



ARGUS is a family business. As such, we attach great importance to a friendly and appreciative working environment. Especially when you share a large part of the day with your colleagues, it shouldn't be all about the work. Even though it's exciting. And enjoyable.

We welcome and encourage the exhange across departments. What better way to meet than on our comfortable sun deck? Cozy outdoor furniture is the ideal basis for a nice chat. Hot and cold beverages are available in the cafeteria next door. Which, by the way, is a great alternative for cool and rainy days.

With more than 160 family members in our company, we attach great importance to fair

treatment and appreciative cooperation. We know that we can only meet our high ARGUS quality standards if we work together. As an IHK certified training company, we have expanded our training opportunities in recent years. Only qualified employees with the latest know-how can guarantee long-term customer satisfaction, which is so very important to us.

You're interested in serving an apprenticeship at ARGUS? You've already pursued a successful career and would like to become part of the ARGUS family? Simply give us a call or write to us. We'll be happy to get to know you and gladly answer your questions.

SITE PLAN

• BUILDING C

Warehouse 3 and repair shop (since 2003)

BUILDING H

Production Plant 4, Laboratories and Administration (since 2013)

BUILDING I

Warehouse 5 (since 2012)

BUILDING G

Warehouse 4 (since 2008) Production plants 3 (since 2009)

(since 2016)

HEADQUARTER IN BÜREN

advantage.

ARGUS is conveniently situated in the

Eastern part of North Rhine-Westphalia. The easy access to Paderborn Airport and the motorways 33 and 44 is a great

BUILDING M Container loading



BUILDING B Warehouse 2 (since 1999)

BUILDING A Production plant 2 (since 1999)

BUILDING A Conference room

and Social room • (Reconstruction 2013) **BUILDING D** Production plant 1 (since 1994)

BUILDING E Warehouse 1 (since 1994)





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