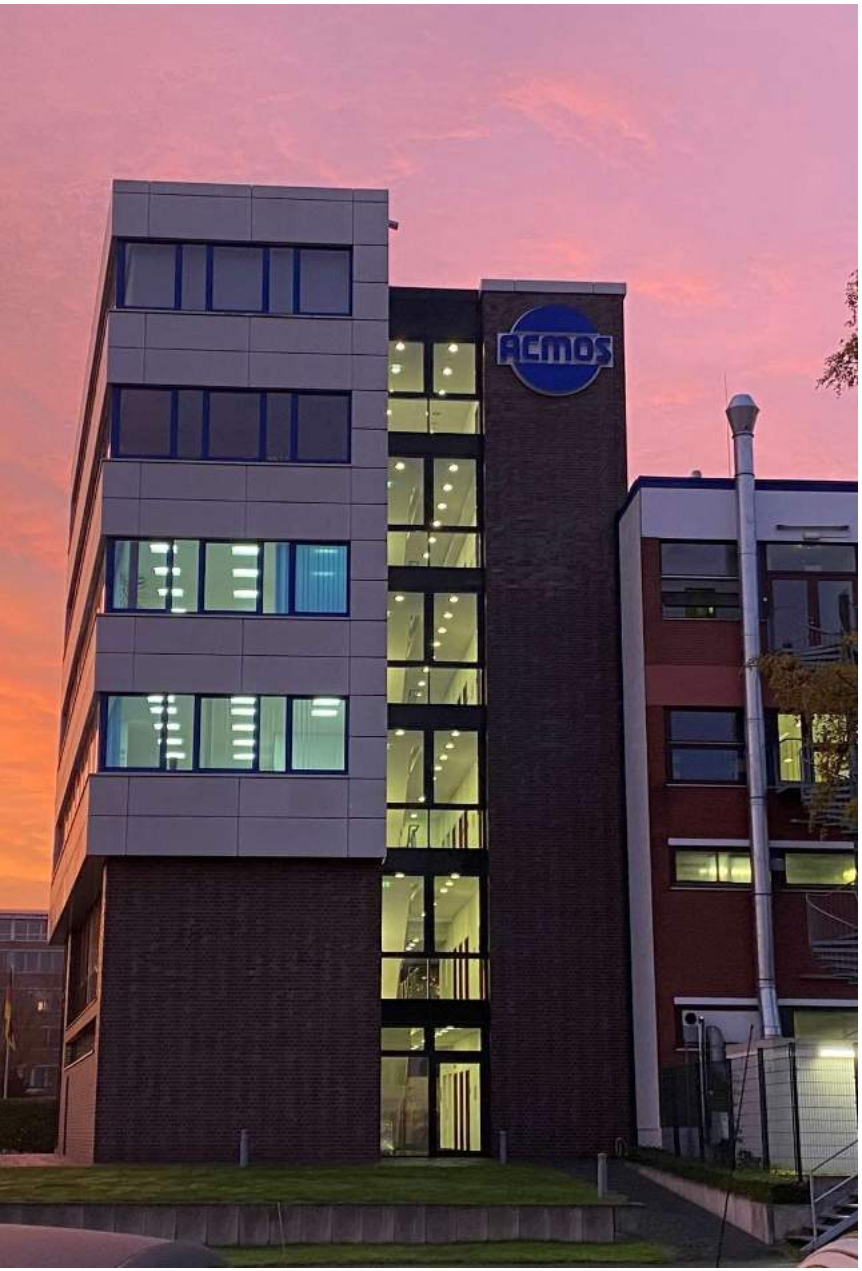
ACMOS Chemie KG

Your Global Partner for Production Excellence in the Rubber Industry

- Tyre Industry -



ACMOS today

- Family owned company in 4th generation
- 150 employees globally
  - 25% in R&D and Application Technology
- > 10,000 t/a production capacity
- ~ 55% water-based products
- ~ 70% export rate
- Worldwide distribution and service network

ACMOS stands for

Reliability

ACMOS is your reliable partner for release agents and process aids.
Our wide range of highly efficient release agents, tailored to your specific application meets your expectation.

Emission & HSE

In the development of our high-performance products, we place particular emphasis on environmental compatibility and product safety. Already today, more than 50 % of our innovative portfolio consists of water-based products.

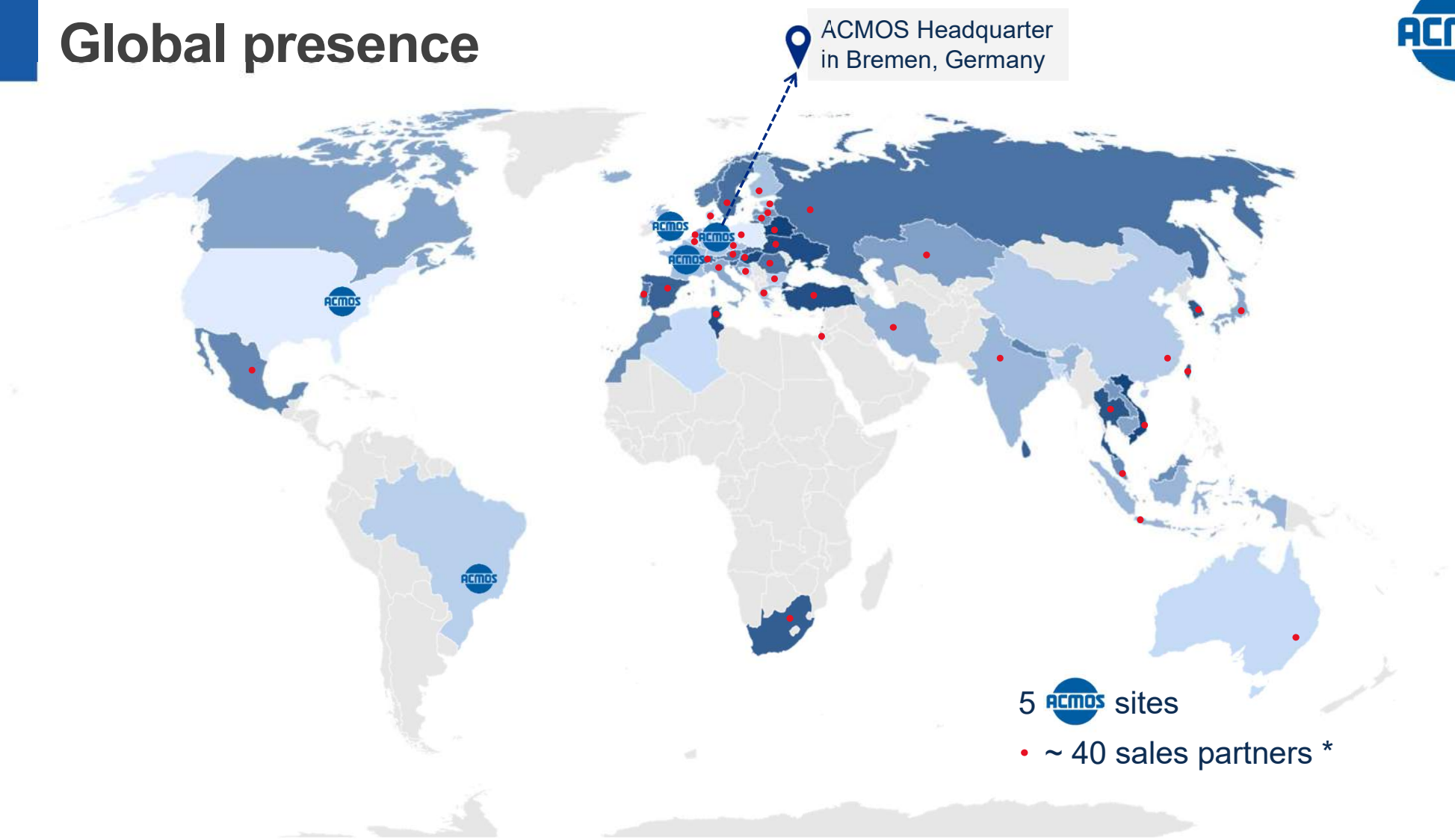
Optimization

The optimization of your processing procedures is our objective. Safer working conditions, reduction of release agent consumption, less mould cleaning, waste reduction, alliance with Health Safety Environmental aspects: our development targets are ambitious and always customer-oriented.

Expertise & Service

Our technically experienced and highly motivated employees offer worldwide service, supported by a distribution network of over 40 local partners. We share our knowledge with your operators in application trainings to achieve the best results.

Global presence

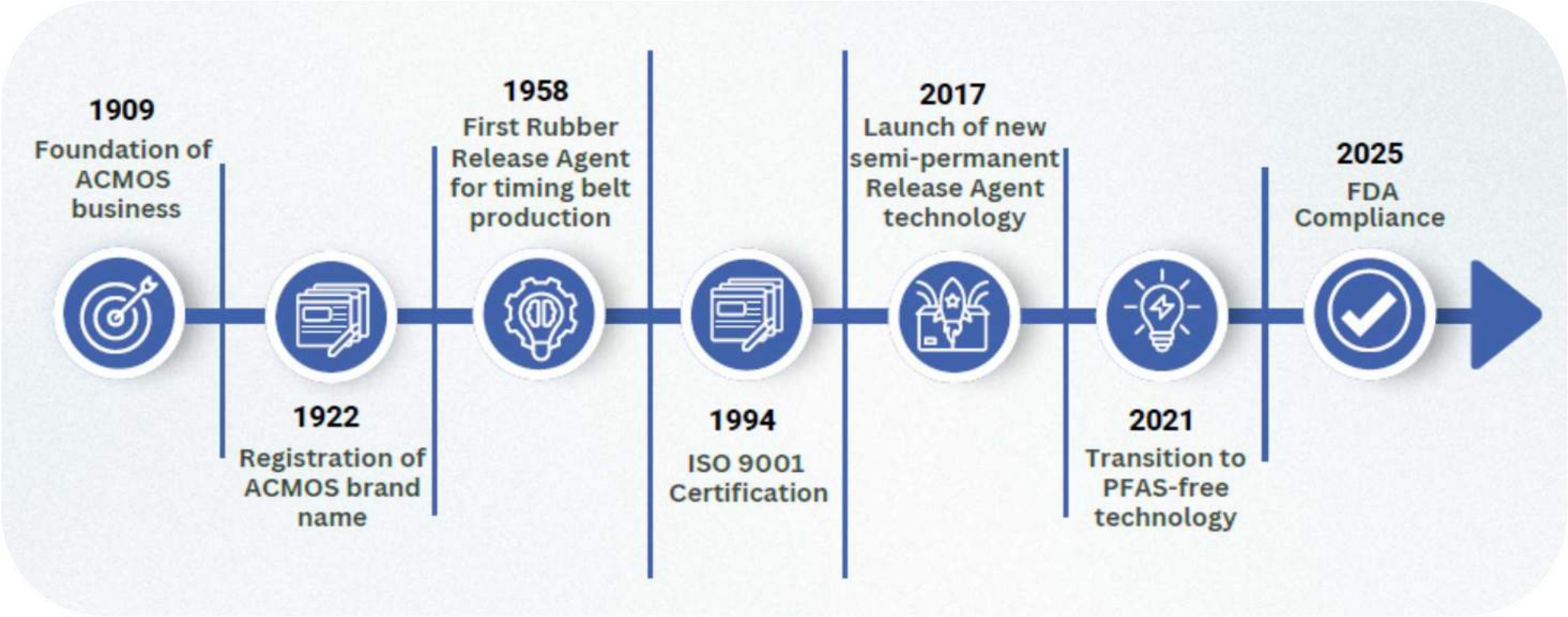


* with technical service provided in more than 40 countries

Target & Goals

- Create high performance products
- Deliver consistent quality products
- Reduced VOC, eco-friendly products
- Increase in productivity
- Reduction in customer cost
- Meet and exceed our customer’s needs
- Technical partner with our customers

Milestones in the rubber industry



ACMOS

PRODUCT OVERVIEW

FOR TYRE MANUFACTURING

In the demanding world of tyre manufacturing, precision and efficiency are the key. ACMOS response to the increasing demand for more efficient, environmentally friendly and economical solutions for tyre production:

ACMOS MOULD RELEASE AGENTS
are semi-permanent, ensuring a high number of releases with fewer touch ups needed.

ACMOS HIGH-PERFORMANCE BLADDER COATINGS
are designed to provide a release for rubber-to-rubber contact, improving the release properties, durability and thermal performance of the bladder, directly enhancing the production of high-quality tyres.

ACMOS INSIDE TYRE PAINTS
provide excellent release and lubrication between the green tyre and the curing bladder.

Challenge us and optimise your process and product quality with our ACMOS solutions!

ACMOS High-Performance Mould Release Agents

ACMOScoat 10-5180 is an advanced medium slip cavity lubricant technology. It is a **semi-permanent**, **PFAS-free**, **water-based** Release Agent that forms a hard, durable film, providing **increased slip**, which is often needed for complex tread designs and deep lug OTR and agriculture tyres.

ACMOScoat 10-5180 improves moulding efficiency by creating an **extremely durable, non-transferring** film. This durable film allows multiple releases before reapplication or touch-up needed and reduces cleaning and build-up, thereby minimasing downtime or open clamp time.

Additional benefits of ACMOScoat 10-5180 include improved **rubber flow** and **finished tyre appearance** by eliminating mould release drips on the sidewalls.

BENEFITS AT A GLANCE

- For wide range of elastomers
- PFAS and VOC-free
- Semi-permanent
- Enhanced Release Properties
- Improved Efficiency
- Ensures rubber flow and finished parts appearance

Mould release **touch-ups** are typically done once per shift, significantly reducing open clamp time to maximise production.

ACMOS coat 10-5180 is excellent for most sulfur cured rubber tyres.

ACMOScoat 10-5180

CASE STUDY

CHALLENGE

A global manufacturer of passenger car tyres was searching for an alternative release agent solution to optimise their process efficiency. Their current semi-permanent release agent caused a higher scrap rate than acceptable.

ACHIEVEMENT

Our team guided the entire process from product selection to final implementation of the ACMOS solution, working closely with manufacturer´s expert team. After analysing the production process and the specific needs, our team recommended using ACMOScoat 10-5180 as a semi-permanent release agent.

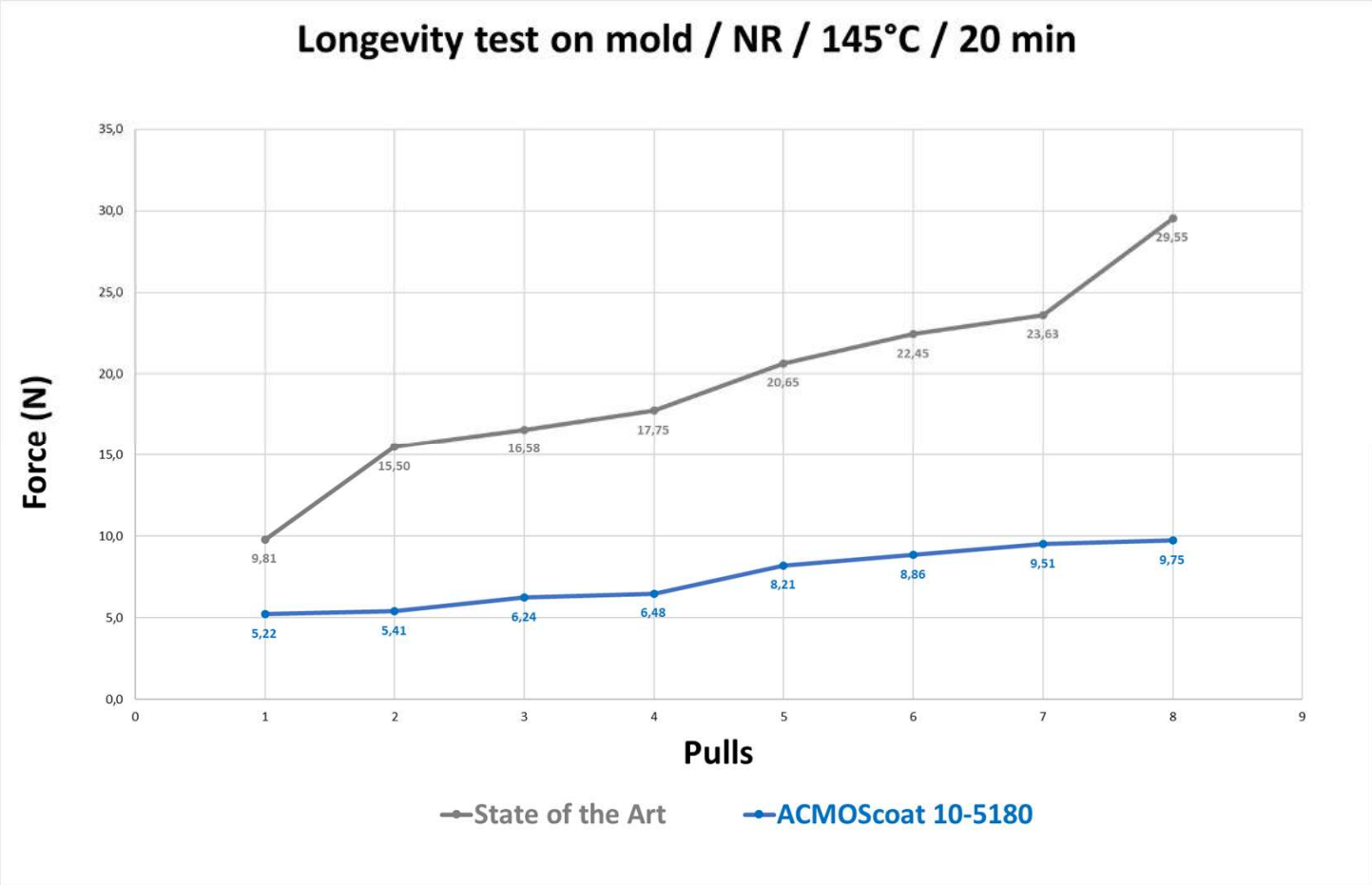
Through the implementation **ACMOScoat 10-5180**, combined with close cooperation and training, our customer achieved numerous **process improvements**:

- **Scrap Rate Decreased** by 10% as ACMOScoat 10-5180 improved release and flow
- Cost Reduction by 33% due to a decrease in **Touch ups** from 3 to 2 times per shift
- 15% Reduction in **Material Consumption** per tyre produced

Beyond the economic aspects, ACMOScoat 10-5180 also enhanced the sustainability of the production process. By implementing ACMOScoat 10-5180, our customer gained not just a tool, but a strategic advantage that ensures their long-term success.

Let our experts advise you and see the performance of our hybrid technology for yourself. We will be happy to advise you on product selection and implementation.

Longevity test ACMOScoat against state of the art products



<u>Less force</u> to release

with ACMOScoat 10-5180 than state of the art technology resulted in

<u>a higher number of demouldings</u>

without touch up

ACMOS High-Performance Bladder Coatings

ACMOS high-performance Bladder Coatings play a critical role in ensuring optimal results during the vulcanisation process, enhancing both: **Productivity and Product Quality.**

Our advanced bladder coatings ensure **smooth and consistent tyre release** from the bladder, **reducing the risk of defects** and **downtime**. By minimising wear and tear, ACMOS Bladder Coatings **extend the service life** of curing bladders, leading to significant cost savings.

Faster tyre release and reduced sticking contribute to **shorter cycle times**, and so optimising the overall production process.

BENEFITS AT A GLANCE

- For wide range of elastomers
- Dilutable, easy to apply
- VOC free
- Semi-permanent
- Enhanced Release Properties
- Increased Bladder Lifespan
- Improved Efficiency

ACMOS Bladder Coatings are applied directly to bladders, bags and sleeves used in belt and tire moulding applications.

Specially designed for wipe-on application at room or typical operating temperatures.

They provide **excellent part appearance**, release power and minimal transfer.

Post moulding printability and **adhesion** can be accomplished **without** the need for additional **cleaning**.

ACMOScoat 10-1128-series

CASE STUDY

CHALLENGE

A global manufacturer of passenger car tyres was searching for an alternative bladder coating to optimise their process efficiency. Their current product caused cracks.

ACHIEVEMENT

Our experts from technical support and development department guided the entire process from product selection to final implementation of the ACMOS solution, working closely with manufacturer´s expert team. After analysing the production process and the specific needs, our team developed a new bladder coat for this specific customer.

Through the implementation **ACMOScoat 10-1128- series**, combined with close cooperation and training, our customer achieved numerous **process Improvements**:

- **Scrap Rate caused by cracks decreased** by 33% as ACMOScoat 10-1128-series
- Less material needed which resulted in annual cost reduction by 7%

Beyond the economic aspects, our ACMOScoat 10-1128-series also enhanced the sustainability of the production process.

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