



THE POWER OF NANO

May 2025



DEVELOPMENT, APPLICATION & PRODUCTION

nanoSaar AG

- Strategy & Corporate Development
- Customer / Partner Relations
- Finance & Legal / IP

nanoSaar CASE GmbH

- Application
- CASE Analytics
- Marketing & Distribution

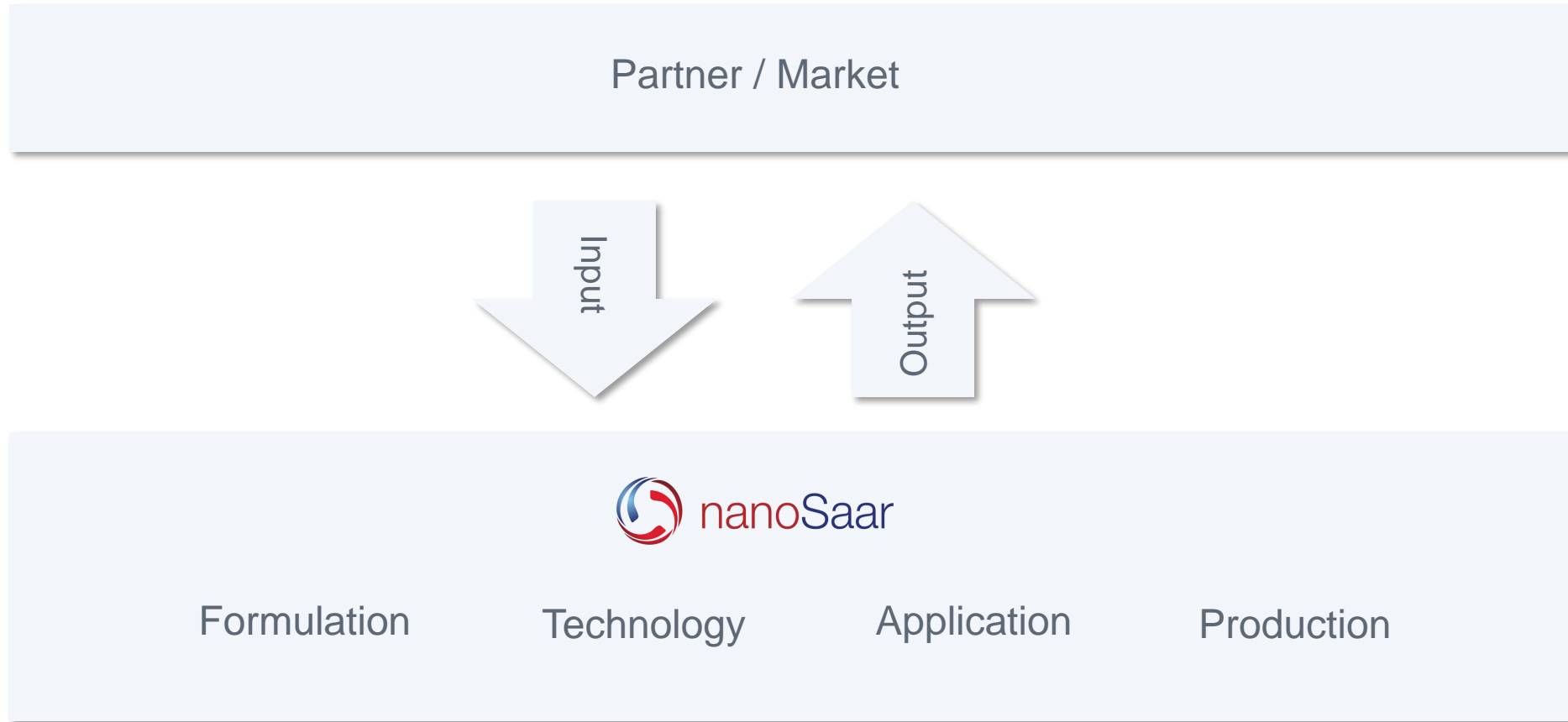
nanoSaar Lab GmbH

- Research & Development
- Products and Processes

nanoSaar Production GmbH

- Technology Upscaling
- Production

WE CREATE SOLUTIONS FOR OUR PARTNERS



NEW NANO-FORMULATIONS

Precipitation Seeds

- TiO_2
- $\text{Al}(\text{OH})_3$
- ZrO_2

Corrosion Protection

- $\text{Zn}_3(\text{PO}_4)_2$
- $\text{Ca}_3(\text{PO}_4)_3$
- $\text{Ba}_3(\text{PO}_4)_3$

Paints & Coatings

- BaSO_4
- CaCO_3
- Wax
- SiO_2

Biocides

- $\text{Zn}(\text{OH})_2(\text{CO}_3)$
- Tebuconazole
- ZnMoO_4
- Ag NP

Concrete

- CSH
- $\text{Ca}(\text{OH})_2$
- BaSO_4
- Wax

Fillers

- BaSO_4
- $\text{Co}(\text{OH})_2$
- ZrO_2
- CaCO_3

Flame Retardants

- $\text{Mg}(\text{OH})_2$
- THPC
- $\text{Al}(\text{OH})_3$

Crop Science

- Metamitron
- DFF / IFT
- Fluopyram

Medical Applications

- BaSO_4
- $\text{Zn}_3(\text{PO}_4)_2$

Diagnostics/Magnetic

- FeO_x SPION
- FeO_x
- SiO_2

Catalyzers

- CaCO_3

Miscellaneous

- SiO_2
- Polymerisation

FOCUS ON CONTINUOUS FLOW TECHNOLOGIES

MicroJetReactor MJR®



LAB DEVICES FOR PRODUCT DEVELOPMENT



- Output of up to 30 liters per hour
- Versatile unit: used for precipitation, emulsification and encapsulation tasks in R&D phase
- Micro gear pumps with high-precision flow rates



- Maximum output of 80 liters per hour
- High-pressure applications of up to 210 bar
- Homogeneous thermal control up to 250°C
- Thermally supported chemical processes, melting processes, matrix encapsulations, and emulsifications

FROM SCALE-UP TO LARGE-SCALE PRODUCTION

Scale-Up Device



- Highly flexible upscaling device
- Siemens-based control software ensures full compatibility with existing production environment
- Highly adjustable for a wide range of industrial, cosmetic and nutritional applications

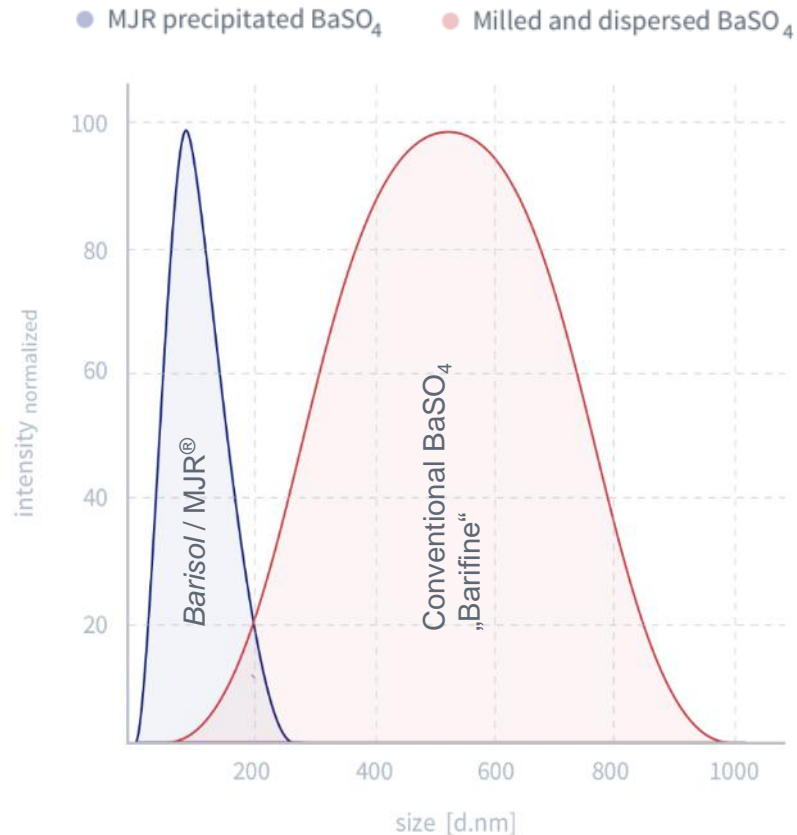
Production Machine



- Maximum throughput of 600 liters per hour (easily scalable by parallelization)
- Siemens-based control software ensures full compatibility with existing production environment
- Highly adjustable for a wide range of industrial, cosmetic and nutritional applications

DISRUPTIVE ADDITIVE FOR PAINTS & COATINGS

Normalized particle size distribution



Business Case Barisol BR 100

- Use of solid particles as spacers
- Application versatility
- Overall cost reduction up to 50 %
- Reduction of Microplastics
- IP granted

ADVANCED ADDITIVES FOR PAINTS & COATINGS

nanoSaar CASE BR 100: Advanced Additive for Water-Based Colorants



Boosts performance in professional paint manufacturing with:

- ✓ **Enhanced Stability** across pH range
- ✓ **No Viscosity Impact** – smooth flow, anti-settling
- ✓ **Lower Dispersant Need** – cost-efficient & durable
- ✓ **Preserved Gloss & Color** in exterior use
- ✓ **Deep, Vibrant Blacks** with bluish undertone
- ✓ **Easy to Integrate** – low viscosity formulation

nanoSaar CASE SL 100: Advanced Additive for Solvent-Based Clear Coatings



Boosts performance in professional coating systems with:

- ✓ **Improved Abrasion Resistance** – long-lasting protection
- ✓ **Excellent Compatibility** – easy post-addition in solvent systems
- ✓ **Preserved Clarity & Gloss** – no optical compromise
- ✓ **Cost-Effective** – premium performance at lower cost
- ✓ **Ideal for Automotive & Architectural Use** – durable showroom finish

TEAM OF EXPERTS IN NANOTEC BUSINESS



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