

THE BEST TOOLS FOR A DAZZLING PERFORMANCE



*Agitator technology for
the cosmetics industry*



PRG



EXONDER®
A World of High Quality Products

EXCELLENT QUALITY, FIRST-CLASS ADVICE: **THE PERFECT MIX FOR YOUR SUCCESS**

More than 40 years of experience, innovative technologies and excellent service: this mix has turned PRG into one of the world's leading suppliers of agitator technology, agitators and agitator systems.

With the highest precision and state-of-the-art production methods, we develop and produce agitating machines and systems for you. You can not only rely on the quality of our products, but also on our extensive consulting expertise: in-depth knowledge of the industry and a sound understanding of processes ensure that we always provide you with the optimum technical solution for your requirements – whether you are a plant planner for large industrial applications or a medium-sized company.

We carry out a test run of all our agitators at the factory to check the functionality and technical details. This allows you to commission our agitator technology on site very promptly. The agitators we use impress with their durability and maximum system availability. In addition, our service technicians are available to you flexibly for service assignments. This ensures short response times for maintenance and servicing issues.

Quality and precision down to the smallest detail – this is what customers worldwide from a wide range of industries rely on.



FOOD



NEW FOOD



COSMETICS



BIOGAS



PHARMA



BIOTECH



CHEMICALS

HIGHEST PRECISION: **FROM THE DEVELOPMENT** **TO THE AGITATOR**



Highest level of consulting expertise



Wide range of products...



... for the best mixing results

AGITATORS FROM PRG: AS INDIVIDUAL AS YOUR PRODUCTS

To ensure you always achieve the best stirring result for your products, we offer you a wide range of highly developed agitator types. Special designs are also possible.

All of the agitators we offer are freely configurable and available for all common installation situations. This enables seamless integration into your processes. You can trust us to always provide you with the best technical solution for your production processes.

Do you have an unusual product or special requirements? No problem. Our internal development department will create special designs for you.

As diverse as our agitators are: they are all characterised by excellent material quality and maximum cost-effectiveness. Our exceptional production depth enables us to manufacture the majority of the required agitator components independently or process them in-house. This enables us to implement your wishes with the greatest possible flexibility.

At the same time, we guarantee precision and quality down to the smallest detail. It is a matter of course for us that, when manufacturing our products, we always comply with the applicable legal requirements and your in-house factory standards.

**So whatever you have
in mind: we will build
the right agitator
for you!**



A PERMANENT TREND: HIGHEST POSSIBLE PRODUCT QUALITY

Whether it is lotions, hair care products, toothpaste, creams or ointments: PRG offers its customers tailor-made agitator technology for a variety of cosmetic products.

We design and build our agitators in close cooperation with our customer and, working from the specified parameters, develop tailor-made solutions for the most demanding processes and complex product characteristics, which may, for example, arise due to altering viscosities during the agitation process.

Through innovative ideas and the further ongoing development of our products, we also contribute to making production processes even more effective and economical. For example, our coaxial agitators are equipped with special anchors which enable containers to be emptied almost completely. Alongside an optimum product yield and maximum filling volumes, an additional advantage of this technology is the reduced costs required for container cleaning.

All of these factors have made PRG agitator technology the first choice of renowned customers worldwide. We look forward to impressing you too with our services!

Examples of end products:

Ointments

Skin care products

Sun cream

Shampoo

Shaving foam

Tooth paste

+ many other products



EXCELLENT FROM PREPARATION TO THE FINAL MIX

Emulsions are the basis for the production of numerous cosmetic products. PRG homogenizers with a fastrotating stator-rotor system (up to 3,000 rpm) are ideally suited for use in mixing systems, enabling outstanding emulsifying results and optimum system integration.

Sterile designs and the low gap implementation in our agitators make for an aseptic design that meets the highest standards and allows for uncomplicated CIP and SIP cleaning. We follow the recognised standards of the European Hygienic Engineering & Design Group (EHEDG) for structural and procedural design.

And naturally, we fulfil the requirements of the FDA and EU Regulation 1935/2004. Our highly developed jet mixer with its quick-changing mechanism that is unique in the sector also fulfils these criteria. With top mounting, it lets the seal be changed quickly and easily, making our jet mixer particularly maintenance-friendly.

Benefit from the numerous advantages of the tailor-made PRG agitators in the manufacturing of cosmetics. If you would like more detailed information, we would be happy to talk to you in person!

Examples of end products:

Deodorant

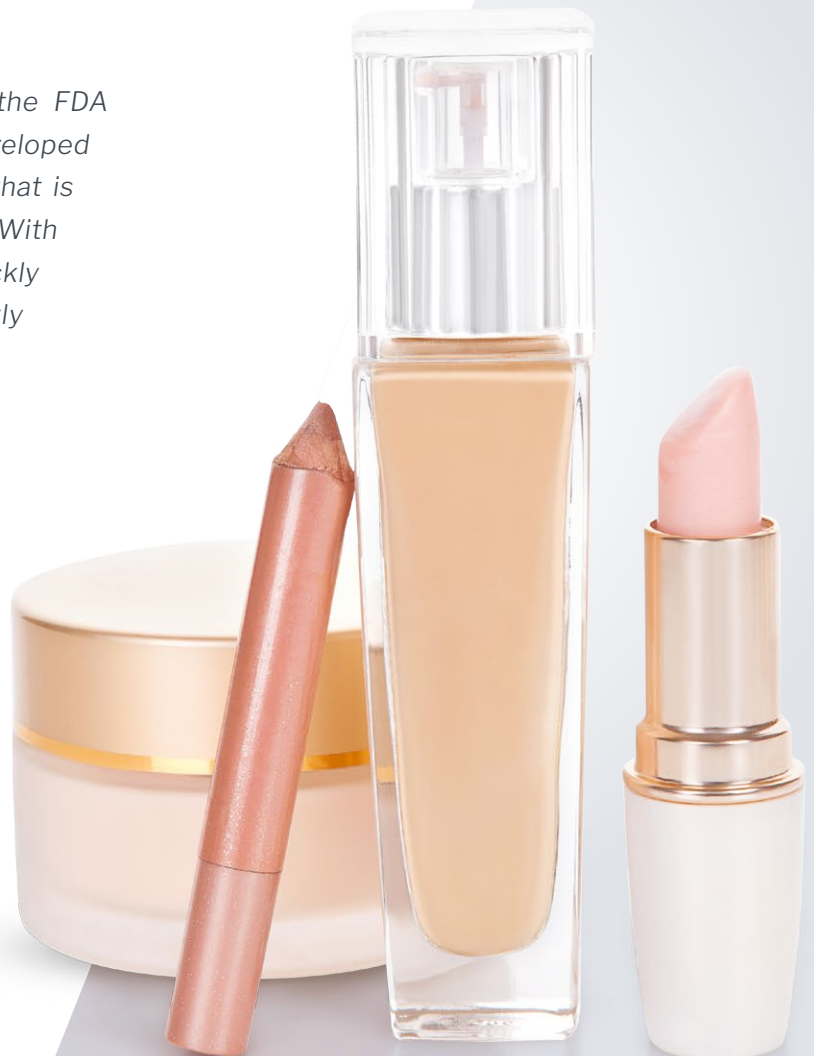
Make-up

Lipstick

Nail varnish

Collagen

+ many other products



RELIABLE SAFETY THANKS TO A VARIETY OF INSPECTIONS

Maximum hygiene standards, consistent product quality and reliable reproducibility: the demands placed on mixing systems for the production of cosmetics are high.

We therefore document our own production quality down to the last detail and can provide proof of product quality at the customer's request. In addition to material certificates, this also includes certificates for the work we have carried out. From concentricity and axial run-out measurement to surface testing and X-ray inspection: we provide you with the required certificates.

In this way, we offer you the proven quality and safety that our customers in the cosmetics industry have been relying on for many years.

Certificates / conformities:

Inspection certificate acc. to DIN EN 10204 (3.1)

ISO 10993

EG 1935/2004

FDA

ADI-free

USP Class VI (USP Class 6)

WPS (Welding Procedure Specification)

PMI testing

Penetration testing

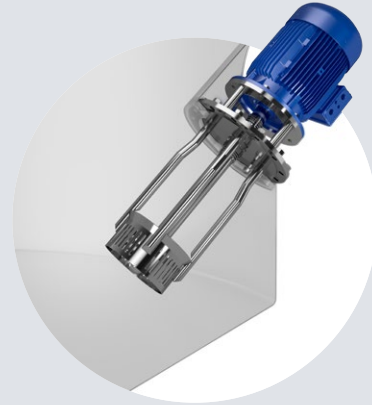


AGITATORS FOR THE COSMETICS INDUSTRY



Co-axial agitator

- ✓ Two drive units (counter-rotating) fulfil complex mixing tasks quickly, effectively and in a space-saving manner
- ✓ Optimum heat transfer and good mixing at the same time using an agitator
- ✓ For sterile processes



Jet mixer

Top / bottom / side installation

- ✓ Dispersing powders in liquids
- ✓ High mixing effect with low use of material
- ✓ The optimum installation position (side or bottom) enables shorter process times



Emulsion reactor / Homogenizer

- ✓ Emulsifying and homogenising liquids
- ✓ High shearing effect with low material usage
- ✓ Installation in the base of the tank enables small batch sizes and, therefore, low dead volumes
- ✓ Various combinations of homogenizers and axially conveying agitator impellers
- ✓ Hygienic design due to sterile double-acting mechanical seal
- ✓ Specially designed for the applications



Preparation and storage tank

- ✓ Optimum agitator selection for the different process requirements in preparation and storage tanks
- ✓ Combinations of large-area gentle and near the ground agitator impellers and shear-intensive agitator moulds

TAKE YOUR AGITATOR TECHNOLOGY TO A NEW LEVEL! **WE LOOK FORWARD TO RECEIVING YOUR INQUIRY**



Quality products made in Germany & India



PRG operates a certified quality management procedure
according to DIN EN ISO 9001/2015 and also holds
Ex certification according to Directive 2014/34/EU

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Management
System
ISO 9001:2015

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