
AGITATOR TECHNOLOGY IN PERFECTION



PRG
RÜHRTECHNIK IN PERFEKTION



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

With more than 35 years of experience in agitation technology and process engineering, innovative technologies and first-class advice, PRG mbH is one of the world's leading suppliers of agitators and agitation plants.

With the highest level of precision and state-of-the-art manufacturing methods, we develop and produce agitators and mixing systems that perfectly fit for your processes. You can rely not just on the quality of our products but also on our well-established expertise as consultants: Exceptional knowledge of the industry and a sound understanding of its processes ensure that we will always offer you the best possible technical solution to meet your needs. This is something that

our customers from a wide range of industries can always count on, whether they come from the cosmetics, chemicals, biotechnology, food, biogas or pharmaceuticals sectors, or are system planners for large-scale industrial applications or medium-sized companies.

Economical, innovative, reliable: Take your agitation technology to a new level - we look forward to your enquiry!

>120
EMPLOYEES

4,800 m²
PRODUCTION
AREA

>50%
EXPORT QUOTA



High level consulting from the very beginning of a project



Every Detail in high end finishing



Innovative technology for highest requirements



PRG company history from 1981 to the present

1981
Founded by
Hubert Dierkes

1990
New building goes up
at the Warburg site

2001
Frank Dierkes
appointed
Managing Director

2004
PRG joins the
BANG training
network

2005
Expansion:
Production area

2007
Further construction:
Warehouse customi-
sation and the production
of steel parts, offices and
training rooms

2010
PRG India
founded

2012
Further construction:
Offices, social areas, tech-
nical centre, final assembly
for pharma/biotech, small
parts and pallet storage

2016
Expansion:
Surface
finishing

2017
Further construction:
self-contained ware-
house and logistics



AGITATORS FROM PRG: QUALITY AND PRECISION FOR THE HIGHEST DEMANDS

Top hygiene standards, consistent product quality and reliable reproducibility: Agitator systems for the manufacturing of cosmetics must meet high-level specifications. PRG offers a wide range of highly-developed and sophisticated agitators that can be perfectly adapted to the respective formula and raw materials used.

All the agitators we offer are freely configurable and are available for all commonly used assembly situations, which ensures seamless integration into your processes. We can also offer custom constructions designed for you by our own development department. Even though our agitators are incredibly diverse: They all feature excellent materials and production quality, meet the highest specifications for aseptic design and of course comply with internationally recognised industry standards such as the FDA and GMP.



Tested welding technology of the highest quality

Another one of our strengths is that we document the manufacturing quality of our products in detail and can provide evidence of this with a variety of certificates and works attestations. From welding seam documentation to dye penetration testing and ultrasonic testing: We carry out numerous intensive tests to prove the quality of our products in detail and at the same time guarantee maximum transparency. Proven safety which has been trusted by our cosmetics industry customers for many years.

Some references and certificates for our products:

- Stainless steel inspection certificate according to DIN EN 10204 (3.1)
- FDA
- EG 1935/2004
- Biocompatibility according to ISO 10993 and USP Class VI (USP Class 6)
- ADI Free
- WPS (Welding Procedure Specification)
- Penetration test
- PMI testing

In addition, the surface quality and the concentricity properties of the agitator shaft are carefully checked and documented.

Certified quality down to the last detail:

- Quality management system according to ISO 9001:2015
- Quality assurance system for ATEX according to EU Directive 2014/34 EU
- Specialist welding company according to AD2000 HPO, DIN EN ISO 3834-2 and PED 2014/68/EU

SOPHISTICATED AGITATOR TECHNOLOGY FOR THE MOST DEMANDING PRODUCTS: AGITATORS FOR THE MANUFACTURING OF COSMETICS

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.

For example, our coaxial agitators can be used in a particularly flexible manner and are available in versions that have been specially designed for sterile processes, like all agitators from PRG. They are ideally suited for mixing highly-viscous media as well as for many other agitation tasks in cosmetics manufacturing. This also includes heating and cooling that is coordinated exactly with the process parameters essential for an optimal heat transfer.

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

Through innovative ideas and 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 that 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!

MIXING PLANT FOR COSMETIC PRODUCTS

Product data: 2,500 l anchor type agitator with pitched blade impellers and adjustable baffles

Motor power: 18.5 kW

Output speed: 35 rpm

ATEX classification: II 1/2 GD cb II C T3

Mixing tasks: Optimised heat and mass transfer in the production of cremes and lotion

CO-AXIAL-AGITATOR

Product data: 15,000 l reactor for high viscous products

Motor power: 18.5 kW / 45.0 kW

Output speed: 16 rpm / 70 rpm

ATEX classification: II 2 GD cb II BT4

Mixing tasks: Homogeneous mixing and optimised heat transfer



For end products of the highest quality



EXCELLENT MIXING PERFORMANCE: HOMOGENISERS, JET MIXERS AND MORE

Emulsions are the basis for the production of numerous cosmetic products. PRG homogenisers with a fast-rotating stator-rotor system (up to 3000 rev/min) are ideally suited for use in mixing systems and enable 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 enables 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. In top mounting, it enables the sealing to be changed easily and quickly, and this makes our jet mixer particularly easy to maintain.

An exceptionally high range of vertical production also enables us to manufacture or process a large proportion of the required agitator components ourselves. This enables us to meet your requirements with the greatest possible flexibility and, at the same time, guarantee precision and quality down to the smallest detail. The space-saving and energy-efficient drive technology of our agitators in asynchronous or servo design is another factor that makes our products the first choice when it comes to efficiency, cost-effectiveness and maximum reliability.

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



High shear forces for stable emulsions



MIXING & STORAGE TANK FOR COSMETIC PRODUCTS

Product data: Combination of jet mixer and anchor type agitator for 3,000 l to 25,000 l shampoo

Motor power: 30.0 kW / 45.0 kW

Output speed: 50 rpm / 1,000 rpm

ATEX classification: II 1/2 G cb II B T3

Feature: Jet mixer with product inlet tube and dismantling device for the mechanical seal

REACTOR FOR EMULSIFYING PROCESSES

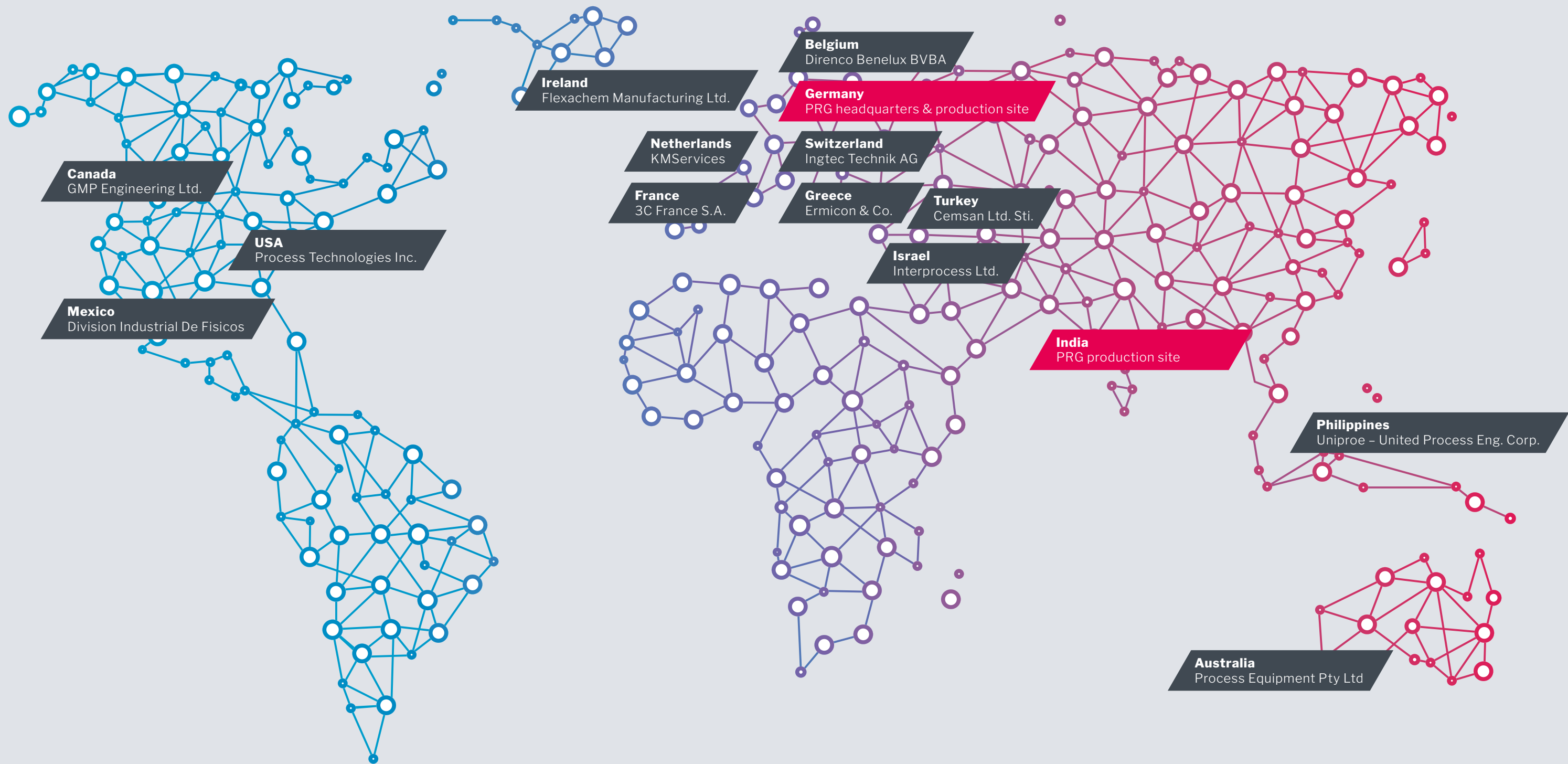
Product data: Combination of dissolver type agitator and homogeniser for 30 l to 350 l emulsion

Motor power: 5.5 kW / 11.0 kW

Output speed: 1,500 rpm / 3,000 rpm

ATEX classification: II 2 G cb II B T3

Feature: Compact design and sterile execution of the mechanical seal



WE'RE AT YOUR SERVICE THROUGHOUT THE WORLD

We take pride in offering you the best service for your PRG agitators and agitation plants at all times. This starts with advice and planning – and continues way beyond the manufacture of our products.

We're there for you around the clock – and around the world – and are on hand at all times with all the advice and practical support you need. Regardless of whether your agitation equipment needs maintenance, you want to further optimise your processes

or you need quick support and the right spare part in the event of a repair: With 15 sites or representatives on four continents, we're always close by and at your disposal at all times. We look forward to a cooperative partnership with you!



PRG Präzisions-Rührer-Gesellschaft mbH
Anton-Böhlen-Strasse 13
34414 Warburg
Germany

Phone +49 (0)5641-9006-0
Fax +49 (0)5641-9006-99
Email info@prg-gmbh.de



PRG Agitators Pvt. Ltd.
66 Alindra, Savli GIDC
Manjusar, Vadodara – 391 775
Gujarat, India

Phone +91 972 633 68 24
Email info@prgagitators.com


AGITATOR TECHNOLOGY IN PERFECTION

Agitator technology for the cosmetics industry

With more than 35 years of experience, innovative technologies and first-class consulting expertise, PRG GmbH is one of the world's leading suppliers of agitators and agitation plants. Our products are used around the globe in a wide variety of industries – not only in the cosmetics industry, but also in the sectors of food, chemicals, biotechnology, pharmaceuticals and biogas.

- Made-to-measure agitator technology
- Consulting expertise at the highest levels
- A broad product range
- Quality and precision down to the last detail

 **Quality products made in Germany**

 **The PRG GmbH operates a certified quality management according to DIN EN ISO 9001/2015 and also an Ex-certificate according to guideline 2014/34/EU.**

PRG Präzisions-Rührer Gesellschaft mbH
Anton-Böhlen-Straße 13 • 34414 Warburg

Phone +49 (0)5641 9006-0 • **Fax** +49 (0)5641 9006-99

Email info@prg-gmbh.de • www.prg-gmbh.de

