

# Systematic water-based cleaning



**Optimise your cleaning process** for maximum **efficiency**

Leading quality:

**Rivolta**  **CASSIDA**

 **bremer & leguil**



## About Bremer & Leguil

Bremer & Leguil has been known for 40 years because of its special lubricants, cleaners anticorrosives and maintenance products. With our wide range of products, we meet practically every challenge arising from technical jobs in industry, power supply and a whole series of other areas.

We point the way with state-of-the-art innovations and service. Our team of technical specialists is always there for you and supports you on site. But that's not all. With our products, we are iconic for

safety in maintenance and production. We only use select materials for driving down environmental pollution and reducing hazards to the user's health.

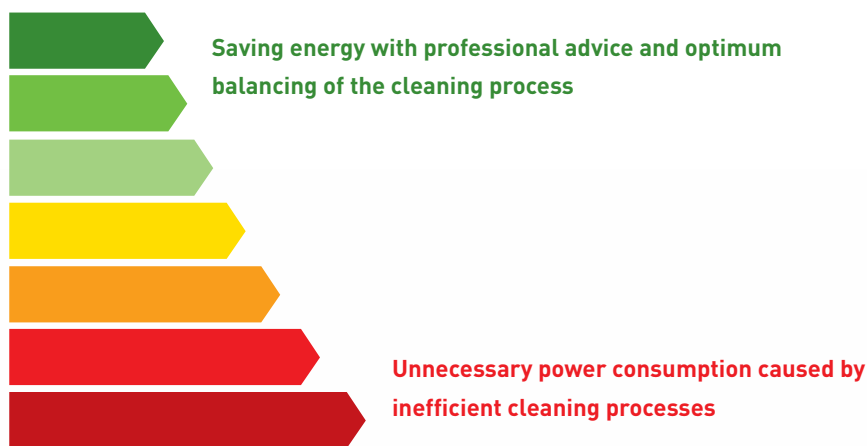
# Energy efficiency and process safety

Our high-tech age is driven by unbridled progress. That means that the development of new process technologies and continuous rise in quality requirements demand constant production process streamlining.

One important building block of trouble-free production routines is surface cleaning with cleaning media based on water – the most frequently used cleaning process with intermediate and final cleaning of parts. The selection of the right product is defined by the basic material to be cleaned, the type of soiling, the degree of cleanliness called for and the constellation in the production process. Finally, it is absolutely necessary to define the duration and temperature of cleaning, compatibility with downstream processes and regular monitoring the concentration of the cleaning solution.

These factors with an impact on the cleaning process should always be taken into account to ensure constant and optimum cleaning. This is the

only way to guarantee process safety. However, thousands of tonnes of cleansers are wasted every year because the above parameters are not included in calculations. For instance, the performance of unsuited cleansers is compensated by overdosing or extending cleaning times and/or excessive temperatures. In turn, this increased consumption of power and products has a negative impact of process expenditures. This is why the efficient usage of existing resources should be assigned great priority in times of limited raw materials and exploding power costs.





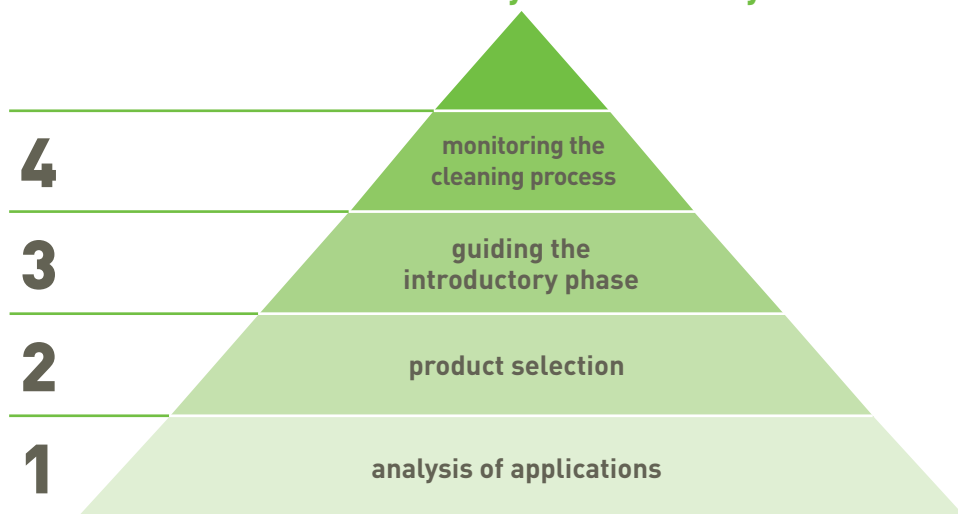


## Analysis, consultation and process streamlining

It is absolutely necessary to analyse the cleaning process to avoid production breakdowns from reworking, material attack or damage from corrosion. The more demanding your range of products or the higher the production volume, the more detailed a process analysis should be.

Take the four steps below to ensure an optimum cleaning process that satisfies your requirements.

### Process safety and efficiency



### 1. Analysis of applications

As a customer, you can rely on the expert advice of B&L's local field service. We come to you to make a detailed analysis of your application where we record the foremost technical and economic criteria. Then, our applications engineers come up with a custom-made strategy that is exactly tuned to your needs.



## 2. Product selection

The technical and economic specifications of the applications analysis primarily dictate the selection of a product. Furthermore, all of the aspects of occupational safety and health protection should be complied with to recommend a product with the least hazard features. This is where efficient cleaners are created in B&L's research & development department that are based on the selected ingredients, achieve their full efficiency even at low temperatures and contain temporary corrosion protection.



Water-based cleaners	Spray water machines	High-pressure cleaning equipment	Ultrasound systems	Floor cleaning machines	Immersion process and manual surface cleaning	Sensitive materials such as aluminium	Decalcifying / Derusting	Removing paint and resin	NSF
<b>B.N.L. 848</b> Low-foaming neutral cleaner	✓	✓	✓	✓	✓	✓			
<b>B.R.X. 501</b> Industry multi-purpose cleaner		✓	✓	✓	✓				A4
<b>B.R.X. 585</b> Industry-high performance cleaner			✓	✓	✓	✓			A1
<b>B.R.X. 611</b> Water-based degreasing concentrate	✓	✓	✓	✓	✓				A1
<b>B.R.X. 624</b> Water-based high-performance cleaner	✓	✓	✓	✓	✓				
<b>B.R.X. 637</b> Water-based high-performance cleaner	✓	✓	✓	✓	✓				
<b>B.R.X. 648</b> Water-based high-performance cleaner					✓		✓		
<b>B.R.X. 659</b> Industrial power cleaner	✓		✓	✓	✓	✓			
<b>B.S.E.</b> Safety rust remover			✓		✓		✓		
<b>B.W.R. 210</b> Water-based cleaning concentrate			✓	✓	✓				A1
<b>B.W.R. 210 phosphatfrei</b> Low-foaming degreasing concentrate	✓	✓	✓	✓	✓				



recommended



can be used to a limited extent

**NSF:** Products permitted for use in food, feed and the pharmaceutical industry

### Processing equipment

As a supplement to our cleaners, we offer you a comprehensive scope of processing equipment such as ultrasound machines and manual spraying systems. If you need cleaning systems, we will come up with a strategy of action with our business partner to be able to recommend the optimum system to you.





### 3. Guiding the introductory phase

There are not only the cleansers, there are other factors having an impact such as the duration of cleaning, the concentration of the cleaning solution and temperature that have a substantial effect on the efficiency of a cleaning process.

We will support you on site when our products are being rolled out to streamline the energy and chemical requirements depending upon the specific application and achieve the maximum technical and economic benefit.



e. g. **Rivolta** B.R.X. 611

Picture: Georg Render GmbH, model W 175 H

The washing machine shown is a simplified outline of the main impacts of a cleaning process. It is necessary to have an individual analysis to be able to appropriately ascertain all constraints.



## 4. Monitoring the cleaning process

The precise concentration of the cleaning chemicals used ensures the best possible cleaning results while avoiding additional costs from reworking, material attack, excess dosage or damage from corrosion.

Aqueous cleaning media always consist of several components such as alkali, tensides, corrosion inhibitors and silicates. There might be differing consumption of these components in a cleaning system, enriched by charged soiling or dragged out by the parts that are cleaned. This causes a drop in the concentration in the cleaning bath with the obvious negative consequences. This is why regularly monitoring the concentration in the process bath is a major factor in cleaning results.

Various methods are applied in practice for determining the concentration of aqueous cleaners. We recommend the titration method based on our many years of experience. Our co-workers would be glad to support you in this process.



The titration method

## We streamline your processes to your benefit

Our specialists in aqueous cleaning will assist you individually and comprehensively to find and launch the most efficient cleaning process.

### How you benefit:

- ✓ Process safety
- ✓ Reduced power consumption
- ✓ Reduced chemical requirements
- ✓ Minimising environmental pollution
- ✓ A high level of user friendliness





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