

Environment-Responsive Concentrated Cleaner (PRTR Compliant Product) **REPEAT CLEANER® PAKUNA RPC Process** | **PAKUNA®**

Unlike conventional powder type cleaner, repeat cleaner 「PAKUNA RPC Series」 is a concentrated cleaner which enabled to have all the features such as re-use of the cleaner, broad range of combination to achieve cleaning variations, high cleaning performance despite of its low concentration, and automatic concentration control.

- Concept**
- 1 Re-Use** You can use the cleaner again ! Reduction of waste disposal and waste water treatment cost.
 - 2 More Flexible Selections** You are to choose cleaner's usage pattern to tackle materials, process preference, various kinds of grease, grease isolation, burden of waste water, and cost.
 - 3 High Cleaning Performance** Despite of its low concentration, the cleaner will exert its excellent cleaning performance against tough grease materials.
 - 4 Auto Control and Management** Auto analysis and feeding mechanism will bring stable concentration, less personnel requirement, and improvement of working environment.

Comparison of Cost / Year

(Case example of cost advantages experienced by our customer, who decided to switch to our introduced cleaner.)

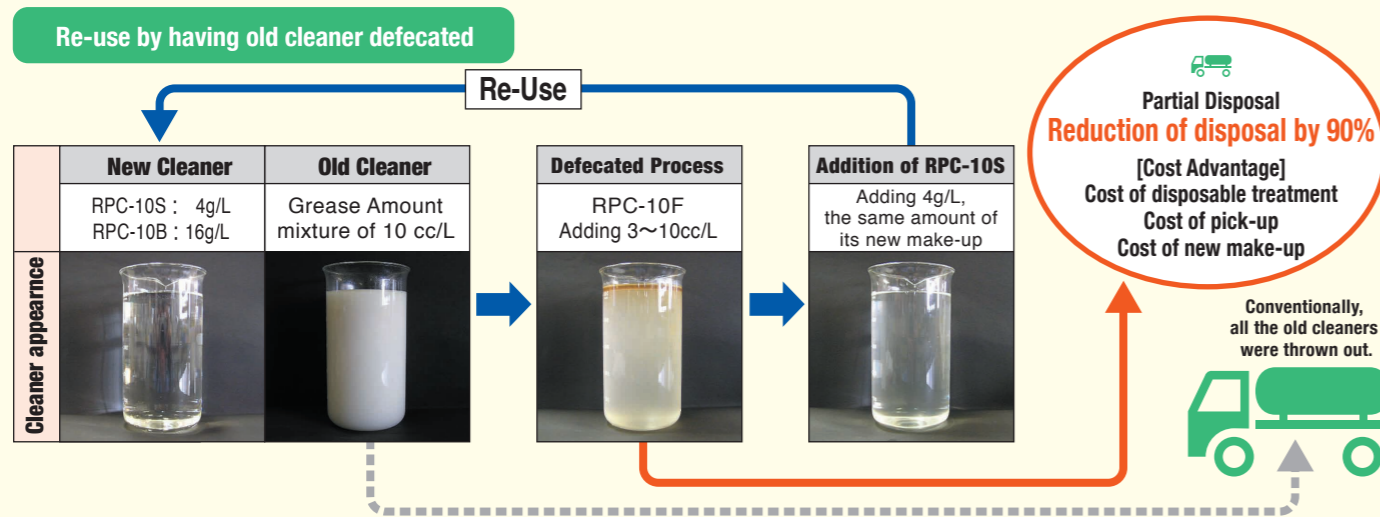


Other Advantages.....

- Auto - Feeding**
Reduction of working hours 150 hrs/year.
Reduction of personnel cost 300,000 yen / year.
※Calculated at the rate of 2,000 yen / hr.
Reduction of redundant replenishment of cleaner.
Improvement of cleaning quality brought by stable concentration of the cleaner.
- Lowering bath temperature (70°C→60°C)**
Reduction of electricity consumption 2.7 million yen / year.
Reduction of CO₂ emission 96t/year.

Reduction of Total Cost: 4.5 million yen / year

1 Re-Use PAKUNA RPC-10F will have old cleaner defecated →Re-use! Reduction of waste disposal and cost of waste water treatment



2 More Flexible Selections Combination of cleaners to be chosen to have effective cleaning performance.

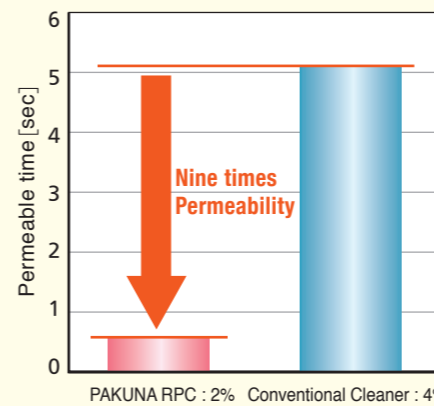
Table illustrating combinations of cleaners for its cleaning purpose

| | High Alkali High Cleaning Performance | High Alkali Low Burden for Waste Water | Low Alkali Low Burden for Waste Water Cleaning non-Ferrous Materials |
|--|--|---|--|
| High Permeability | PAKUNA RPC 10S/10B | PAKUNA RPC 10S/20B | PAKUNA RPC 10S/30B |
| Grease Separation Low Foaming | PAKUNA RPC 20S/10B | PAKUNA RPC 20S/20B | PAKUNA RPC ※ 10S/30B 30S/30B |
| Immersion and Primary Electrolytic Degreasing | PAKUNA RPC 30S/10B | PAKUNA RPC 30S/20B | PAKUNA RPC 30S/30B |

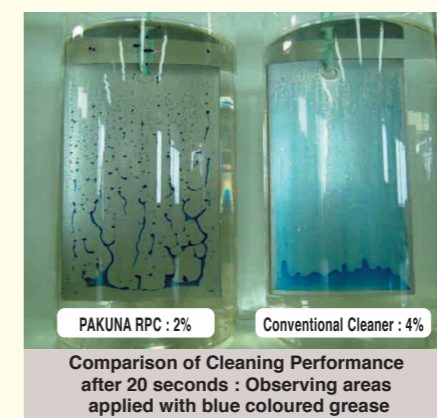
※ Please add grease separation additives, PAKUNA RPC-AB.

3 High Cleaning Performance Despite of its low concentration, the cleaner will exert its excellent cleaning performance against tough grease materials.

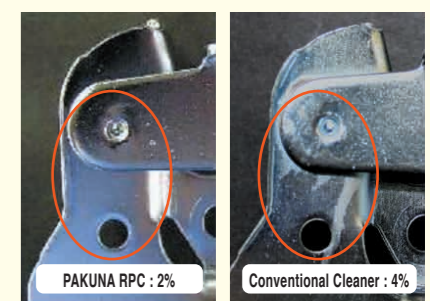
Confirming Permeability by Felt Disc Testing



Confirming Rolling-Up Performance



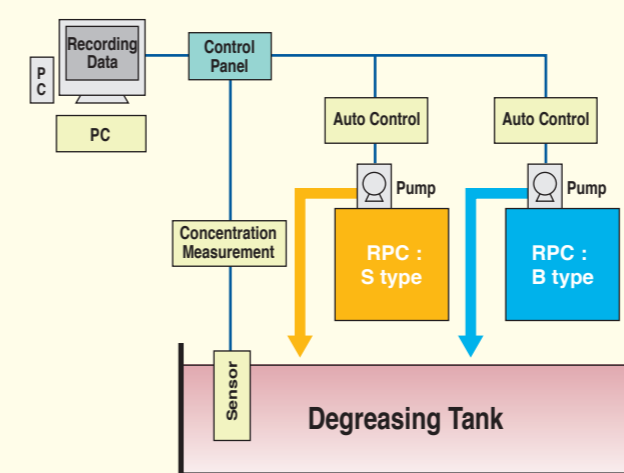
Actual Observation of Excellent Performance for Swaged Areas



Great Permeability and Rolling-Up Performance will curtail Degreasing Failures due to Dripping

4 Auto Control and Management Auto analysis and feeding mechanism will bring stable concentration, less personnel requirement, and improvement of working environment.

Auto Management System with Control Panel



Half Auto Feeding System with Timer Outlet

