



SmartWasher[®]
BIOREMEDIATING parts washing system



*Winning
Together*



CRC Brands



Ambersil

By CRC Industries



YOUR
COMPLETE
CHEMICAL
SOLUTION™

ACTION CAN®

By CRC Industries



SmartWasher®

BIOREMEDIATING parts washing system

KONTAKT
CHEMIE®

By CRC Industries



Cradle to Grave



PARTS WASHER TYPES



From traditional to modern parts washing offerings there are several options in the market. They differ mainly around waste management, mobility and cleaning fluid solutions. Below are some examples:



BIOREMEDIATING PARTS WASHERS

Modern, sustainable parts washers with a microbial dosage system. Circular cleaning solution with significant hazardous waste reduction.



SOLVENT PARTS WASHERS

Typically sink on a drum or metal parts washing units. Will have a lid that is always open, replenished with drums of solvent on service intervals.



AQUEOUS PARTS WASHERS

Offers similar functions to bioremediating parts washers. However, the unit **Does not contain microbes** and fluid needs to be changed out regularly.



AUTOMATIC PARTS WASHERS

Large, Fixed-Place, Metal cabinet washers that have lids to close the machines during operations. These machines are expensive and need fluid change out on regular intervals.





WHAT IS BIOREMEDIATION



Not just a buzz-word, bioremediation technology is the key to the SmartWasher® system that allows for the magic of circular sustainability and long-term fluid efficacy to take place.

HOW CRC SMARTWASHER® USES BIOREMEDIATING TECHNOLOGY

CRC SmartWasher® utilizes bioremediation technology to decompose, and breakdown oils, greases and other contaminants cleaned off parts in workshops and facilities around the world.

Using the combination of the SmartWasher® machine, OzzyJuice® water-based degreasers and OzzyMat® multi-layer filter mats, CRC has been able to harness this incredible technology into a modern parts washing system that truly offers a complete, safe and effective solution.

1

THE SCIENCE

Bioremediation is the use of biodegradation to break down pollutants in soil, air or groundwater.

2

THE APPLICATION

Bioremediation takes place through the releasing of Microbes into the OzzyJuice® fluid as cleaning takes place in a SmartWasher®.

3

THE RESULT

Microbes decompose the waste into carbon and electrons for reproduction. If maintained properly, no waste is produced, and excellent fluid efficacy is maintained.



THE CRC SMARTWASHER® HISTORY



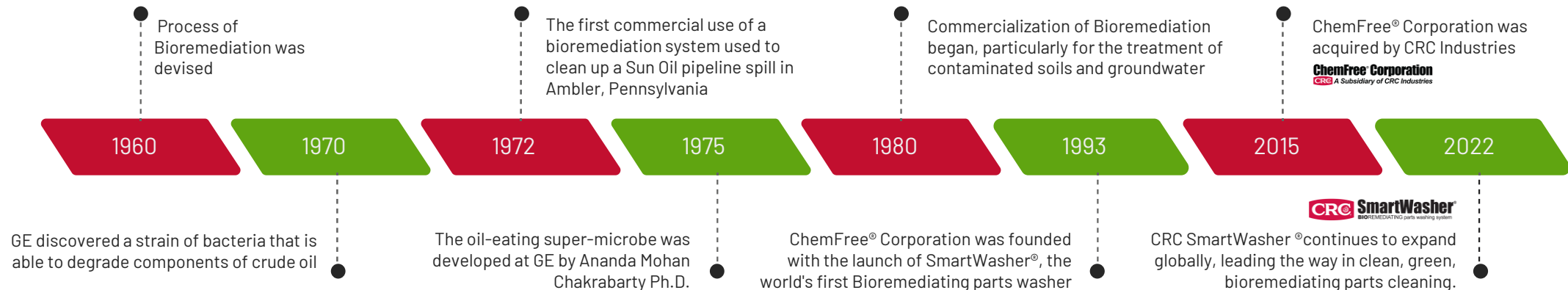
HISTORY OF SMARTWASHER®

ChemFree® Corporation was founded in 1993, the company was acquired April 1, 2015, by CRC Industries, the global leader in the production of specialty chemicals for maintenance, repair and operational professionals.

For nearly 30 years, CRC SmartWasher® has been evolving, committed to providing an alternative method to cleaning parts without harming the environment or users. CRC SmartWasher® currently sells its products globally in many regions across a wide range of markets, holding patents in both the United States and abroad.



The timeline below highlights the evolution of Bioremediation technology and when SmartWasher® adopted this amazing technology.

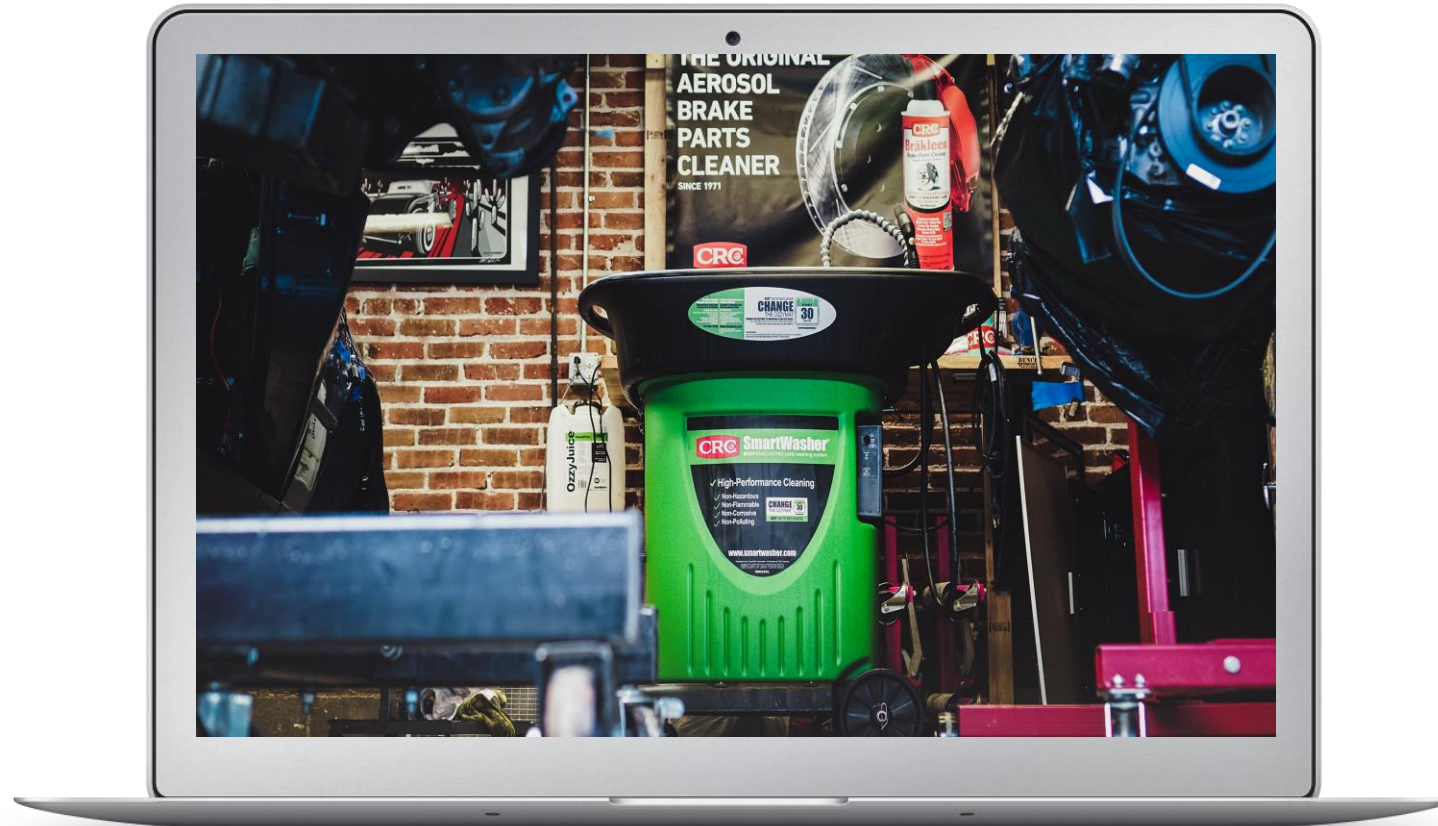




THE POWER OF BIOREMEDIATION



See why **CRC SMARTWASHER®** is the modern solution for your workshop within 5 minutes!





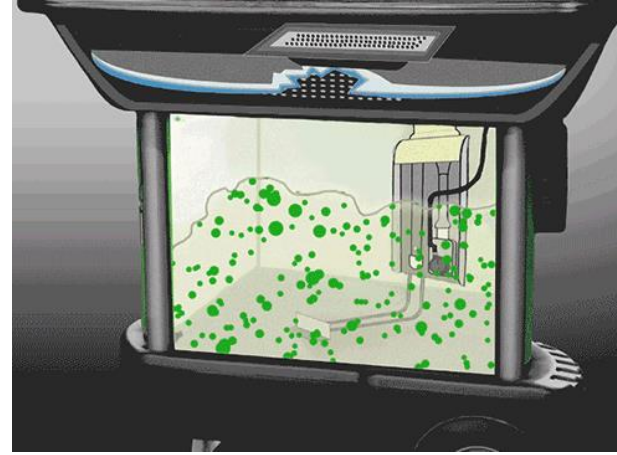
1

**Oil contaminants
enter the OzzyJuice
as parts are washed**



2

**Surfactant in OzzyJuice
solution emulsify the oils**



3

**Emulsified oil is
eaten by the
Ozzy microbe**



4

**Oil is
converted into
water and Co2**



Parts washer comparison



A more detailed look at why SmartWasher® is the best solution!

	SmartWasher®		Solvent		Aqueous		Automatic/Cabinet	
Performance	✓ Highly Effective		✓ Highly Effective		— Effective		✓ Highly Effective	
Cleaning Prep & Speed	Setup Prep.	Cleaning Time	Setup Prep.	Cleaning Time	Setup Prep.	Cleaning Time	Setup Prep.	Cleaning Time
	✓ Fast	— Medium	✓ Fast	— Medium	✓ Fast	— Medium	— Medium	✓ Fast
Wastage	✓ Very low		✗ High		✗ High		— Medium	
Cost	✓ Low		✗ High		✗ High		✗ Very High	
Degreaser Formulas	✓ Specialized Offerings		✗ Single Purpose		✓ Specialised Offerings		✓ Specialised Offerings	
Health & Safety	✓ Very safe for users & Workplaces		✗ Significant PPE required for Users and hazards for workplaces		— Safe for users, wastage hazards for workplaces		— Safe for users, some wastage hazards for workplaces	
Sustainability	✓ Circular System		✗ Single use, frequent waste haulage		✗ Single use, frequent waste haulage		— Single use, intermittent waste haulage	
Regulatory	✓ Little regulation		✗ Highly regulated		— Medium regulation		— Medium regulation	



GENERAL INFORMATION



WHAT IS THE SMARTWASHER®

The CRC SmartWasher® is a manual parts washer that replaces traditional solvent or aqueous alternatives, offering superior cleaning performance to meet the needs of modern businesses' parts washing requirements.

The CRC SmartWasher® utilizes the natural process of bioremediation to break down and convert oil, grease and carbon-based contaminants into harmless by-products of CO² and water.

The bioremediation process reduces liquid hazardous waste streams and reduces the release of harmful pollutants into the environment.

AN EASY 3-STEP SYSTEM



THE SMARTWASHER®

A high-quality, durable parts washer that heats the OzzyJuice® fluid and allows for the magic of bioremediation to take place. Designed specifically for heavy duty applications, with the flexibility to suit almost any working environment.



THE OZZYJUICE®

A water-Based, Industrial Strength, pH neutral, VOC-free, non-corrosive, non-flammable, biodegradable cleaning fluid for use in the CRC SmartWasher® system. The advanced OzzyJuice® formula cleans as well, if not better, than traditional solvent technologies.



THE OZZYMAT®

A revolutionary, Multi-Layer Filter Mat that not only traps particulates, but most importantly contains the advanced Microbes that will fall into the OzzyJuice® solution as it passes through. The microbes then get to work breaking down and cleaning the fluid so it can be re-used over and over again.



SMARTWASHER® - SAFER CLEANING



The CRC SmartWasher® is the safest parts washing solution for your workshop.
The below demonstrates some of the main advantages compared to traditional solvent solutions.

CRC SmartWasher®

- Bioremediating ✓
- Biodegradable ✓
- Aqueous-based ✓
- Non-flammable ✓
- Non-hazardous ✓
- Non-polluting ✓
- pH Neutral ✓



SOLVENT PARTS WASHERS

- ✗ Hazardous waste
- ✗ Increased liability
- ✗ Increased fire risk
- ✗ Spill safety risk
- ✗ Extensive PPE required
- ✗ Pollution control
- ✗ Extensive staff safety training required



WHERE IS SMARTWASHER® USED?



The CRC SmartWasher® is used all over in the world in various industries and applications, from heavy mining applications to aerospace and marine, there's one in a workshop near you.

MANUFACTURING



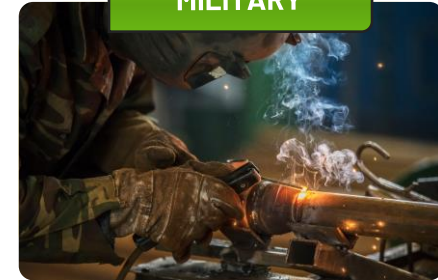
FOOD & BEV



AUTOMOTIVE



MILITARY



AVIATION



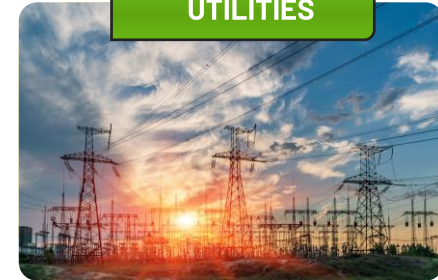
RAIL



BIKE



UTILITIES



+Heavy Industry Mining Oil & Gas Polymer Processing Machining Welding

+ With more industries added everyday



SMARTWASHER® MACHINES



The CRC SmartWasher® unit is the core of the system, offering a modern solution to parts washing with specialist bioremediating technology and long-lasting build quality.



Industry Proven Durability

- The SmartWasher® has been built from the ground up for the tough jobs.
- Industry tested and proven, the CRC SmartWasher® can withstand almost any working environment.



Designed For The Workshop

- Decades of feedback and improvements have led to a parts washer that meets the needs of its users better than any alternative.
- From mobile solutions to benchtop, SmartWasher® has you covered.



The Modern Parts Washer

- Traditional parts washers have utilized the same technology for years without adapting to the modern user.
- The SmartWasher® has been tailored specifically to meet the needs of a modern user, going far beyond a basic cleaning solution.



SMARTWASHER® MACHINE RANGE



The SmartWasher® range offers a wide range of heavy-duty machines, designed for all applications across multiple industries. Check out the range below:



SmartWasher® SW-23
MOBILE PARTS WASHER

- Most Popular
- Light, Mobile Unit
- Heated fluid
- 60 litre capacity



SmartWasher® SW-25
SIGNATURE PARTS WASHER

- Original Design
- Stationary Unit
- Heated fluid
- 100 litre tank capacity



SmartWasher® SW-28
SUPERSINK PARTS WASHER

- Double brush stations
- Stationary Unit
- Heated fluid
- 100 litre tank capacity



SmartWasher® SW-37
MOBILE HEAVYWEIGHT

- Heavy-Duty Capacity
- Mobile Unit
- Heated fluid
- 100 litre tank capacity



SmartWasher® BTP
BENCHTOP PRO®

- Ultra-Portable
- Compact Design
- Cold fluid
- Leak-Proof & Storable



SMARTWASHER® OZZYJUICE® DEGREASERS



CRC OzzyJuice® offers effective, high-performance cleaning for any parts washing application. Formulated specifically for the CRC SmartWasher®, there's no better solution for your needs.



Class Leading Degreasers

- CRC SmartWasher® has used its decades of experience in cleaning technology to craft the best water-based degreasers on the market.
- No other parts washing system offers the breadth of range CRC does.



Solutions For Every Application

- The wide range of OzzyJuice® degreasers available ensure that every cleaning application can be tackled with ease.
- The range has been tailored to meet the needs of every industry application



Performance Without The Cost

- With OzzyJuice® the user can clean with confidence knowing they are using safe formulas, that can be re-used over and over.
- This saves time, money and reduces risks to themselves and their workplace.





SMARTWASHER® OZZYJUICE® RANGE



The OzzyJuice® selection offers exceptional cleaning performance with no-compromise water-based formulas. CRC provides a solution for every industry and application.



OzzyJuice® SW-X1

PARTS/BRAKE CLEANING

CRC's premium offering is specially formulated to tackle the most extreme cleaning applications with ease.



Max Performance



Heavy-Duty cleaning



OzzyJuice® SW-3

DEGREASING SOLUTION

The original degreasing formula optimized for heavier duty workshop applications.



User Favorite



Original Cleaner



OzzyJuice® SW-4

HEAVY DUTY DEGREASER

CRC's all-round heavy-duty degreaser, suitable for almost any application with exceptional performance.



Most Popular



Best All-Rounder



OzzyJuice® SW-6

AIRCRAFT, WEAPONS & SELECT METALS

Optimized for cleaning of soft and ferrous metals. Excels as a weapons cleaner and for other specialty metals cleaning applications.



Industry certified



Specialist Cleaner

OZZMAT® MICROBE FILTER MAT



The OzzyMat® is what separates SmartWasher® from the rest. A high-quality, multi-layer filter mat containing state of the art microbes that allow the bioremediating, sustainable system to function.



Advanced Microbe Delivery

- The OzzyMat® utilizes a state-of-the-art process to deliver microbes into the OzzyJuice® solution each month.
- This ensures the SmartWasher® can clean at optimum performance continuously.



Smarter Filter System

- The OzzyMat® incorporates a unique weekly peel system, allowing for maximum filtration performance throughout the month.
- At the end of the month simply roll-up the OzzyMat® and replace with a new one.



Sustainability That Makes Sense

- The OzzyMat® constantly refreshes that microbe activity in the OzzyJuice® solution, allowing for sustainable cleaning performance.
- If maintained correctly, the OzzyJuice® fluid should never have to be changed out.

THE KEY TO THE SMARTWASHER® SYSTEM



Easy to maintain and highly effective, the OzzyMat® offers an effective and reliable way to ensure your bioremediating SmartWasher® performs to the high demands of our customers.



- Microbe Impregnated
-
- Weekly Peelable Layers
-
- Microbe Impregnated
-
- Easy monthly change-out
-
- Heavy duty ready
-
- Traps particles down to 50 Microns
-
- Simple Microbe Delivery System



SMARTWASHER® BENEFITS



The CRC SmartWasher® offers countless benefits to the user, workshop and the environment. Listed are just a handful of benefits that make the CRC SmartWasher® best in class.



High performance cleaning



Self-cleaning technology



Long lasting cleaning efficacy



Major cost reductions



Eliminate hauling of hazardous parts washer waste



Increased employee safety

THE COST FACTOR



When you compare traditional parts washers to the CRC SmartWasher®, the savings are clear. From minimized waste streams to no service fees, there's a lot to like about the solution!

■ LESS SPENDING

No ongoing purchase of solvent cleaners with expensive service costs

■ MINIMIZED WASTE

No changing or hauling away of dirty cleaning fluids

■ ZERO CONTRACTS

Eliminates hazardous waste removal contracts that tie you in with a vendor and cleaning solution, often with termination fees

■ LESS LIABILITY

No cradle to grave legal liability like with solvent solutions



THE SAFETY FACTOR



CRC SmartWasher® delivers exceptional cleaning without any of the health risks associated with solvent and aqueous-based parts washers.



■ BIOREMEDIATING MICROBES

Industry tested, Naturally occurring, non-pathogenic and highly effective

■ OZZYJUICE® CLEANING FLUIDS

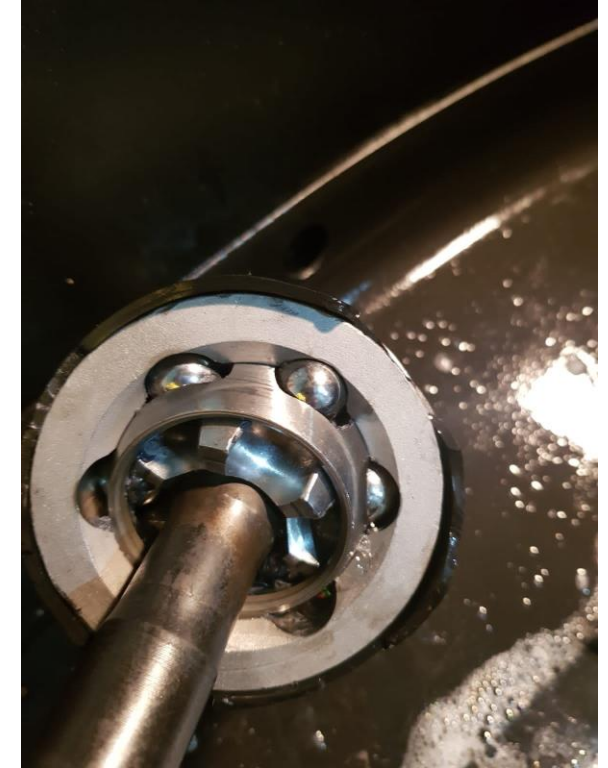
High performance, non-irritating and environmentally-friendly

■ SAFER FOR EMPLOYEES

Far safer for your workplace and user, carrying none of the traditional hazards that come with solvent parts washing solutions

■ SAFER FOR THE ENVIRONMENT

Greatly reduced hazardous waste streams with sustainable technology that cleans pollutants out of the system



Reduced Waste Generation & Cost Savings

Comparison Between Solvent and SmartWasher® Parts Washers



SmartWasher bioremediation system allows users to:

- Eliminate or dramatically reduce waste streams
- Eliminate expense of hazardous liquid waste removal contracts

ONE SOLVENT PARTS WASHER holding 72 litres of solvent that is changed every 6 weeks **generates 377 kg of waste annually**

Formula: *ltrs of solvent x density of solvent x times solvent is replaced per year = kg's of waste annually*



ONE SMARTWASHER® BIOREMEDIATING PARTS WASHER, changing one OzzyMat® filter per month **generates 3.3 kg of waste annually**

Formula: *weight of OzzyMat® x number of mats used per year = kg's of waste annually*

Less Waste Generation



99% Waste Reduction



WHY THE SMARTWASHER®?



There's many reasons why the CRC SmartWasher® is the best parts washing solution for you application, below are some of the key highlights:

- Easy to maintain
- Easy to service
- No hazardous bi-products
- Eliminates expense and liability of liquid hazardous waste
- Cost effective
- Safer for the user and environment
- Strong, durable parts washer that works



“

The environmentally responsible alternative to hazardous solvent parts washing.

Any Questions?

