The reactivation of activated carbon
BATREC, part of SARPI-VEOLIA

BATREC is a leading specialist in the treatment and recycling of hazardous wastes. We are part of SARP Industries, a member of the VEOLIA group, the European leader in our field.

BATREC sets a benchmark in the world of treating difficult, hazardous wastes, particularly those containing mercury. We treat and recycle batteries, various mercury contaminated wastes, liquid elemental mercury and absorbents & catalysts containing mercury for clients globally. We also have a world class activated carbon reactivation plant.

Activated carbon is used to purify gas, air or wastewaters. Following its use, it is saturated with pollutants and becomes waste. BATREC has developed a unique process to reactivate activated carbon which is highly contaminated with difficult pollutants to give it a second life.

The reactivation of activated carbon

BATREC's expertise

Utilisation of the activated carbon

Emptying the filter and sending the spent activated carbon to BATREC in Wimmis, Switzerland

Sending back the reactivated carbon (product) to the customer

Treatment and reactivation of the activated carbon

2 types of activated carbon

The impregnated AC cannot be re-used for its original purpose, but it can be recycled for another one.

Granular Activated Carbon
spent AC mainly coming from the treatment of LIQUIDS. E.g. waste waters.

Extruded Activated Carbon
spent AC mainly coming from the treatment of NON- LIQUIDS. E.g. gas & air.

Treatment capacity: 6.000 tons/year. 3 production lines

SARP Industries treats more than 46 MILLION TONS OF WASTE PER YEAR.

GEOGRAPHICAL ZONES

Wimmis

1991 FOUNDATION

ISO 9001
ISO 14001
OSHAS 18001 CERTIFICATIONS

5 CORE SPECIALITIES

Liquid Mercury Stabilisation Activated Carbon reactivation Mercury wastes treatment Mercury adsorbents recycling Battery recycling

BATTERY RECYCLING

Mercury wastes treatment

Mercury adsorbents recycling

Battery recycling

2 TYPES OF ACTIVATED CARBON
A unique treatment process for activated carbon

1. **Thermal Treatment**
   - Desorption of pollutants at 750° - 850° C
   - Destruction of pollutants in the post-combustion chamber

2. **Wet Off-Gas Treatment**
   - Condensation of mercury
   - Elimination of sulphur
   - Elimination of chlorine

3. **Off-Gas Treatment**
   - Elimination of remaining trace mercury
   - Elimination of any residual pollutants

The decontamination and reactivation kiln

**Spent AC with Pollutants** (chlorine, sulphur, mercury...)

- Off-gas to post-combustion chamber

**Reactivated AC**

**Off-Gas Treatment**

**Waste Water Treatment**
The advantages of reactivation

Transform waste into a resource

With its unique and innovative process, BATREC can reactivate spent activated carbon contaminated with difficult pollutants in order to give it a new life, preserving the natural resources of our planet.

1. Together we identify the activated carbon application
2. You provide 2 samples:
   - Fresh activated carbon
   - Spent activated carbon (2 kg)
3. BATREC prepares the TFS and transports the waste for reactivation

**Advantages**

- The carbon footprint is 70% to 90% less when we re-activate carbon
- Reactivation costs are cheaper than disposing of used activated carbon and buying new activated carbon
- Lower life-cycle cost
- No waste so no disposal costs

**Zero waste solution**

- Transform waste into a resource
- With its unique and innovative process, BATREC can reactivate spent activated carbon contaminated with difficult pollutants in order to give it a new life, preserving the natural resources of our planet.

**Global offer**

Working with you

1. Together we identify the activated carbon application
2. You provide 2 samples:
   - Fresh activated carbon
   - Spent activated carbon (2 kg)
3. BATREC prepares the TFS and transports the waste for reactivation

**Options**

- Destruction
- Recycling

**Disposal cost**

+ Purchase 100% new carbon

1 ton of activated carbon incinerated = More than 3 tons of CO₂ emissions

**Reactivation cost**

- Lower life-cycle cost
- No waste so no disposal costs

**Benefits**

- Zero waste solution
- The carbon footprint is 70% to 90% less when we re-activate carbon
- Reactivation costs are cheaper than disposing of used activated carbon and buying new activated carbon
- Lower life-cycle cost
- No waste so no disposal costs
For any further information, do not hesitate to contact our dedicated team:

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You're more than welcome to visit us!
We would be delighted to be your trusted partner for the reactivation of your activated carbon to reduce your operational costs and your carbon footprint.