

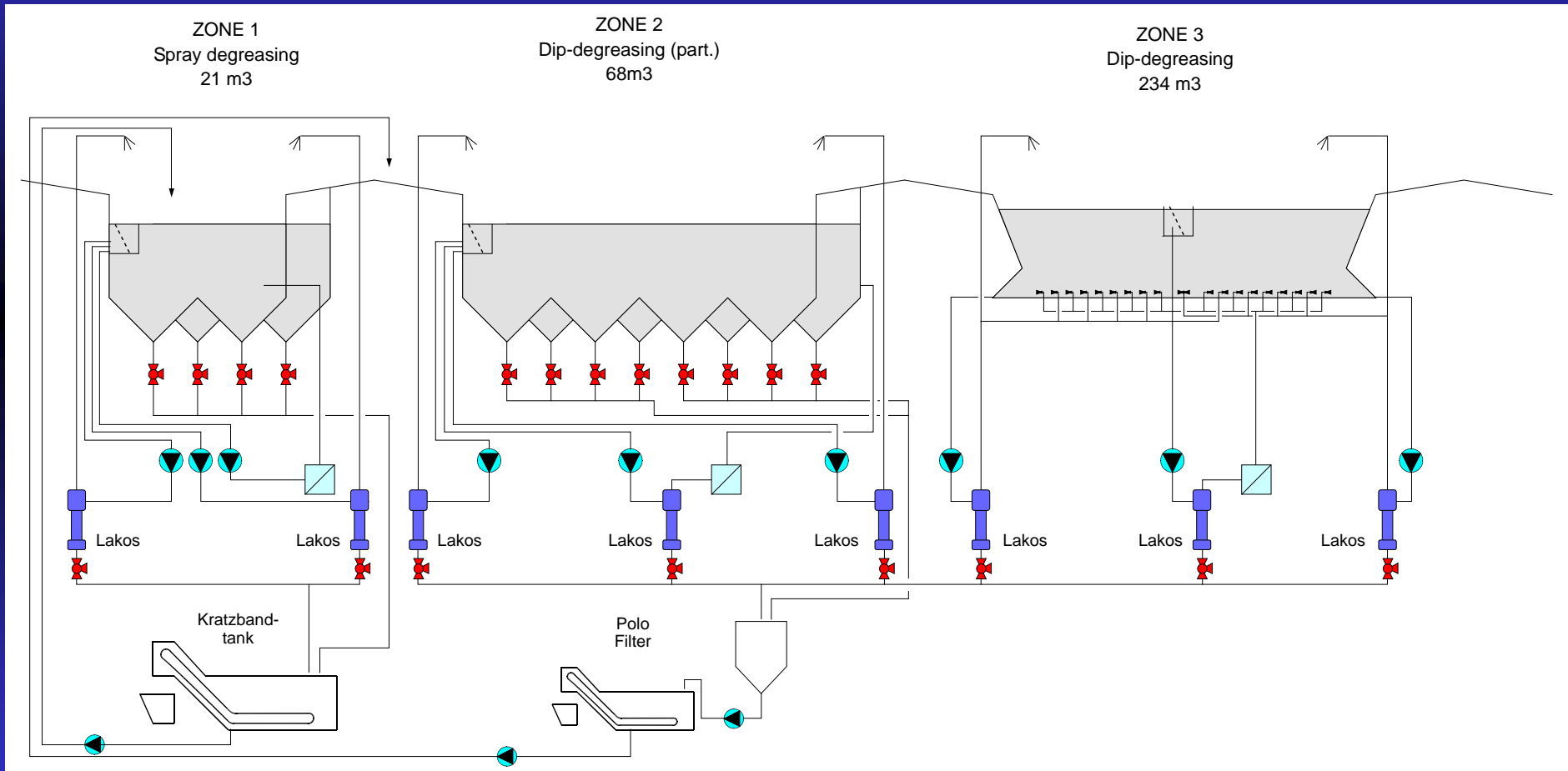
# *Automotive plant*

*Germany*

# ***Back ground***

- ***Old plant with very high production volume***
- ***Change over to demulsifying chemistry***
- ***Suparator® and Q-Filter® were installed and integrated with the existing equipment.***

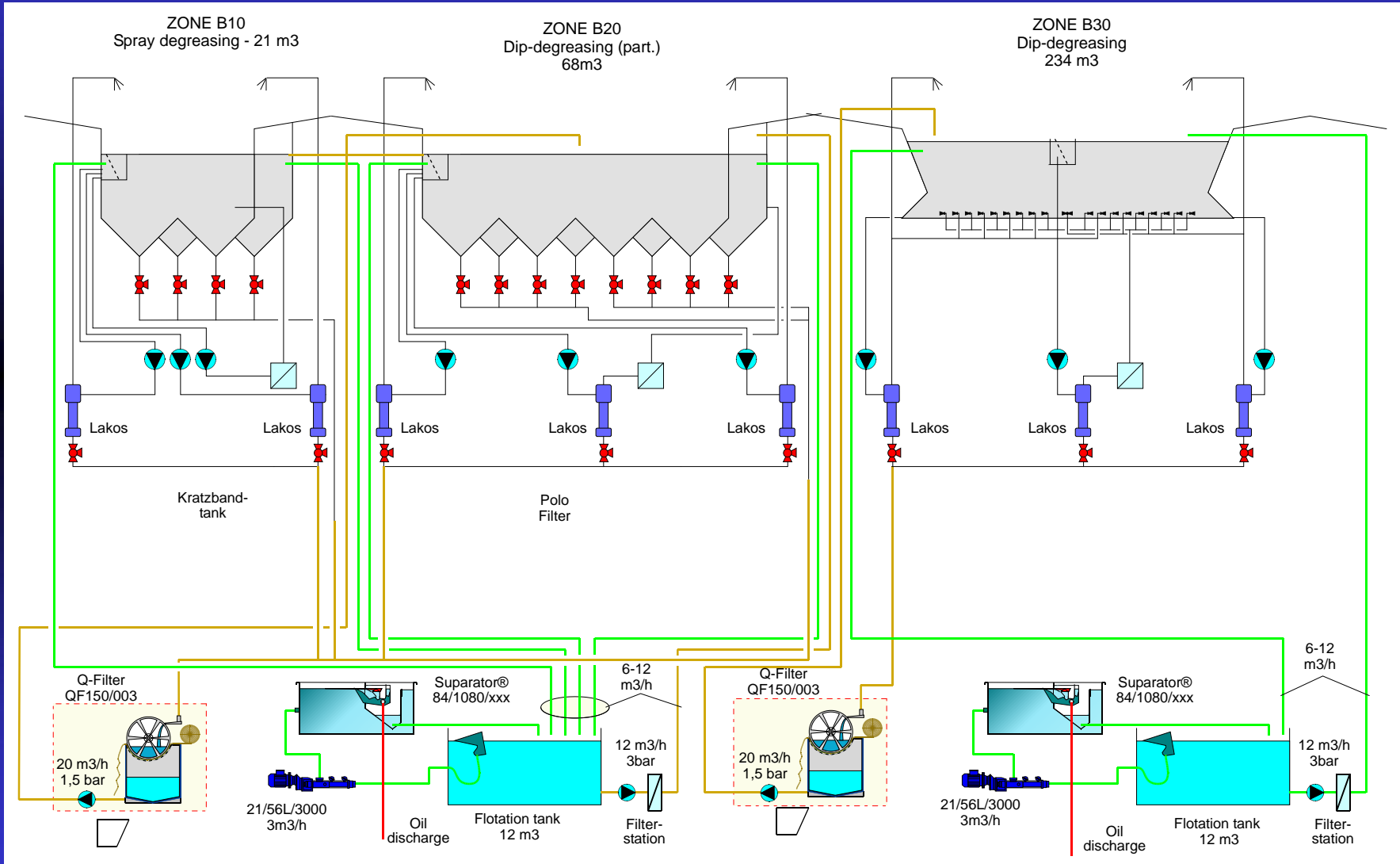
# Old situation



# **Operation (old situation)**

- *Hydro-cyclones flushed once every hour for several minutes.*
- *The bottom cones from baths B10 and B20 flushed once every hour for several minutes.*
- *Medium flushed from hydro-cyclones and bath bottom cones is collected in sedimentation tanks with scraper.*
- *Medium is further treated with membrane filtration system.*

# New situation



# Operation (new situation)

- *The hydro-cyclones are flushed to Q-Filter® once every 10 minutes for 15 to 30 seconds.*
- *The bottom cones from baths B10 and B20 are flushed to Q-Filter® once every 10 minutes for 15 to 30 seconds.*
- *Continuous overflow from baths to settling tank for oil separation.*
- *Oil is removed from settling tanks with Suparator® in bypass.*
- *The effluent from Q-Filter® is send back to the baths directly.*
- *The effluent from settling tanks is sent back to baths via filter stations.*

# Both Q-Filters®



[VIDEO](#)

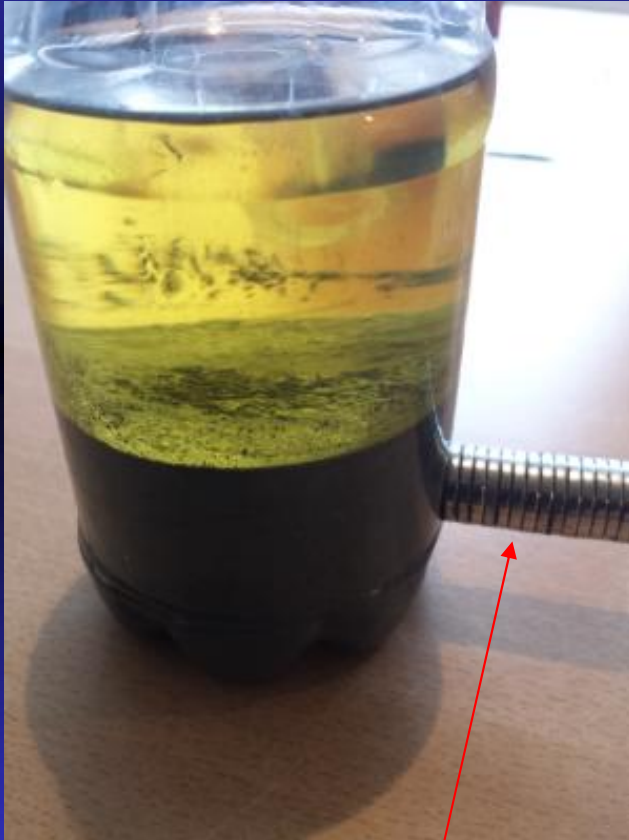
# *The dirt being separated.*

VIDEO





# *The dirt that's removed*

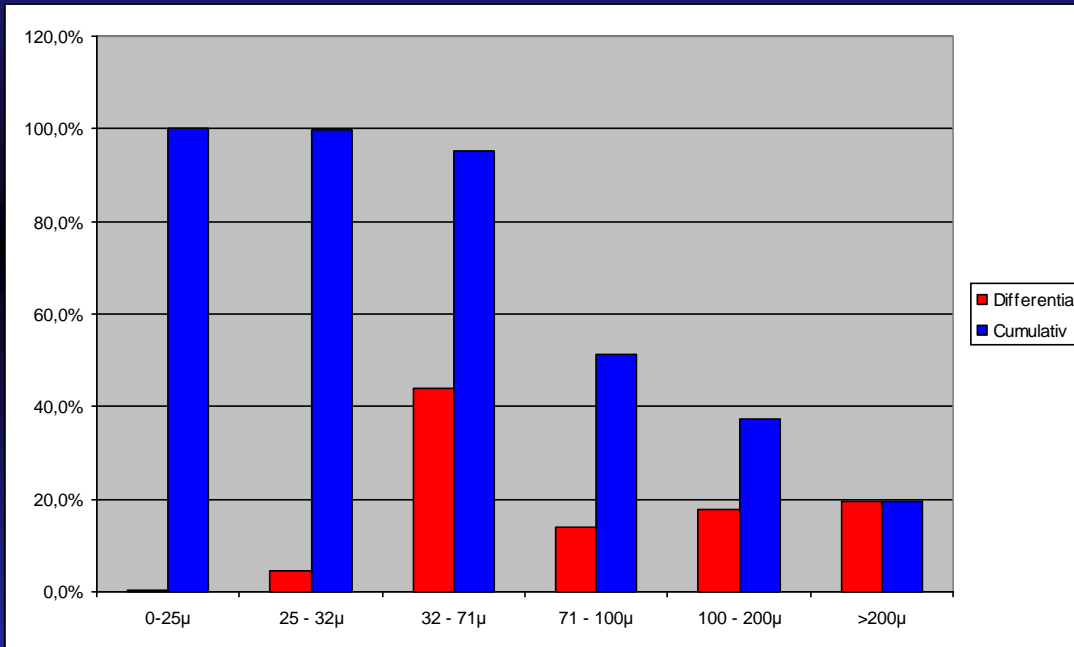


Magnet

*The bottle contains dirt, scraped from the filter cloth, after oil was removed via extraction.*

*On the right is a small magnet, clinging to the bottle. Clearly most of the dirt is metal dust.*

# Dirt analyses (by weight)



*Red indicates the % of each of the fractions. More than 40% is between 32 and 71µ.*

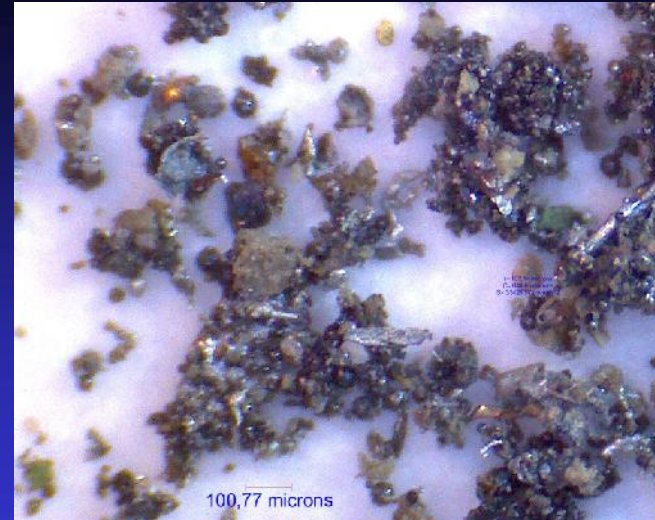
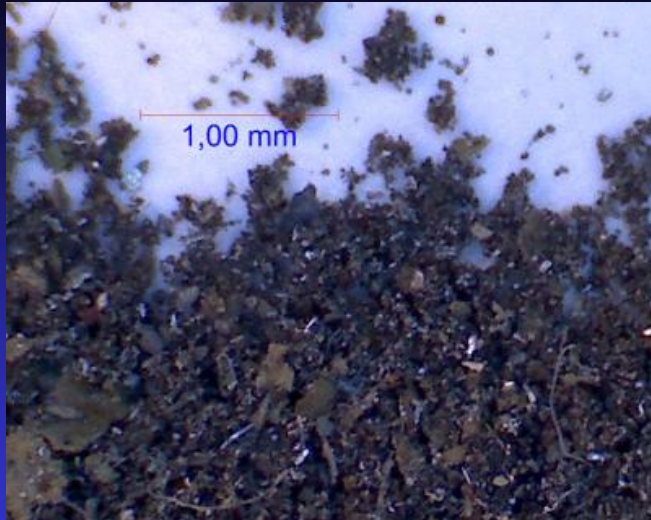
*Blue indicates the accumulated % of the fractions, starting at the right.*

*Removing particles > 32µ removes 95%*

# *The particles*

*Microscope exposures from the dirt.*

*The coarser material (>200 $\mu$ ), clearly visible on the left, is mainly paint flakes and non metallic. The finer particles are metallic.*



# *The Suparskim® skimmer*



- *A floating Suparskim® skimmer, installed in the flotation tank.*
- *Continuously removes the surface layer.*

VIDEO

# *The Suparator® removing the oil*

*Concentrated oil inside the Suparator® device.*



*The separated, pure, oil.*



# *The Suparator® units*



# *Dirt after the Suparator® units*



- *A magnet, placed at the back of one of the Suparator® devices*



- *The magnet with the collected metal particles after 2 hours.*

[VIDEO](#)

# *Want to know more?*

*If you need more information, want to discuss your application or if you are interested in a trial, please contact:*

**Suparator Systems Europe b.v.**

Groenewoud 25A  
5151 RM Drunen, The Netherlands

Tel.: +31 (0)73 22000 30

Fax: +31 (0)73 2200039

Email : [business@suparator.eu](mailto:business@suparator.eu)

Web : [www.suparator.eu](http://www.suparator.eu)