Bolero – Flexible decontamination system for walls and ceilings with subsequent contamination measurement.

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The brochure below will act as an abstract further on, a "real" abstract will be available in January.

Intended for poster session



## High accuracy and capacity



BOLERO is a tool system for stripping walls and ceilings in a wide variety of applications:

#### Suitable for:

- Concrete
- Masonry (calcareous sandstone, bricks, gas concrete, etc
- Plaster work
- Wall coatings
- Decontamination coatings

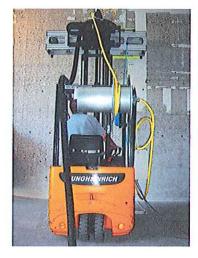
- · Removal of surfaces to predefined depths
- Sampling of treated surfaces for radiological analysis
- Control and free release measurements (direct measurements) carried out immediately after stripping
- Surface areas which are above the permitted free release levels are automatically treated further

The completely encapsulated decontamination system enables work to be carried out

- with the waste material evacuated directly into suitable containers
- without additional containment
- without additional ventilation or extraction systems

This ensures maximum cleanliness in the working area and the best possible protection against the spread of contamination or recontamination.

- Definable and highly accurate stripping depth (from 1 mm – 10 mm per working step, depending on the material)
- High or very high surface removal rates
- Very short tool installation and repositioning times
- Leaves surfaces smooth and dust-free, which ensures the accuracy of radiological measurements, especially alpha contamination
- Specifying a precise stripping depths significantly reduce the amount of radioactive waste









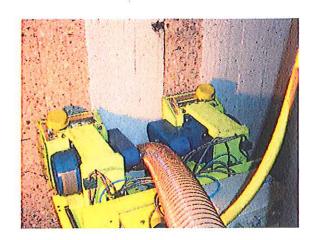
# SHAVER TOOL on Fork Lift System



- Maximum working height can be changed through the choice of fork lift
- Can be fixed to any lift with a DIN 15173 fork
- No damage to the tool when stripping concrete down to the steel reinforcement
- The fork lift system is also suitable for carrying the HAM-MER TOOL







#### Surface removal rate per working step

• Concrete: at a depth of 3 mm approx. 15m2/h

• Calcareous sandstone:

at a depth of 3 mm approx. 30m2/h

• Epoxy: at a depth of 3 mm approx. 20m2/h

#### Surface area treated:

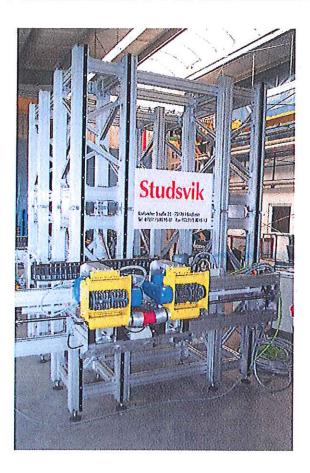
• 2 m2 (2 x 185 mm x 5,4 m)\* per working step

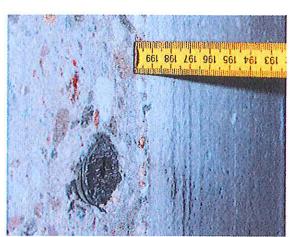
• 11,5 m2 (2,2 m x 5,4 m)\*

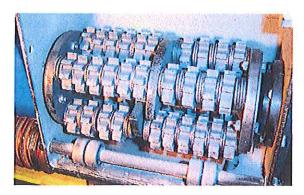
m x 5,4 m)\* per location

\*depending on the fork lift

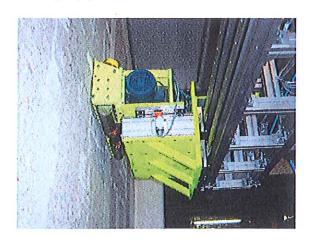
## SHAVER TOOL on Gantry System







- Can be dismantled into sections and transported by hand
- Can be used in rooms inaccessible to vehicles
- Modular construction enables it to be adjusted to specific room geometry
- Passes over metal parts in the wall without detriment to the machine or the process
- The gantry system is also suitable for the HAMMER TOOL



#### Surface removal rate per working step:

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	Concrete:	at a depth of 3 mm	approx. 15 m2/h
	Calcareous s	andstone:	
		at a depth of 3 mm	approx. 30 m2/h
•	Epoxy:	at a depth of 3 mm	approx. 20 m2/h

<ul><li>2,4 m2</li></ul>	(2 x 185 mm x 6,5 m)*	per working step
<ul> <li>17,3 m2</li> </ul>	(2,66 m x 6,5 m)*	per location
*can be extend	ded as required	



#### References

- Aventis Pharma
   Decontamination of concrete surfaces in solvent laboratory
- Kahl Nuclear Power Plant
   Decontamination of concrete blocks from
  the reactor area
- Karlsruhe Reprocessing Plant WAK Stripping of decontamination coating
   Decontamination of concrete surfaces
- CEA, Cadarache, France
   Decontamination of 10000m<sup>2</sup> surfaces in fuel facility

#### New technology protects people

Using technology for the benefit of mankind – STUDSVIK is committed to developing new technologies, but not only for economic reasons. Using the SHAVER tool has several advantages over conventional, labour intensive processes:

- considerable reduction in manpower requirement
- lower single and collective doses
- considerable improvement in on-site working conditions from a conventional point of view (less noise, reduced respirator requirements – if needed at all)

In other words STUDSVIK uses the latest technology to protect the health and wellbeing of the operators.

### Studsvik

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