

Using Dry Urinals



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Using Dry Urinals



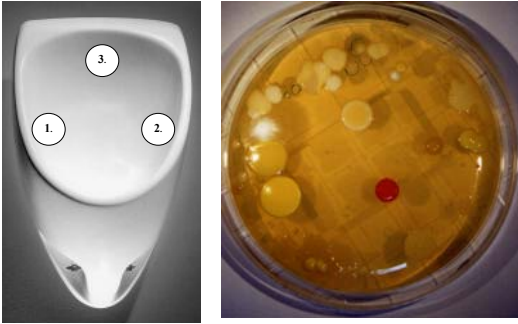
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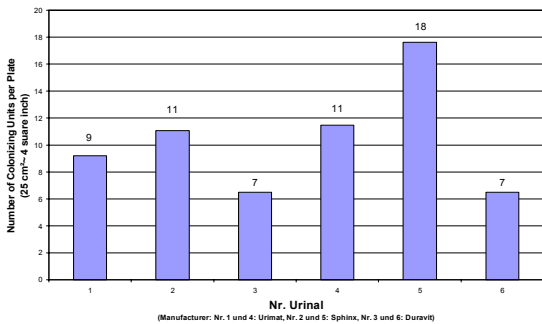
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(Manufacturer: Nr. 1 und 4: Urinal; Nr. 2 und 6: Sphinx; Nr. 3 und 5: Duravit)

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⌘ TYPES

- ☒ Traps with a floating layer of sealing liquid
- ☒ Mechanically working traps

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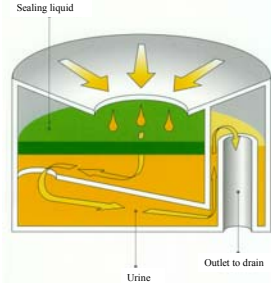
⌘ Traps with floating liquid layer

- ☒ Ernst, Switzerland
- ☒ Sinaqua-Waterless, Europe
- ☒ Uridan, Denmark
- ☒ No-Flush
- ☒ Mc Dry, Germany
- ☒ and others

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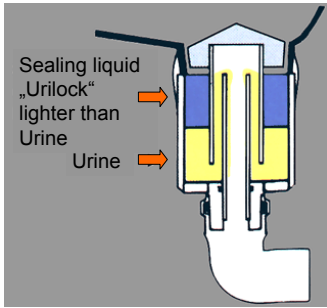
⌘ Traps with floating liquid layer



Trap of Sinaqua

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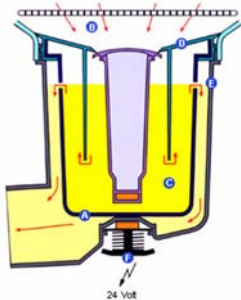


Trap of Uridan

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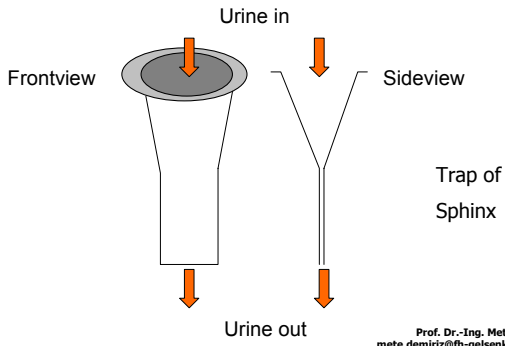
⌘ Mechanical working traps



Trap of Urimat

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Trap of
Sphinx

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⌘ LONGTERM TESTING



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Collecting drainline 2 inch

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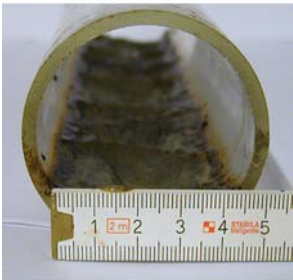
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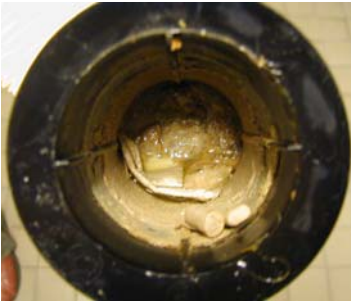
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⌘ ECONOMIC EFFICIENCY

- ☒ Equipment Cost
- ☒ Water and Sewer Charges
- ☒ Actual Maintenance Cost of Flushed Urinals
- ☒ Design and Installation of Water Connection for Flushed Urinals

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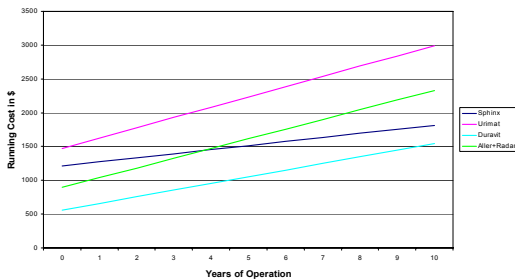
⌘ ECONOMIC EFFICIENCY

- ☒ Actual Maintenance Intervals and Cost for Dry Urinals
- ☒ Cleaning Cost for Dry Urinals
- ☒ Cleaning of nonflushed drainline attached to dry urinals
- ☒ Prospective Energy Cost

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Cost Comparison of 50 Uses per Day



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⌘ CONCLUSION

- ☒ Dry Urinals can be operated hygienically, if they are maintained and cleaned according to manufacturer's instructions

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⌘ CONCLUSION

- ☒ The optimization of dry urinals and new techniques such as developing new traps, have increased the life and maintenance intervalls within the last few years. This has lead to cost efficient operation of dry urinals.

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⌘ CONCLUSION

- ☒ Contrary to some claims made in many publications, urine sedimentation and build-up in the drainlines of dry urinals is an inevitable fact.

These cannot be removed through application of high amounts of water into the dry urinal.

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○ CONCLUSION

- A very intense odour developes in the drainlines leading away from the dry urinals. A larger clearance has to be taken into consideration during the design and positioning of the breather pipes and the air inlet ducts.

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Any questions?

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