

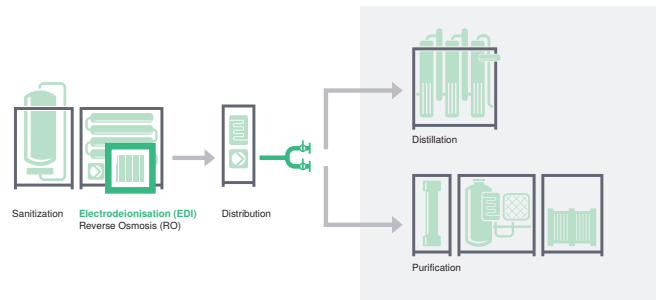
Prevention measures - EDI

ENSURING PLANT AVAILABILITY FOR PURE WATER GENERATIONS UNITS AND DOWNSTREAM PROCESSES

MINIMIZE YOUR RISK - REQUEST A QUOTATION!

The sensitivity of electro deionization modules (EDI) as an essential part of Pure Water generation is often underestimated. The performance of EDI is important for conductivity and necessary for all downstream processes. Water pretreatment is in many cases the cause of early shutdowns.

In non-redundant systems, a failure of EDI modules can lead to a complete production stop for several weeks (delivery time approx. 4 weeks, country of origin USA).



Example of a process chain: malfunction of EDI leads to failure of further processes

WHAT YOU SHOULD PAY ATTENTION TO:

- ❑ Increase of the resistance to alarm value
- ❑ Continuous rise in voltage
- ❑ Continuous decrease of the current intensity
- ❑ Increase in conductivity in pure water
- ❑ Leaks in the EDI
- ❑ Longer operation with increased conductivity in the feed water

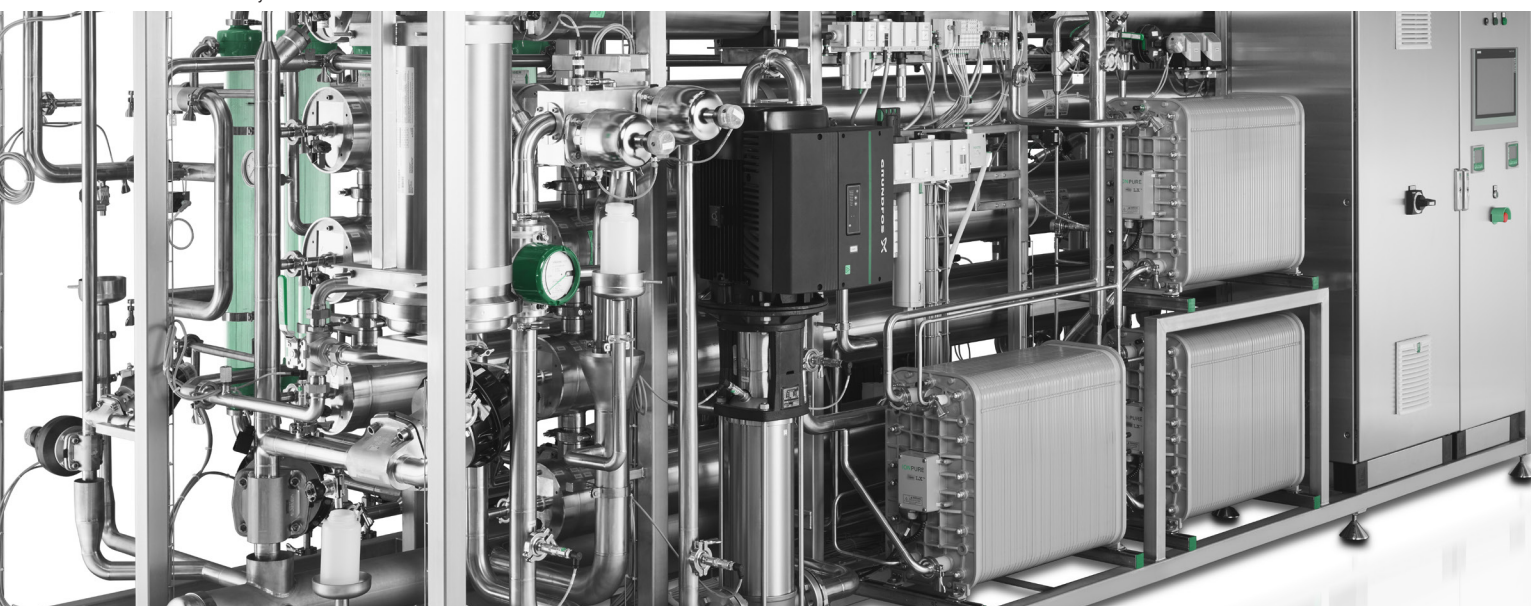
THE FOLLOWING LEADS TO A SPONTANEOUS SHUTDOWN:

- ❑ High difference in pressure between the product- and the concentrate pipeline
- ❑ Pressure shocks in pipelines
- ❑ Operation above 6.9 bar pressure
- ❑ Operation above 45 °C (113 °F) standard modules / 85 °C (185 °F) HWS modules
- ❑ Chlorine in the feed of the RO system
- ❑ Hardness irruption of the RO system

HOW YOU CAN PREVENT A SHUTDOWN:

- ❑ Preventive maintenance / inspections several times a year
- ❑ Log record of EDI values for early detection
- ❑ Pre-treatment operating within the specification
- ❑ Preventive replacement after 5 years at the latest!
Probability of spontaneous production stop will be reduced
- ❑ Storage of an EDI as a spare part (storable for up to 5 years)
- ❑ Ensuring consistent product quality

Section of a MWFI System with three EDI modules



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