HSI Research at HRP

Achievements and plans

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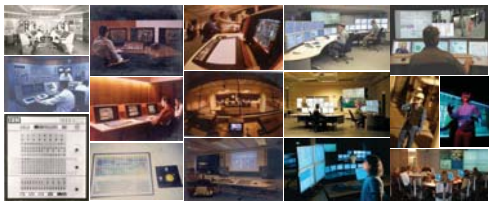
IFE Halden has a long and rich history of HSI research

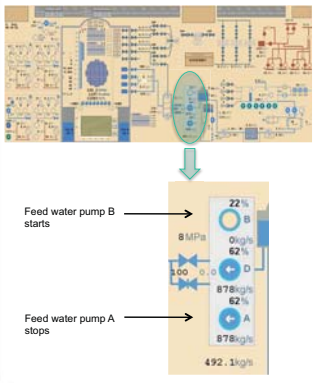


Hard wired panels → Innovative solutions using Virtual Reality

In the later years several HSI concepts have been developed and tested in Halden

- LSD Large Screen Display
  - Task-Based Displays
  - Function-Oriented Displays
- Innovative BWR Displays
  - Outage Information Displays
- Information Rich Displays
  - Ecological Interface Design

Large Screen Displays (LSD)



This display was developed by T. Karlsson approx. 10 years ago.

Purpose to aid and guide operators without using hardwired panels.

The design is inspired by traditional P&ID diagram consistent with operator displays.

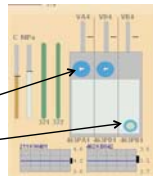
Some advanced dynamic behavior are implemented.

Innovative BWR Displays

This is a further development of the previous BWR display.

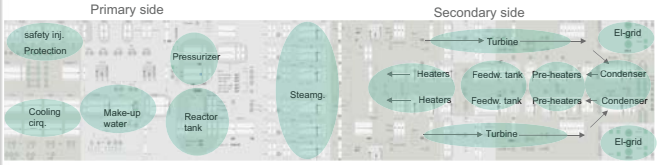
More information related to the operational state is given

The overall design scheme is less influenced by physical appearance; the functional attribute is more highlighted. Small mini-trends gives historical information



This design is under evaluation in a large scale HAMMLAB experiment

Information Rich Displays



Designed by Braseth; as a first prototype IRD design for the VVER Loviisa development simulator.

Supporting early fault detection

Using pattern recognition principles and normalization of variables.

The feedback is mixed; some positive and some negative; results from user test at NPIC & HMIT 2009

Future HSI Research at HRP