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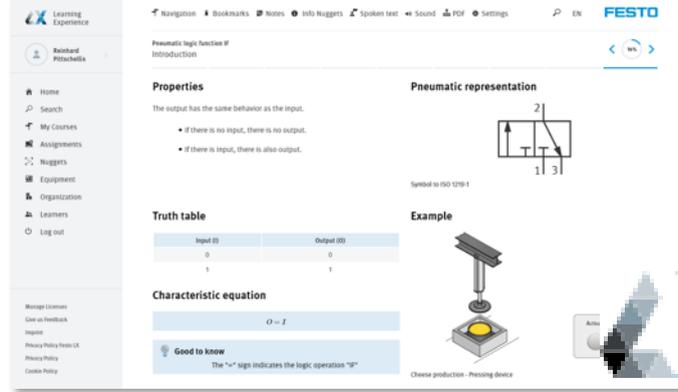


Early 1990's: **FluidStudio** - Learning Program for Pneumatic & Hydraulic on Laserdisc

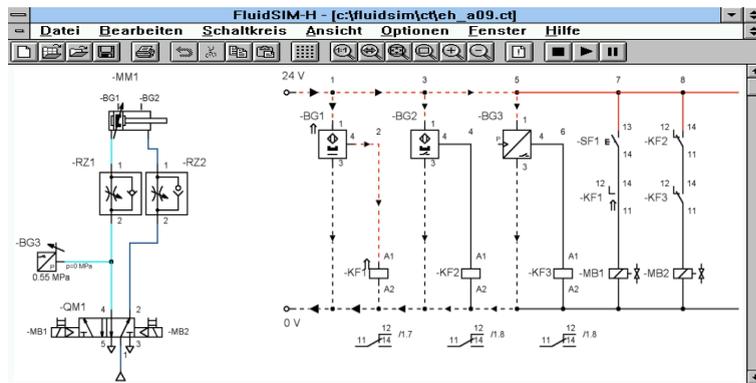
<http://en.wikipedia.org/wiki/File:LasersRecorder.jpg>



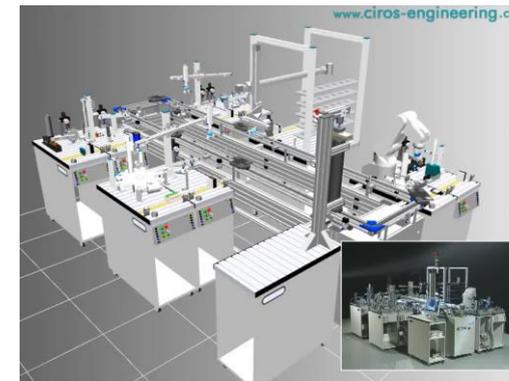
2021: **Festo LX** – a fully integrated online Learning Portal



2018: **AR & QR App**: Delivering Information on Smart Devices



Early 1990's: **FluidSIM** Simulate Fluidic and electric circuits



Early 1990's: **Cosimir (now CIROS)** Simulation of robots & complete Learning Factories

## Key learning and Conclusions from 30 years of Experience by Festo

### Key Learnings

- Digitalization must not add another level of complexity to the learning process!
- Avoid need for complicated installation processes, passwords, dongles, administrators etc.
- Teacher is key: He has to see a benefit for his lessons! Train him first!

### Chances by Digitalization / Online Learning:

- Online Learning can avoid need for installation etc., just password is enough
- Online trainings can help to relief teachers and help them to keep pace with technical progress

## Further Information

- Link to Festo LX: <https://lx.festo.com> (registration free of charge)
- Festo LX on Youtube: <https://www.youtube.com/watch?v=WqTzsMItYDI>
- Festo FluidSIM: <https://www.festo-didactic.com/int-en/news/fluidsim-6.htm?>
- Festo CIROS: <https://www.festo-didactic.com/int-en/learning-systems/factory-automation-industry-4.0/focus-trending-topics-i4.0/digital-factory/factory-simulation/ciros-professional-training-in-virtual-learning-environments.htm?>
- CIROS on Youtube: <https://www.youtube.com/watch?v=7Kp6uM1xSPY>