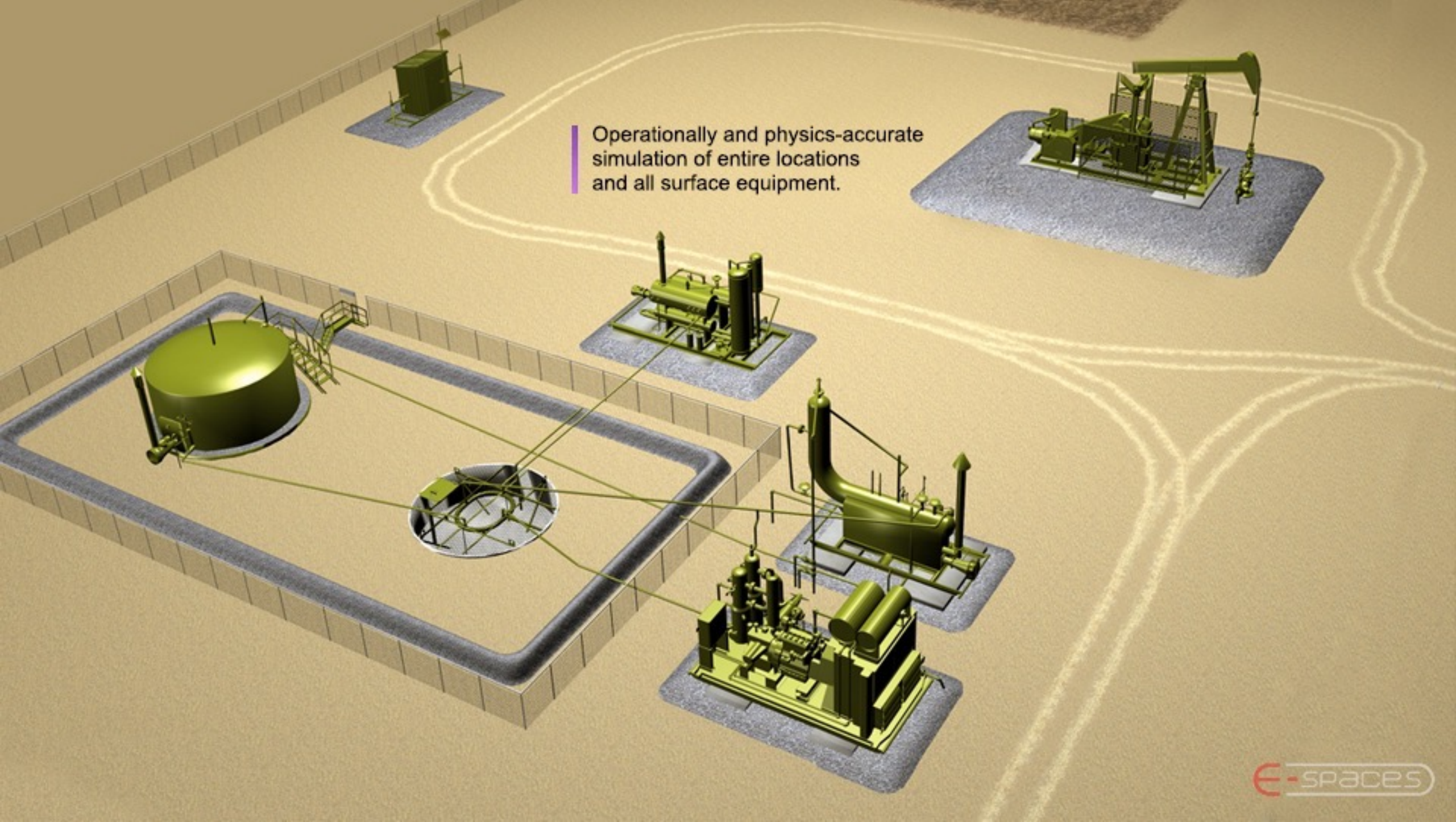# AVR Simulators of Oil & Gas Equipment
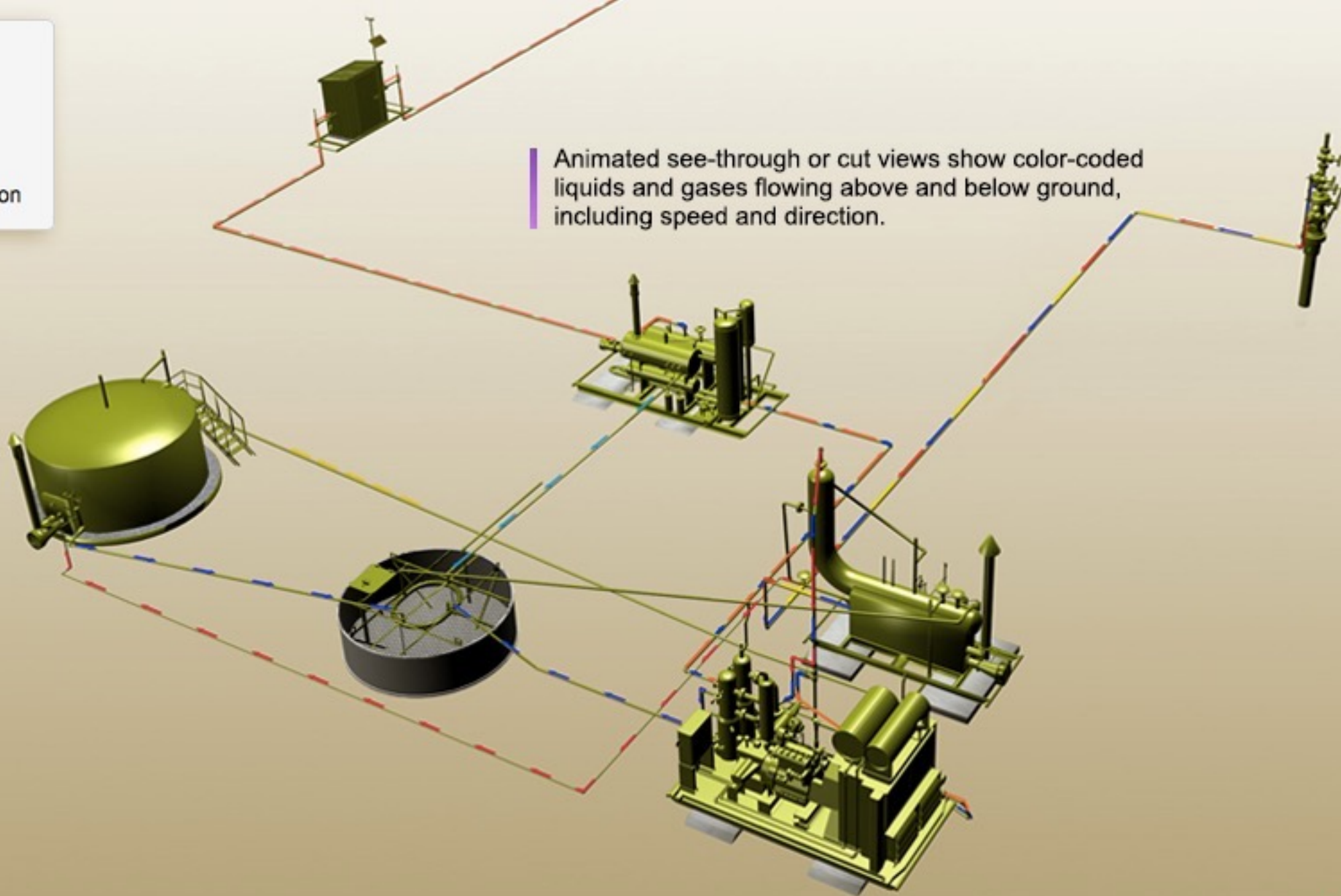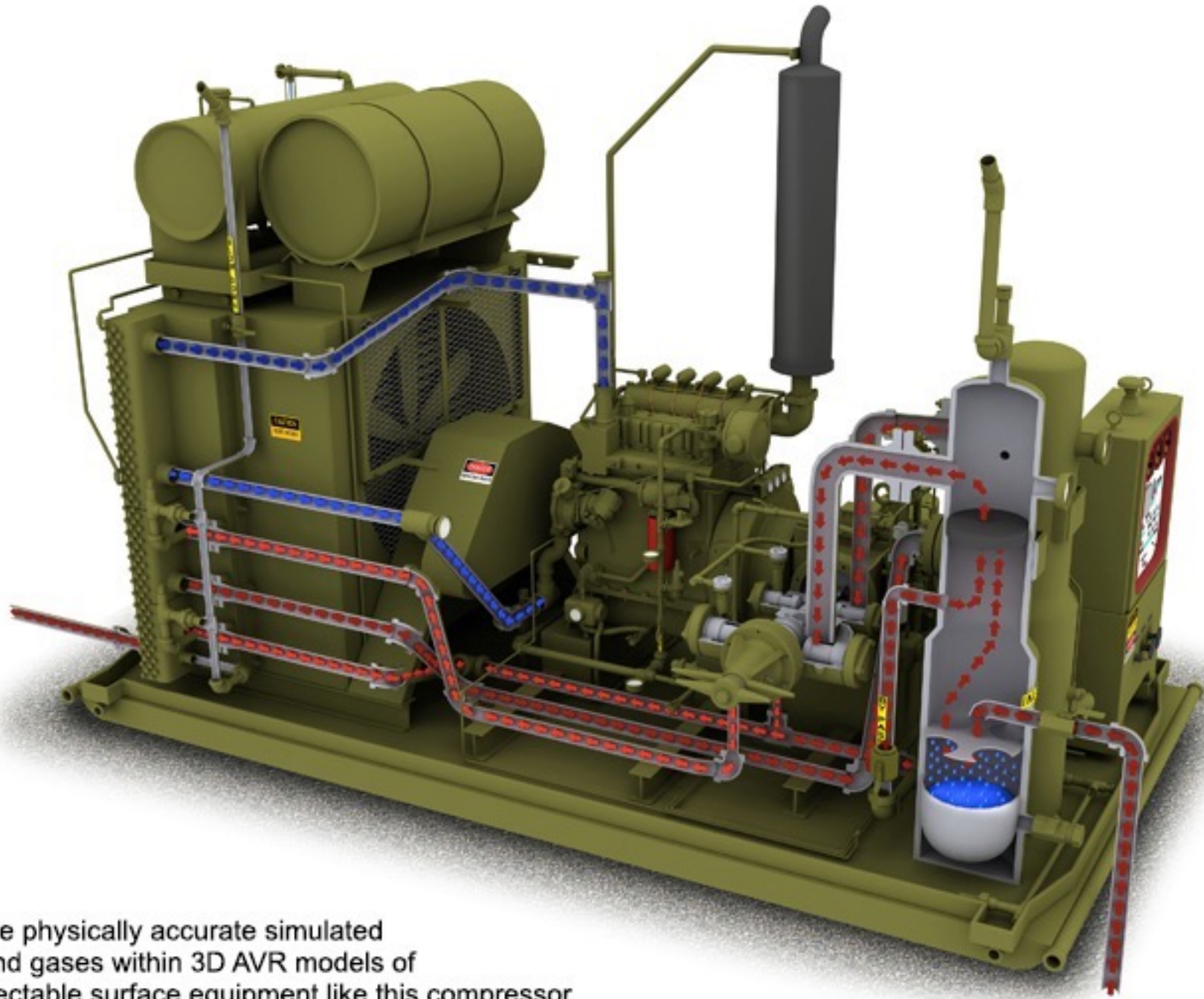
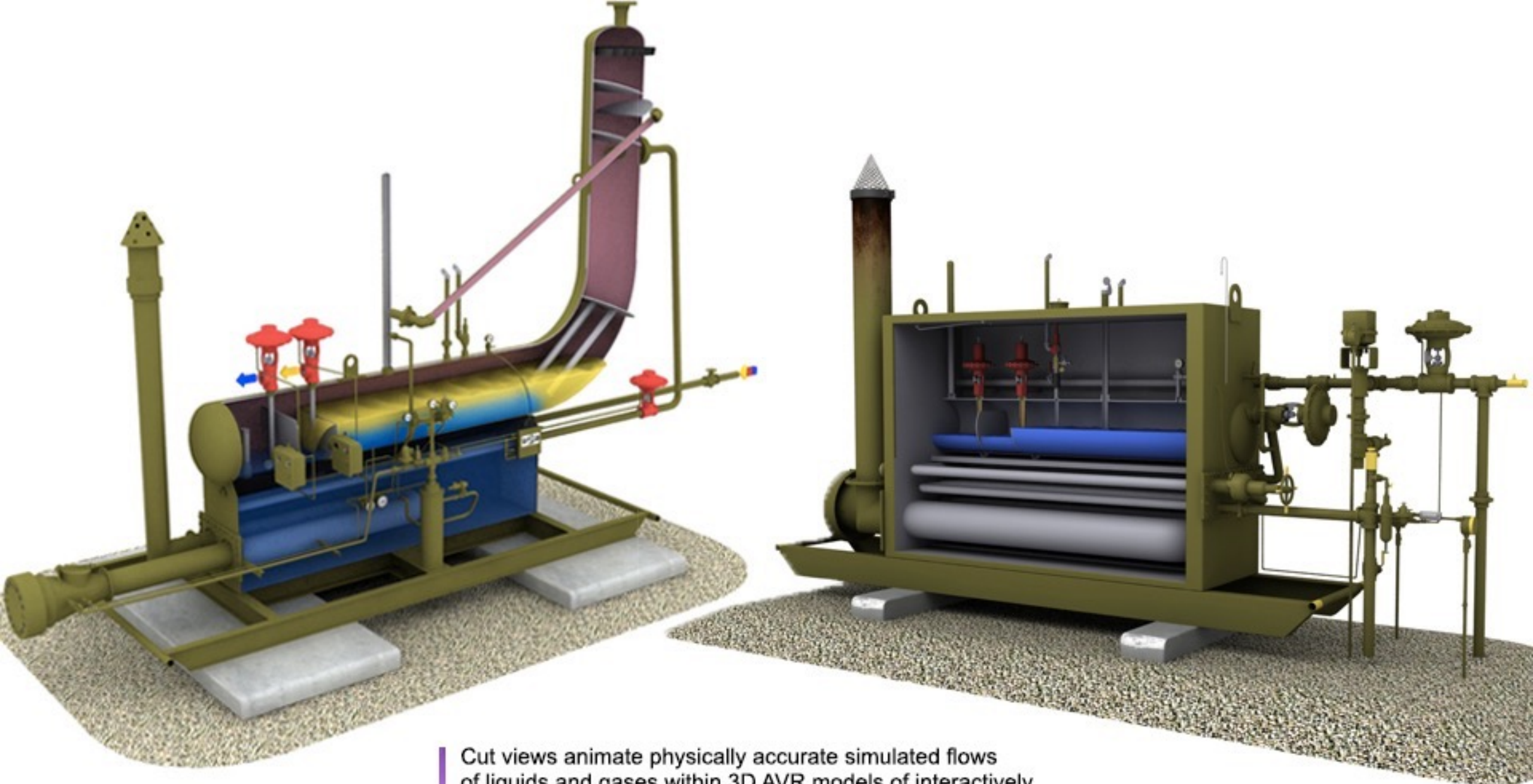Operationally and physics-accurate simulation of entire locations and all surface equipment.

Oil
Gas
Water
Emulsion

Animated see-through or cut views show color-coded liquids and gases flowing above and below ground, including speed and direction.

E-spaces

Cut views animate physically accurate simulated flows of liquids and gases within 3D AVR models of interactively inspectable surface equipment like this compressor.
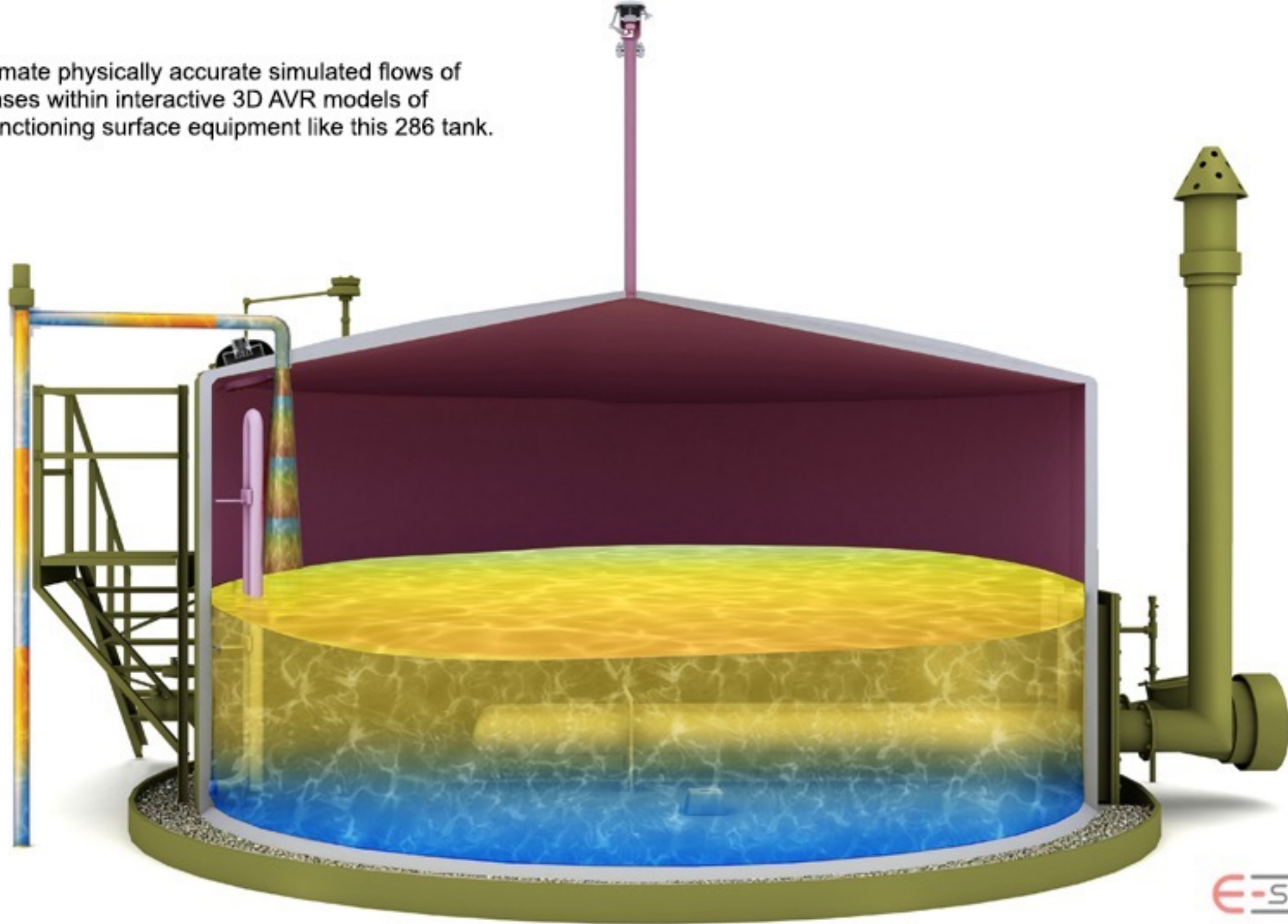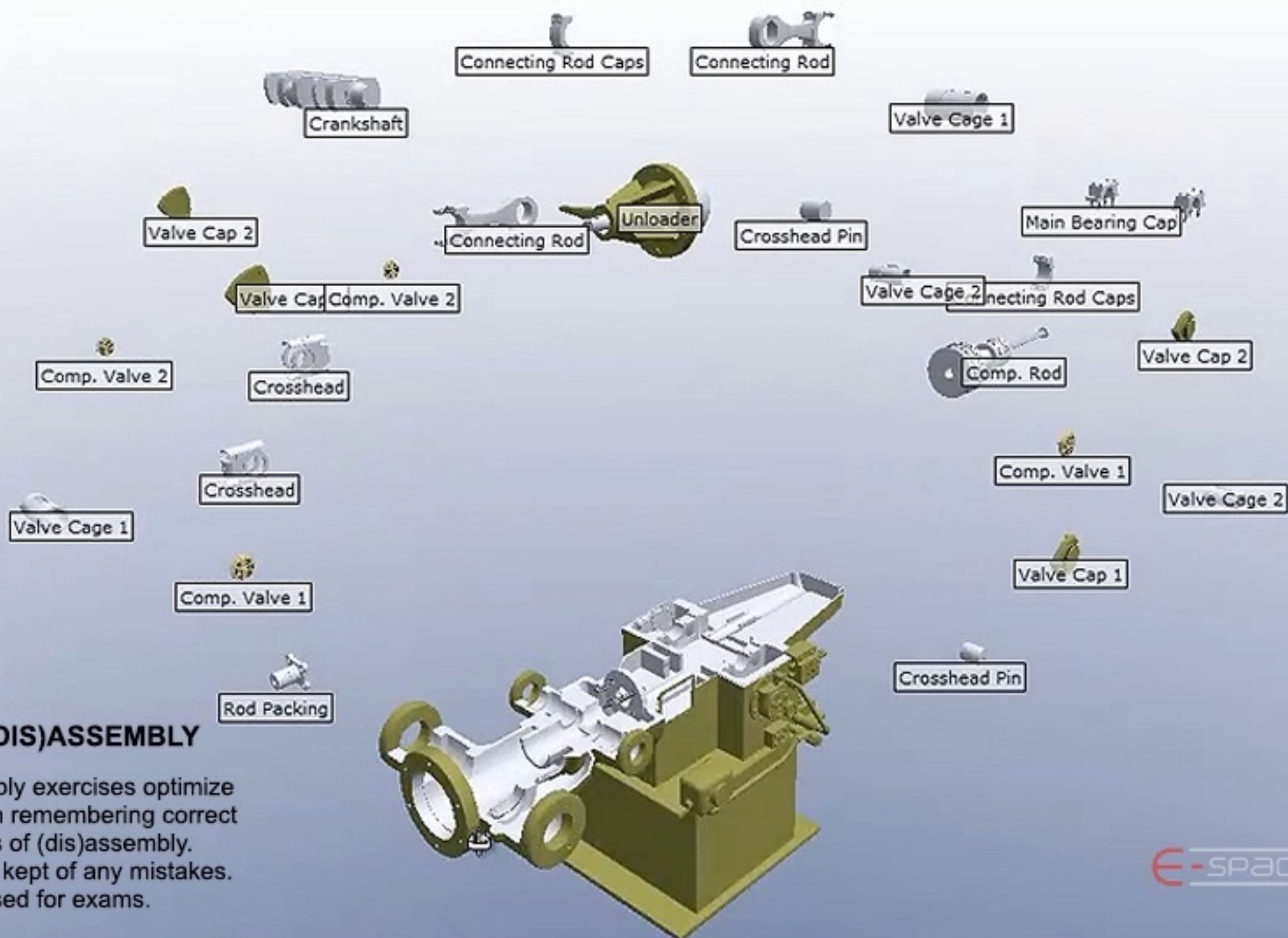
Cut views animate physically accurate simulated flows of liquids and gases within 3D AVR models of interactively inspectable surface equipment like these seperators.

E-spaces

Cut views animate physically accurate simulated flows of liquids and gases within interactive 3D AVR models of realistically functioning surface equipment like this 286 tank.
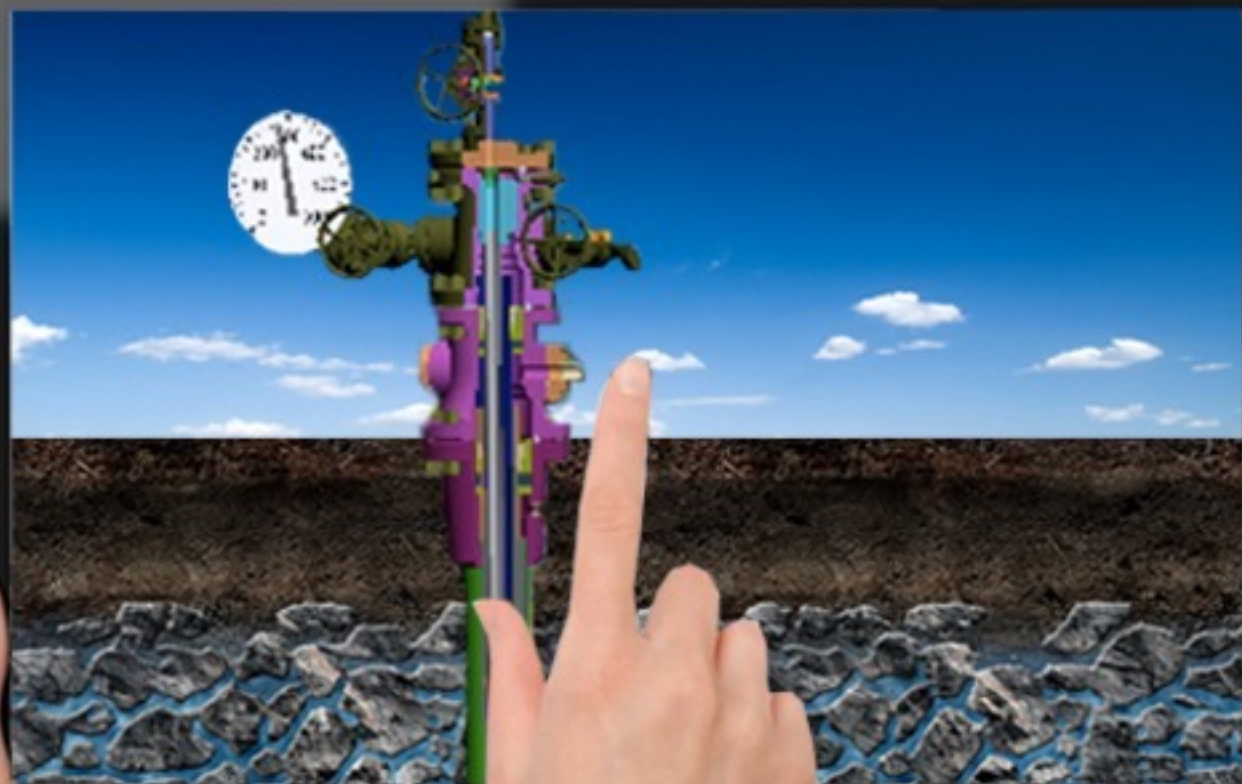
Highly detailed, physically accurate 3D AVR models of equipment like this pumping unit interactively simulate its sounds, movements and safe operation.

INTERACTIVE (DIS)ASSEMBLY

Intuitive (dis)assembly exercises optimize personnel training in remembering correct and safe sequences of (dis)assembly. Running scores are kept of any mistakes. They can also be used for exams.

LESSONS CBT courseware with VCR style controls allow pausing the simulation at will to rotate, zoom and interact with the equipment.

PHYSICS Built-in formulas show what happens in the system if key parameters change. Close a valve, see what happens.
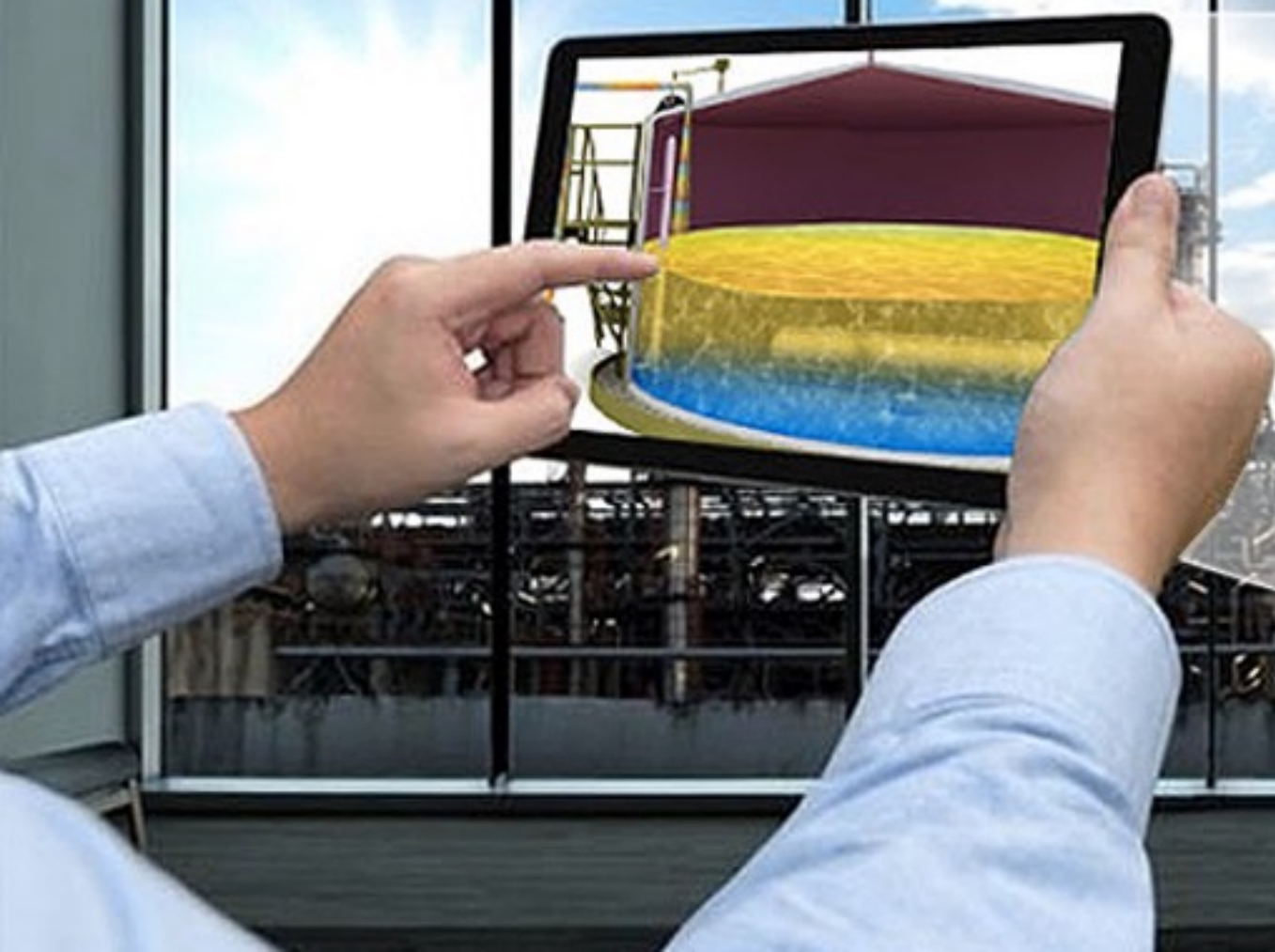
ALL DEVICES Our interactive AVR simulators run in any browser on any device including Windows PCs, Macs, tablets and all smartphones.

E-spaces

AVR to the rescue: *eco-disaster prevention*

HIGH PRESSURE: ^P = +8

Danger level: HIGH

Step 1: Stop oil flow >>>

- 3D model displays live status of entire location

- Sensors monitor real time system performance

- Instant problem detection and operator notification

- Diagnostic sims find optimal solution in minutes

- Mobile AR glasses point to the exact location of the problem

- Significant human error reduction potential

- Systems kept in optimal working conditions 24/7

Live AVR 'C-Thru' for a 'Mobile Control Room'
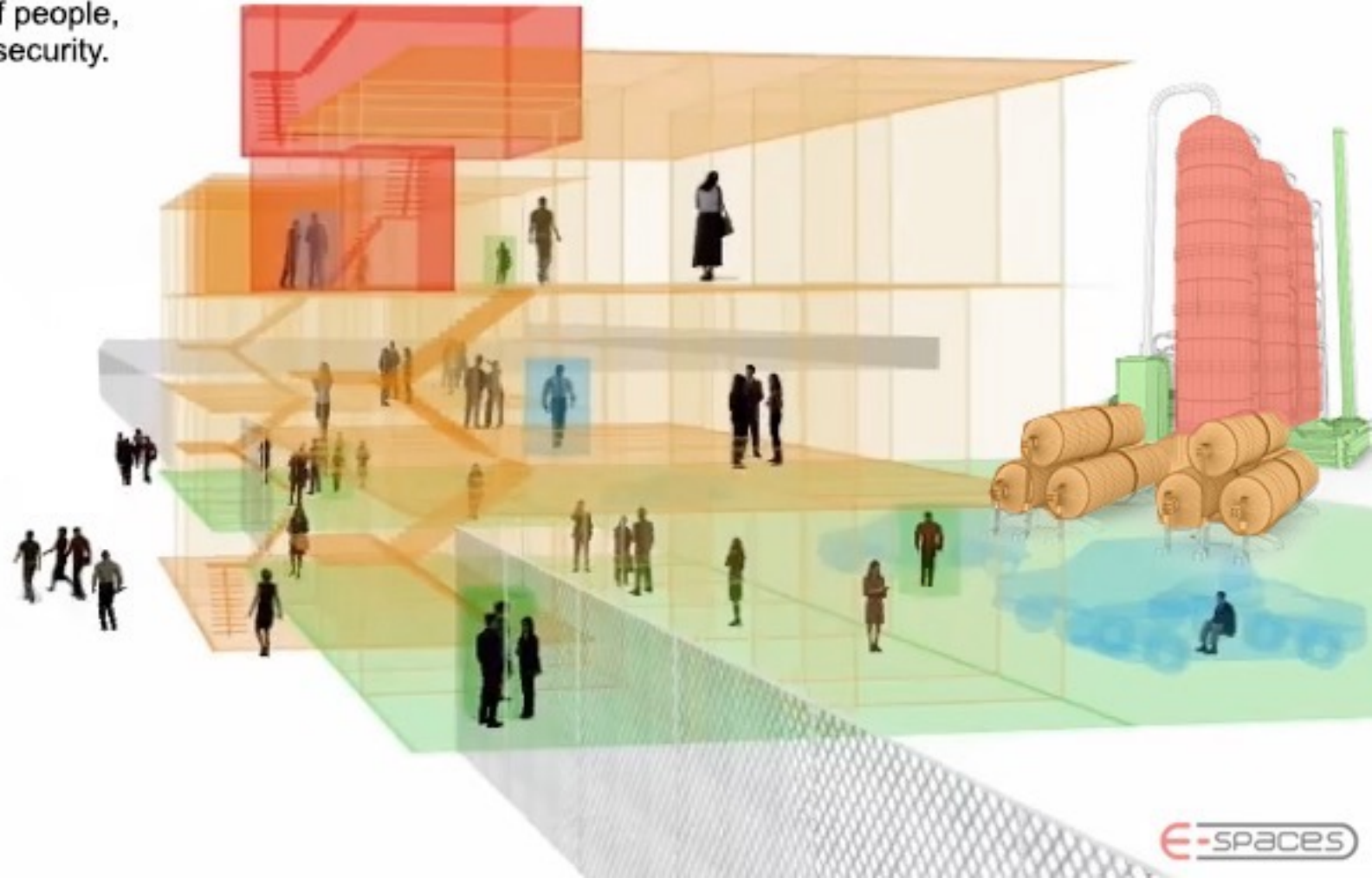
Live AVR 'C-Thru' for a 'Mobile Control Room'

Our state-of-the-art 'total situational awareness' C-THRU system enables real-time tracking and interactive 3D display of process & equipment status and the wherabouts of people, vehicles, tools, resources, etc for optimal safety and security.

Records all movements & changes with ability of 3D playback, trace backward and forward, focused on a person or an object.

Detects pressure drops and other system failures.

Instantly detects intruders, spots theft, cyberattacks (hacking), and sounds situation-appropriate 'smart alarms'.

Provides a mobile AR control room worn on the head in the form of AR smartglasses with real-time tracking & registration of viewer position and orientation.

E-spaces

- Award-winning AVR application development house

- World's oldest continuously operated VR studio, since 1993

- Founded by 25+ year VR industry veteran Philippe van Nedervelde

E-spaces

Interactive 3D Oil & Gas Equipment Simulators

Wellhead Christmas Tree

Pumping Unit (Lufkin 160)
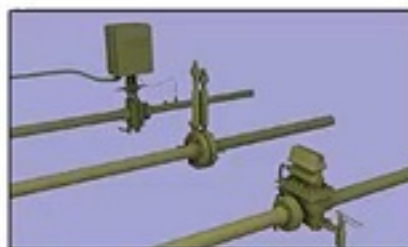
Entire Location

L-PUD1
Lesson 1 / Lesson 2

1-Stage Separator

Dehydrator

286 TANK

MR3 Meter Runs

Compression Unit

Legend:
- Oil
- Gas
- Water
- Emulsion

Parts Overview

1. Pressure Transmitter
2. High Level Switch
3. Sight Glasses
4. High Level Switch Drain Valve
5. Pressure Transmitter Drain Valve
6. Back Pressure Valve
7. Water Outlet Dump Valve
8. Oil Outlet Dump Valve
9. Production Inlet Block Valve
10. Gas Outlet Block Valves
11. Back Pressure Valve Gauge
12. Water Leg Weir
13. Pressure Relief Valve
14. Oil Outlet Block Valves
15. Water Outlet Block Valves
16. undefined

☑ Legend

Start Up Procedure

Shut Down Procedure