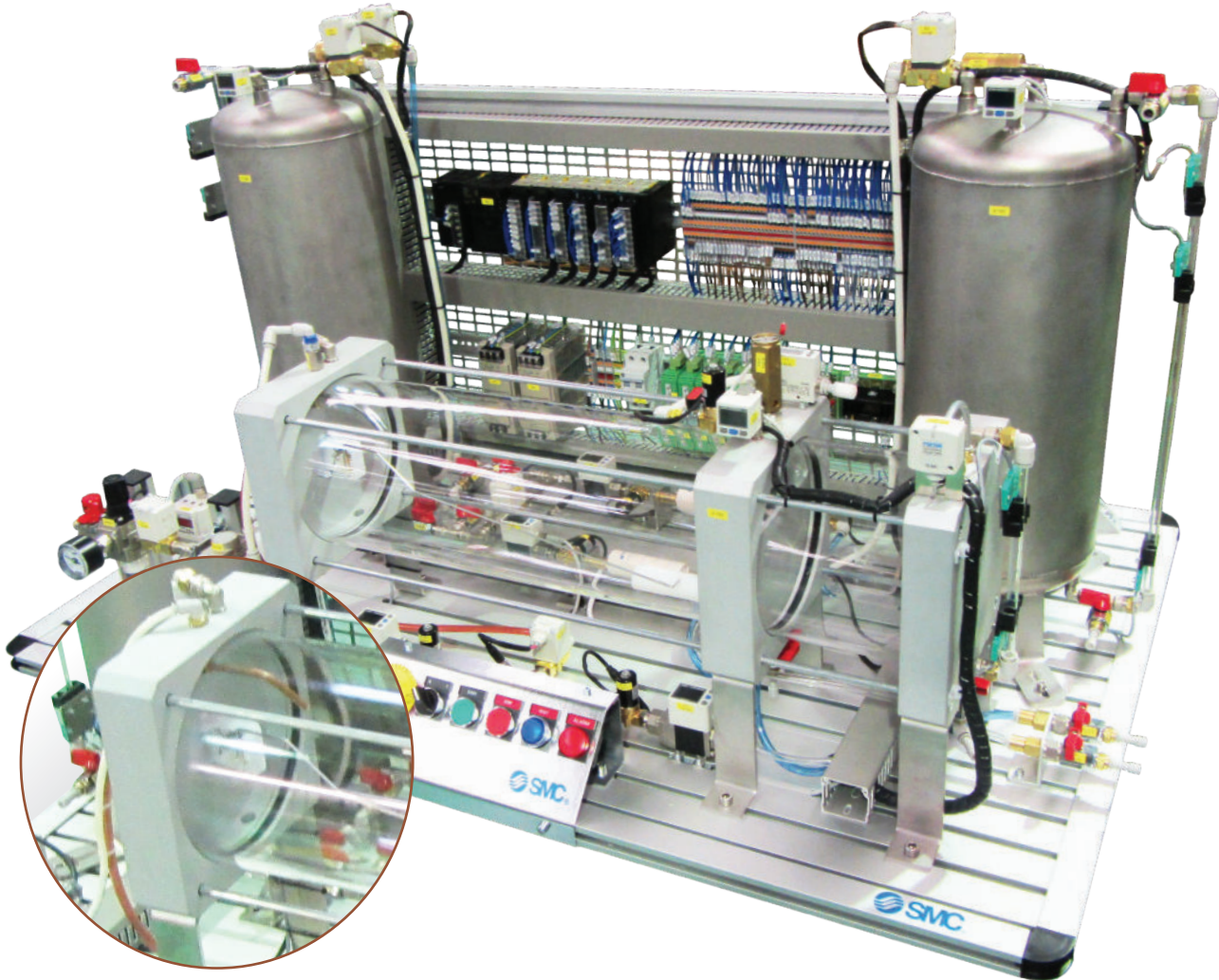


TPS-200

Three phase separator



The new TPS-200 system emulates the separation process of the oil, gas and water obtained from oil wells in gaseous and liquid components using a pressure container.

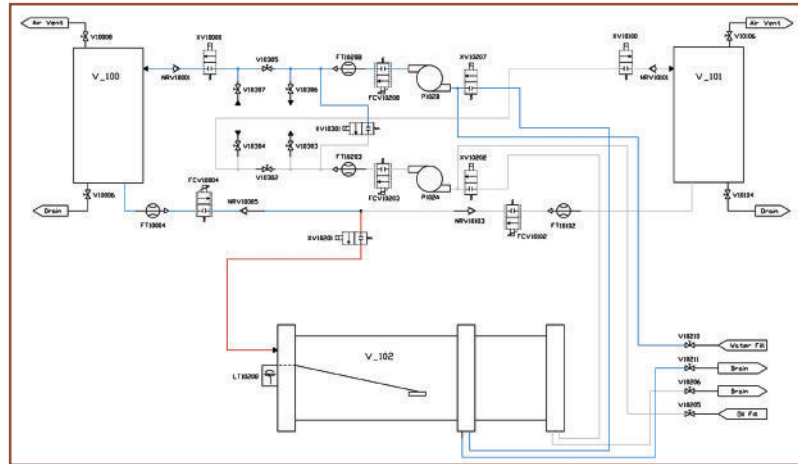
A three phase separator for oil production is a large container designed to separate the fluids obtained from the well into its constituent components: oil, gas and water.

These types of separators are based on the principle that the three components have different densities. This allows separating them when they move slowly, the gas in the upper part, the water in the bottom and the oil in the middle.



TPS-200 system allows the user knowing more about the fundamentals of three-phase separation. The petrol separation basics can be learned with this system:

- Physical layout (visual and practical)
- Flow vs. residence time (visual and theoretical).
- Flow vs. compositions (visual and using sim model)
- Pressure vs. flow/gas rates (visual an theoretical).
- Pressure vs. compositions (using sim model).
- Temperature vs. compositions (using sim model).



With the new TPS-200 system the user will be able to work and develop different skills using the following control systems:

- Transmitters (pressure, flow, level and interface level).
- Level Control (several sensor types, PID tuning and variable cascade control).
- Pressure control (PID tuning and several sensor types).
- Flow control (fluid flow control, ratio flow control and direct flow control).
- PLC system (PLC ladder may be viewed and limit switches).
- Safety Systems (ESD and cause and effect).

