TYTAN

CROSS FLOW
FILTRATION
WHEELED SKIDS

TYTAN

TYTAN is Solaris' completely customisable pilot / industrial scale Cross Flow Filtration System based on microfiltration and ultrafiltration techniques and operating at low pressure ranges (1-5 bar).

Starting from the clients' URS, Solaris manufactures tailored TFF solutions, to be applied to the recovery and separation of biotechnological products in downstream operations.

With TYTAN, customers can opt for custom-designed vessels with smart sensor technology integrated for optimal process workflow.

Cross Flow Filtration equipment

Fixed or wheeled skid options

Applications:

Upstream and Downstream filtration processes: Brewery, Wines, Cider, Concentrate juice and more

- The Tytan configuration includes:
  - spiral wound
  - hollow fiber (polymeric)
  - cassettes (polymeric)
  - tubular (ceramic)

- Group of impulsive counter-washing (BACK FLUSH SYSTEM) for the periodic and automatic counter-washing of the membranes.

- Instrumentation control, transducers of pressure for the maintenance of the PTM pressure.

- Buffer tank with level control and automatic product inlet system control with the relevant pump.

- System for the automatic washing phase control.

- Instrumentation for the control of pressures, temperatures, output, level in the buffer tank with a PLC "touch-screen" system.

- The measurement and control system is based on a SCADA supervisory Lab View, SFC-10, connected to the PLC.

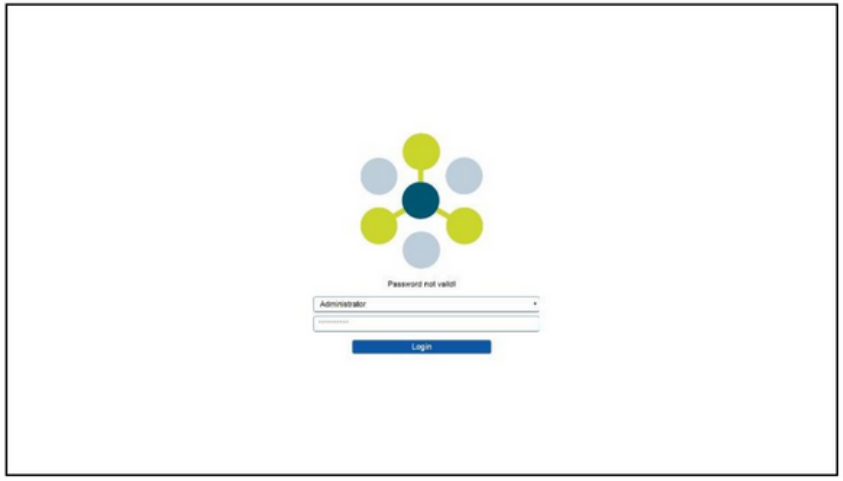
- Operational device for the final unloading of the filter.

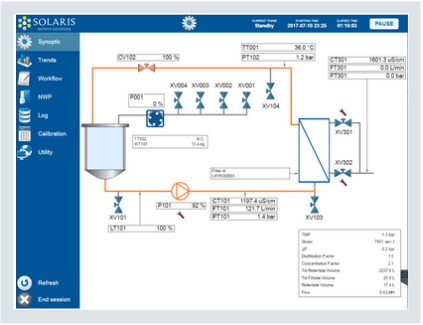
- The systems are fully suitable for inline CIP and compliant to GMP regulations, and to PED standards.

Filter area / m^2	30	40	60	80	120
N° of modules	3	4	6	8	12
Module type: ceramic	X	X	X	X	X
Module type: Hollowfiber	X	X	X	X	X
Semi Automated	X	X	X	X	X
Fully Automated			X	X	X

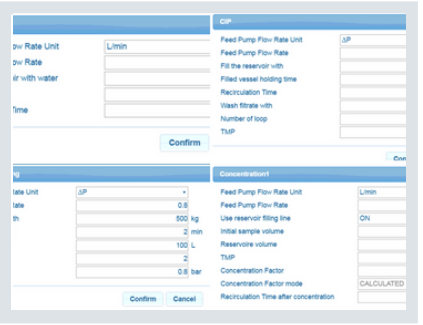
Leonardo

- Innovative SCADA software LEONARDO: a smart and user-friendly controller designed to provide a high level of complete automated monitoring of the process
- Full version included in the equipment supply
- Data extraction in .csv format
- Remote access via PC, tablet or smartphone, with QR code scanning or dedicated portal
- Remote control

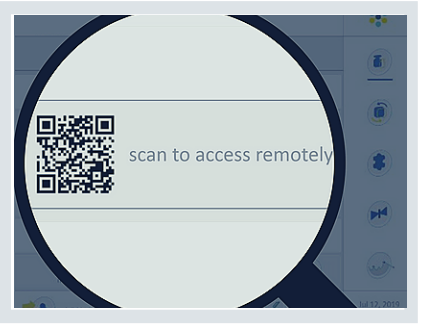




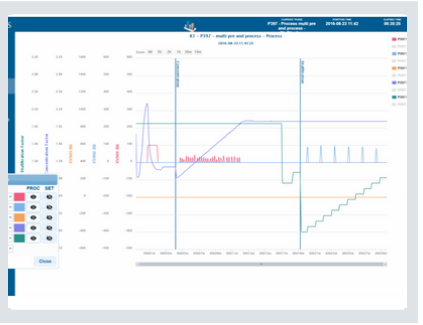
Synoptic



Filtration management and controls

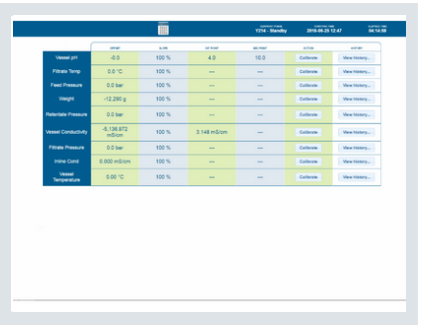


Remote Control



Trends

Workflow



Calibration

THOUGHT

FEASIBILITY STUDY

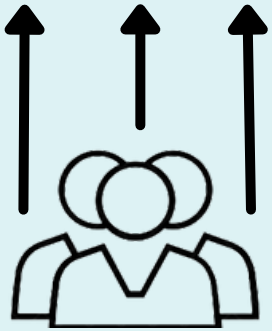
BASIC ENGINEERING

MANUFACTURING

DELIVERY

INSTALLATION

PERSONEL TRAINING



FOOD & BEV and PHARMA VALIDATION