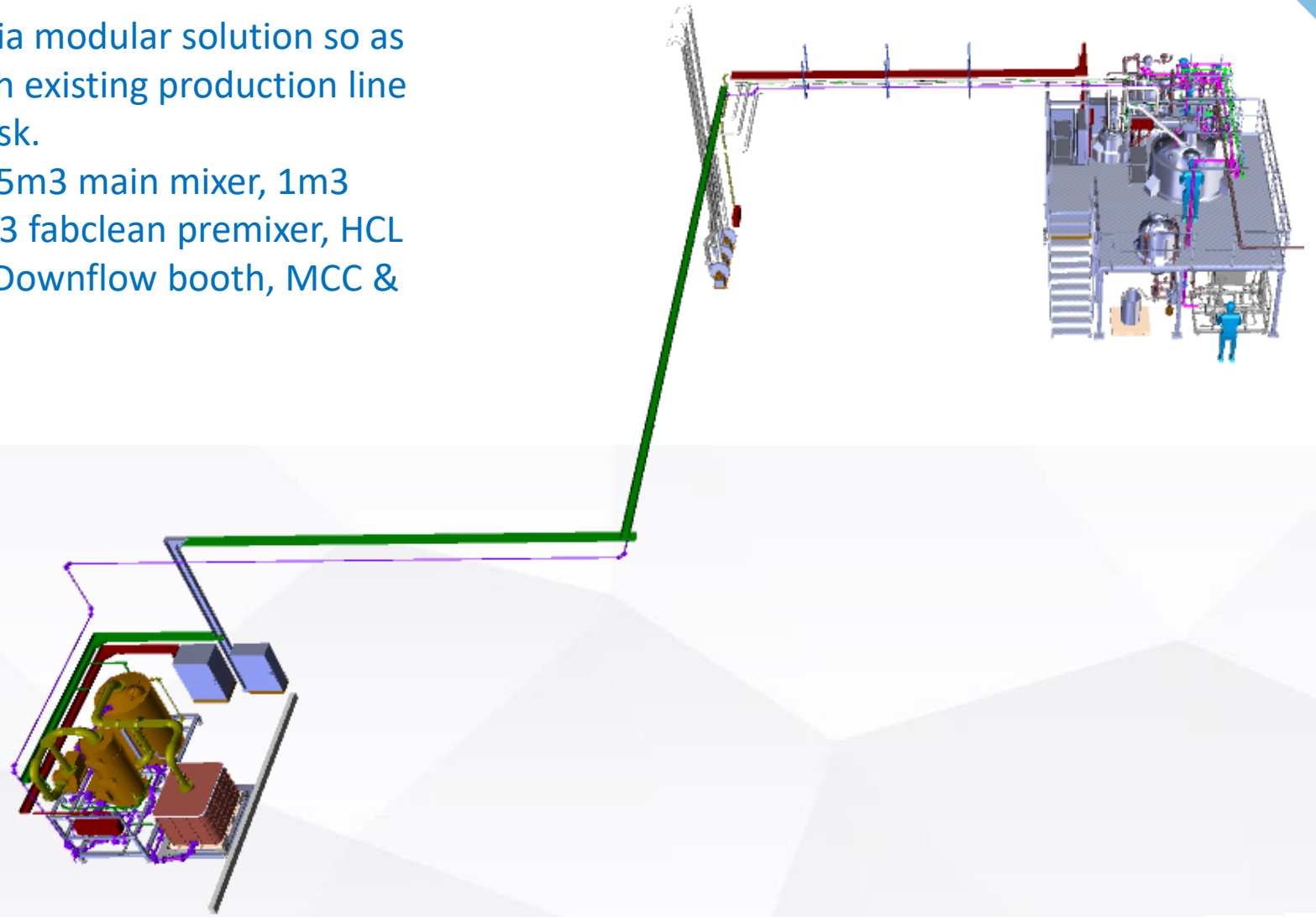
PROJECT 5m3 HCL SYSTEM

5m3 HCL SYSTEM

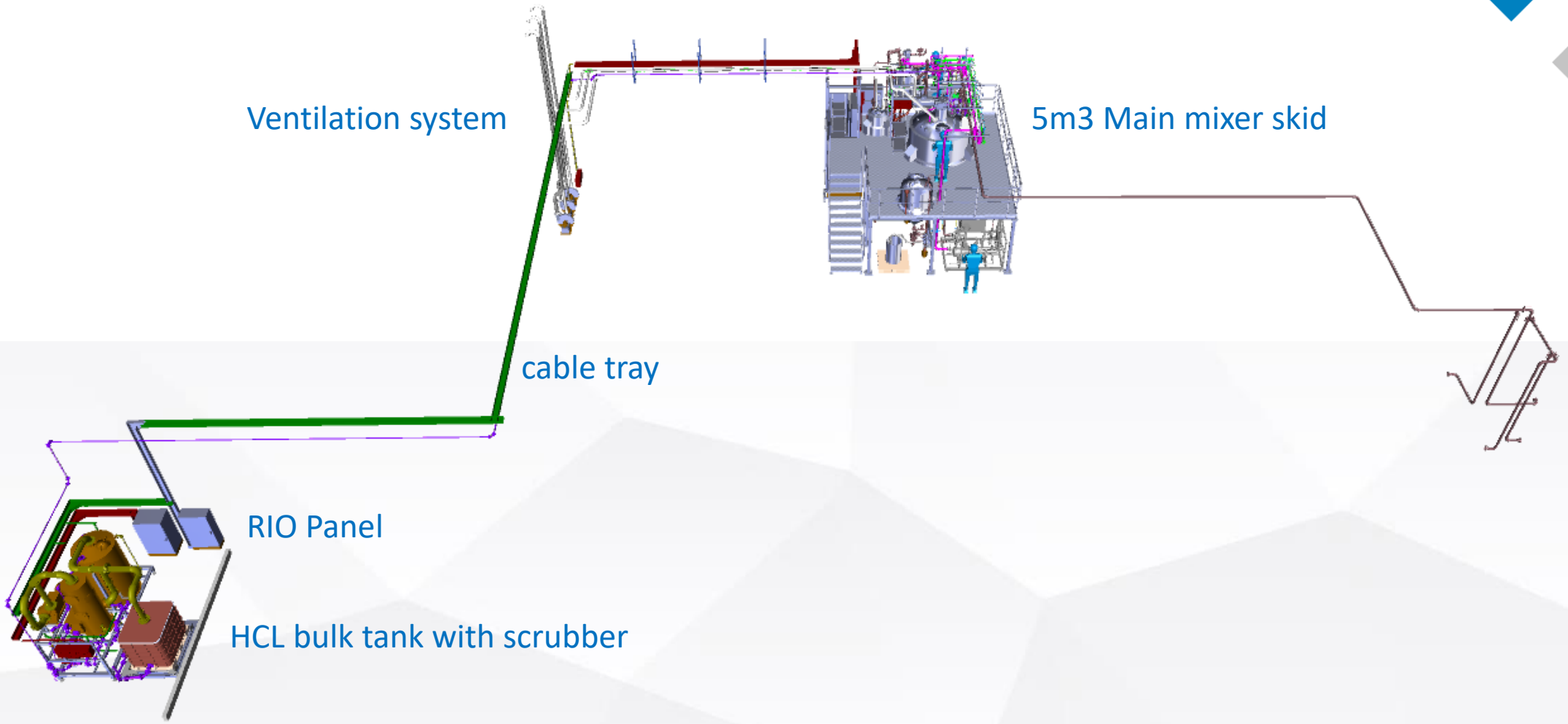
Overall View

HCL System is designed via modular solution so as to decrease interface with existing production line and minimize potential risk.
It is mainly composed of 5m3 main mixer, 1m3 quat premixer vessel, 2m3 fabclean premixer, HCL bulk tank with scrubber, Downflow booth, MCC & RIO Panel.



5m3 HCL SYSTEM

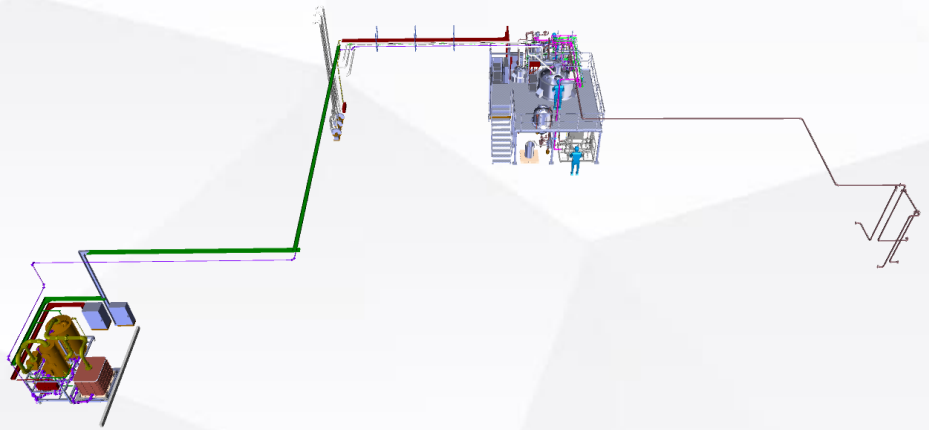
Overall View



5m3 HCL SYSTEM

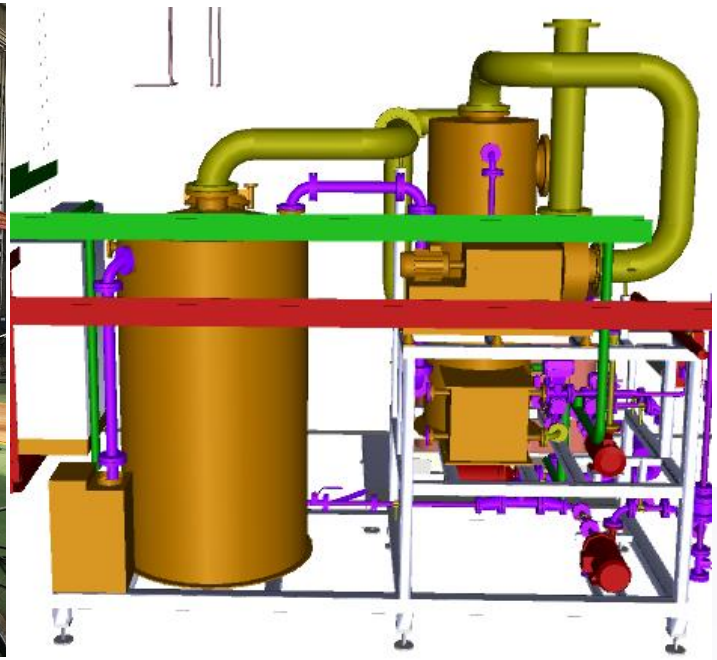
5m3 Main Mixer

Main mixer skid is composed of 5m3 main mixer vessel, 1m3 quat premixer vessel, 2m3 fabclean premixer, lobe pumps, heat exchanger, MCC Panel, valves, piping.
Raw materials pumped from the premixer, IBC station to main mixer and premixer for mixing.
Control system is also integrated into the skid for automation.

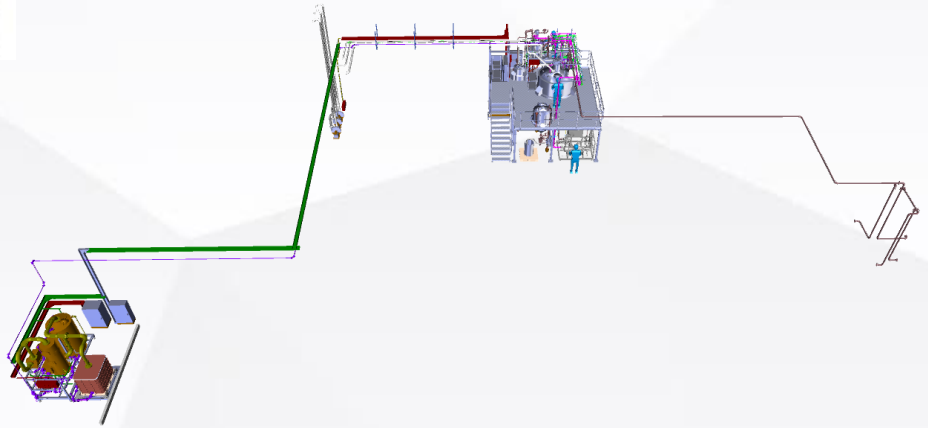


5m3 HCL SYSTEM

HCL bulk tank with scrubber

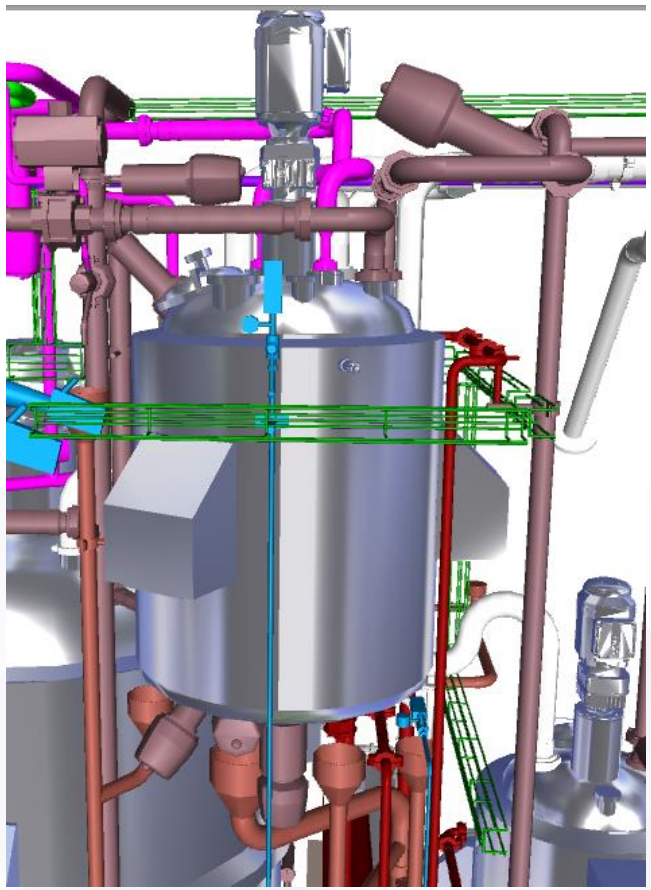


HCL bulk tank is connected with main mixer skid to supply raw materials. Scrubber is integrated with tank skid for the purpose of health & environmental protection.

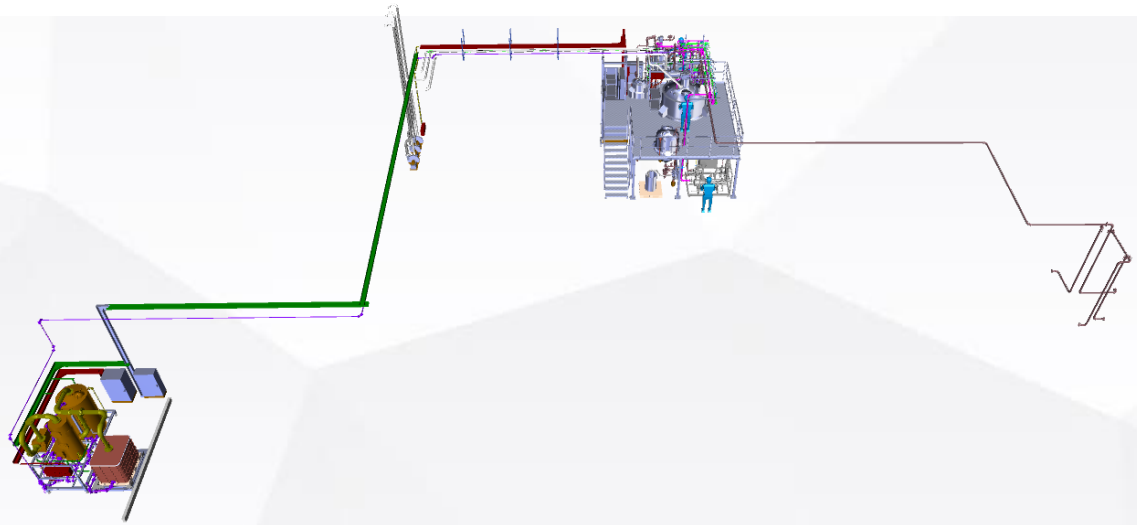


5m3 HCL SYSTEM

1m3 Premixer

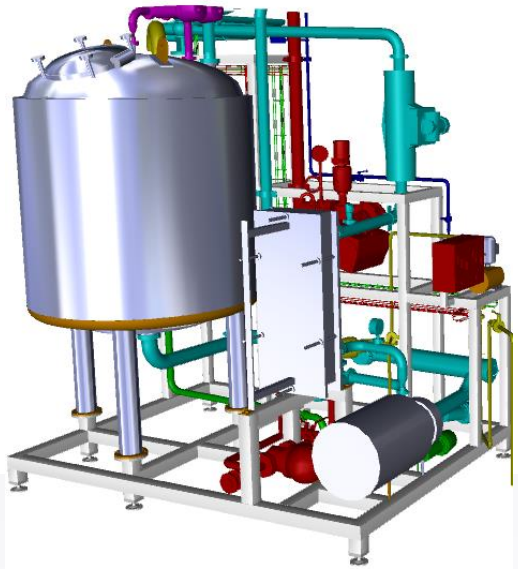


The premixer is 1m3 integrated into main mixer skid for pre-heating & mixing before material transferred to main mixer

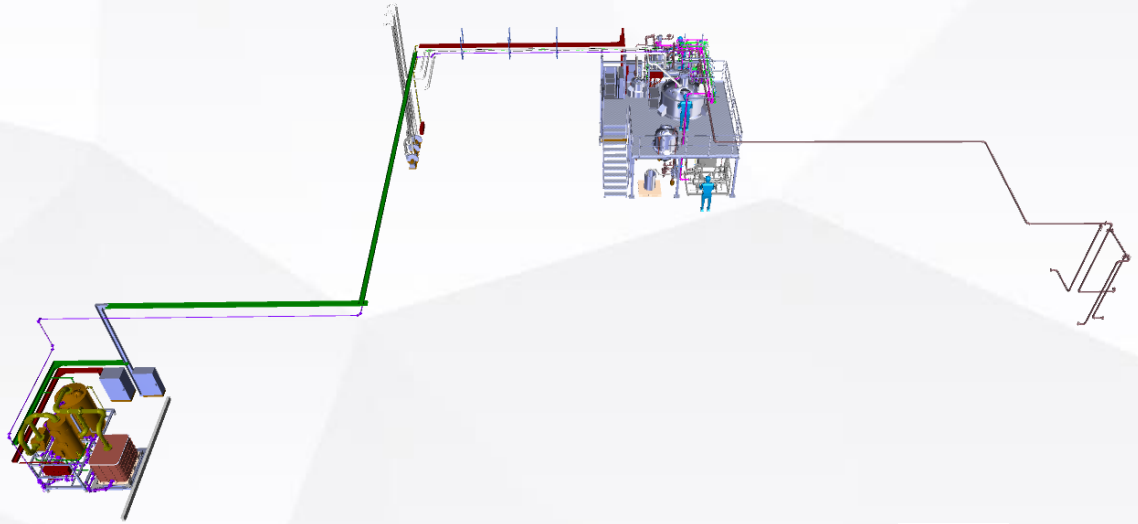


5m3 HCL SYSTEM

CIP Station

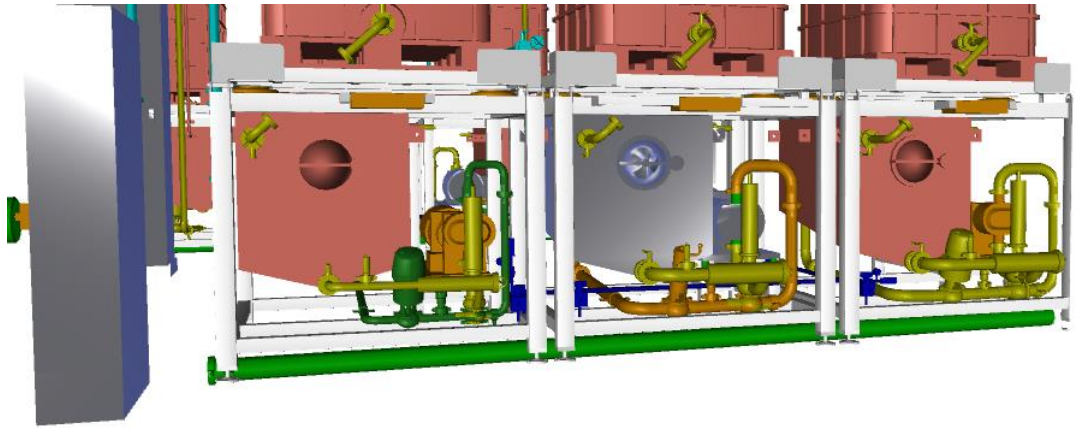


The CIP skid is composed of balance tank, CIP supply pump, dosing pump, Heat exchange, valves and piping.
After each batch, the process line will be cleaned with hot/cold process water to avoid contamination before next batch.

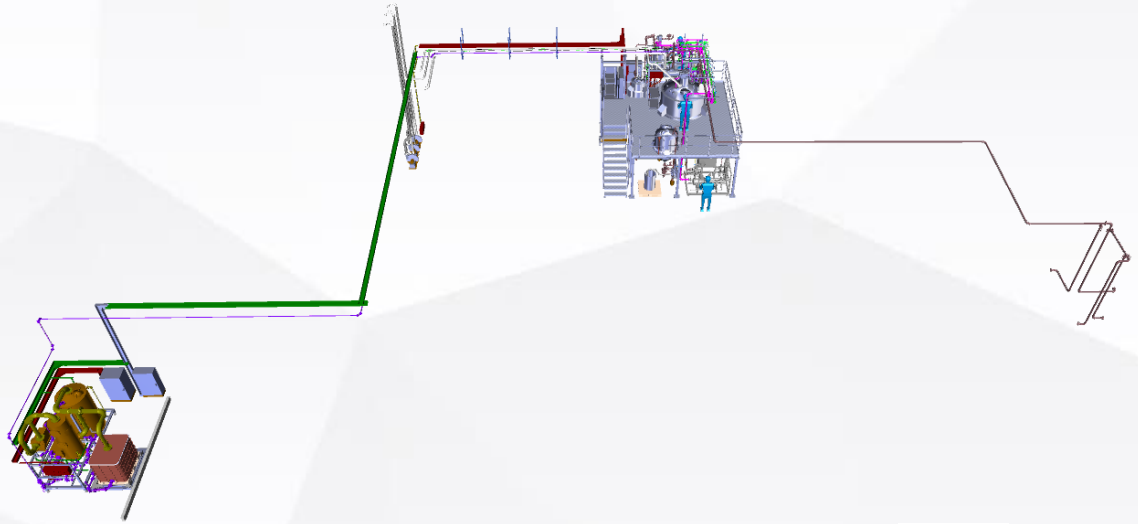


5m3 HCL SYSTEM

IBC Station

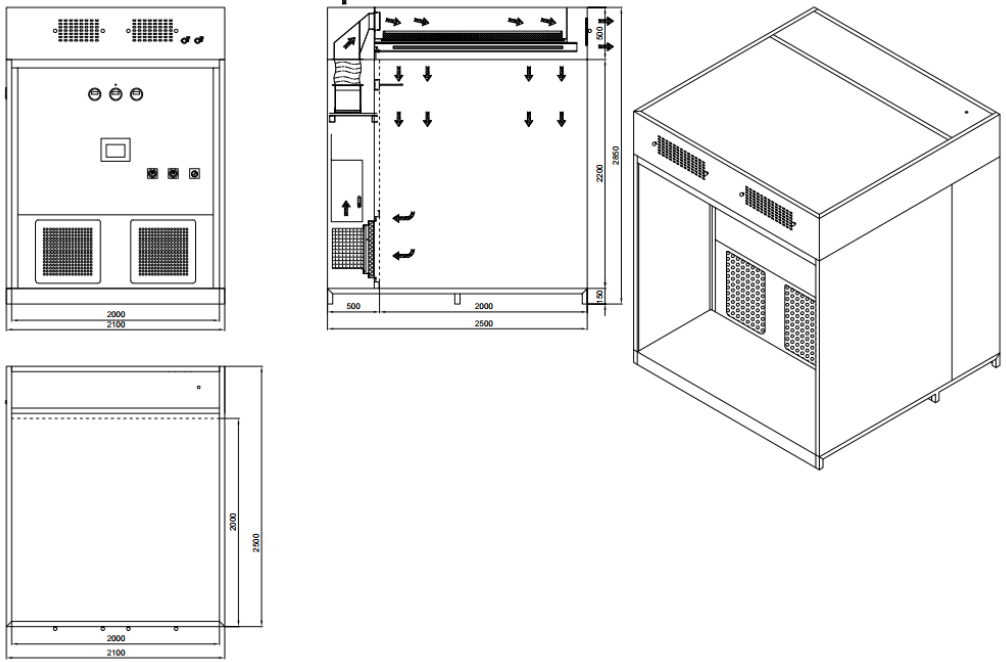


IBC stations are used for storing raw materials. They are made of SS316L, added to the mixer for circulation as well.

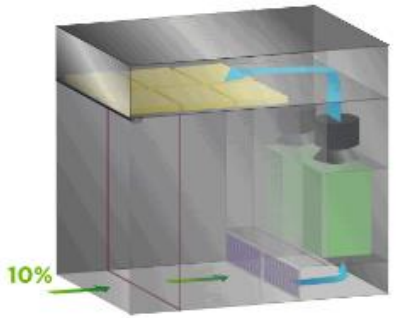


5m3 HCL SYSTEM

DFB



Operating Principle - Bleed Airflow



Down flow booth is used for Enzyme transferred from IBC to mixer. In the DFB, the air is filtered to provide the operator a safe working room.