

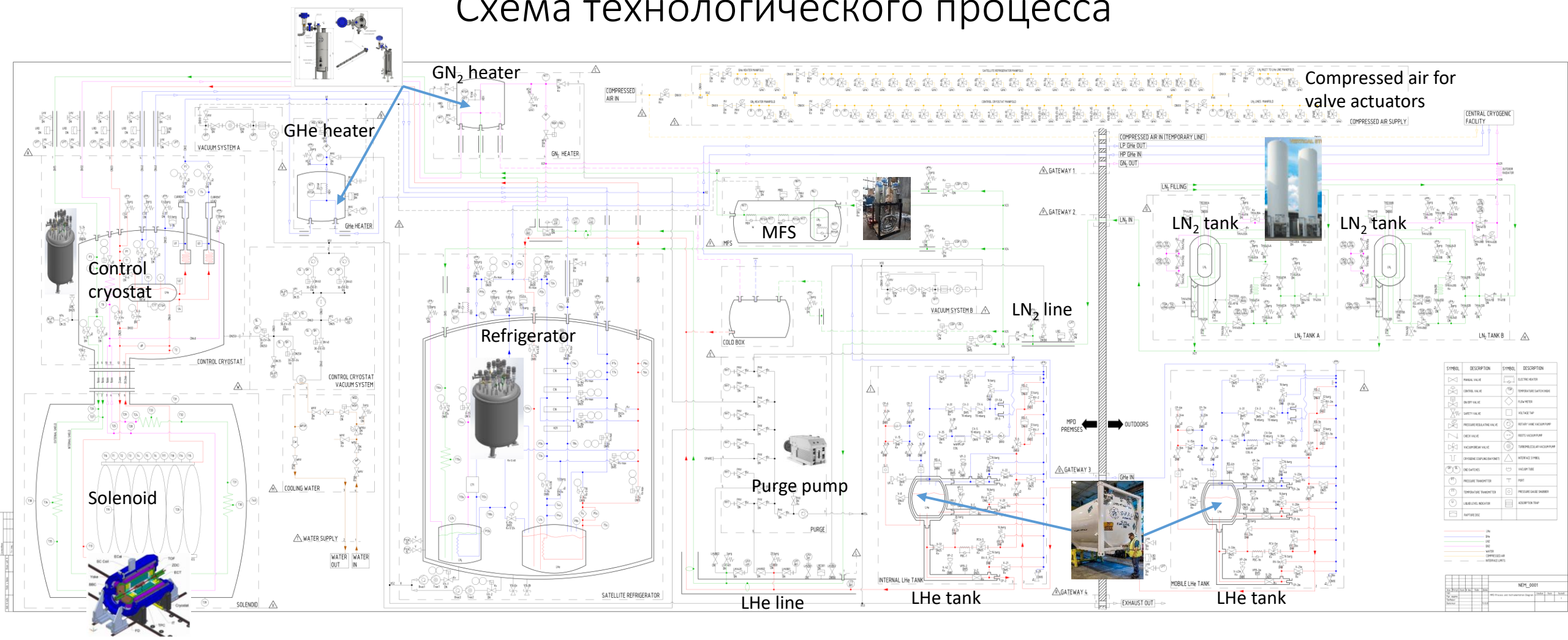
MPD status

focused on cryogenics

V. Benda

MPD P&I, Process and Instrumentation diagram

Схема технологического процесса



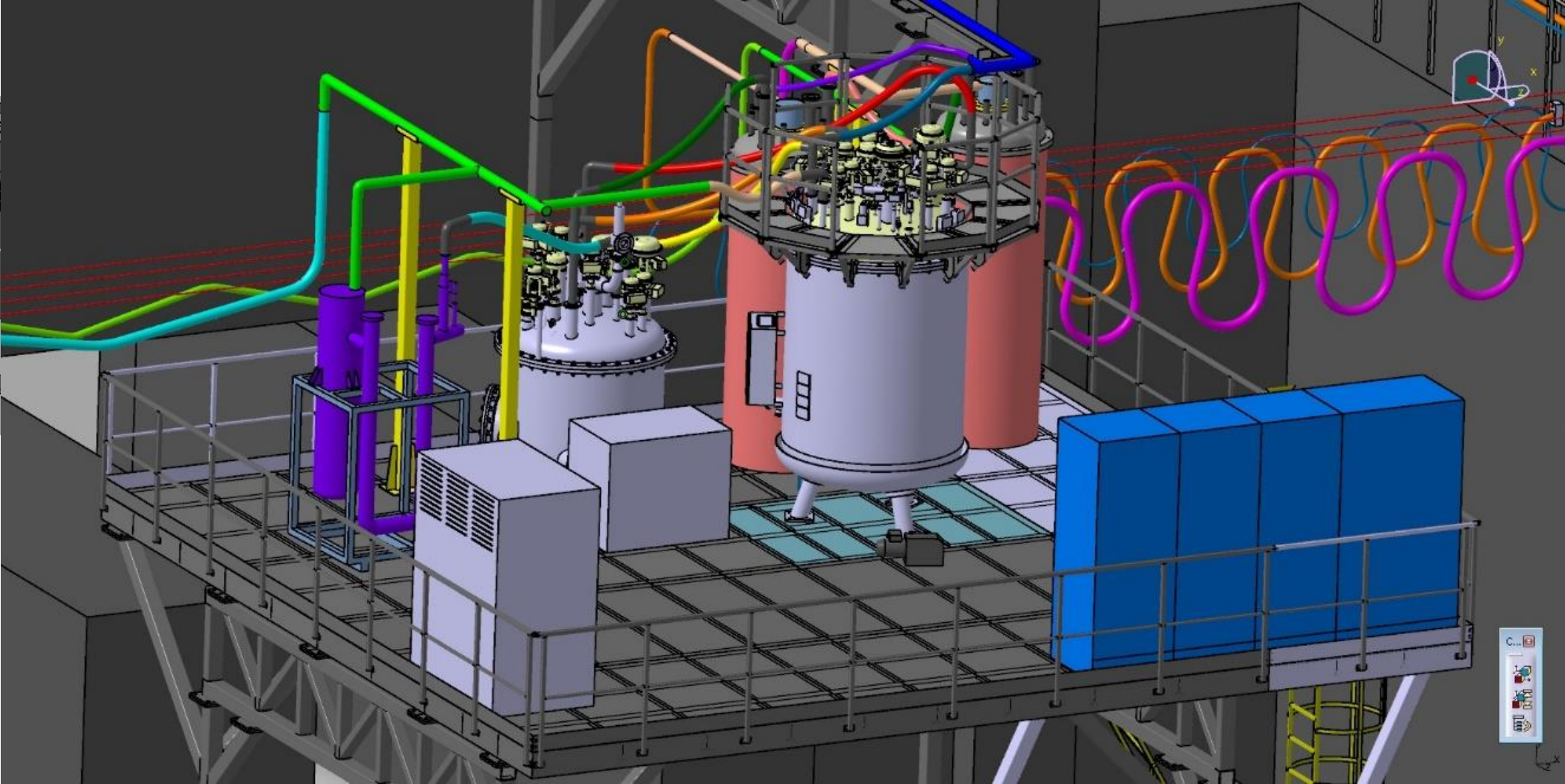
Final infrastructure for cool down to 4.5 K by LHe

MPD – Infrastructure and their key components

- LN₂ tanks: Chart-Ferox was chosen 25 February 2021
- LHe line: A.S.Scientific UK was chosen 19 March 2021
- GHe & GN₂ heater: Heating cartridge, waiting for final quotation
- MFS arrived to b. 203A on Friday 19 March
- ILK (D) – Refrigerator and Control cryostat future collaboration
 - Spare parts
 - Assembly of the Satellite refrigerator & modification
 - Dummy in negotiation
 - Control system (PLC automat) - discussion
- ASG (It) – Solenoid, arrival (perhaps) on Monday 12 April for 3 days
 - Opening of the MPD magnet transport box. In process
 - Visual and electrical test
 - Preparation for next visit – preparation and pumping for leak test
- Document server – highest priority, in the testing process

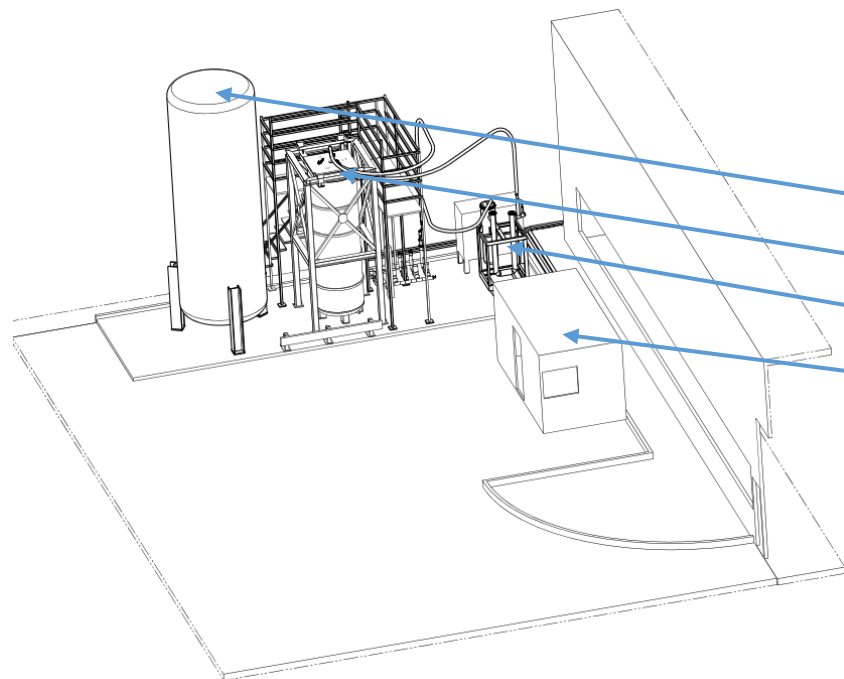


Layout макет



MPD magnet cool-down to 80K by LN₂

- Для увеличения скорости работы над проектом MPD готовится охлаждение до 80 K
- При 80K большинство возможных проблем с магнитом появится
 - Холодная утечка и электрическое короткое замыкание катушки
- Это охлаждение продемонстрирует прогресс проекта
- В случае неисправности магнита будет достаточно времени на его ремонт
- Для этой цели находится в стадии подготовки MFS (Magnet Flushing Station), которая использовалась в ЦЕРН для аналогичной задачи



Slow magnet cool-down at CERN

LN₂ storage container

Test cryostat

MFS

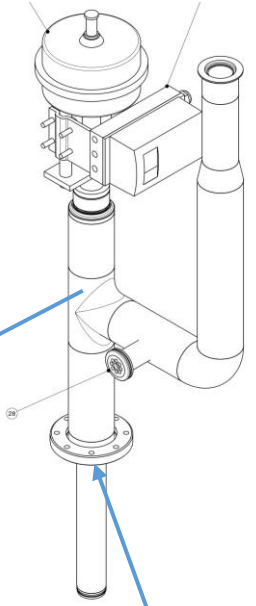
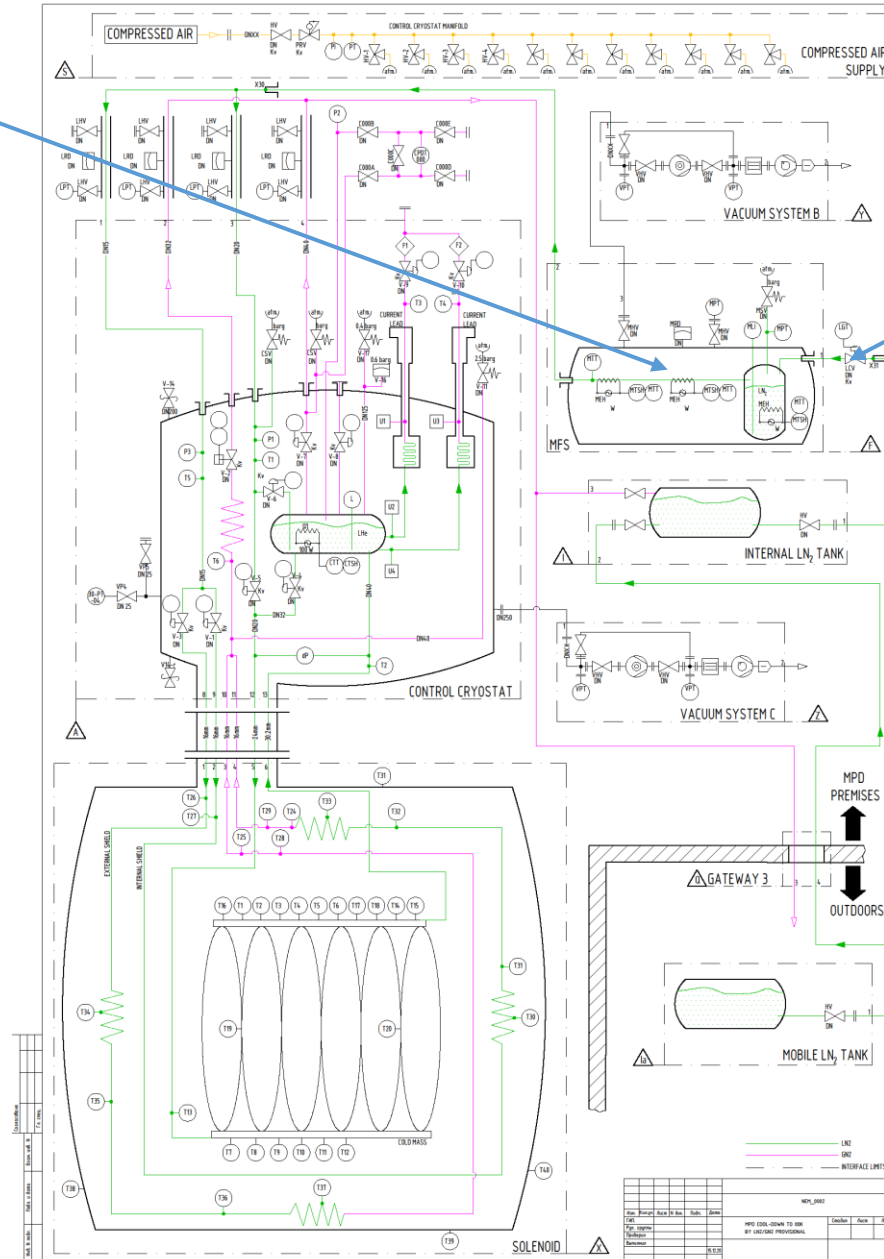
PLC control system



MPD solenoid cool-down to 80K at JINR

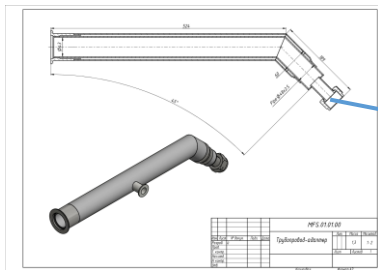


MFS

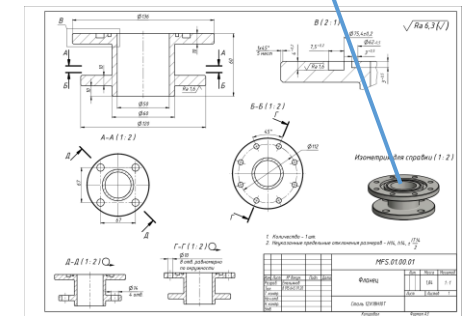


Existing valve

Preparation and testing in b.203A



LN₂ distribution in b.203A



02.04.2021

Thank you for your attention