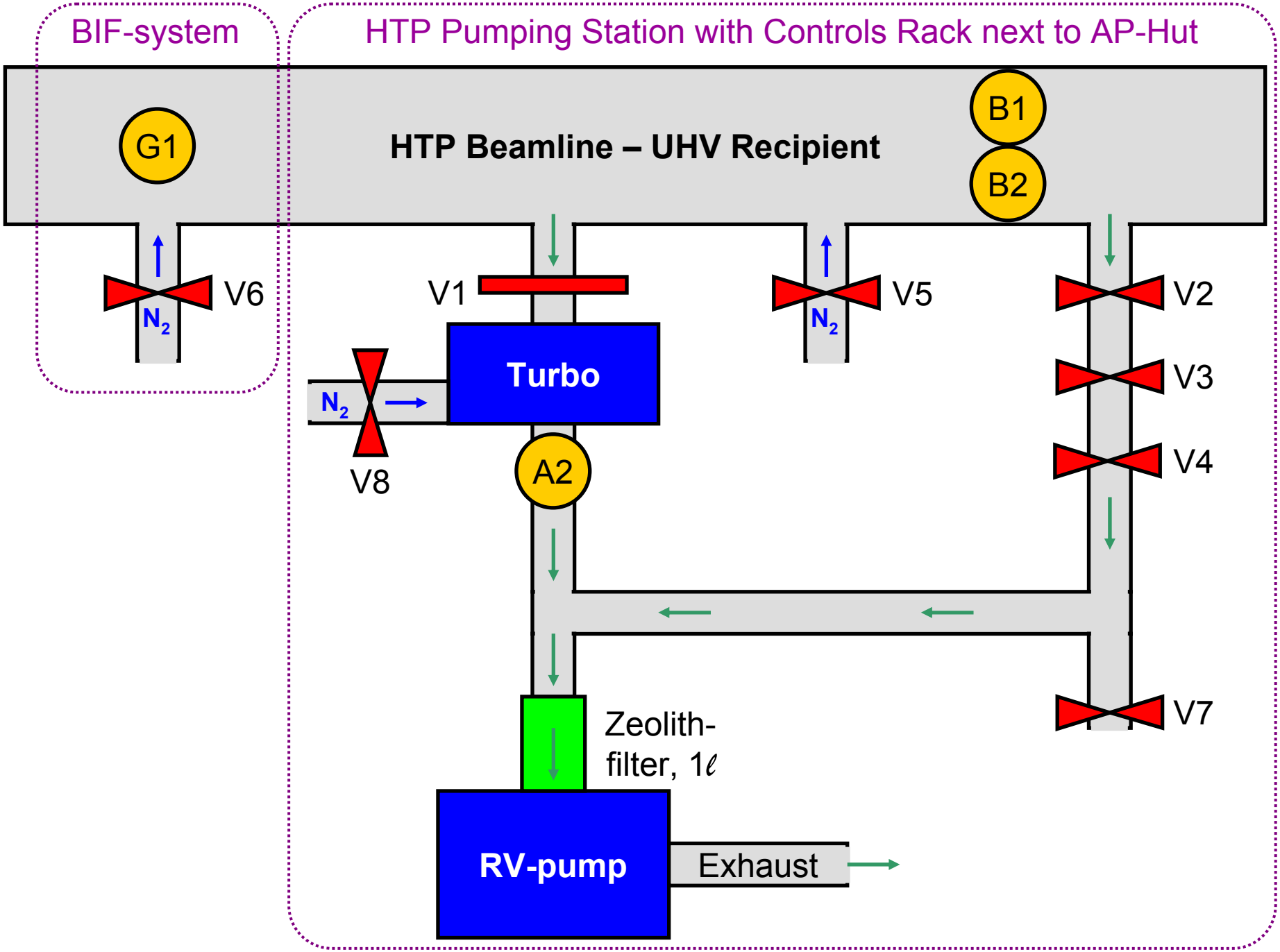

BIF-system
HTP Pumping Station with Controls Rack next to AP-Hut
G1
HTP Beamline – UHV Recipient
B1
B2
V6
N2
V1
Turbo
V5
N2
V2
V3
V4
N2
V8
A2
V7
Zeolith-
filter, 1ℓ
RV-pump
Exhaust

Übersicht der Komponenten des HTP Pumpstandes

- Ventile:  V

  - V1: Plattenventil zum Schutz der Turbo
  - V2: Handventil – typ. geöffnet
  - V3: Fernsteuerbares Ventil – typ. geschlossen
  - V4: Handventil – typ. geöffnet
  - V5: Nadelventil zum Belüften mit N_2
  - V6: BIF Gasdosiersystem ferngesteuert (N_2)
  - V7: Handventil zum Anschluss des Lecksuchers
  - V8: Automatisches Ventil zum Fluten der Turbo

- Messröhren: 

  - A2: Pirani Messröhre im Vorvakuum (1E+3 – 5E-4 mbar)
  - B2: Pirani Messröhre im UHV-Rezipient (1E+3 – 5E-4 mbar)
  - B1: Penning Messröhre im UHV-Rezipient (1E-3 – 1E-9 mbar)
  - G1: Penning/Pirani Röhre des BIF-Systems (1E+3 – 1E-9 mbar)

Cutline of Components @ HTP Pumping Station

- Valves:  V

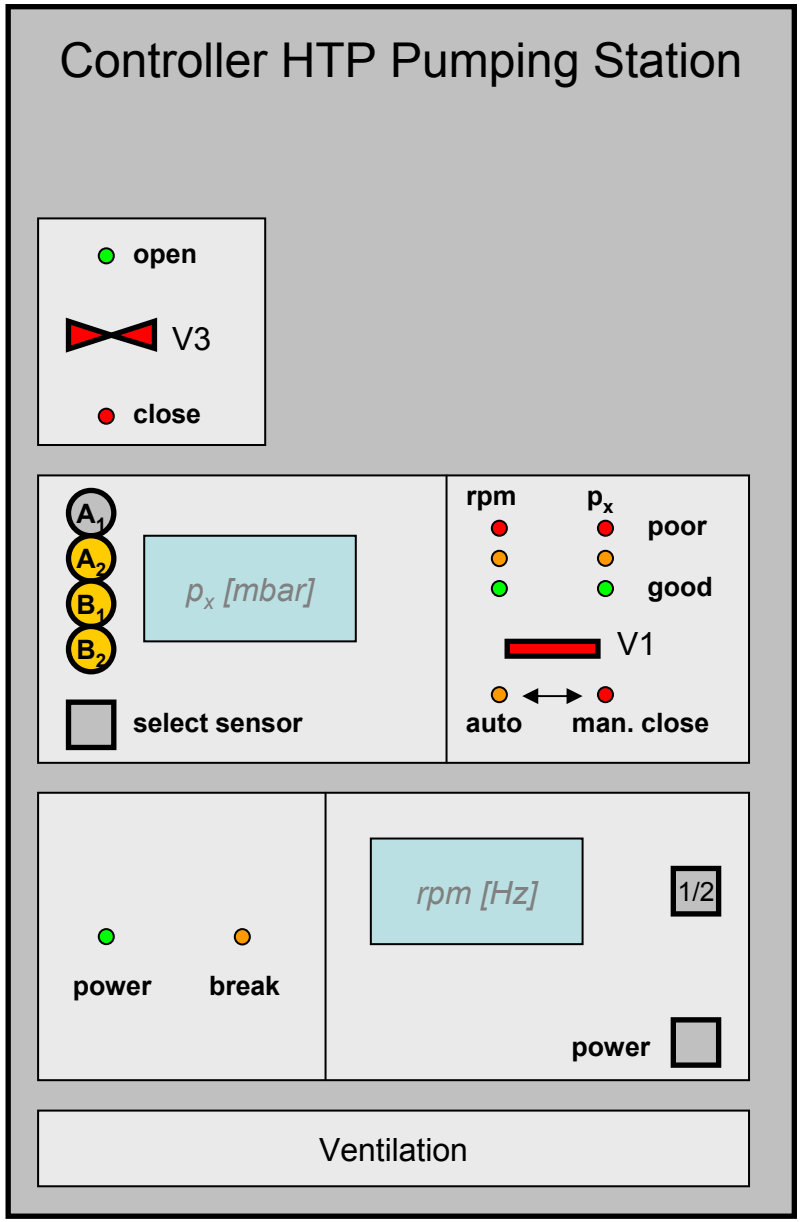
  - V1: plate valve to protect the turbo
  - V2: hand valve – usually open
  - V3: remote valve – usually closed
  - V4: hand valve – usually open
  - V5: needle valve for N_2 venting
  - V6: BIF gas dosing system (N_2)
  - V7: shutter valve for leakage test
  - V8: automatic valve to vent the turbo

- Gauges: 

  - A2: Pirani gauge in the pre-vacuum (1E+3 – 5E-4 mbar)
  - B2: Pirani gauge in the UHV-system (1E+3 – 5E-4 mbar)
  - B1: Penning gauge in the UHV-system (1E-3 – 1E-9 mbar)
  - G1: Penning/Pirani gauge for BIF-system (1E+3 – 1E-9 mbar)

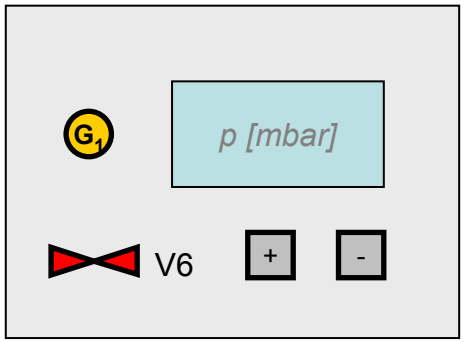
I

Controller HTP Pumping Station

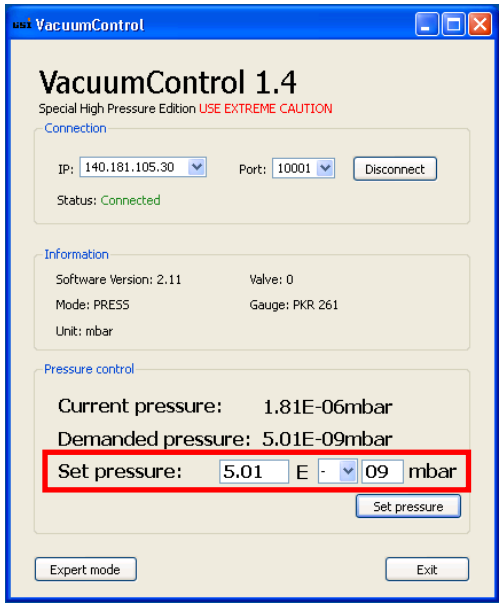


II

BIF-Controller for V6 in the Cave



BIF GUI to set pressure for venting



Instruction for Venting and Pumping HTP

- Venting:

1. Swich plate valve to „manual close“ and keep bypass valve closed

- Pumping
  - …