TE-VSC contribution to WP8: 3 MeV Beam Line
Spare RFQ Project

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3MeV Layout 2013

3×Ion pumps
1×VGP (Penning)
1×VGR (Pirani)
1×VPG (Pumping group)
2×Valves
very similar layout
The duration of tests with beam is presently scheduled for approx. 4 weeks (12 hours/day) starting in Oct. 2022, if feasible.
Reuse as much equipment as possible (including vacuum chambers)
SCADA integration? Control requirement? Interlocks? → Minimalistic approach?
(Very) Preliminary budget

- Vacuum Hardware 20kCHF:
  2×valves, 3×VPIs, 1×venting, 1×VGP/VGR,
- Control Hardware 20kCHF:
  1×TPG300, 2×VPI power supplies, cabling, etc.
- Other items 10kCHF
  Manpower, seals, bolts, etc.
- Mobile pumping group 0kCHF
  Minimum 50kCHF

- Vacuum chambers?
  Drift tubes 2-5kCHF (design and manufacturing)
- New spectrometer chamber? 10-20kCHF
- Control system? 10kCHF
  SCADA, supervision, etc.