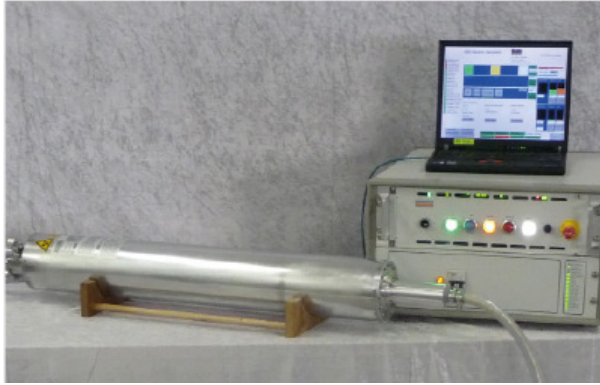
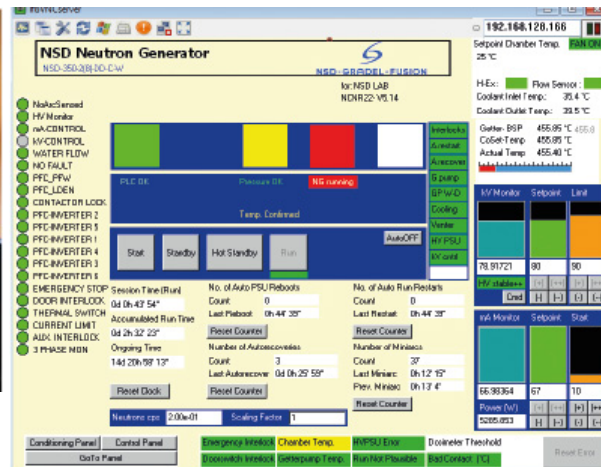
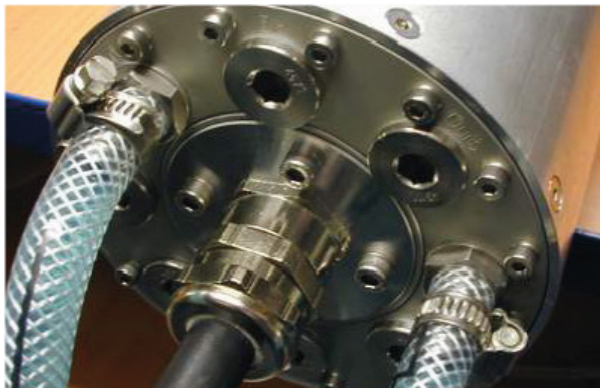


# NSD-50 Neutron Generator

DD 2.5 MeV or DT 14 MeV or TT



- Intelligent fail-safe automation control
- Emergency stop and door switch external interlock loops plus extra inputs for dosimeter alarm signals
- Remote connection watchdog
- LB112 dosimeter integration interface
- UN2911 Class 7 excepted transport package (applicable to DT or TT only)
- No environmentally harmful SF6 -gas
- DD/DT/TT gas is stored in a solid getter pump for vacuum pressure in the sealed reaction chamber at room temperature (no risk of outward gas leakage)
- No breakable glass components



## Specifications

- Electrode and fusion emission zone length in middle of reaction chamber: **50 mm**
- DD 2.5 MeV neutron max. yield:  $\sim 4 \times 10^7$  n/s
- DT 14 MeV neutron max. yield:  $> 3 \times 10^8$  n/s
- max. voltage: 120 kV
- max. current: 15 mA
- Greater than 20,000 hour lifetime
- Non-pulsed continuous operation
- Quick start to near full output
- stable operations and starting from lowest ( $\sim 1000$  n/s DD) to highest output
- High stability and repeatability
- Outer casing is at ground potential
- Reaction chamber: 815 mm long, 135 mm O.D.
- Neutron emission module weight:  $\sim 12$  kg
- Input power 230 or 110/220 VAC 50/60 Hz, 3 kW
- VNC control HMI over LAN via any PC
- Automated unattended operation for industrial applications
- Neutron monitoring for connection to a neutron detector and TTL signal for neutron emission
- Complete plug and play system includes everything required except a PC for VNC access: NG head, central control unit, power supply, cooling unit, cables