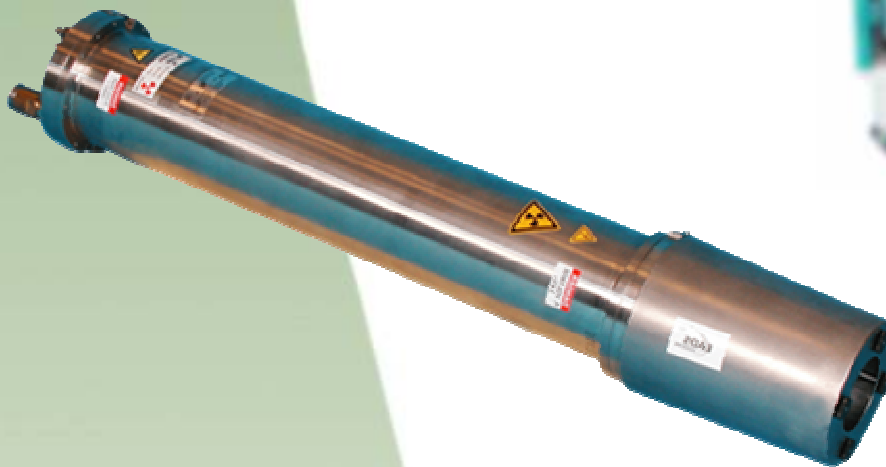


SODERN NEUTRON GENERATOR GENIE 35

**New High Neutron
Output Generator**



The GENIE 35 is the last evolution of EADS SODERN's neutron generator.

This new generation meets perfectly the industrial's expectation by gathering reliability, performance and user-friendliness interface.

This new generator combines the simplicity of Use of the GENIE 16 with the high reliability of GENIE 36.

The neutron generator GENIE 35 benefits from an extensive experience of EADS SODERN in manufacturing reliable sealed neutron tubes and in designing electrical equipment for industrial applications, which makes this new generation very attractive compared with conventional isotopic source.

The GENIE 35 offers a variety of advantages:

-High Neutron output:

The most powerful neutron generator
Up to 10^{10} n/s (D-T)
Up to 10^8 n/s (D-D)

-Advanced digital control:

Remote simplified electronic with user-friendliness software

-Easy to use:

Design for an easier industrial system integration

-Unsurpassed tube life

Insuring low cost operation

- Safety:

No radiation in the off position,
Safety loops

Certified ISO 9001 by



All components, assemblies and systems are designed, built or integrated in-house and are subject to the world's highest standards of testing and quality insurance.

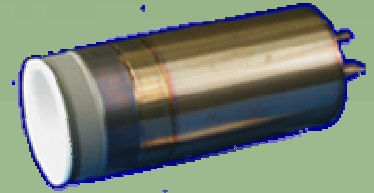


Technical Specifications

The GENIE 35 is made up of the high neutron yield sealed tube, which is well known for its high reliability.

The Neutron Emitting Module of the GENIE 35 is a stainless steel probe filled in with oil cooling for insulation.

Key part SODERN sealed tube



Neutron output

- Neutron Energy : 14 MeV (DT) or 2.5MeV (DD)
- Neutron yield : up to 10^{10} n/s/4πsr (DT) or 10^8 n/s/4πsr (DD)
- Typical tube lifetime at $2 \cdot 10^9$ n/s/4πsr (DT) : 4000 hours

Pulsing parameters

- Pulse rate : 10 Hz to 10 KHz
- Nominal duty factor : from 2.5 % to 100 %
- Rise and fall time : < 1.5 μs

Electrical

- Power supply: 230 V / 50 Hz (16A) or 110 V / 60 Hz
- Must be grounded
- 2 synchronisation output (TTL) are provided

Mechanical

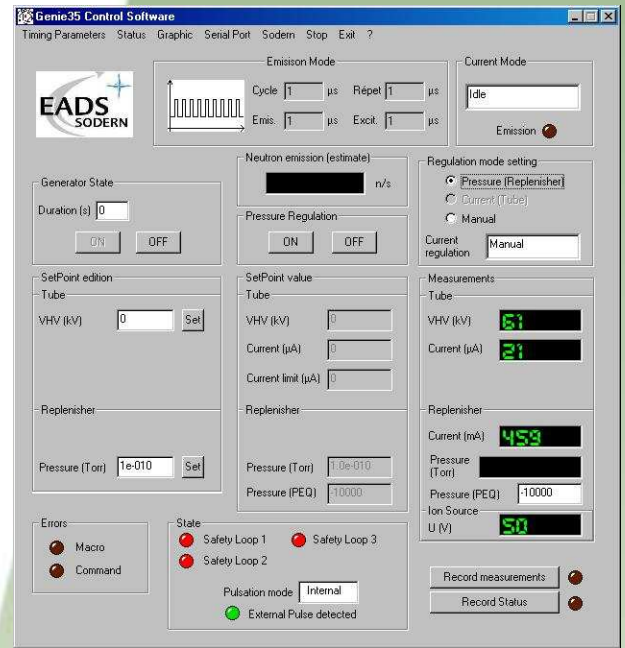
- Neutron Emitting module : 25 Kg,
Diameter < 150 mm - Length < 900 mm
- Control cabinet: 750mm height / 600mm width / 800mm depth
- Optional NEM cooling System : 50 Kg (only necessary above 10^9 n/s)

Remote control

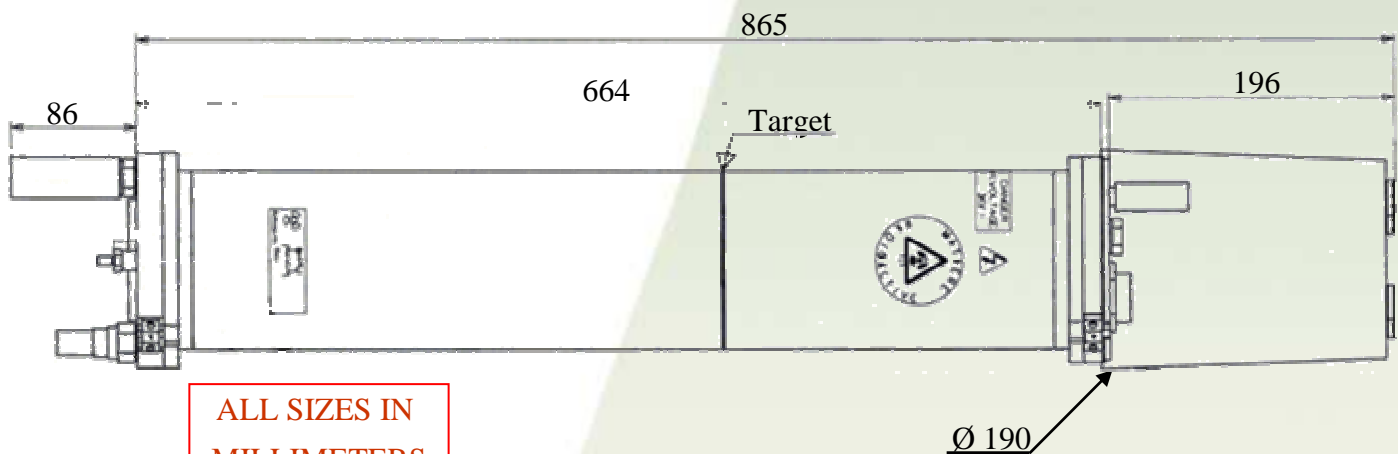
Genie 35 is supplied with SODERN control software, and an Active X driver allowing users to control GENIE 35 from their own control interface. Inputs for safety loops available on the cabinet.

Safety

GENIE 35 is equipped with three hard safety loops and any cutting of data link of the PC and the control unit stops the neutron emission.



User-friendly operator interface



ALL SIZES IN
MILLIMETERS

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