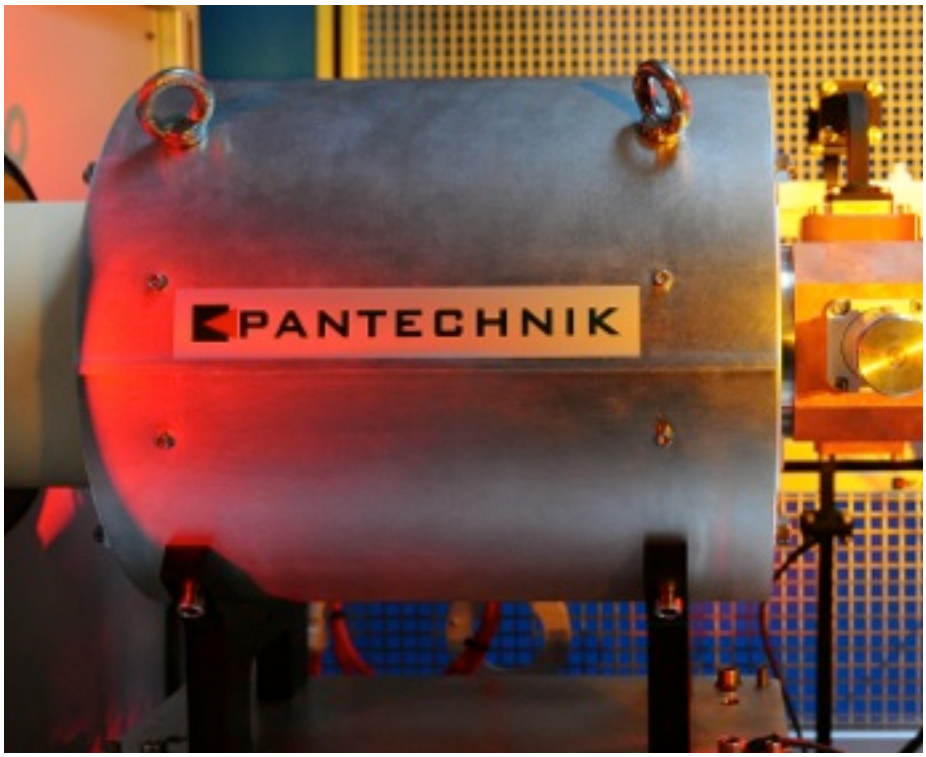
PANTECHNIK

nanogan 14.5



The perfect source for high voltage platforms

Nanogan 14,5 is an ECR ion source, compact and with good performance,

which the magnetic circuit is entirely made with permanent magnets both for the radial and longitudinal fields, so the total electrical power is extremely low. The weight of the source is about 90kg. Its performance is the best in its category, allowing the production of beam currents of 20 epA of Ar^{9+}. Nanogan14,5 can run with RF power up to 200W at 14.5 GHz depending on the element and charge state needed. The maximum extracting voltage is 30 kV. This ion source is working in several laboratories and can also be installed easily on a high voltage platform.

ion / Q	1	2	4	6	8	9	12	14
H	1500							
He	1500	200						
Ar	700		280	100	60	20		
Xe							20	15
Ta					10		20	20
Au			20	20	20	15		4

Beam intensity for various charge states given in electric µA


turn-key Nano-PK bench

Turn-key bench for Mini-PK

The turn-key bench includes the Nanogan14,5 ECR ion source with all complementary equipment, for example:

- RF VCO generator 14.5 GHz
- RF amplifier (200W)
- DC-breaker
- RF window
- Extraction system
- Einzel lens
- Pumping (extraction) with one TMP and primary
- Gate valve
- R=400 mm double focussing dipole
- 2 steerers (focal plane)
- Pumping with one TMP and primary
- Slits
- Beam profiler
- Faraday-cup
- Complete gas system

The full bench is pre-tested in the Pantechnik headquarters in the presence of the customer. The bench can be mounted in the final site by Pantechnik experts.

Command and Control Cabinet

The cabinet includes all high voltage equipment and interface between the source, high voltage platform and the power supplies. Information on vacuum is also read and used for interlocking the equipment. Optionally, power supplies and control of sputtering and oven systems, for production of metallic beams, can be included.

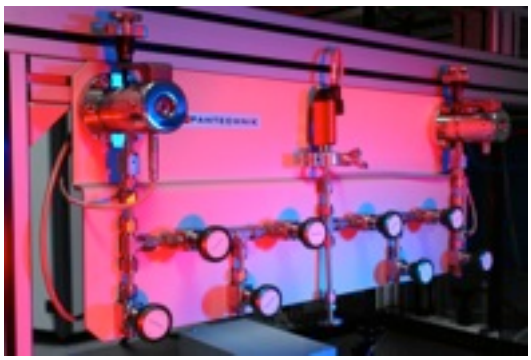
The cabinet uses National Instruments modules and is interfaced via ethernet. It can be connected to a computer via optic fiber.

All security and safety interlocks are hardware cabled in the cabinet.

The system can be controlled via a PC, optionally delivered with a Labview® interface.

Training is performed during the factory tests and after installation and commissioning, if requested.

The bench can also be adapted to the specifications of the customer, in particular, complementary optics for transporting the beam after analysis.



PANTECHNIK
13 rue de la Résistance
14400, Bayeux
France
T: +33 231 51 27 60
F: +33 231 21 96 33

contact@pantechnik.com
www.pantechnik.com

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