



Jaroslav Moravec

**30.3.2016
Dubna**

www.fotons.cz

FOTON, s.r.o.

- ❖ **founded 2000**
- ❖ **Czech private company (LTD)**
- ❖ **Development and manufacturing of special electronic devices**
- ❖ Studénka 1
509 01 Nová Paka
Czech Republic



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„From system design to k delivery of final product ...”

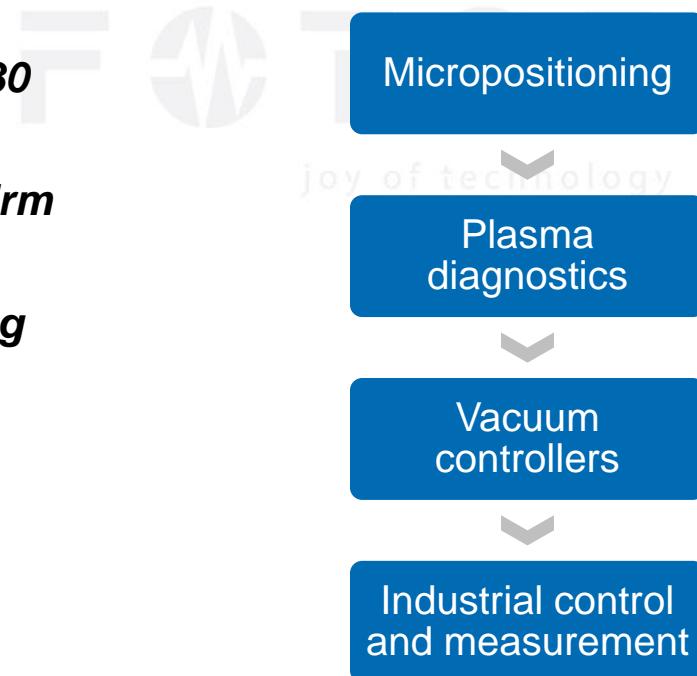
- **Founded 2000**

- **SME**

- **PIC (FP7) : 968991880**

- **Special innovative firm**

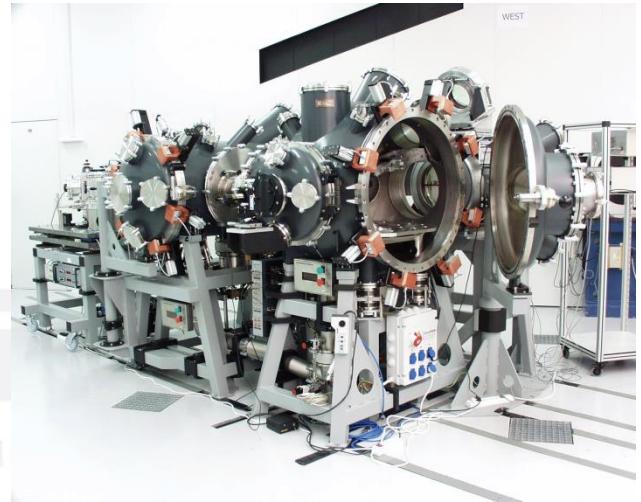
- **R&D + manufacturing**



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Company history

- **2000** FOTON founded, instrumentation for PALS
- **2001** X-ray laser instrumentation
- **2002** diagnostics for tokamaks
 - first high voltage supplies
 - Multidrive16
 - first exports
- **2007** Škoda Auto a.s.
- **2008** Joint Institute of Nuclear Research, Dubna, RF
- **2010** ELI – vacuum system
- **2011** LA3NET (Liverpool): [ULIV](#), [CERN](#), [GANIL](#), [KIT](#), [CLPU](#), [HZDR](#), [DANFYSIK+FOTON](#)



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Products overview

More than 140 prototypes during 15 years

*nA-100s A uV-10s kV
uW-kW UV-IR*



High voltage supplies



Micropositioning



Optoelectronics



High temperature plasma diagnostics



Special systems



Vacuum controllers



Current and voltage power supplies



Industrial control systems

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High voltage power supplies

Low – middle – high power, voltage up to 20kV (60kV)



HVS 04



HV 8002



HVG 2000

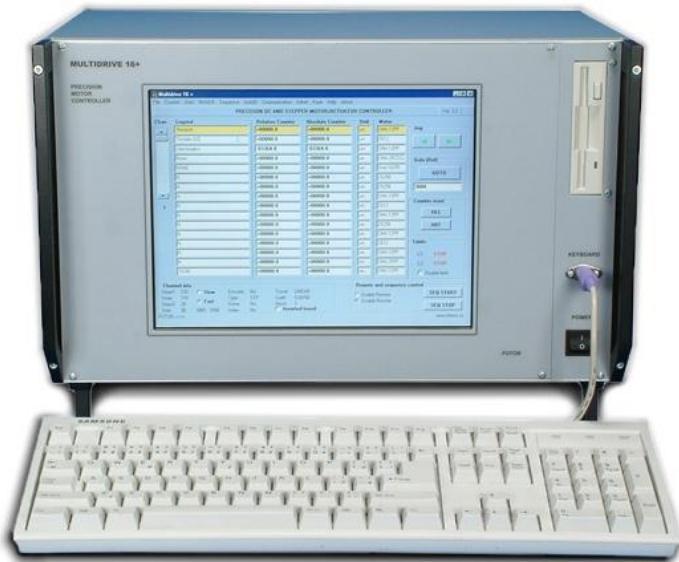


HV 5000+

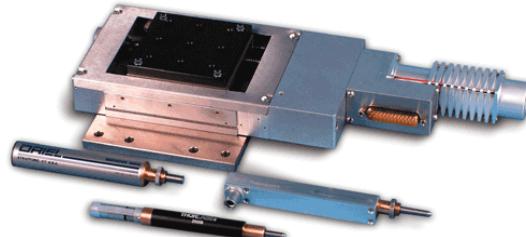
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Micropositioning

System Multidrive 16+



Multidrive 16+



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High temperature plasma diagnostics

Signal processing, generators and controllers for experiments



DLS 08



HPD 4.1



Vacuum control systems

High reliability control systems (HW, SW) for vacuum pumping



VCU 2000

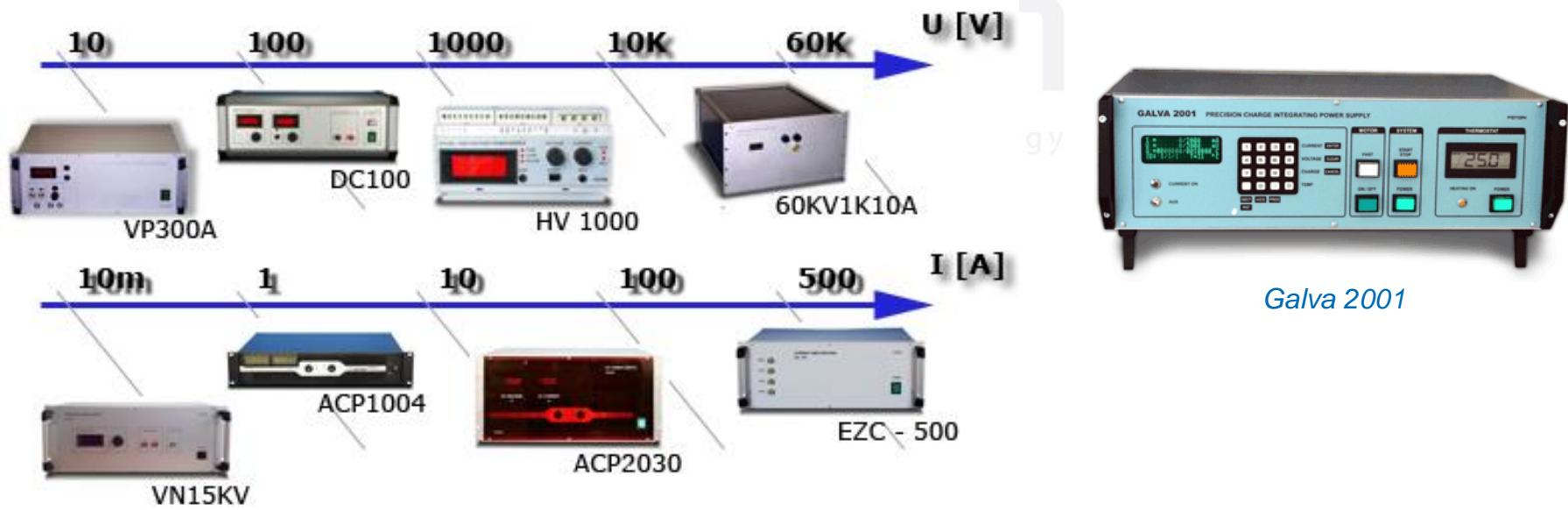


ASU 2009

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Voltage and current power supplies

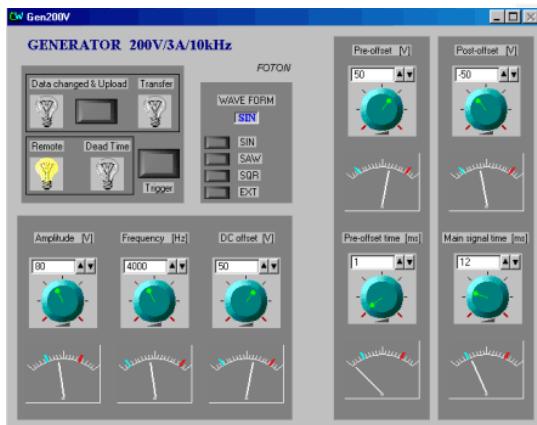
DC – AC – waveform – programmable, up to 500 A, peak power 40 kW



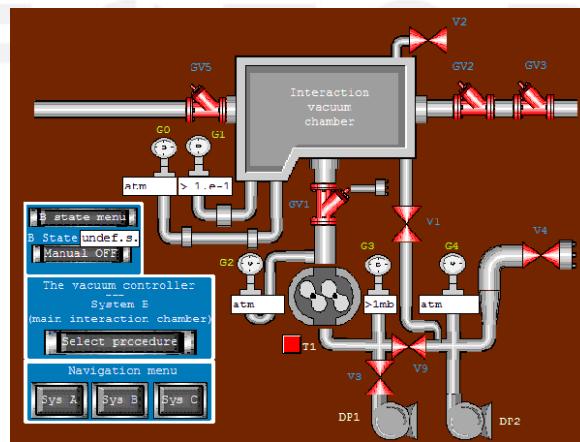
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Software

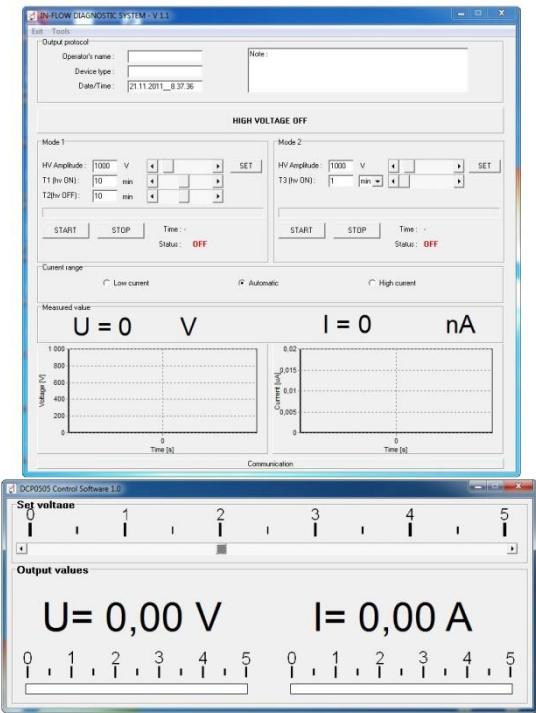
**Intuitive user-friendly interfaces
PC, PLC, microcontrollers, web-controls, OPC, logic arrays**



PC SW for voltage generator



HMI
for vacuum controller

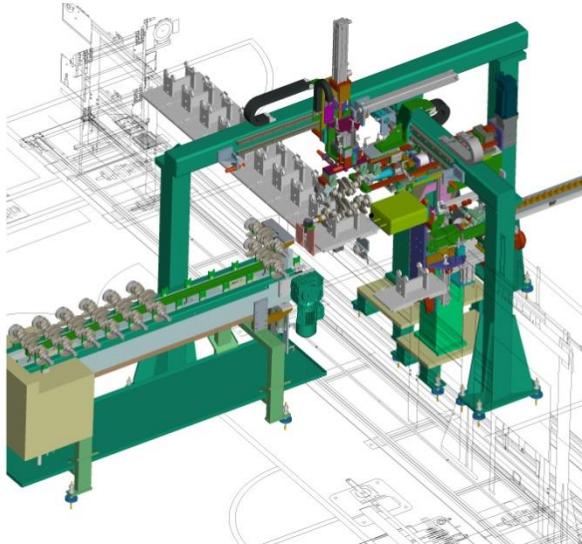


PC SW
for power supply

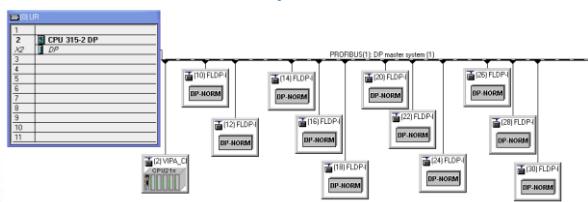
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Automation and industrial process control

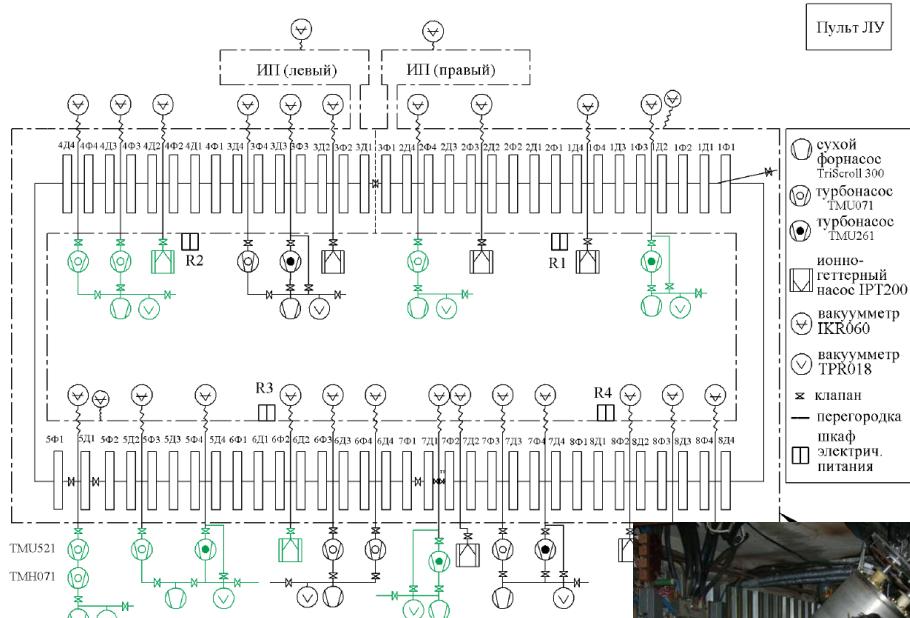
Industrial projects:



Automatic pressure station



Large experiments:



Particle accelerator



Recent products



NPA



Piezodriver
for adaptive optics



High voltage supplies



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Our European References:

- Universite Henri Poincare, Nancy, France
- Instituto Superior Técnico, Lisboa, Portugal
- Asociacion Euroatom CIAEMAT, Madrid, Spain
- Universita degli studi di Padova, Padova, Italy
- Joint Institute od Nuclear Research, Dubna, Russia
- Institute of Physics, Academy of Science, Prague
- Nuclear Research Institute plc, Rez
- Skoda Auto, Mladá Boleslav



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Do you need a solution ?

You know WHAT, but you don't know HOW?

Have you not power / capacity?

...contact FOTON !!



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