

E.O. Paton Welding Institute

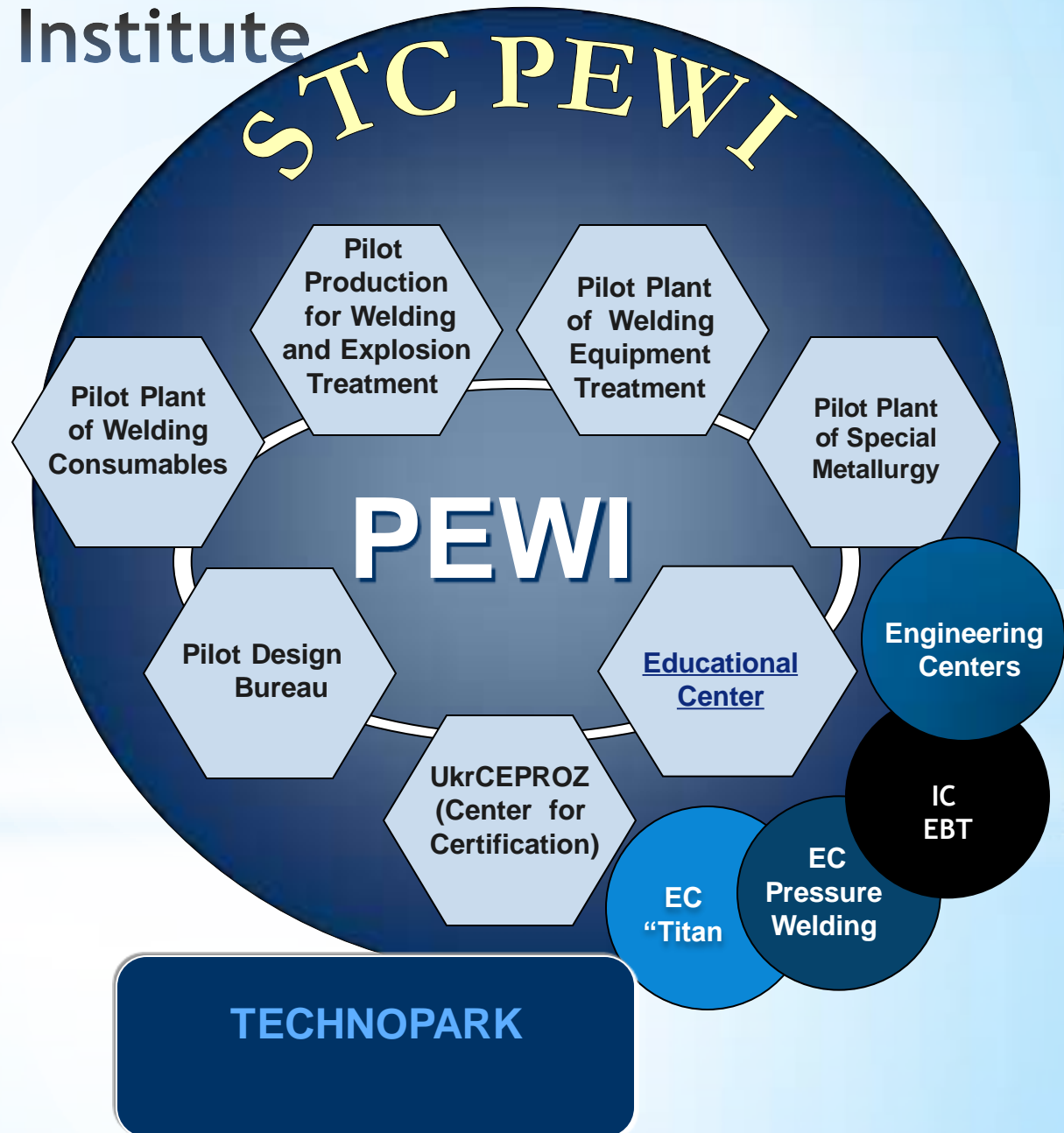


E.O. Paton Welding Institute, was found more than 80 years ago as scientific-research institute, now is a multidisciplinary research complex which realizes fundamental and applied research works, develops technologies, materials, equipment and control systems, rational welded structures and weldments, methods and equipment for diagnostics and non-destructive quality control according to the following directions:

- integrated study of character of welding, soldering, surfacing, spraying and allied process, creation on their basis new high-performance technologies, equipment and materials;
- research of strength and performance characteristics of welded structures, development of principles and basis of their designing, improvement of reliability, service life and resource;
- automatization and mechanization of welding and allied process;
- creation of new technologies and equipment for electrometallurgy production of high quality alloys and composite materials and products from them.

The E.O. Paton Electric Welding Institute

The E.O. Paton Electric Welding Institute of the NAS of Ukraine is Scientific and Technical Complex. It includes Pilot Design, experimental production, three pilot plants, number of engineering centers. 3500 peoples are engaged in all Institutes departments, including 1700 peoples who employ in the Institute. Scientific potential makes 300 research workers, including 9 academicians and 7 correspondent members, 72 doctors of science and more than 200 PhD.



Research (scientific) Departments of the E.O. Paton Electric Welding Institute

№2 Physical and metallurgical processes surfacing wear and heat resistant steels

№3 Strength of welded structures

№4 Non-destructive testing of welded joints

№5 Physical and structural strength of welded joints of high-strength steel

№6 Department of new physical-chemical methods of welding and special electric metallurgy

№7 Department of physical-metallurgical processes of welding light metals and alloys

№8 Optimization of welded structures of new technology

№9 Physical and metallurgical problems of electrosag technologies

№10 Physical and chemical processes in the welding arc

№11 Physical and metallurgical processes of welding of midalloyed high strength steels

№12 New structural forms of welded structures and constructions

№13 Vapor phases technology of inorganic materials

№15 Welding materials

№16 Of economic research

№18 Physical and mechanical study of weldability of structural steels and irons

№19 Metallurgy and technology of welding high-strength steels and alloys

№20 Plasma-slag metallurgy

№21 Electrothermal Treatment of the Materials

№22 Physico-chemical studies of materials

№23 Surfacing Materials and technology of surfacing metal

№26 Pressure welding

№27 Automated systems of technological processes

№28 Technology of welding gas and oil tubes

№29 Physical and chemical processes of soldering

№30 Physical and metallurgical problems of welding titanium and diffusion welding of metallic materials

№31 Methodological basis of quality assurance and certification of processes and products

№34 Mathematical methods of investigation of physical and chemical processes in welding and special electrometallurgy

№35 Space technology

№36 Welding, cutting and explosion processing of metals

№37 Problems of technique and technology of arc welding

№38 Magnetohydrodynamics electrosag processes

№39 Welding of alloy steels

№43 Electroheat

№47 Power supplies

№48 Welding in construction

№51 Editing and publishing

№55 Automation of scientific research

№56 Physics of gas discharge and plasma technology

№57 Physical processes, techniques and equipment for electron beam and laser welding

№59 technical diagnostics of welded structures

№60 Problems health and the environment in the welding industry

№73 Of the protective coating

№74 Automatic control of welding and coating

№77 specialized high-voltage equipment and laser welding

№78 Scientific and technical information and Information Technology

№80 Welding and bonding of plastics

№84 Electron-beam nanotechnology

№87 The reliability of welded structures and mechanical testing

№90 Scientific organization

Scientific and engineering enterprise and pilot plants of the E.O. Paton Electric Welding Institute

Experimental design technological bureau

Scientific Engineering and Production Centers :

International center «Electron-beam technologies»

Scientific-production center «Titan»

Pressure Welding Engineering Centre

Scientific Engineering Centre «Electroslag technology»

Scientific Engineering Centre «Explosion metal working»

State organization "Scientific Engineering Centre "Arc"

Scientific Engineering Centre «Technologies and equipment for manufacturing of welded structures»

Scientific Engineering Centre «Research and production of welded structures»

Scientific Engineering Centre «Welding and control in the field of nuclear power engineering »

Certification, evaluation and training departments:

Scientific and technical center of quality and certification of products UkrCEPROZ

State enterprise «Evaluation center of nondestructive inspection»

Training center

Technological Park "E.O. Paton Electric Welding Institute (35 enterprises)

Pilot-producing plant of PEWI :

Pilot-producing plant of welding equipment (PPPWE)

Pilot-producing plant of welding materials (PPPWM)

Pilot-producing plant of special electrometallurgy (PPPSE)

Experimental production