

XIII REPUBLICAN SCIENTIFIC-TECHNICAL CONFERENCE OF KAZAKHSTAN WELDERS



On December 10–11, 2009 the XIII Republican Scientific-Technical Conference «Welding and Control» was held at Karaganda State Technical University (KarSTU) (Kazakhstan Republic). Chief welding engineers, specialists on welding and non-destructive testing, lecturers of educational establishments from more than 30 enterprises and organizations of Kazakhstan participated in the Conference.

Before the Conference opening, F. Jabbur and D. Konysova, Managers of Italian-Kazakhstan Company ERSAI, presented to the KarSTU eight pieces of modern multimedia training equipment for the total sum of 1 mln tenge for training students of welding speciality and for the jointly established training center «Svarka». In June 2009 this Company already supplied free-of-charge filter-ventilation unit EMK-1600, the cost of which is 1.2 mln tenge, for the welding laboratory. Speaking at the Conference opening,



Conference session in progress

Conference Chairman I.A. Bartenev, Cand. of Sci. (Eng.), Assistant Professor of KarSTU, expressed his gratitude to ERSAI Company.

During the Conference activities 16 papers were presented and discussed, which were devoted to different aspects of theory and practice of welding fabrication and non-destructive testing, as well as training personnel for welding fabrication in Kazakhstan Republic.

I.A. Bartenev spoke about the International Exhibition of modern welding equipment and technologies «Weldex 2009», which was held from 12 to 16.10.2009 in Moscow, demonstrating photo slides and videos. A fundamentally new technology MicroTack™ developed by KEMPPPI for tack welding thin metal was described in his presentation by S. Linovsky, Chief Welder of «Welding Group» Company from Almaty, with his co-author P. Yarnstrom, Dr. of Sci. (Eng.), KEMPPPI Oy, Lachti, Finland. V.I. Bochenin, Cand. of Sci. (Eng.), one of the oldest lecturers of welding subjects in KarSTU, made a presentation on the prospects for development of welding fabrication. A.F. Kuritsyn, academician of KR Academy of Arts, Director of Karaganda Division of KR Union of Artists, spoke about interesting work on application of argon-arc welding in creation of original monumental sculptures from bronze, which are mounted in such major cities of Kazakhstan as Astana, Karaganda, Atyrau, Ust-Kamenogorsk, with demonstration of illustrations.

Presentation by F. Jabbur, Manager of ERSAI Ltd. from Aktau on the Caspian Sea, and I.A. Bartenev was devoted to the experience of fruitful cooperation of Italian-Kazakhstan ERSAI Company and KarSTU in the area of training and probation of young specialists on welding. Two papers on wear-resistant arc surfacing by strip electrode in manufacture of welded sliding shutters and on nanonitride strengthening of chromium-nickel-silicon deposited metal for pipeline fittings were presented by Yu.I. Lopukhov, Cand of Sci. (Eng.), Assistant Professor from East-Kazakhstan State Technical University (Ust-Kamenogorsk).

Information on the influence of plasma surfacing and welding parameters on metal properties was presented by I.A. Bartenev and B.M. Marinushkin from «Vetromashservis» Ltd., Almaty. Three papers were presented by young lecturers and undergraduates from KarSTU. These were «Nature of strains and stresses developing in welded structures», «Cladding of hammer mill beaters» (D.K. Absatov, postgraduate); «CAE systems – systems of engineering analysis in simulation of welding processes» (E.A. Telenkova, postgraduate, G.R. Gurba, lecturer).



E.M. Kvitko, Deputy Director of Karaganda Professional Lyceum #26, talked about development of KR state general education standards of technical and professional post-secondary education. A paper on technological features of welding and control of pipeline root weld was delivered by Zh.E. Abilov, engineer, first graduate of Welding Chair of KarSTU. I.M. Pokasov, Director of SPA «Tekhnik» Ltd., Karaganda, reported on development of a procedure of control and assessment of weld quality by defect area, which gave rise to lively discussion in the Conference. Another serious discussion was held in connection with the presentation of S. Linovsky, Chief Welder of «Welding Group», Almaty, on FastROOT technology of welding the weld root by a modified short arc.

In conclusion of the first day of the Conference, I.A. Bartenev talked about the experience of student training in the welding speciality at KarSTU in keeping with the Bacheloriante system, and assigning the graduates to work in major companies and firms in Western and Central Kazakhstan.

On the Conference first day a tour to KarSTU welding laboratory was conducted, where presentation of new KEMPPi equipment was held. In particular, Master TIG MLS™ 3000/3003 ACDC machine for welding and tack welding of sheet metal by Microtack technology was demonstrated in operation. Setting up of the modes and welding by this machine were demonstrated by S. Linovsky. The new technology excited great interest of Conference participants, who themselves tried welding with Maser TIG MLS™ 3000/3003 ACDC machine. On the second day of the Conference activities, a meeting of chief welders of enterprises, head of welding laboratories and welding and NDT specialists was held, where the draft of new Rules of Certification of Welders and Welding Fabrication Specialists of KR, as well as development of a system of welding fabrication certification in the country, was discussed. I.A. Bartenev delivered a paper on this subject.

Candidates for the National Certification Committee on welding fabrication of KR were nominated and



Presentation by S. Linovsky

its functions were outlined. Specialists present in the meeting approved these proposals and spoke in favour of as prompt as possible approval of the new Rules of Certification of Welders and Welding Fabrication Specialists of KR in the Ministry of Emergency Situations of KR and introduction of a system of welding fabrication certification in the country.

The subject of collective subscription to «Avtomaticheskaya Svarka» journal was also discussed in the Conference. More than 10 representatives of companies and enterprises expressed their wish to become collective subscribers to this prestigious journal.

After completion of the Conference A.G. Kozmin, Director of «Welding Technologies» Ltd., Atyrau, expressed a wish to provide assistance to the welding laboratory and supply free of charge three advanced welding machines of KEMPPi for training KarSTU students, which will promote an improvement of the quality of training young specialists of welding fabrication in Kazakhstan's only higher educational establishment with such a speciality.

Dr. I.A. Bartenev, KarSTU

PROBLEMS OF LIFE AND SAFE OPERATION OF STRUCTURES, CONSTRUCTIONS AND MACHINES (Final Scientific Conference at the E.O. Paton Electric Welding Institute of the NAS of Ukraine)

On January 22, 2010 the Final Scientific Conference devoted to consideration of scientific and applied results obtained during 2007–2009 in fulfillment of projects of purpose-oriented program of the NAS of Ukraine «Problems of Life and Safe Operation of Structures, Constructions and Machines» was held at PWI. Scientific leaders and performers of projects, as

well as representatives of interested ministries, departments, educational and branch institutes, industrial enterprises and organizations participated in the Conference activities.

The Conference was opened by academician B.E. Paton, President of the National Academy of Sciences of Ukraine, who noted that «...problems of controlling