



## SOLEMN MEETING DEDICATED TO THE JUBILEE OF VICTORY IN THE GREAT PATRIOTIC WAR

A solemn meeting dedicated to the 65th anniversary of Victory in the Great Patriotic War was held on May 7, 2010 at PWI at the legendary tank T-34. Among those present were participants of the GPW, PWI scientific staff members, administration and leading specialists, representatives of the young generation.

The meeting was opened by Prof. Boris E. Paton, who expressed his sincere jubilee congratulations for the veterans. He noted a significant contribution to the Victory of that small but united PWI team, who worked heroically in the Urals during the war years, doing everything in their power for the fastest liberation from the fascist yoke.

Then the meeting was addressed by Prof. I.K. Pokhodnya, I.M. Kokojko, retired Major-General, now the staff member of the Presidium of NASU, A.I. Fomin, PWI veteran, former flux maker, and A.N. Kornienko, Dr. of Sci. (Hist.).

welding air bombs and ammunition were developed and realized, and flow lines were designed. Institute's scientific staff went out to plants, worked directly in the shops and trained welders. Under such hard conditions the Institute's team consisting of three dozen people officially working for 12 hours seven days a week, managed to resolve a lot of other organizational and technological problems. Fluxes from local raw materials were developed including blast-furnace slags. The phenomenon of self-regulation of consumable electrode arc processes was discovered for the first time in the world. It was the basis for designing simplified automatic welding heads with a constant speed of electrode wire feed. By the end of 1943 the work was performed in 52 defense industry plants, which have mastered submerged-arc welding.

During the war years, the automatic machines welded 4 mln m of welds, saved 5 mln kW/h of power, and labour consumption of tank body manu-



It was noted in the speeches that PWI which was evacuated to Nizhny Tagil already at the start of 1942, determined the causes for crack initiation in armour steel joints, developed technologies of sound welding and automatic machines for manufacture of complex three-dimensional structures of tank armoured bodies. It was possible to achieve a stable high quality of the joints at welding speed, which was 8 times higher than the speed achieved by the best manual welders. Teenagers could and did work as automatic machine operators. 250 welders were freed just in the Nizhny Tagil plant. In 1942–1943, 20 designs of machines for welding the tank bodies and 8 designs of machines for

facture was reduced 5 times. By the end of the war, the country's plants produced up to 30,000 heavy and medium tanks and self-propelled guns annually. All together 102,857 tanks and self-propelled guns were produced in the Soviet Union during the war years.

It is highly important that the growing generation had a clear idea of the great contribution made by Ukraine into Victory and subsequent reconstruction of the post-war world.

*Editorial Board  
of «The Paton Welding Journal»*