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High speed zinc-phosphate coating method with acidic electrolytes on metal surface**Karayigit Erkan**
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The surface cleaning and preparation processes which are developed to meet the high resistance, long life and surface quality expected from the coating/paint application more effectively, are called phosphating. It is known that the protection of metallic surfaces with phosphate coating, especially the protection of iron and steel surfaces. This process is a traditional method and limits the speed and capacity of wire production due to the long process time in chemical baths, slow rate of deposition on the surface, high phosphate consumption, the difficulty of bath control. Phosphate performance also decreases with deterioration of bath quality. The purpose of this work is to provide very successful phosphate layer on steel wires which are rapidly phosphated by acidic electrodes. In such a case, the performance of the bath can be enhanced by the ability to rapidly form the phosphate film layer. This method provides an innovative and technological superiority in the industry, while playing an active role in solving the problems specified both in terms of standardizing the coating quality.

Biography

Karayigit Erkan has completed his Bachelor's degree from Erciyes University and Post-graduation from Baskent University. Presently, he is the Director of Research and Development Department of Guneş Celik Company.

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