The Complete Technology Book on Electroplating, Phosphating, Powder Coating and Metal Finishing (2nd Revised Edition)

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Electroplating is the process of depositing a metal coating onto the surface of an object through the use of an electrical current. Electroplating has evolved into a highly complex process requiring a high level of precision and expertise. Phosphating is the process of converting a steel surface to iron phosphate. This is mostly used as a pretreatment method in conjunction with another method of corrosion protection.

Powder coating is a finishing process in which a coating is applied electrostatically to a surface as a free-floating, dry powder before heat is used to finalize the coating. The powder can be made of any number of products: polyester, polyurethane, polyester-epoxy, straight epoxy, and acrylics. Metal finishing is the final step in the manufacturing process used to provide aesthetics and environmental protection.

The electroplating market mostly is driven by the electronics and electrical industry and followed by the automotive industry. The demand for electroplating is rising rapidly from the end user industries which propel the growth of the market. The increasing demand for durable metals and growing use of adaptable manufacturing processes for a wide range of applications in the automotive, aerospace & defense, and electrical & electronics industries are likely to boost the demand for electroplating. With the growing demand for high-performance automobile components having excellent resistance to corrosion to enhance the appearance of exterior automobile parts, such as emblems, door handles, hood ornaments, and wheel rims, is driving the demand for electroplating and likely to continue owing to the increasing automobiles production in Asia-Pacific and other emerging economies in the Middle East & Africa. The zinc-nickel electroplating is one of the popular methods of electroplating in the automotive industry.

The book cover various aspects related to different Electroplating, Phosphating, Powder Coating and Metal Finishing with their manufacturing process and also provides contact details of machinery suppliers with
equipment photographs and plant layout.

A total guide to manufacturing and entrepreneurial success in one of today’s complete process of electroplating to metal finishing in industry. This book is one-stop guide to one of the fastest growing electroplating, phosphating, powder coating and metal finishing industry, where opportunities abound for manufacturers, retailers, and entrepreneurs. The book serves up a feast of how-to information, from concept to purchasing equipment.

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About NIIR

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