Electroplated tin and tin alloy coatings have been utilized extensively in the electronics industry. These coatings can be described as bright, satin bright and matte, based on a reflectance scale established recently (reported at SUR/FIN® ’99). A comprehensive study was undertaken of the microstructural differences among various finishes and their influences on the physical and materials properties, such as appearance, hardness, ductility, wear and contact resistance.