PRETREATMENT: At Therma-Tron-X, multi-stage pretreatment equipment is engineered to prepare a product’s surface for painting, plating or other industrial finishing processes. Using spray, immersion or combination pretreatment methods, dirt, oils and contaminants are removed from the product’s surface and phosphate or conversion coatings are applied to help prevent corrosion and increase paint adhesion. Working with chemical and paint suppliers, TTX engineers analyze the requirements before developing equipment that can be incorporated into the overall finishing system.

Contact a TTX sales engineer to learn more.

BENEFITS: TTX pretreatment systems can be fabricated using mild or stainless steel. Slotted roof designs protect conveyor components from moisture and chemical overspray, and treated parts from dripping conveyor lubricant. Piping and nozzles are fitted with maintenance and quick disconnection in mind.

AVAILABLE FEATURES: • Mild or stainless steel construction • Spray or immersion or combined designs • Double-welded tanks • Slotted top construction • Bag filtration • Iron removal system • Class A quality design • Insulated tanks • Automatic chemical feed system • Zero discharge system design available • Water conservation • High efficiency heating systems (gas, steam and hot water) • Quick-disconnect risers and nozzles • Continuous and batch cabinet designs • Spiral flow movement in immersion tanks • Zinc sludge removal system • Preassembled and shop tested • Oil coalescing separator • pH and conductivity meters • VFD control of spray pressure
PRACTICAL APPLICATIONS:
Thorough cleaning and conditioning are crucial aspects of any finishing operation, and inadequate preparation will result in paint peeling, blistering or flaking. Depending on the quality of the finish required, parts may utilize multiple pretreatment stages. Circulation in tanks is accomplished through TTX mixers. Spiral flow and high impingement is maintained through correct placement of eductor nozzles.

COST EFFECTIVENESS:
TTX pretreatment systems are PLC controlled, with automatic start-up and shut-down programs. They are designed with computer aided rinse ratios, reducing water usage, and in some cases creating a zero discharge system. Coupled with complete water conditioning and wastewater treatment from TTX Environmental, a TTX pretreatment system will produce consistently cleaner parts, combining lower operational costs with lower levels of generated waste. In immersion stages requiring no filtration, mixers can be used instead of pumps, greatly reducing energy consumption.