BY PHIL PHILLIPS
CONTRIBUTING EDITOR
PHILLIPS@CHEMARKCONSULTING.NET

Analyzing the future of E-coat growth

E-coat technology is increasingly integrated in mature markets, as well as developing regions of the world, at above average coatings consumption growth rates.

Electrocoat growth in the industrialized regions of the world took a surprisingly long time to reach adolescence. It took 28 years to reach the $200 million threshold, and to become a standard tool of use in today's finishing industries. This month, Chemark will briefly touch on where E-coat came from and where it is headed in the future.

The finishing industry is growing at slightly less than GDP in both North America and in Western Europe where it is considered a mature industry with significant consolidation over the past ten years and continues as we speak. Chemark estimates that in the past 35 years—from 1970 to 2005—the number of coatings and paint companies in the U.S. and Western Europe combined, have decreased from 3,800 to less than 1,700 today. This decrease represents a 55% reduction in the total number of coatings and paint companies during that time period.

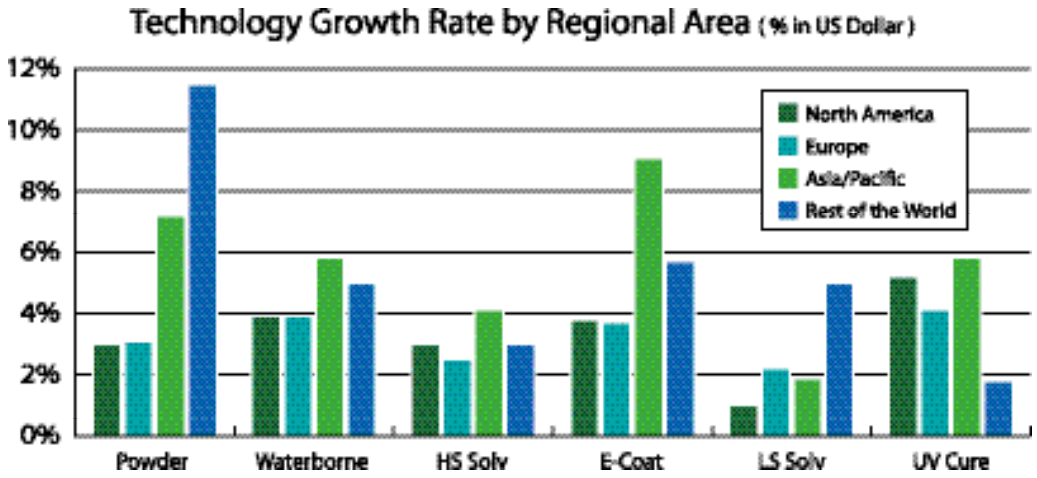
However, in the so-called growth regions such as China, India and some parts of South America, the finishing industry is growing at a rate between five to 15% due to several factors. For one, the general economies in these parts of the world are based on manufacturing. In addition, the latest production techniques are employed in the manufacturing process and labor is plentiful as well as cheap.

Growth in these regions is also, in large part, due to the manufacturing base in the industrialized regions seeking to lower their costs and increase profits through out-sourcing more goods offshore. The finishing industry is inextricably tied into this manufacturing base shift.

As a result, small and many mid-cap coating formulators will be forced to make significantly painful decisions as their large customers will either move offshore or import their needs, eliminating the need for the local formulators who cannot relocate offshore due to resource constraints.

Electrocoated items are increasing slightly above GDP in the industrialized countries and above the medium range in aggressively developing regions.

E-coat is relegated to finishing metal substrates principally. Therefore, at this point in its technological development, it cannot appeal broadly to other large outlets for coating systems. When considering metal substrates exclusively, E-coat is a well-accepted primer alternative to spray and dip systems because of its inherent ability to "throw" paint into portions of three-dimensional parts these other systems cannot reach. Therefore, wherever non-uniform



metal parts require long-term protection, E-coat can and will continue to play a part and capture share from other metal coating systems.

That being said, other optional product design considerations will influence E-coat growth and acceptance. The primary driver to any system of production is economics. For example, if pole line electrical transformers are switched to plastic housings, E-coat opportunities in this application will basically go away. Yes, there has been technical success in E-coating plastic substrates, but only when the plastic is either conductively primed or the plastic is formulated to be conductive, therefore, accepting the E-coat primer. Back to economics! This system is many times more expensive than the "grandfathered" metal.

E-coat will be successful in all regions of the world and, therefore, grow as the production of metal substrates grows in each.

Chemark estimates E-coat growth will be accepted globally at above average coatings consumption growth rates. This means, by definition, E-coat is penetrating other segments where conventional systems have held forte.

Chemark estimates the size of E-coat usage by region is:

- North America (U.S., Canada and Mexico): $1.2 billion
- S. America: $0.080 billion
- Japan: $0.880 billion
- W. Europe: $0.750 billion
- Asia/Pacific (excluding Japan): $0.370 billion
- E. Europe & Russia: $0.400 billion

Certainly the movement of any manufacturing business from one region to another for economic reasons will effect the loser region negatively and the winning region positively. However, within the regions' metal coatings industry, E-coat is growing in acceptance through new applications.

One development in E-coat over the past ten years has been the use of this system as both a primer and a color topcoat. Slow, initial acceptance has given way to E-coat gaining broader acceptance in all regions of the world. ***CW***