

Paint and Coatings:



What Will Be Coloring the Market in 2007?

by Cynthia Challener, JCT CoatingsTech Contributing Writer

The year is drawing to a close and 2007 will arrive shortly. What will the New Year have in store for the paint and coatings industry? Which issues will come to the forefront? Globalization, consolidation, regulation, innovation—how will these market drivers impact manufacturers of paint and coatings? What effect will changes in the housing market and auto industry have? COATINGS^{TECH} asked these questions of leading paint producers and industry consultants. Their thoughts are presented below.

Contributors: Steven Nerlfi, consultant with Kusumgar, Nerlfi and Growney (KNG); Daniel S. Murad, president and CEO, The Chem Quest Group; Holger Ebbighausen, group communication manager coatings, Akzo Nobel nv; Thomas W. McKay, product manager, BASF Corporation; Angela R. Strzelecki, strategic planning manager, DuPont Coatings & Color Technologies; Bill Wulfsohn, senior vice president, PPG Coatings; Sandeep Goel, market manager, Specialty Additives, Rohm and Haas Company; J.R. "Rusty" Johnson III, market manager, Architectural Binders, Rohm and Haas Company; Thomas P. Frauman, global marketing director, Powder Coatings, Rohm and Haas

Company; and Susan Gill, DIY market manager, Rohm and Haas Company.

RAW MATERIAL AND ENERGY COSTS

JCT: *Do you expect the recent trend of higher oil and petrochemical prices to continue in the New Year? Or will moderating prices hold firm? Will the paint and coatings supply chain be able to recover higher costs in 2007?*

Daniel Murad, The ChemQuest Group: I expect raw material prices to moderate for 2007. Ethylene (impacting vinyl acetate), propylene, and natural gas (impacting acrylics) are loosening with the exception of occasional spot supply interruptions due to maintenance issues. Natural gas prices are down to the \$4 range. TiO_2 inventories are building with the effects of Rita and Katrina behind us. As one consequence, the industry should be able to achieve good margins in 2007 as it is approaching the back end of the cycle where raw materials are going down. Overall, coatings producers should be able to recover some lost margins. They are currently still behind by 5–8% in their gross margins.

Not surprisingly, there will be continued heavy emphasis on improving efficiencies. After regulations, this trend is the second largest driver in the paint industry. The biggest impact felt would be in cutting the cost of pigment grinding, which is approximately 35% of the cost of manufacturing and tends to be the second highest cost component after raw materials.

Angela R. Strzelecki, DuPont: Energy prices have declined somewhat from their record highs. Despite the recent decline, energy, raw materials, and logistics costs remain significantly above historic levels. In 2007, I would expect that crude oil prices will continue to rise, but at a moderated pace. With the dependency on petrochemical pricing, the supply chain will continue to be challenged to recover these costs.

Holger Ebbighausen, Akzo Nobel nv: We expect petrochemical prices as well as prices of other key raw materials to stay high and continue increasing, although not at the same pace as we have experienced during the last 18 months.

Tom McKay, BASF: Market experts are saying crude oil prices will continue to rise to near \$80 per barrel. This will undoubtedly affect the

price of many raw materials used in industrial coatings. How much is the big question, and only time will give us the answer. In general, we have a difficult time passing on these increases in raw materials.

GLOBALIZATION

JCT: Will globalization throughout the paint and coatings supply chain continue? Will there be specific impacts in 2007 that haven't been observed yet, or issues that will be more prevalent in the coming year than have been recently? If so, what are they? Will there be a lessening of any pressures resulting from globalization? If so, what would they be?

Steven Nerlfi, KNC: Globalization is a key issue in the paint and coatings industry throughout the supply chain. Both paint producers and raw material suppliers to the industry are building plants in Asia and/or forming joint ventures with Asian companies. Asia is the leading growth market for the industry, and all the major players are active in the region. This trend will continue for years to come.

Daniel Murad, The ChemQuest Group: The shift of manufacturing to low labor cost regions will continue in 2007. We see a great deal of activity in companies looking to invest further in China, India, and Eastern Europe.

Angela R. Strzelecki, DuPont: Globalization is expected to continue and it is expected that the growth rates for the coatings industry in emerging economies will continue to significantly outpace those of North America and Western Europe.

Bill Wulfsch, PPG: We anticipate that Asia-Pacific (China, Southeast Asia, India) and Central and Eastern European demand will grow, and that North American and Western European demand will have a slower growth rate.

Holger Ebbighausen, Akzo Nobel *inc.*: We believe that further globalization of the coatings industry is inevitable as the supplier and the customer bases strengthen globally. Only coatings manufacturers having a strong global reach in both manufacturing and distribution will be able to profit from these developments, while small regional companies will have more and more difficulty protecting their margins.

Segments displaying a particularly strong trend toward further globalization are the industrial markets (automotive, steel, and wood furniture, for example). In these segments, the trend towards the relocation of the industry forced coatings suppliers to shift their manufacturing base to low-cost countries several years ago. A similar globalization trend can now also be seen in architectural coatings. Strong growth in housing and business construction in a number of emerging markets will be a key driver for growth in the coming years.

Thomas P. Frauman, Rohm and Haas, Powder Coatings: Powder coating represents an environmentally compliant alternative for factory applied finishing of most metal products. Production of fabricated metal goods continues to leave Western Europe and the United States in favor of lower labor economies in China, India, Russia, Latin America, and Eastern Europe. Today, migration represents a significant challenge for the powder coatings industry as formulators must deal with stranded capacity and costs in more mature markets, while placing strategic investments in emerging markets to support

growth and follow their global customers. The most notable change ahead will come with the rising affluence of the middle class in places like China, where the nature of local demand will change over time. That is, with increases in disposable income and more popular concern about environmental issues will come greater demand for "clean technology," offering an expansive array of appearance choices as well as higher standards of quality and performance.

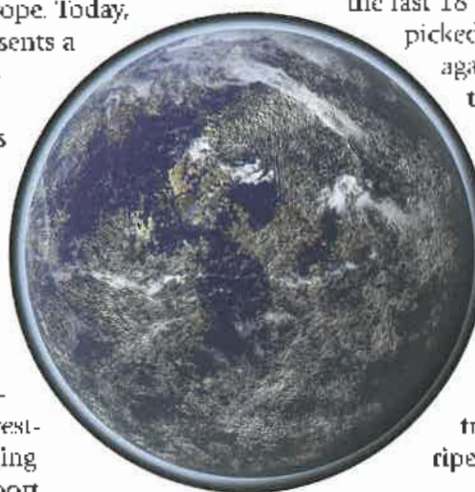
CONSOLIDATION

JCT: Will consolidation within the paint and coatings supply chain continue in 2007 at the same pace? Will any specific segments see more activity than others? Who (in general) will benefit from these activities? Who (in general) will experience a detrimental effect?

Daniel Murad, The ChemQuest Group: Consolidation is definitely very active. I expect the pace will continue with strategic firms making good money and actively seeking investment opportunities.

Steven Nerlfi, KNC: Consolidation has been going on for more than 20 years. M&A activity was high in the late 1990s but then slowed down in the first few years of the current decade. During the last 18 months activity has picked up noticeably again and should continue at a heightened pace on into 2007.

Thomas P. Frauman, Rohm and Haas Company: In Western Europe and North America, the industrial coatings sector is ripe for consolidation



as major producers seek to optimize cost of goods sold in ever more challenging market conditions. The most likely acquisition candidates would be mid-sized, privately owned companies with good brands and reputations, where plants could be shuttered and production transferred to existing assets. Additionally, I would expect major coatings producers to continue the process of consolidating second tier players in growth markets like China to achieve greater market access.

Angela R. Strzelecki, DuPont: We expect to see continued consolidation within the supply chain, especially in those markets that are still highly fragmented such as select industrial and decorative segments. Globalization of coatings consumers will continue to drive consolidation as suppliers look to serve their multinational customers in their local regions.

Holger Ebbighausen, Akzo Nobel nv: Globalization is a key driver of consolidation. Akzo Nobel will actively pursue organic growth and growth by acquisition to be a front-runner in the consolidation of the coatings industry.

LOW COST COMPETITION

JCT: *Low-cost competition from emerging regions of the world is likely to increase. What specific effects do you see this increasing competition having on the market in 2007?*

Daniel Murad, The ChemQuest Group: Low-cost competition is present in raw materials, particularly in dry goods such as pigments and fillers. On the formulated coatings side, China is already exporting a great deal of powder coatings but they seem to find their way into Europe more so than the U.S. This is in part due to the fact that some European manufacturers that invested heavily in building state-of-

the-art facilities in China are taking advantage of low-cost production and importing powder coatings back into Europe. I expect that Chinese manufacturers will also export into the U.S. eventually. There is little evidence of that occurring already.

Angela R. Strzelecki, DuPont: Competition from emerging regions has been increasing over the preceding years, and we expect it to continue in 2007. Multinational suppliers to the coatings industry need to be able to compete locally in the markets they serve. Additionally, advances in technology continue to play a significant role in the industry and the value delivered to the consumer.

Tom McKay, BASF: The main low-cost providers impacting the coil and extrusion market place are Taiwan and Korea, with India and China lurking in the background. In general, more coated material will be imported as the price gap between Asian steel and domestic steel widens. If this gap were to narrow, more product would be coated domestically.

Thomas P. Frauman, Rohm and Haas Company: The applied cost of powder coatings is largely determined on the customers' factory floor. Rohm and Haas will continue to invest in R&D to provide more application-efficient and lower energy curing coating systems. Furthermore, we will deliver the application support to insure our customers know how to apply our coatings in a manner consistent with meeting their cost objectives. We feel that better technology, applied more efficiently, will deliver lower applied costs for the customer than cheap materials.

Holger Ebbighausen, Akzo Nobel nv: We don't expect any specific negative effects from this development. We have a clear strategic focus on the emerging regions, which also means that we continue to expand our own manufacturing base

into those markets. In doing so, we will be able to profit from the cost advantages in emerging regions.

Bill Wulfsohn, PPG: PPG is focused on being competitive in each region around the globe. PPG's technology and technical support are tools that enable us to deliver extra value to our customer base.

INCREASING REGULATORY REQUIREMENTS

JCT: *Will additional regulatory requirements be implemented in 2007? If so, what are they and what impact might they have?*

Steven Nerfi, KNC: New regulations will be taking effect through the rest of the year and additional regulations will be promulgated in 2007. Increasing regulatory restrictions will be the norm for the foreseeable future and will affect all segments of the paint and coatings industry.

Bill Wulfsohn, PPG: There may be profound impact by new European legislation, referred to as REACH (Regulation, Evaluation, and Authorization of Chemicals), anticipated to be enacted in 2007. It is expected to involve more than 30,000 chemical compounds made in or shipped into Europe. This could have far-reaching effects across the industry, and possibly help spur similar legislation in other parts of the world.

Angela R. Strzelecki, DuPont: Regulatory requirements and the shift to greener technologies continued to drive the industry to powder, higher solids, and waterborne coatings. Increasing regulatory requirements in Europe and California for 2007 will drive much conversion to waterborne systems.

Sandeep Goel, Rohm and Haas Company: The continued trend towards lower volatile organic compound (VOC) limits, particularly in California as well as the rest of the U.S., will lead to further perform-

ance improvements in low-VOC systems.

TECHNOLOGY DEVELOPMENTS

JCT: *Nanomaterials, smart coatings, and other state-of-the-art technologies are being adopted more widely by the paint and coatings industry. What can we expect from these and other novel technologies in 2007?*

Steven Nerlfi, KNC:

Nanomaterials are receiving great interest, particularly as inorganic additives such as fillers, pigments, and extenders. Some researchers are developing resins formulated as nanoscale materials. Smart coatings are at the infant stage, but interest is definitely growing. Interest in these novel technologies will continue to grow in 2007.

Angela R. Strzelecki, DuPont:

Nanomaterials continue to be an area of significant interest and investment. There are commercial examples where the application of nanomaterials in coatings imparts improved functionality. An example where we have integrated this into our product offerings is Voltron™ wire enamel, which provides superior electrical insulation properties. Researchers will continue to investigate additional applications that transform the performance of traditional coatings to previously unattainable levels.

Thomas P. Frauman, Rohm and Haas Company: Expanding powder coatings' share of the industrial coatings market will depend heavily on advancing technology in the following areas: lower cure temperatures; enhanced appearance properties such as spatter finish textures and brighter metallics; smoother thin film clear and opaque coatings; improved application at higher rates on both simple and complex parts; better solutions for customers requiring numerous colors and fre-

quent color changes; coatings that provide protective properties with minimal surface preparation; and reparability.

Developing products that fulfill these attributes enables powder suppliers to deliver substantial benefits to the industrial coatings buyer and compete more aggressively with alternative coatings. These benefits include favorable economics, environmental compliance, and cured film performance.

Additionally, new markets including engineered wood, plastic, and metal coil are accessible to powder coatings with order of magnitude improvements in cure temperature, powder application, and appearance properties.

Bill Wulfsohn, PPC: Development and availability of those technologies represent two key enablers for a successful marketing strategy. Coatings



suppliers, in conjunction with original equipment manufacturers, will strive to establish a premium image and value for their respective innovations in the eyes of the consumer.

Examples of PPC's recent new product introductions include Durabed sprayable bedliner, the first OEM-applied sprayable bedliner for pickup trucks; Audioguard sprayable damper to reduce sound in automotive passenger compartments; and EnviroPrime NT lead-free electrocoat for enhancing a vehicle's corrosion properties while leading in environmental compliance.

PRODUCT INNOVATION

JCT: *Will R&D leading to product innovation be important in 2007? If so, how can we expect to see that significance reflected? Will there be extensive new product introductions? If so, in what areas?*

Steven Nerlfi, KNC: Producers of organic additives traditionally have relied on product innovation as a means for maintaining or expanding market share. They are constantly developing new materials or new formulations of existing compounds that are more concentrated or use a different carrier. Always, the goal is to offer improved performance at an equivalent price or equal performance at a lower price.

Bill Wulfsohn, PPC Coatings: Product innovation remains a key to PPC's technology leadership role in the markets we serve, and to maintaining a competitive advantage in those marketplaces. Invention in and of itself is not a fulfilling strategy for our customers or our company, but market-driven innovation can serve unmet—and unrecognized—market needs. That combination must result in a differentiated value to customers that will allow them to capture share or to value price. We strongly believe the melding of our research and development and marketing and sales initiatives is essential in serving the needs of our customers, and in meeting the growth

goals of our company. The success of this approach is reflected, for example, in the five PACE Awards that PPG has won during the past six years. (In 2006, PPG won the award for its collaboration with General Motors on the development of an environmentally friendly, color-specific powder primer.)

Susan Gill, Rohm and Haas Company: We expect to see continued growth in, and introduction of, specialty high performance paints for various applications. Examples include primerless paints for exterior applications, cleanable coatings, and mildew-resistant paints.

Sandeep Goel, Rohm and Haas Company: Performance in pastels and deep tones will continue to be important.

Tom McKay, BASF: Key advancements we expect to see reach the market include improved durability, and increased reflectivity for roofing products.

Angela R. Strzelecki, DuPont: Environmentally friendly applications, such as waterborne systems or improved powder systems for new and existing applications, will continue to be areas where advances will be made and we expect sales from these technologies to grow in 2007.

Holger Ebbighausen, Akzo Nobel nv: We regard innovation and investment in new technology as a key growth driver for our coatings businesses, particularly in the mature markets of the U.S. and Western Europe. A continuous stream of innovations is essential to allow for better differentiation in order to secure margins in this highly competitive environment.

Increased environmental regulations are a challenge but are, at the same time, another driver for innovation and, thus, offer opportunities for the well-prepared company. The implementation of the first stage (as of January 1, 2007) of the EU VOC-Directive in decorative products and vehicle refinishes is an

example for this. In this case, our early ability to supply compliant products helped us to defend and expand our position in a number of mature markets.

JCT: *Are there any other issues not yet mentioned that will impact the paint and coatings industry in 2007? If so, what are they and why will they be important?*

Steven Nerlfi, KNG: In the U.S., recent results in the housing and automotive markets should be of concern to manufacturers of paint and coatings. New home sales (new homes always require painting) are declining while sales of pre-existing homes are stagnating. The architectural segment experienced healthy growth rates as the market boomed over the past four years. The decline in housing sales in the U.S. will now translate into lower growth rates for this segment, which accounts for 50% of the market.

In the automotive market, planned plant closures by Ford and recent announcements of significantly reduced productivity at DaimlerChrysler will also translate into reduced demand for paint and coatings. The impact will be quite broad, with both large producers and small paint shops feeling the effects. Some of the reduced production will eventually be replaced by three new U.S. plants announced by Toyota and Honda. However, because these plants will not be operational for several years, the contraction of the U.S. auto industry will definitely take a toll in 2006 and 2007.

Demand for durable goods tends to be more stable. However, where it has been feasible to shift production to lower cost regions (wood furniture and fixture coatings, for example), manufacturing has been moved offshore.

J.R. "Rusty" Johnson III, Rohm and Haas Company: In the architectural market, big box stores/mass merchandisers are continuing to grow

their share of the contractor paint business at the expense of company owned paint stores, independent paint dealers, and other outlets.

POSITIVE FACTORS

JCT: *What positive factors can you identify that will drive growth in the paint and coatings industry in 2007?*

J.R. "Rusty" Johnson III, Rohm and Haas Company: While there are many challenges facing paint and coatings producers, there are also many opportunities. One key area is the increasing interest in green paints and coatings. Architects, builders, and some municipalities are looking for LEEDS and/or Green Seal approved products (including environmentally friendly paints) for building projects.

Angela R. Strzelecki, DuPont: Industrial production has remained strong globally through much of 2006. A continuation of this trend would have a positive impact on the industry. Additionally, coatings is an industry where technological advances continue to be made in application and performance, leading to greater value in the industry overall.

Holger Ebbighausen, Akzo Nobel nv: The Global Coatings Report 2006, published by Akzo Nobel, contains a comprehensive market analysis from Euromonitor International, an independent market intelligence company. Euromonitor's analysis clearly indicates that the coatings industry can look forward to healthy growth in the next five years. This forecast is based on the following factors: a positive economic climate in many mature markets in the U.S. and Europe; a strong international construction boom; healthy demand in special purpose coatings (marine, car refinishes, aerospace); and, as already emphasized, strong growth in emerging markets. ■