

2007 World Frost & Sullivan Award for
Product Innovation

Award Recipient – Noble Polymers

I. Award Description

The Frost & Sullivan Award for Product Innovation is presented each year to the company that has demonstrated excellence in new products and technologies within their industry. The recipient company has shown innovation by launching a broad line of emerging products and technologies.

II. Research Methodology

To choose a recipient of this Award, the analyst team tracks all new product launches, R&D spending, products in development, and new product features and modifications. This is accomplished through interviews with the market participants and extensive secondary and technology research. All new product launches and new products in development in each company are compared and evaluated based on degree of innovation and customer satisfaction. Companies are then ranked by number of new product launches and new products in development.

III. Measurement Criteria

In addition to the methodology describe above, there are specific criteria used to determine final competitor rankings in this industry. The recipient of this Award has excelled based on one or more of the following criteria:

- Significance of new product(s) in their industry
- Competitive advantage of new product(s) in their industry
- Product innovation in terms of unique or revolutionary technology
- Product acceptance in the marketplace
- New product value-added services provided to customers
- Number of competitors with similar product(s)

IV. Award Recipient

Noble Polymers is the winner of the 2007 World Frost & Sullivan Award for Production Innovation in the World Polymer Nanocomposites Market. The company is awarded for its pioneering work in the field of nanocomposites, and its efforts towards commercializing this breakthrough technology.

Company Profile

Noble Polymers is a custom provider of niche high performance resins and plastic solutions. It is a well known supplier of thermoplastic polyolefins (TPO), which it offers under the brand names of Regis and Ecobarrier. It is a major supplier to the automotive industry which uses these products in wide ranging applications from bumper fascias to acoustics. It has further extended its strength in the automotive industry, with its ground breaking Forte Nanocomposites range of polypropylene based nanocomposites. This revolutionary product range will provide Noble Polymers with a platform to differentiate their products from the competition, and also put them on a high growth path.

Noble Polymers is a subsidiary of the Michigan based Cascade Engineering, which is an important supplier of injection moulded engineering plastic systems and components to the transportation, container and commercial markets. Noble Polymers came into existence on the back of an initiative from Cascade Engineering towards backward integration into the production of plastic resins, suited to individual customer requirements. Since then, it has evolved into a stand alone company in its own right, supplying many clients outside Cascade Engineering as well.

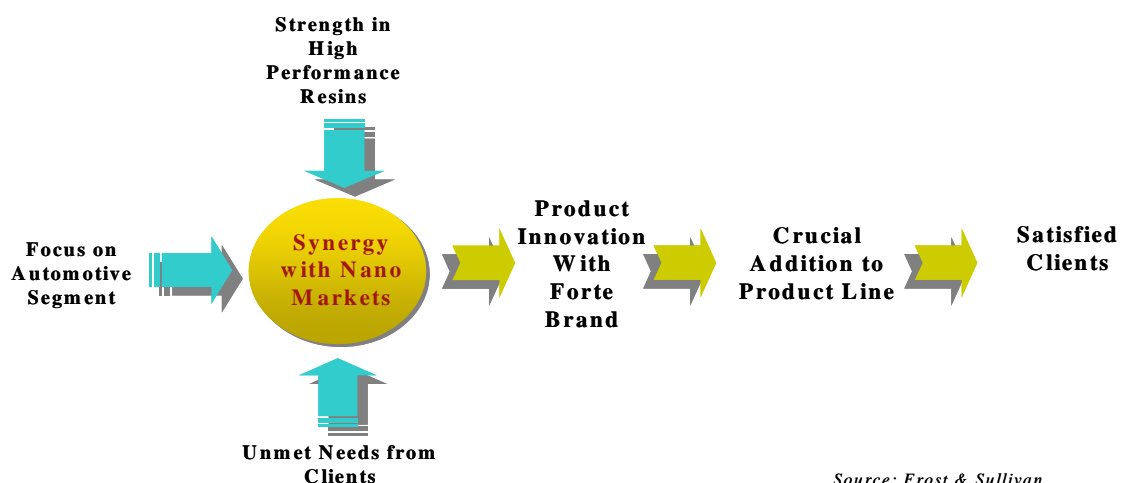
Revolutionary Technology

Nanotechnology has been one of the most promising developments of the last decade, and it has the potential to change the landscape of the high performance materials industry. Nanocomposites, which are polymer resins incorporating nanosized reinforcements are one of the key developments in this area. Nanoclays because of their very high aspect ratios, can be used in much lower quantities than other fillers. As a result, they can contribute to improving the mechanical and thermal properties of the polymer, without compromising on the beneficial properties of the base resin. Though nanocomposites unquestionably have a huge potential, it has taken a lot of effort to unravel their real benefits, as there have been tough technological and economical barriers to overcome. Players such as Noble Polymers have played a major role in ensuring that this is made possible, through their technological ingenuity and commercial acumen.

Forte Nanocomposites

Chart 1 shows the excellent fit of nanocomposites with Noble Polymers' key business focus areas.

Polymer Nanocomposites Market: Product Innovation Award (World), 2007



Source: Frost & Sullivan

Noble Polymers offers its PP based nanocomposites under the Forte brand name. The company has been responsible for creating some of the earliest opportunities for nanocomposites in commercial applications. The product is offered in four grades differing in their temperature and mechanical characteristics. This is key to this evolutionary market, and the ability to provide products that are closer in attributes to individual customer needs is of paramount importance. Some of the main differentiating characteristics of Forte Nanocomposites include their light weight due to lower density and also the ability to provide better durability and strength than the virgin polymer.

Successful Commercialisation of the Technology

Noble Polymers' Forte Nanocomposites range has successfully penetrated into high performance applications in the automotive segment. One of the earliest applications included the usage of this product in the seat backs of the Honda Acura car in 2004. End users were able to eliminate some of the issues with glass filled PP such as warping and processing difficulties with the usage of Forte Nanocomposites. The company also has a more focused approach to its innovation program, concentrating on the interiors of an automobile and creating opportunities for nanocomposites here.

Noble Polymers is also involved in expanding beyond its traditionally strong automotive market, into newer areas such as office furniture and HVAC applications. This will also contribute towards expanding the horizons for the emerging nanocomposite technology.

Being a part of Cascade Engineering provides Noble Polymers with a competitive edge on the processing end, and provide a more integrated solution to its customers. Also, they have a strong history in serving niche markets and this will keep them in good stead in the developing nanocomposite market, where such experience is most valuable.

V. Conclusion

Noble Polymers has played a key role in unearthing the potential for nanocomposites in commercial applications. Innovation is an ongoing process at Noble Polymers, and many of its current research in this market are bound to meet with further successes in the coming years. For its pioneering research in developing the Forte Nanocomposites product range, Noble Polymers is a worth recipient of the 2007 World Frost & Sullivan Product Innovation Award in the polymer nanocomposites market.