

## Product Leadership Award, Remote Field-Testing Global, 2011

### Frost & Sullivan's Global Research Platform

Frost & Sullivan is in its 50th year in business with a global research organization of 1,800 analysts and consultants who monitor more than 300 industries and 250,000 companies. The company's research philosophy originates with the CEO's 360-Degree Perspective™, which serves as the foundation of its TEAM Research™ methodology. This unique approach enables us to determine how best-in-class companies worldwide manage growth, innovation and leadership. Based on the findings of this Best Practices research, Frost & Sullivan is proud to present the 2011 Global Product Leadership Award in Remote Field-Testing to Russell NDE Systems.

### Significance of the Product Leadership Award

#### Key Industry Challenges

The Remote Field-Testing market is highly competitive with several market participants offering different and unique solutions. Adding to the competitive landscape, several Chinese manufacturers are now flooding the market with products that are competitively priced. These products, however, do not possess the same quality as offered by other well-established manufacturers but thrive on the price consciousness displayed by customers in certain regions.

To overcome this challenge companies need to display strong product leadership strategies focused on providing better value to customers in terms of product quality, backed by prompt after sales services to resolve any issues related to product maintenance.

#### Key Benchmarking Criteria for the Product Leadership Award

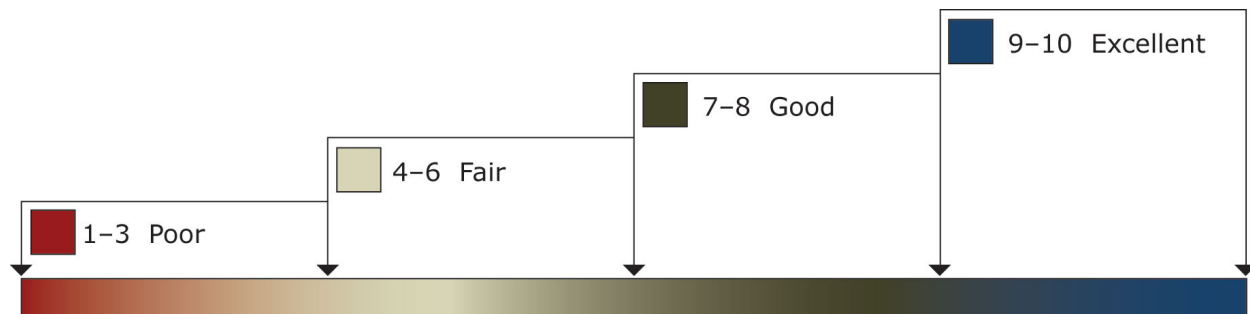
For the Product Leadership Award, the following criteria were used to benchmark Russell NDE System's performance against key competitors:

- **Product Features/Functionality**
- **Innovative Element of the Product**
- **Product Acceptance in the Marketplace**
- **Provides Customer Value Enhancements**
- **Product Quality**

## Decision Support Matrix and Measurement Criteria

To support its evaluation of best practices across multiple business performance categories, Frost & Sullivan employs a customized Decision Support Matrix (DSM). The DSM is an analytical tool that compares companies' performance relative to each other with an integration of quantitative and qualitative metrics. The DSM features criteria unique to each Award category and ranks importance by assigning weights to each criterion. The relative weighting reflects current market conditions and illustrates the associated importance of each criterion according to Frost & Sullivan. Fundamentally, each DSM is distinct for each market and Award category. The DSM allows our research and consulting teams to objectively analyze each company's performance on each criterion relative to its top competitors and assign performance ratings on that basis. The DSM follows a 10-point scale that allows for nuances in performance evaluation; ratings guidelines are shown in Chart 2.

**Chart 2: Performance-Based Ratings for Decision Support Matrix**



This exercise encompasses all criteria, leading to a weighted average ranking of each company. Researchers can then easily identify the company with the highest ranking. As a final step, the research team confirms the veracity of the model by ensuring that small changes to the ratings for a specific criterion do not lead to a significant change in the overall relative rankings of the companies.

**Chart 3: Frost & Sullivan's 10-Step Process for Identifying Award Recipients**



## Best Practice Award Analysis for Russell NDE Systems

The Decision Support Matrix, shown in Figure 4, illustrates the relative importance of each criterion for the Product Leadership of the Year Award and the ratings for each company under evaluation. To protect the interests of the award recipient’s competitors, we have chosen to refer to them as Competitor 1 and Competitor 2.

**Figure 4: Decision Support Matrix for Product Leadership Award**

<i>Measurement of 1-10 (1 = lowest; 10 = highest)</i>	Award Criteria					Weighted Rating
	Features/Functionality	Innovative Element of the Product	Product Acceptance in the Marketplace	Provides Customer Value Enhancements	Product Quality	
<b>Relative Weight (%)</b>	<b>20%</b>	<b>20%</b>	<b>20%</b>	<b>20%</b>	<b>20%</b>	<b>100%</b>
Russell NDE Systems	9.5	9	9	9.5	9	9.2
Competitor 1	9	8.5	8.5	8	9	8.6
Competitor 2	8.5	8	8	8	7.5	8

### Criterion 1: Product Features/Functionality

Having pioneered the development of remote field-testing (RFT), Russell NDE Systems has always believed in providing its customers with best-in-class performance through its products. Launched in 1988, the company’s Ferroscope® 108 was the only product, globally, to provide testing of small-bore ferromagnetic tubes. Instead of resting on its laurels, Russell NDE undertook further development of this product to modernize its design with new features and functionality to cover a larger customer base. In 2000, the third generation (Ferroscope 308) was released with new and improved features, adding to its already reputable performance. In 2010, an eddy current testing (ECT) module was added to the Ferroscope 308 to provide a complete package for electromagnetic testing.

A feature that stands out in comparison with its competitors’ offerings is the number of operating channels for both RFT and ECT modules. Ferroscope 308 has the highest number of operating channels in the market, providing the best resolution for RFT and ECT. Another feature that enhances Ferroscope’s functionality is the operating frequency range. It provides frequencies from 10 Hz up to 12 MHz, which helps it perform inspection on a variety of materials including non-ferrous tubes.

In line with the company's drive towards providing outstanding features, Ferroscope 308 comes with highly sophisticated software, Adept-Pro™, developed with a thorough understanding of customer needs. It provides advanced features with an easy-to-use interface. One key feature is the built-in report generator capable of creating an MS Excel® compatible file for easy computer storage. This allows comparison of up to 5 different data files on screen for better trending analysis.

### **Criterion 2: Innovative Element of the Product**

Since its first sale in 1988, Ferroscope has set the benchmark for innovation. It was recognized by NRC/ASTech for innovation in industrial research, 1993 and 2001. The current series 308 provides additional capabilities for inspection in tubes with a module for eddy current testing. Supplementing this module is the increase in number of operating channels for remote field testing module and the eddy current testing module. The increased number of operating channels provides better resolution, thereby enhancing the quality of inspection. Weighed against the competition, Russell NDE offers an unmatched blend of performance and usability with innovation.

### **Criterion 3: Product Acceptance in the Marketplace**

Ferroscope 108 was the first commercial product based on remote field technology and Russell NDE Systems has maintained its leadership in this market through a strong distribution channel of authorized dealers and agents selling across the globe. Backed by prompt technical support, Ferroscope found entry into the market easily. In addition, several customers including Acuren, Shell, and ATCO Power have rated Ferroscope as the best instrument for remote field-testing. These references coupled with the advanced features of the Ferroscope accelerated its market acceptance and has quickly grown to be recognized as the leading instrument for remote field-testing.

### **Criterion 4: Provides Customer Value Enhancements**

As with any technology-defined industry, customer value enhancement is of vital importance in this market. Russell NDE leverages its highly qualified technical workforce to provide prompt customer service. This is vital in keeping long-term working relationships with customers. Ferroscope comes with excellent after sales service options, covering various maintenance issues as well as application assistance and on-site support. Russell NDE insists on annual product calibration, supplemented with regular filter changes by outlining specific maintenance procedures. If these maintenance procedures are followed without exception, Ferroscope can operate without failure and with peak accuracy for as long as required. Another feature that provides high customer value is the range of operating frequencies. With one product customers can inspect ferrous as well as non-ferrous tubes; thus providing unmatched value.

**Criterion 5: Product Quality**

Russell NDE Systems works closely with its clients to understand their requirements and incorporate them into its products. The company's experience and considerable success in the Remote Field-Testing market, gives the company intimate knowledge of the market, which enables it to meet the current and future needs of its customers. The company's willingness to incorporate the latest technology advances in its systems has earned Russell NDE Systems a reputation for quality and a loyal customer base that spans across the globe. The company works closely with standard bodies like ASTM ensuring its product meets the latest standards for safety and quality.

**Conclusion**

Ferroscope 108 was the first commercial product for remote field-testing and it has maintained its leadership position by being a best-in-class product for over 25 years. Russell NDE Systems has leveraged its superior knowledge in the Remote Field-Testing space to provide additional advanced features in its subsequent series. Ferroscope 308 comes with additional channels for eddy current testing making it a complete package for inspection of ferrous and non-ferrous tubes from 0.25" to 8 inches in diameter. Based on Frost & Sullivan's independent analysis of the Global Remote Field-Testing market, Russell NDE Systems is being recognized with the 2011 Global Product Leadership Award.

**The CEO 360-Degree Perspective™ - Visionary Platform for Growth Strategies**

The CEO 360-Degree Perspective™ model provides a clear illustration of the complex business universe in which CEOs and their management teams live today. It represents the foundation of Frost & Sullivan's global research organization and provides the basis on which companies can gain a visionary and strategic understanding of the market. The CEO 360-Degree Perspective™ is also a "must-have" requirement for the identification and analysis of best-practice performance by industry leaders.

The CEO 360-Degree Perspective™ model enables our clients to gain a comprehensive, action-oriented understanding of market evolution and its implications for their companies' growth strategies. As illustrated in Chart 5 below, the following six-step process outlines how our researchers and consultants embed the CEO 360-Degree Perspective™ into their analyses and recommendations.

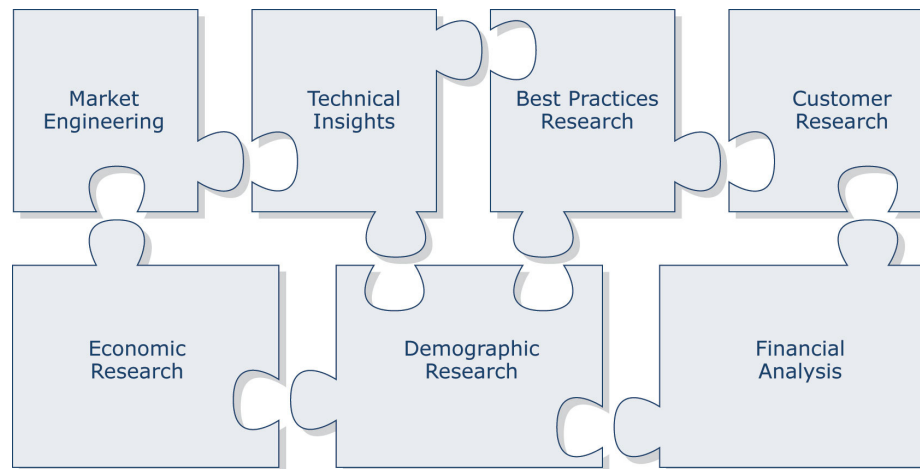
Chart 5: CEO's 360-Degree Perspective™ Model Directs Our Research



## Critical Importance of TEAM Research

Frost & Sullivan's TEAM Research methodology represents the analytical rigor of our research process. It offers a 360-Degree view of industry challenges, trends, and issues by integrating all seven of Frost & Sullivan's research methodologies. Our experience has shown over the years that companies too often make important growth decisions based on a narrow understanding of their environment, leading to errors of both omission and commission. Frost & Sullivan contends that successful growth strategies are founded on a thorough understanding of market, technical, economic, financial, customer, best practices, and demographic analyses. In that vein, the letters T, E, A and M reflect our core technical, economic, applied (financial and best practices) and market analyses. The integration of these research disciplines into the TEAM Research methodology provides an evaluation platform for benchmarking industry players and for creating high-potential growth strategies for our clients.

**Chart 6: Benchmarking Performance with TEAM Research**



## About Frost & Sullivan

Frost & Sullivan, the Growth Partnership Company, enables clients to accelerate growth and achieve best-in-class positions in growth, innovation and leadership. The company's Growth Partnership Service provides the CEO and the CEO's Growth Team with disciplined research and best-practice models to drive the generation, evaluation and implementation of powerful growth strategies. Frost & Sullivan leverages 50 years of experience in partnering with Global 1000 companies, emerging businesses and the investment community from more than 40 offices on six continents. To join our Growth Partnership, please visit <http://www.frost.com>.