Terronics Development Corporation
Passing the Thirty Year Mark

Introduction

Terronics is a world leader of innovative technology for the application of coatings by harnessing the science of electrostatics. Our products are state of the art in the world. The technologies, component choices, PLC programs, and service methods are relentlessly refined. We pride ourselves with having one hundred percent pleased customers across a number of major manufacturing businesses. We will continue to improve our formula of success well into the 21st century!

In the Beginning

About the second week in October 1984, Ed Escallon and Andy Brighton moved into Mrs. Stottlemyer’s Farm House and set up shop.

Nineteen eighty four was an outstanding year for the United States, with record growth and optimism of the future. While Ed had worked for five very large companies during his 19 years in engineering work, dreams of how he and Andy could prosper without their inherit political constraints and nonsensical headaches was a driver to create and grow a new small, better, and more-fun business.

Initially the thoughts were to build a business either around a bicycle accessory or something electrostatic, as both were keen interests of the co founders. Luckily they chose electrostatics, as the business would have had a very different “shape” trying to make a consumer product and obtain proper manufacturing and distribution for it. It was decided to time-bracket our small business as a success, and press on, if within 6 to 18 months we had something salable.

Three Founding Partners

Andy Brighton had worked on a major coil coating with powder paint project for Ed at Ball Corporation in Muncie, Indiana previously. Andy left Ball and joined Ed that October. There’s always some unsung hero, and in this case it was Delora Wallace, who helped them clean the farm up, and served our guests and customers a delicious Southern Gourmet meal for many years afterwards.

Phil Rodenberger, previously a team member at Ball participated as an outsider in some of the decisions being made. Later on he also left Ball and joined Terronics as a partner and major shareholder. Phil was our Chief Design Engineer for 15 years before his retirement, and sadly just
recently passed away. Andy decided to get his Master’s Degree and left Terronics after a little over a year.

Ed had good knowledge of electrostatics from his completion of the development and production design of the family of Electrostatic Waxers for Ball, and his further invention and development of a coil coater for can end (lid) stock using powder paint coating material. Furthering this development, but with thicker films, as his friends in the powder paint business suggested, was not thought economically practical due to the costly substrate material and machinery necessary to handle and cure it.

Milestone Accomplishments

Consequently, Terronics turned to powder coating magnet wire, as nearby Fort Wayne was a major manufacturing site for this product, where it is applied using solvented liquids. And purchasing and handling wire is significantly more readily doable than coil. Working nights and weekends, a small vertical coating apparatus was invented. The first material deposited was actually cigarette smoke, as no powder paint was yet available.

The Patent Office’s unusual quick allowance of the Wire Coater Patent, in full view of Escallon’s major Ball Patent, was the step that Terronics definitely had something sellable. Work with Armstrong, later Morton Powder Coatings and Phelps Dodge Magnet Wire Company provided the first revenues in Spring of 1985 insuring Terronics was truly in business with intellectual property. Work was also done on a super magnet coater at the suggestion of Tom Scattaloni of Armstrong.

The liquid spray technology was pursued concurrently, and by mid year Ed had invented an electrohydrodynamic nozzle. About 100 man years of work later, and 6 more inventors added to Terronics’ Patent portfolio, the nozzle was finally fully understood and commercially developed. The shear elegance and enduring reliability of this nozzle has never been matched, and it’s a major part of Terronics business to date, always incorporated in an excellently designed massive spray system.

Powder on coil metal took a great leap forward when Escallon, walking through the grocery store one evening, discovered 200 foot long rolls of aluminum foil for five dollars. This was the substrate that Terronics could well afford for its development of thick film powder coating. Over

1,000 pounds of foil were ultimately sent to recycle indicating the extent of effort needed to invent and master this technology.

Who we are today

Terronics is not operated with robots. Through the years it has had the benefit of highly motivated and very skilled explorers who have created all the inventions, development and production machines.
Many observers from larger companies decry the seeming chaos yet amazingly productive atmosphere of this company. We certainly favor the high quality of our working life and the complete freedom to create.

Early on, and through the entire thirty years, Terronics has had the pleasure of attracting and retaining excellent people with talent and energy. Our earliest people included Frank McEntee, model maker extraordinaire, Dave Poole, great all-round guy, and interns Brent Reynolds and Tony Tyner. Over the years we’ve had as many as 7 interns in one summer, and their foreign nationalities go from Mexico, Thailand, Indonesia, France, and the Netherlands, where of course our Dr. Han Almekinders calls home. Probably numbering close to 100 interns, Terronics is extremely proud of their ongoing professional success.

Currently, our staff includes Jill Bott, office manager, Jerry Groshong, project manager, Jennifer Swenson, designer extraordinaire, Mike Jones, sales, and our incredibly talented model makers, Rod Compton, Mike Hankley and Steve Whitcomb. And our forever landlord and great friend, Chuck Stottlemyer continues his excellent CNC work on the fabrication of the essential “magic” of our technology.

Conclusion

Have we made a difference? You bet. There are countless ways in fact that our installed base of coating machines, approaching one hundred in number, have. One of the simpler measures is rust protection for cold rolled steel, a very necessary step in its production. Thirty years ago oil was applied using rubber rollers and minimal levels that could be obtained were 250 +/- 100 milligrams/square foot/side. Ten years later our steel customers were electrostatically routinely oiling at one fifth of that level with confidence. Twenty years ago one of our fine food processors was applying starch to a cake that was to be inverted with a gravity depositor. Five years later his Terronics Electrostatic Starch Depositor reduced the material to 42 percent and provided another two shifts of production by lessening the clean up time.

It is a gratifying feeling following each installation to know that a sloppy process has been replaced with a precise and controllable technology that will operate with minimal maintenance and produce a cleaner working environment. Equally satisfying is that a far better product will benefit our customer and his customer as well. That was the dream that founded Terronics and that objective will continue to be met as time moves forward from our thirtieth birthday!