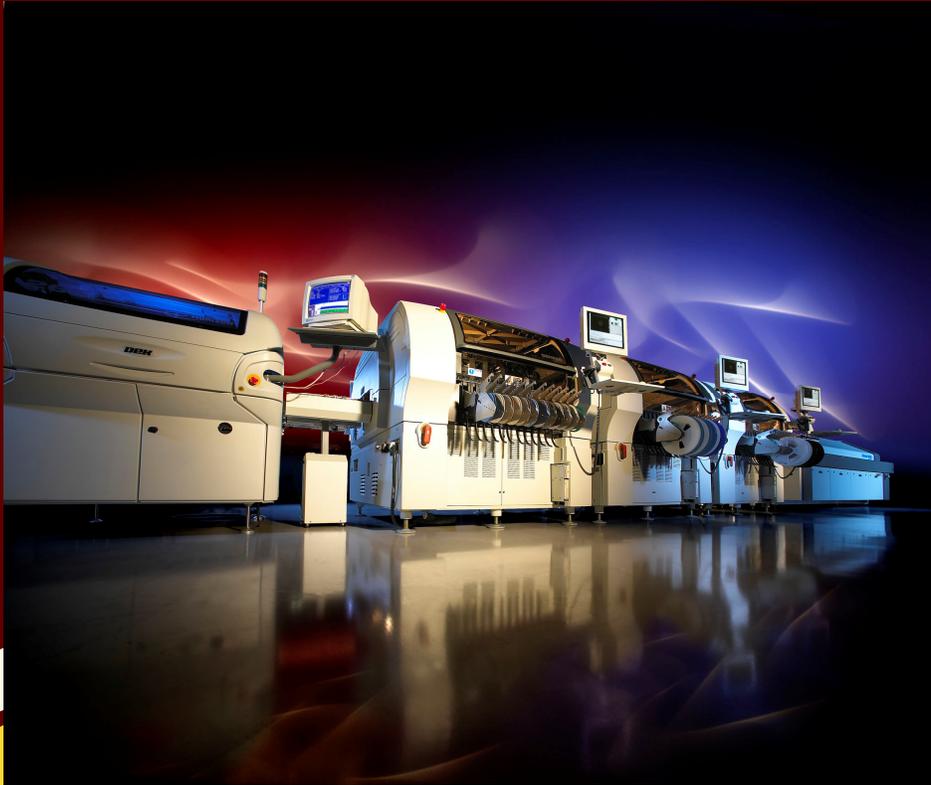


# Technical Resources Corporation

Quarterly Newsletter

ISSUE 02 December 2018



## Welcome...from Frank's Desk!



It's hard to believe that we are celebrating our 25th year in business, serving the Florida, Puerto Rico and Dominican Republic regions. We've certainly witnessed a lot of changes over this time period within our company, our partner-suppliers, and our customers. The company was incorporated in Florida on December 17th, 1993.

It's interesting to see how my company has transformed since those early days. We have represented 74 different product lines over that period of time. While it was "Polar Instruments" signature analyzers that got us "out on the factory floors" in those early years, it's "KIC's" thermal profilers that get us out on the floors today. Hired as the "first-ever" Sales Representative firm for GenRad in 1995, our focus in the early years was Automatic Test Equipment only. Since that time, we have transitioned to handle process assembly, inspection, test & repair equipment as well as associated chemistries. We have lines that we have represented for well over twenty years and truly grateful for the suppliers that have supported us and the customers that entrusted us.

I look forward to your suggestions and feedback so that we can make this document a worthy resource for you.

Sincerely,

### In this issue

Welcome, New Products P.1  
Who ya Gonna Call? P.2

Screen Printing Optimization P.2  
Quarter Century In Pictures P.3-5  
Upcoming Events, Linecard P.6

### NEW PRODUCT LINES

Due to acquisitions of DEK by ASM and the Vitronics & Electrovert integration under ITW, TRC replaced both product lines in 2017. The Vitronics relationship dated over 23 years and DEK over 13 years! *Change* is inevitable in any business, and we are pleased to make you aware of our new partnerships with [Speedprint USA](#), headquartered right here in Tampa and [kurtz Ersa](#).

Speedprint offers pre-bundled screen printer solutions including solder bead monitoring and a five-year warranty. The latest S-Track option will allow for barcode label picking and placing as well. ERSA has a world-class support center in Plymouth, WI, supporting a full line of screen printers, selective, wave, reflow and rework stations. The "inventor" of the electric solder iron in 1921, they house \$ 1.8M of spares in that facility.

# Who ya gonna call?

We urge our customers to take advantage of the resources within our post-sales support organizations..”and beyond”

When TRC evaluates a potential product line, the technical capabilities and support staff are critical factors. Being an Electrical Engineer and having worked at both Westinghouse and Racal-Milgo myself, I learned that products can turn into “white elephants” if not properly supported and deployed. Often times, there’s nothing wrong with the product at all. If the support structure isn’t behind the product, it’s up to your own personal talents to make it work. If the resources are there, however not used, “shame on both parties.”

My customers know and hear me talk about this all the time. We like to think that we solve customer problems by bringing total process solutions to the partnership. It’s a two-way street and the supplier must bear the necessary resources to support our clientele. The customers must also realize that we have watched 70% of our electronics manufacturing move offshore during the past ten years and this puts new strains on our suppliers in the way they might have provided service before. They also must work smarter, not necessarily harder as support staffs here in America have been right-sized to deal with a different size market here. “Please don’t get mad at me when that 23 year old SMD722 Vitronics reflow oven breaks and the guy that knew that product inside and out might not be around any more!” I would bet that there are “none” of these 20-30 year old dinosaurs at the new factories in Eastern Europe, Vietnam, Asia, etc. Nonetheless, my company will find those resources for you and for those companies that do business with TRC, you should know this well.

Besides our supplier “Help Desks” and resources, TRC will continue to support our local SMTA chapters with technical

leadership, Users Groups, and reviving our successful Advanced Process Technology seminars.

Customers have realized great value and we have had AOI Users Group (Tampa), DEK Users Group (Orlando), Lead Free Seminars (Vitronics Soltec, Clearwater), and Advanced Process seminars in Ft. Lauderdale and Tampa. We are in the planning stages for a several training webinars by two of our suppliers and Universal in now offering on-line training modules as well.

Here are some handy references:

<http://www.trcflorida.com> (TRC website)

<http://www.ipc.org> (IPC)

<http://www.smta.org> (SMTA)

<http://www.globalsmt.net> (Global SMT Mag)

[GSMTEchs@uic.com](mailto:GSMTEchs@uic.com) (Universal)

[tech@kicmail.com](mailto:tech@kicmail.com) (KIC)

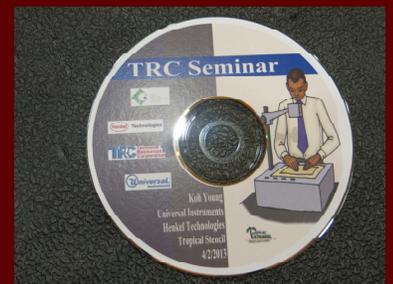
[kya\\_support@kohyoung.com](mailto:kya_support@kohyoung.com) (Koh Young)

[Chad.Suckow@kurtzrsa.com](mailto:Chad.Suckow@kurtzrsa.com) (ERSA)

[us1-sc-help@flexlink.com](mailto:us1-sc-help@flexlink.com) (Flexlink USA)

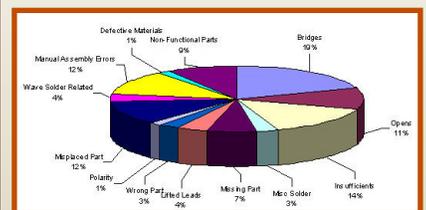
[https://www.youtube.com/channel/UCfJ3\\_mCg3n8pkQf-V83GKaQ/playlists](https://www.youtube.com/channel/UCfJ3_mCg3n8pkQf-V83GKaQ/playlists)

(TRC YouTube Channel)



## Screen Printing Optimization

Industry data continues to show that ~ 70% of all SMT-related defects’ root causes are traced back to the screen printing process. One vendor has stated that there are actually 50 control variables at this process. With



boards becoming more dense, apertures becoming smaller, and new package technologies, we are pushing the process envelope for SMT printing. Process Engineers need to educate themselves with available tools to open the process parameters.

For example:

**Stencil Technology:** finer grain stainless, nickel and other materials are being explored as options to the more expensive electroform stencils. There are stencil treatment products that are nano coatings which allows a standard stencil to be treated once for life and allows better paste release and higher yields.

**3D SPI:** 3D volumetric paste inspection is on the rise. We have deployed numerous in-line and benchtop systems in the area and now offer closed loop inspection with DEK, MPM and EKRA printers. Sophisticated SPI technology that provides accurate data for paste height, area, volume and alignment is now affordable. We have offered on-site printing process optimization classes from a Koh Young tech expert as well, offering a full solution.

# A Quarter Century in Pictures

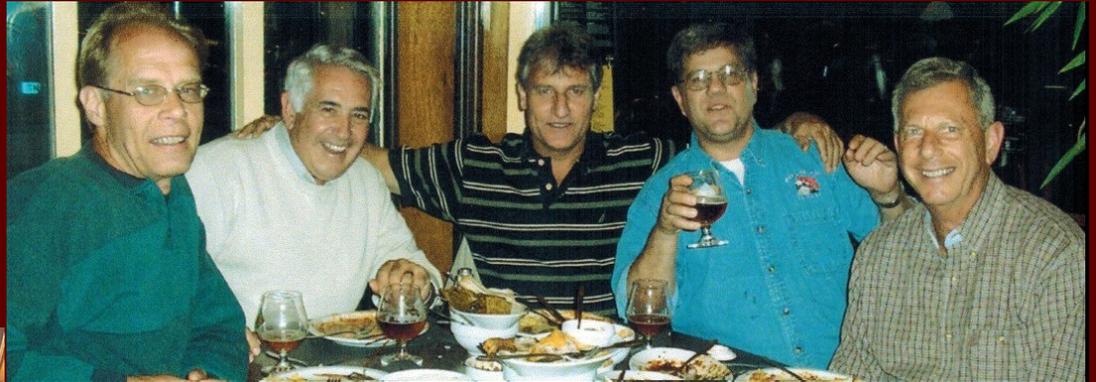


Exploitation for sure!!

Frank, Bryan Anderson-Henkel, Brad Peters w/ Champ at the time



Fishing with some Puerto Rican friends!



From NY, to Canada, to Missouri...lots of friendly rep-associates—Sales Meeting/Amsterdam



Not always that glamorous!



## Meet the TRC Team!



From left to right: Brad Peters, Frank Mascetti, Andres Torres



# A Quarter Century in Pictures



The early years...had hair and wore a suit!



EMS, Puerto Rico—Zevatech days



Frank and Pedro, Puerto Rico office, 1999



MSI, Melbourne..."rest in peace"



A younger Ken Jack...an older Vitronics oven



Many PR factories...long gone

# A Quarter Century in Pictures



SMTA International—Orlando, 2012





## TRC Linecard

- **Speedprint** Screen Printers
- **Universal Instruments** P&P
- **ERSA** selective, ovens, waves & rework
- **SCS** Conformal Coating
- **GPD** microdot dispensers
- **Aqua Klean Systems** in-line cleaners
- **Koh Young** 3D AOI & SPI
- **Nikon** X-Ray systems
- **Checksum** In-Circuit Test
- **KIC** thermal profilers
- **Henkel Technologies** chemistries
- **Takaya** flying probers
- **Pentagon EMS** pallets & tooling
- **LPMS USA** low pressure mold machines
- **Flexlink** conveyors, laser markers

## Upcoming Events—Mark Your Calendar

**IPC APEX EXPO 2019! (January 29th—31st, San Diego Convention Center)**

Hotels are filling up fast and the show will be upon us very soon so make your arrangements for the show now. San Diego is the host city for our industry's largest event in North America for the next few years. TRC will have all fifteen of our suppliers on hand, demonstrating their latest technologies. New this year, there will be a CFX Production Line, demonstrating the latest capabilities of Industry 4.0. Several of our suppliers will be participating in that production line.

There has been a great buzz in our industry regarding machine-to-machine intelligence, closed-loop feedback, decisions "on the fly", Industry 4.0 and more. Please feel free to reach out to your representative so we might discuss the realities and the hype around these exciting trends and how you can witness first-hand actual results in realtime right on the show floor. We're certain to be busy and highly recommend confirming scheduled meeting and demo times to maximize your time spent with the vendor. Hope to see you there!

For additional information, visit [www.ipcapexexpo.org/](http://www.ipcapexexpo.org/)



652 NE Francesca Lane  
Boca Raton, Florida 33487

561.488.9064 ph  
561.487.5036 fax

[www.trcflorida.com](http://www.trcflorida.com)