



Dear Friends:

We look forward to exhibiting at another NACE Corrosion Conference. Our 14th year!



When asked what we've been up to at Curran, we have a lot to show.

Tube repairs using hydraulically installed sleeves and liners have taken our crews to applications globally. This repair strategy for fixed equipment has solved tube corrosion issues and restored reliability; projects have been completed in-situ at a minimal service interruption to the client.

Curran's field service "reach" is recounted in an article about a tube sleeving project at an energy company in India. Through our partner M/s Curran Specialty Coating Services Pvt Ltd, we provided tools, materials and expertise to salvage leaking exchangers. The plant was able to remediate tube wall erosion resulting in premature tube failure after less than four years of service.

We continue to invest in our tube repair capabilities. Our clients recognize the benefit of hydraulic alloy tube installations when installed in a Curran cleaned tube ID. Maximizing the "intimate contact" of the tube with the repair liner is essential to optimized performance.

In North America, the refining and petrochemical industries are operating under a changing economic period, enjoying low cost and abundant energy, and continuing to be

Contents

Letter From Ed Curran

Richard Rodriguez – Tackling Customer Problems

1,326,801,527 People – 325 Tubes Curran International Delights Indian Oil Refiner

Curran Cleaning Containment Module is Ready to Roll!

Catch Curran

Meet the Professionals
from Curran:

NACE Corrosion 2016

March 6 – 10, 2016
Vancouver Convention
Centre, Vancouver, BC,
Canada.



AFPM Reliability and Maintenance Conference and Exhibit

measured for safe, efficient operation. Keeping “bad actor” exchangers operating reliability continues to be of high value for clients. There are hundreds of cooling water exchangers in continuous service with Curran’s proprietary coatings, meeting expectations for the extremes of plant operating and “steam out” cycling.

In this issue of Curran Events, you’ll find an introduction to our Production Manager, Richard Rodriguez, who has led our shop coating team for four years. Richard understands what dictates the day-to-day priorities of our protective coating applications. Client deadlines for equipment critical to unit operation drive our production planning and shop schedule, and Richard has fostered a highly functional and committed work force.

I appreciate the consistency and quality the shop team delivers every day.

We rolled out an innovative solution for tube ID dry blast cleaning of pull and clean bundles, which enables fully-contained, dry-grit tube ID cleaning for pull and clean exchangers. The module eliminates plant waste containment, fully captures dust and debris and leaves a clean “footprint” when demobilized. The module has integrated dust vacuum and blast equipment, the only plant utility required is 110V AC.

Our grit blast tube ID cleaning improves predictability and integrity of exchanger inspection, and the module makes integration at plant wash slab seamless.

We attend NACE Corrosion 2016 in Vancouver March 7 through March 10. Make sure to come visit us on the exhibit floor, we want to hear what you’ve been up to!

Sincerely,

Ed Curran

Ed Curran

May 26 – 27, 2016
Henry B. Gonzalez
Convention Center,
San Antonio, Texas



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Richard Rodriguez – Tackling Customer Problems

Built like a linebacker and in constant motion, it wasn't long after Richard Rodriguez joined Curran International, four years ago, that his work ethic, discipline and the respect of the shop team made him the consensus choice to be the Production Manager of Curran's plant, in Dickinson, Texas.



Richard Rodriguez surrounded by the Curran Shop Application Team; (left to right) Greg Hunter, Rudy Rodriguez, Marcus Rodriguez, Roger Fernandez, Jorge Viera.

As Production Manager, Richard is responsible for all protective coating activity in the shop. Richard's position comes with an office and view of the shop floor, but he's rarely at his desk. Instead, it's common to find Richard behind a protective mask, in a Tyvek suit, coating steel with his team.

Richard manages a team of five full-time applicators and oversees all aspects of shop protective coating activity. The range of his experience includes everyday applications of full length tube ID exchanger coating, to donning heat-resistant gear to hot flock fluoropolymer coating onto equipment in severe service.

Think of adding toppings to a pizza in front of a 5000 cubic foot, 650 degree oven!

Richard and his team understand being flexible to react to new work on short notice is part of the job. Developing shop team competencies and responsibilities has been a key to being able to split work teams when shift work is required to meet aggressive schedules.

“The Curran facility has a commitment for quality coating applications. It’s often not enough to just hit the specification, because clients often push for highly expedited schedules,” notes Richard.

During refinery turnaround season, it can feel like running on a treadmill at a five-minute mile pace with exchangers and channels coming in and going out – coated and ready for installation.



Richard working on his homestead.

When not leading his team at Curran, Richard puts his energy and muscle into a home building project in nearby San Leon. It’s a ground-up endeavor, which he is completing at a steady pace. When complete, the new home will allow his family’s hobbies to spread out over a couple of acres. An area for free range chickens is likely in the plans. Richard and his wife Denise have enjoyed raising chickens for years. Their hens offer a bounty of fresh eggs that is shared with Curran employees.

“It’s a better tasting egg,” Richard says with a wide grin!

His interest in farm animals comes naturally, Richard grew up in Abernathy, a small west Texas town, where agriculture is a way of life. His high school success on the gridiron earned him a scholarship to Panhandle State University in Oklahoma. There, in the mid-1980s, he earned a degree and played Division II football for four years - across west Texas, Oklahoma and Kansas.

Since his football playing days, Richard's come south making his home and career in an area not more than a mile from Galveston Bay. Richard and Denise have two adult daughters, Morgan and Meleya, and Marcus a son who recently completed his service in the US Air Force. Richard keeps his family close. Marcus and both sons in law work in Curran's shop and in field-operations.

Richard and Denise enjoy hitting the road to explore historic sites in the southwest. Among their highlights was traveling with Richard's mother on her pilgrimage to San Miguel Chapel, Santa Fe, New Mexico. Established in 1628, the chapel stands as the oldest church in North America.

Future course work in the NACE Coating Inspector Program (CIP) is on Richard's agenda. Richard's learning from course work is further augmented by the valuable experience provided by his daily work.

When he is not working directly with his team, Richard looks forward to meeting new customers and offering a working tour of the Curran shop.

1,326,801,527 People – 325 Tubes **Curran International Delights Indian Oil Refiner**



Curran works worldwide.

HPCL Mittal Energy Limited, based at Bathinda, in the state of Punjab, recently contacted Curran International because a number of the refinery's amine cooler tubes were experiencing leaks. Alarming, the number of tubes with leaks was increasing at a rapid pace.

The \$4,000,000,000 refinery processes 180,000 barrels of oil a day. The enormity of the Guru Gobind Singh Refinery makes it the single largest investment at any location in Punjab. The refinery has high Nelson Complexity Index, which enables maximizing value-added products even from heavy/sour crudes.

When the Curran Team arrived on-site, one of the coolers was taken out of service, so that a tube sample could be removed. Upon inspection of the tube sample, it was clear that the primary defects were located approximately 2" from the face of the tubesheet. This location was at the transition point of the end of the tubesheet to the airside of the cooler. Curran determined the defects were due to excessive wall-thinning at the tube inlets. Most likely, the thinning was a result of excessive fluid velocity.

The HPCL Mittal Energy Limited plant ordered a replacement cooler however, since the parent tubes are SA-179 carbon steel, which is highly susceptible to erosion, a decision was made to install SA-213 TP-316L inserts in the cooler tubes. This change in the tubes composition protected the parent tubes from inlet erosion. Curran International along with its Indian subsidiary Curran Speciality Coating Services Private, Ltd. was selected to install the inserts. The work was performed in-situ, at elevation, at HPCL Mittal Energy Limited's facility.

Once Curran's crew was onsite and had full access to the cooler, the inserts were installed within 1.5 shifts. The client conducted a completed QA/QC inspection of the inserts after installation and performed a tube-side hydro test with 15.5 kg/cm² pressure. No leaks were detected during the hydro and the cooler was returned to service.

The bundle has been in service since the project was completed and has been operating without incident. The repairs implemented by Curran International should provide the client with several years of trouble-free operation of their repaired amine cooler.

The customer was so please with the services provided and the quality of the work that they have contracted with Curran International to install more inlet inserts within more of their amine coolers.

For more information, please feel free to contact:

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Curran Cleaning Containment Module is Ready to Roll!



Utility end of tube cleaning module with integrated dust vacuum, sand pots.



A small exchanger is on V-block and ready to roll into the blast module. Two bundles can be loaded at the same time. When blasting the end doors are closed, sealing all blast-waste inside.

In December, Curran demonstrated its new and unique grit blast cleaning module at GMA facility in Reserve, Louisiana. Four companies that may use the cleaning containment module, attended the demonstration, which was part of a Lunch and Learn.

The module creates a portable, dustless waste-containing solution for dry grit blast cleaning of pull and clean exchangers. The module operates on a 120V connection from plant.

To learn more about the Cleaning Containment Module, please contact Ed Deely, Business Development, for a rental rate. (281) 339-9993
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