Daily Thermetrics, a division of Daily Instruments Corporation, is internationally recognized for its excellence in designing, engineering, manufacturing, and delivering superior products to the demanding needs of our customers. The engineering staff and personnel at Daily Thermetrics are highly trained and dedicated to solve the problems and meet the challenges presented by the Refining & Petrochemical Industry. Clients around the world have relied on Daily Thermetrics' experience and expertise for over 35 years. Daily Thermetrics' world headquarters is in Houston, Texas, USA.



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CCR PLATFORMING REGENERATION with **Precision Temperature Profiling** 





# **Teaming up to offer the most** advanced regenerator profile ever

**Daily Thermetrics**, a global expert in temperature solutions for the refining industry, is an engineering body specific to designing and manufacturing the patented CatTracker® Temperature Tracking System. A proven technology with operational service on five continents, the CatTracker® System provides unsurpassed reliability and precision.



Working together with **Daily Thermetrics**, **UOP** has harnessed the unique advantages of the CatTracker® System to maximize the operator's ability for precise monitoring and control of the facility's UOP licensed **CCR Platforming Regenerator**.

## Getting the best bang out of your burn-zone

The profitability of the CCR Regenerator's operation and investment in hardware and catalyst is reliant on a very tight temperature range.

Proper temperature management in the burn-zone of your regenerator is not only important, its critical to the long term stainability of the catalyst, its reactive life, and the integrity of the internal screen. Daily Thermetrics' CatTracker® Temperature Tracking System is designed to offer vertical profiling, radial (horizontal) profiling, or both with 89% less hardware than any other system.

In addition to minimizing mechanical hardware and increasing point density, Daily Thermetrics uniquely offers **Ultra High Precision**<sup>™</sup> **Technology**, a proprietary technology that offers the most precise, repeatable quality of data available.



#### Ultra High Precision<sup>™</sup> Technology Every CatTracker® Temperature Sensor is engineered and manufactured such that the temperature readings are within 1°C (at 427°C) from highest to lowest temperature reading per reactor.





### **Superior sensor density** Maximizing temperature sensor locations

The complete temperature profile of the regenerator's burn-zone, transition-zone, and chlorination-zone is limited to the number of sensing points capable of fitting through the existing TI entry nozzle(s). Historically, the typical Regenerator contained between five (5) and thirteen (13) temperature sensor elevations.

Benefiting from the unique patented design of the CatTracker<sup>®</sup> System, CCR Platforming Users now have the ability to specify nine times **more temperature sensors** than previously capable with any other temperature monitoring system.

It is important to note that with added point density, the CatTracker® System also improves the durability of the industry's expectation of direct contact, heavy-duty temperature sensors. The mechanical strength of the CatTracker® System is designed for maximum durability in applications that experience vibrational impact on the temperature sensor.

### **Revamping the impossible**



With more than 200 successfully completed reactors and regenerators and thousands of operational sensing points, there isn't a processing unit Daily Thermetrics can't revamp.

Daily Thermetrics will work with UOP's Internals designers and catalyst division to offer the ultimate in regenerator revamping:

- I Newest UOP Screens & Internals
- II Newest High-Activity UOP Catalysts
- III CatTracker® Temperature Tracking System

Daily Thermetrics Field Engineering Services gives refiners on-site technical expertise to ensure confidence in the reactor's performance.

Daily Thermetrics understands that offering the best technology isn't enough. As experienced refining experts, we have engineered the CatTracker<sup>®</sup> System to not only provide the most accurate real-time information, but also install in a fraction of the time of any previous generation hardware.



#### Field Technical Services from Daily Thermetrics include:

- » HYDROCRACKING temperature sensor installations
- » Heater & Furnace temperature sensor installations
- » Abnormal temperature variation analysis
- » Temperature Hardware troubleshooting & repair

### Designed with **quality** in mind

No less important than proper Design & Manufacturing is the verification of quality through extensive inspection.

Daily Thermetrics uses the latest techniques and equipment to guarantee every temperature sensor fabricated has been rigorously inspected to the strictest requirements of Daily Thermetrics, the technology licensor, and your refining facility.

» ISO 9001 Certified

» On-Site State-of-the-Art X-RAY Facility » In-House NDT Level II Inspectors

