

**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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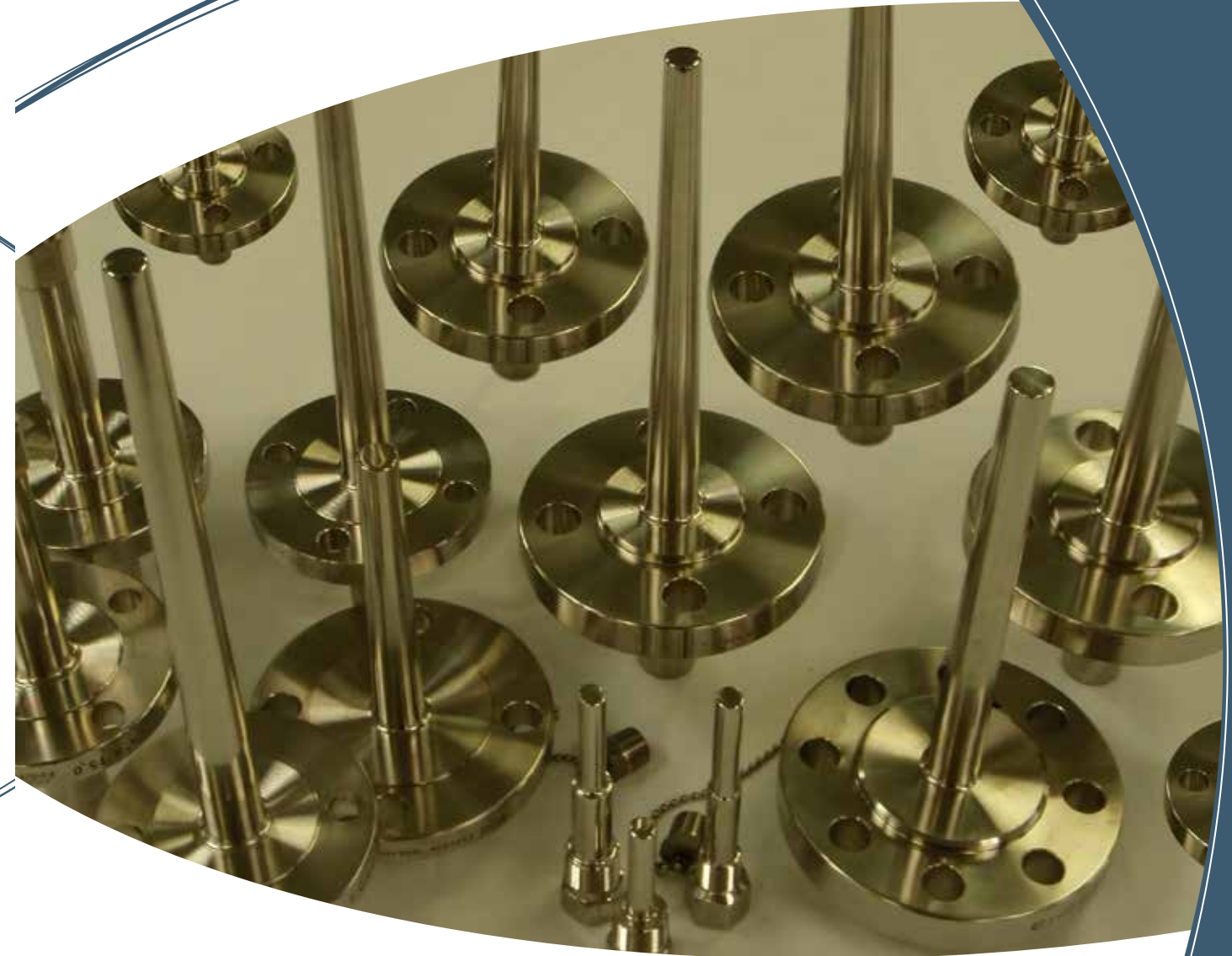
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# THERMOWELLS

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**THERMOWELLS**  
Daily Thermetrics Product Advantages



# Demanding the best THERMOWELLS for the process industry

Identifying critical design specifications, manufacturing operations, and inspection tests

## 100% in-house design & fabrication

A rarity in our industry; don't take this for granted

Every thermowell purchased from Daily Thermetrics is designed, engineered, and manufactured by **Daily Thermetrics, an ISO 9001:2008 Certified Company**. This enables Daily Thermetrics to offer **same-day delivery**, while at the same time ensuring consistent quality to a recognized international standard for every order.

As the most critical component of the sensor assembly, each thermowell must be designed, manufactured, and tested properly in order to be able to seal against the process at the appropriate design pressure and temperature. Daily Thermetrics is capable of manufacturing **single-piece barstock construction thermowells up to 72 inches (1.83m) in length**. *Pipewell thermowells* can be made much longer, exceeding 100 ft (>30m) in length.

Every thermowell is backed by Daily Thermetrics' promise to all our customers that we will exceed its expectations for the safest, most reliable thermowell available anywhere.



## Wake frequency analysis

Engineering is our foundation

Daily Thermetrics offers the most thorough **Wake Frequency Analysis (commonly referred to as thermowell vibration and/or velocity calculations)** in the industry, free of charge with every thermowell order.

Over the years, the refining industry has been steadily **increasing the throughput** of its process units. As the velocities of the processes today are increasingly higher than in decades past, it is imperative that the thermowells' design be reviewed to verify that they are suitable for every specific service and application.

**CASE STUDY:** In a recent multi-billion dollar refinery expansion project, Daily Thermetrics found that approximately **25% of all of the thermowells designed by a major EPC firm failed** to meet the design criteria set forth by the process conditions. Daily Thermetrics' expertise was called upon to correct this situation, redesigning the thermowells while saving the EPC and customer countless engineering hours in design, engineering, and field installation. As was proved in this recent occasion, **costly and potentially life-threatening mistakes can be avoided** by allowing Daily Thermetrics' engineers to assist in proper thermowell design.

## Full penetration welding

Superior verification with ultrasonic testing

For **hydrocarbon service**, refiners around the world are increasingly specifying **flanged thermowells with full penetration welds**. Full penetration welds are intended to eliminate any areas in the weld in which hydrogen can migrate and potentially build pressure.

*How can it be verified that a full penetration weld is truly free from imperfections such as stress cracks and/or voids?*



Daily Thermetrics recognizes that X-rays and dye penetrant testing fall short of providing a **complete volumetric inspection** to verify the integrity of the weld. As such, Daily Thermetrics provides **Ultrasonic Testing** as a standard inspection procedure for 100% of all full penetration welds performed at its facility.

## What your 'tag number' won't tell you

In order to allow for complete **material traceability**, Daily Thermetrics employs a 100% serialization policy for every thermowell. **No other thermowell manufacturer offers this level of traceability for thermowells.**

The permanent, computer-etched Serial Number on each of Daily Thermetrics' thermowells is in addition to any customer furnished Tag Number.



A copy of all manufacturing/inspection/quality records can be obtained for any thermowell by simply providing its unique Serial Number.

**EMERGENCY?**

Manufacturing 24/7

Large Inventory of Rare & Standard Materials

On-call Engineers, Designers, & Technical Service Personnel

TEL: 713 • 780 • 8600



**PMI** POSITIVE MATERIAL IDENTIFICATION

End users around the world have recognized (learning the hard way) that even though a piece of equipment may be stamped with the material type, and even though it may include paperwork documenting its metallurgy, the best way to verify material makeup is to perform a Non Destructive Test known as Positive Material Identification ("PMI").

Even the world's largest raw materials suppliers are subject to human error, and therefore it is not uncommon that a 316 SS flange, for instance, be stamped incorrectly as Inconel 600.



In order to support all material identification and documentation, all incoming raw materials and all outgoing finished products undergo 100% PMI testing at Daily Thermetrics.