

**IMPORTANT TECHNICAL UPDATE**

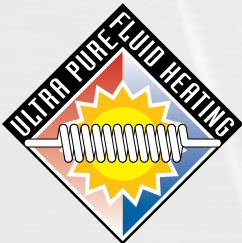
**FOR SOLAR CELL MANUFACTURERS CURRENTLY USING DILUTE KOH FOR THEIR  
TEXTURING PROCESSES**

# OPTIMIZE

**Increase Solar Cell Wafer  
Conversion Efficiencies  
by a Simple Improvement  
in Texturing Equipment**

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**Heateflex® Immersion Heaters**

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**INCREASE THE  
CONVERSION EFFICIENCY  
OF SOLAR CELL WAFERS**



**Heateflex Corporation**

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**PURPOSE:** Raise the conversion efficiencies of solar cell wafers with a basic improvement in the texturing process. SAVE by getting a bigger return on equipment and production investment by producing a final product with a higher market value.

**WHO CAN BENEFIT:** Solar cell manufacturers who use KOH baths for texturing wafers.

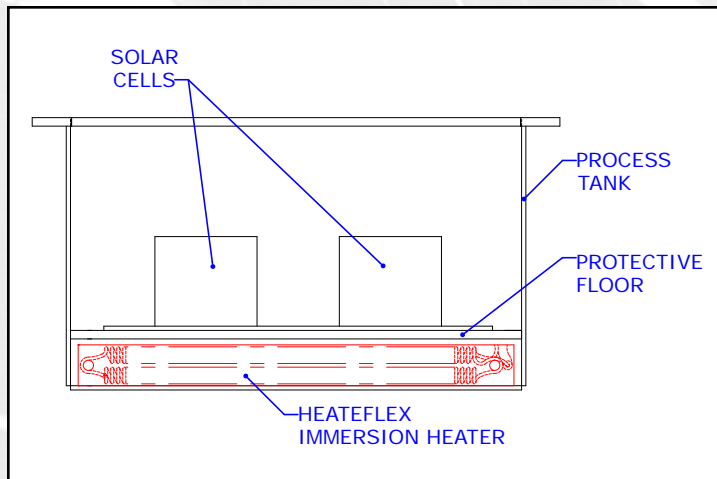
**PROBLEM:** Our analysis has found that uneven distribution of temperatures in heated baths can result in poorly textured solar cell wafers. Metal exposure in the process can result in impurities due to ion contamination and less effective chemistries.

**RECOMMENDED SOLUTION:** Heateflex® PFA immersion heaters are highly responsive, efficient, and custom-engineered for individual processes in order to provide clean and even heat for OPTIMIZED texturing of solar cell wafers. Process baths which utilize the direct application of heat should only use immersion heaters which have been designed specifically for solar cell applications. Heateflex® immersion heaters feature PFA and PTFE wetted surfaces for ultra purity, and can be controlled by microprocessor-based temperature controls for precise temperatures and safe operation.

**BENEFITS:** Produce a higher quality product without raising production costs.



**Heateflex® Immersion Frame Heater**



**Solar Cell Process Tank**



**High Purity PFA Jacketed Elements for No Metal Contact**



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