D&L Oil Tools in Tulsa, Oklahoma, does their own phosphate coatings on their downhole tools in order to ensure a quality finish. Phosphate coatings are often used in the oil and gas extraction industry, as equipment must be kept lubricated in order to continue performing in incredibly demanding applications. These coatings provide a grain structure for oil to reside to improve lubricity for gears and threads while protecting against corrosion.

During the phosphate process, a coating builds up on heated surfaces such as electric immersion heaters, restricting heat transfer, causing corrosion and shortening heater life. For this reason, Process Technology developed a purpose-built heater for phosphate chemistries: the DAS-series immersion heater. The DAS-series heaters are designed to last longer in heavy buildup and surface corrosion that normally occurs in these baths. A heavy-wall outer sheath and unique internal construction protects the heater core resulting in a longer life and better performance in harsh phosphate applications. Since D&L Oil Tools replaced their standard immersion heaters (which tended to last about a year) with DAS heaters, they haven’t suffered a single heater failure after seven years of service.

The DAS heaters have reduced D&L’s cleaning intervals from every week to every six weeks. Today, D&L wouldn’t consider using anything else for heating their phosphates!