

STANDARDIZING TO MINIMIZE SPARES

WHY ARE ALL OF MY PUMPS DIFFERENT MODELS?

When a new roofing plant is built, the engineer specifies each pump application, including the liquid, required flow rate, pressure and temperature. Pumps are selected to satisfy each unique application to keep capital costs low. Then, over time, some pumps may be replaced with pumps differing even more from the original. The end result can be a plant with 40 pumps in which 37 of them are different sizes, materials or designs, even if they are all Vikings. This makes maintenance planning extremely difficult, and requires excessive spare pump and part inventories to keep the plant running smoothly.

STANDARDIZING

Some roofing plants have embraced a new strategy for improving process reliability: standardizing on two or three pump models for all applications throughout the plant.

One of the key features of a Viking pump is the ability to operate at any point on the curve, by adjusting the speed with a Variable Frequency Drive (VFD). This means, for example, that a Viking LS size pump, which is capable of delivering 200 GPM of clean asphalt at maximum speed, can replace any size pump smaller than that, including the LL (140 GPM), L/LQ (135 GPM), KK (100 GPM), K (70 GPM), HL (30 GPM) or H (15 GPM), simply by reducing the speed. The brake horsepower required is no different than that used by the smaller pump.

A 200 GPM rated pump is certainly higher cost than a 15 GPM pump, but when the plant standardizes on one size for 90% of its pumps, that pump, or a single spare, can be rotated to any of those different services. When you consider the cost of downtime waiting for a spare part for that one 15 GPM seal-down pump, the cost of standardization becomes very small. And the spares in the stockroom shrink from hundreds of parts to a dozen.

The process of standardizing requires piping connection changes, as well as pump mounting changes. But for the plants that have done it, they have found improvements in process reliability and reduction in maintenance to be worth the effort. Talk to your Viking distributor to help you evaluate the feasibility of standardization.