

EXTENDING LIFE OF COATER PUMPS

PUMPING LIQUID SANDPAPER

Surge and coater pumps are critical to the roofing process, but are subjected to extreme abrasion from the stabilizer (filler) material. It's like pumping liquid sandpaper. Yet, no other pump has proven capable of handling the combination of abrasive fillers, high viscosity and the high temperatures of coating asphalt, filled seal down and filled adhesive asphalt for laminated shingles. Through extensive experience on these and other abrasive liquids, Viking has developed many material options and operational and maintenance strategies to minimize wear and extend pump life.

HARD MATERIAL OPTIONS

Each plant has to make decisions about the economics of using harder, more costly materials and larger pumps running slower, in exchange for longer life. Your Viking distributor can provide a range of options for you to consider.

Liquid	Construction	Idler Pin	Idler Bushing	Rotor Gear	Idler Gear	Shaft	Bracket Bushing
Clean Asphalt	Standard	Hardened Steel	Bronze	Cast or Ductile Iron (dep. on size & viscosity)	Cast Iron	Steel	Bronze
Filled Asphalt	Good	Hardened Steel	Hardened Iron	Ductile Iron	Cast Iron	Steel	Bronze
	Better	Colmonoy + TC Coated	Colmonoy Coated	Steel	Cast Iron	Hardened Steel	Hardened Iron
	Best	Tungsten Carbide	Tungsten Carbide	Hardened Steel	Hardened Steel	Colmonoy + TC Coated	Colmonoy Coated

OPERATIONAL & MAINTENANCE STRATEGIES

- Oversize the pump to 1) reduce wear by running as slow as possible, and 2) allow speed increases within allowable limits (with Variable Speed Drive) to compensate for wear over time
- Periodically measure key internal dimensions for wear and compare to factory new using Pump Inspection Reports available from your Viking Authorized Distributor; allows prediction of scheduled maintenance or replacement
- Swap pumps – Coater return pumps may have lower wear than surge pumps due to generally lower flows; when surge pump is worn, replace it with the return pump and install a new return pump, if construction is identical
- If replacing head and idler, re-use expensive tungsten carbide idler pin and idler bushing; these are shrink fit parts that require heating the heads and idlers in an industrial oven to remove and replace them