

Packing Run-in

How to avoid premature packing failure

By: John Hayward
President
Hayward Gordon Ltd.

The most serious damage to packing generally occurs within a few minutes of initial startup. Here's how this can be eliminated.

When a packed pump is first started it is essential that a ,generous and steady initial leakage be maintained in order to cool and lubricate the packing while it is running in.

Everyone knows that packing only needs a steady drip in order to function properly. Unfortunately what happens too often at startup is that the gland is immediately adjusted so that there is only a steady drip from the packing and then the pump is left to run.

As the packing runs in it heats up and expands. This cuts off the supply of lubricating and cooling liquid and this causes failure of the packing and a scored shaft or shaft sleeve.

It does not take more than a few minutes of running dry for this to occur. Once the sleeve has become scored, there is no alternative but to replace the sleeve as well as fitting new packing.

Initial startup is therefore the most critical period in the life of a packed gland. When the pump is started for the first time, the gland nuts should be adjusted so that there is a steady stream of liquid leaking from the gland.

The rate of leakage should be monitored every 10 to 15 minutes initially and gradually adjusted over a period of four to six hours to achieve an optimum operating leakage rate of 30 to 60 drops per minute.

Throughout this process, if the flow stops or the packing becomes overheated, the gland nuts should be slackened off immediately to allow for increased cooling.

