

# HOW TO PREVENT DRY RUNNING OF PUMPS



MARK, ROCK... I HAVE SOME BAD NEWS.



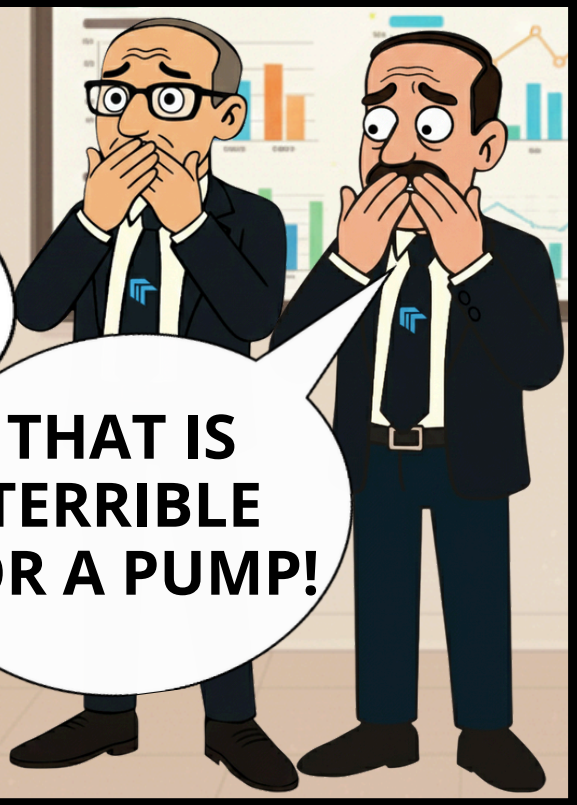
WHAT IS IT, GEMMY?



I JUST HEARD THAT... A CENTRIFUGAL PUMP FRIEND OF MINE... GOT DAMAGED DUE TO DRY RUNNING.



THAT IS TERRIBLE FOR A PUMP!



I DON'T WANT THIS TO HAPPEN TO ANY OTHER PUMPS! WHAT CAN WE DO TO PREVENT IT? HOW DO WE ENSURE EVERY PUMP WORKS CORRECTLY AND SAFELY?



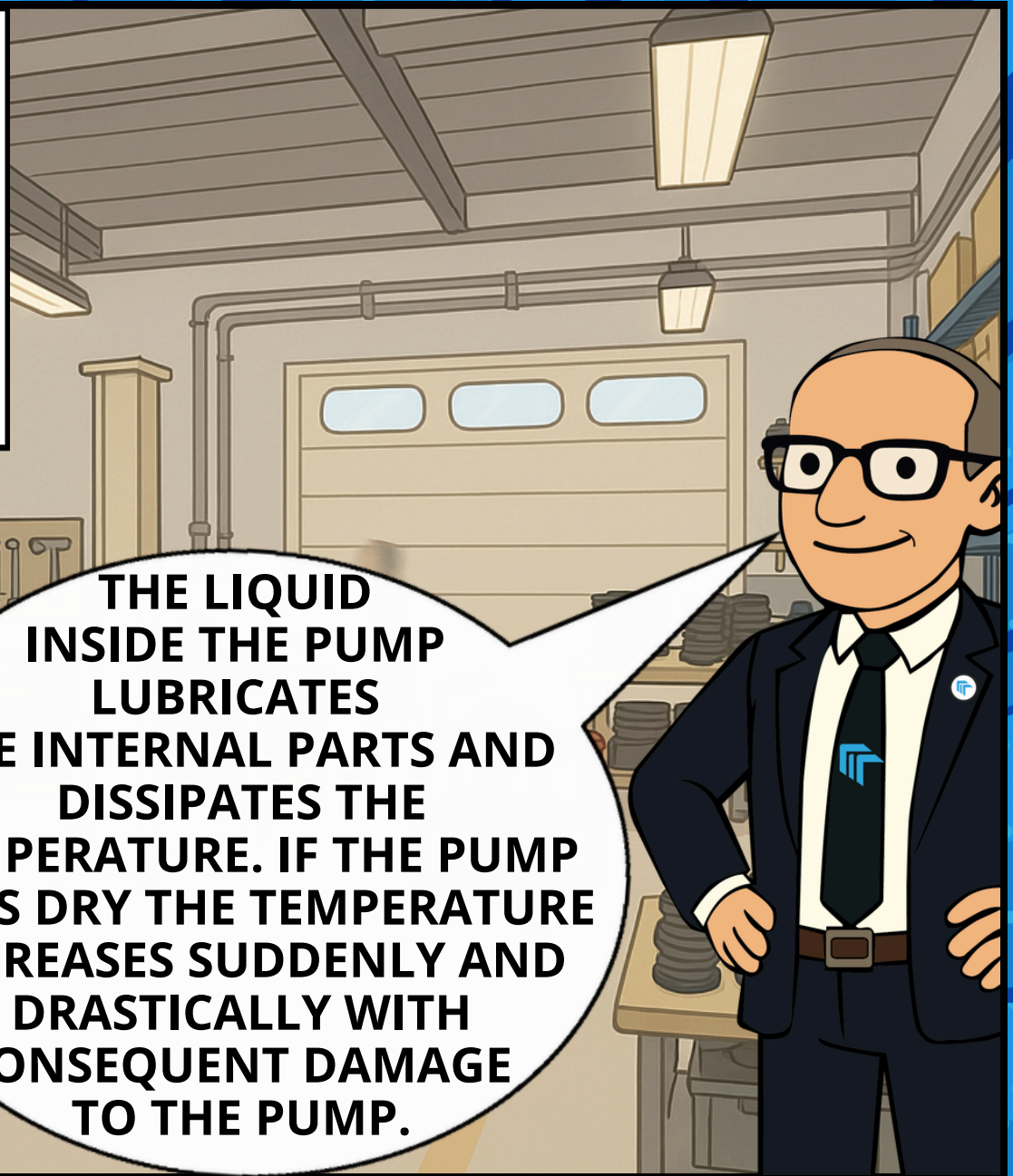
THAT'S AN EXCELLENT QUESTION, GEMMY. PREVENTION IS EVERYTHING. LET'S GO OVER THE KEY RULES TO AVOID DRY RUNNING.



**THE MAIN CAUSE OF A DRY RUN IS SIMPLE: NO LIQUID INSIDE THE PUMP AT START UP OR DURING FUNCTIONING. SO, FIRST: MAKE SURE THAT THE PUMP IS ALWAYS FULL OF LIQUID.**

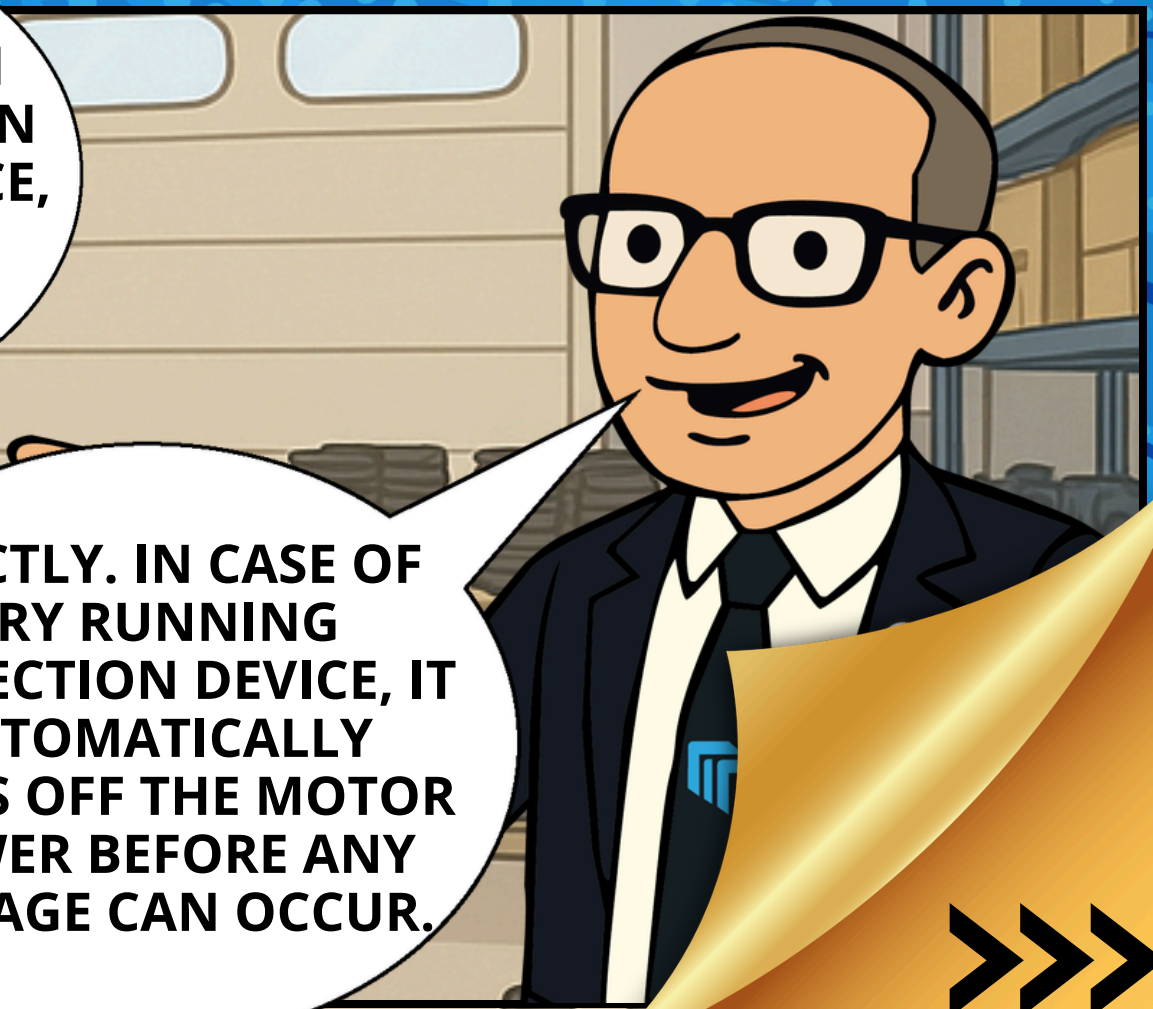


**THE LIQUID INSIDE THE PUMP LUBRICATES THE INTERNAL PARTS AND DISSIPATES THE TEMPERATURE. IF THE PUMP RUNS DRY THE TEMPERATURE INCREASES SUDDENLY AND DRASTICALLY WITH CONSEQUENT DAMAGE TO THE PUMP.**



**FOR EXTRA SAFETY, YOU CAN INSTALL A DRY-RUN PROTECTION DEVICE, A LEVEL SWITCH OR A FLOW MONITOR.**

**EXACTLY. IN CASE OF DRY RUNNING PROTECTION DEVICE, IT AUTOMATICALLY SHUTS OFF THE MOTOR POWER BEFORE ANY DAMAGE CAN OCCUR.**



**THE SECOND GREAT ENEMY IS AIR IN THE PUMP. SO THE SECOND RULE IS: REGULARLY INSPECT THE SUCTION LINE.**

**IT IS ESSENTIAL TO AVOID THE FORMATION OF AIR POCKETS ALONG LONG PIPELINES AND TO ENSURE THAT NO TURBULENCE OR SIPHONS ARE CREATED BEFORE THE PUMP SUCTION.**

**AND THIRD: KEEP THE SUCTION LINE CLEAR. A CLOGGED FILTER OR FOOT VALVE CAN PREVENT LIQUID FROM REACHING THE PUMP, CAUSING IT TO OVERHEAT JUST LIKE IN A DRY RUNNING SCENARIO.**

**SO, WITH PROPER MONITORING AND GOOD FUNCTIONING, WE CAN PROTECT ALL THE PUMPS!**

**THAT'S THE SECRET, GEMMY! IF THE PUMP ALWAYS WORKS FULL OF LIQUID, IT CAN LAST DECADES!**

