

Tips to Avoid Excess Heat

Excessive heat is the worst thing there is for rubber products. Understanding how heat affects the efficiency and the reliability of power transmission systems can help consumers reduce troublesome downtime and improve productivity.

While there are several ingredients a compounder can add to a rubber compound to improve heat resistance, those ingredients merely delay the inevitable. By keeping your operating conditions within the recommended ranges, you can be sure to get the maximum life out of your belts.

Customer scenario with 5VX900 HY-T WEDGE TORQUE TEAM

Customer reports that they have had ten 5VX900 HT-Wedge TT belts fail on their application within 3 months. After evaluating the damaged belt images below, flex fatigue cracks can be noticed which is a result of excess heat causing premature cracking:



5VX is EPDM which can withstand heat up to +230degF (most resistant Continental belt to heat). The “X” clarifies that the belt is cogged and more flexible around smaller pulleys compared to 5V wrapped belts. Pending a MaximizerPro drive analysis, below are common system application issues to look for with noticeable fatigue cracking:

- Belt is under powered – Need more belts for the drive
- Belt is operating on too small of pulleys (even for a 5VX belt)
- Poor alignment generating excess heat
- Poor tension control:
 - Over-tension (too much pressure on belt instead of the drive)
 - Under-tension (leads to spin burn)
- Excess ambient heat -- Shield belt drive from heat source (see chart to the right)

