



Technology Spotlight... The Faster Treadmill is Not Always Best

Which treadmill is better — one that has a maximum speed of 19km/h or one that only goes up to 16km/h? At first glance, customers may think the treadmill that can go faster must be better, but that's not always the case. If you have a heavy, out-of-shape customer who simply wants to walk, a maximum speed of 19km/h is not necessary. More importantly, a higher maximum speed usually means compromising torque. A motor with more torque and a lower maximum speed will better support the user's walking needs.



Torque, the relationship between the continuous horsepower and RPMs, plays an important role in the usage of the treadmill and the longevity of the motor. The lower the RPMs of a motor, the more torque it will have. This allows the motor to last longer and not allow the brushes to wear out as fast.

A 2-HP Continuous Duty motor operating at 1500 RPMs has more torque than a 3-HP motor spinning at 4000 RPMs. Motors over 5000 RPMs will heat up too quickly and will wear out the motor and electronics, requiring replacement of motor brushes and bearings more often. The same way that a lightweight, high revving hot rod engine wouldn't last long trying to haul a heavy truck up a steep grade.

Users over 90 kgs need to have the torque to support starting and stopping the treadmill. For a smoother walk without hesitation or jerking, a treadmill motor with a high continuous duty horsepower and low revolutions per minute is best. To demonstrate the motor HP and torque to customers, have them walk on the treadmill and see how well it performs at different speeds, especially less than 1.5 km/h

Did You Know?

Research shows that 85% of people use treadmills for walking and not running.