

#### **INDUSTRY**

**FITNESS** 

### **APPLICATION**

**TREADMILL** 

## **PRODUCT**

**MEGAFLEX** 







# SITUATION/APPLICATION

Most types of equipment used in the fitness industry such as treadmills, exercise bicycles, steppers and cross trainers all contain some type of drive system that utilizes different types of belt or chain.

The drives on equipment at the upper end of the market are required to operate at very low noise levels while functioning with a high level of smooth, progressive action. A drive that does not operate well creates a negative experience for the user, giving the impression of a low quality machine.

The development of treadmill conveyor belts in particular has evolved to a level that demands extremely high efficiency and an excellent smooth movement, as the belt passes from friction support to friction support.

## THE PROBLEM

A manufacturer of high-end treadmills contacted Megadyne for assistance with drive issues on a treadmill they were developing for the elite athlete and medical rehabilitation segment of the fitness market. In this application, the slats that make up the conveyor belt (where the user walks) are attached directly to the drive belts. The belts supplied by a competitor experienced various problems. The drive was loud and did not have the smooth, progressive movement required. There were also issues with the slats becoming loose and eventually detaching from the drive belts.

### THE SOLUTION

Our Application Engineer had seen these issues before and relied on Megadyne "know-how" to provide the solution. The implementation of small design changes based on extensive experience in the fitness industry along with a special construction Megaflex polyurethane synchronous endless belt with were the cure for the problems with this drive.

### THE RESULT

Megaflex synchronous endless belt with a custom, special polyurethane construction guaranteed minimal noise and delivered maximum durability and smoothness of movement. Combined with superior technical support from Megadyne, the customer was able to deliver the high-end experience expected by users of their very specialized equipment.

