



# EPPro8 Challenge

*Engineer Problem Solve Innovate*

## Conveyor Belt – Teacher's Notes

### Summary

Teams will build a high speed conveyor belt. They will calculate the speed of the conveyor belt and how many products go past every hour.

### Principles

Mechanisms, Structures, Practical Mathematics, Measurements, Electronics.

### Extra Equipment

- Stopwatch.
- Calculator.
- Bike Inner Tube, 27.5" x 3.50-4.80 (\$9.95 from Torpedo 7).

This is the widest bike tube available, meaning the section of it we are using will be flatter.  
We are making a "rubber band" 1m long and 66mm wide.



Cut along the entire length of the tube, in line with the valve.



Using the flattest part of the tube, trim to a strip 66mm wide. You will need to trim off both sides to achieve this.



Wipe belt clean with a damp cloth

## What to Aim For

See the “Getting the Most from your Equipment” document for guidelines on what to aim for from these challenges.

This challenge uses a gearbox. There is a separate challenge that describes how to build a gearbox. Teams may wish to complete this challenge first

## Our Solution

