



# Technical Segment Presentation

Optibelt GmbH | BDA – Fitness Applications



Created by J. Ewen



## Structure

1. **Application overview**
2. **Different types of drive systems**
3. **Special solutions**
4. **Others**



# 1. Application overview

In the past already solutions for different fitness devices such as:

Treadmills	Cycling Bikes	Rowing Machines	Steppers
			



Also:  
**Belts for multi gyms**





## 2. Different types of drive systems

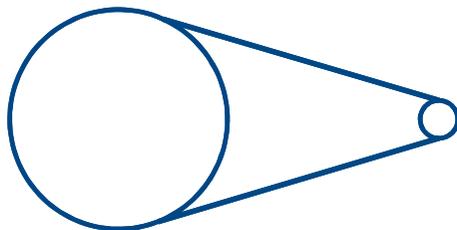
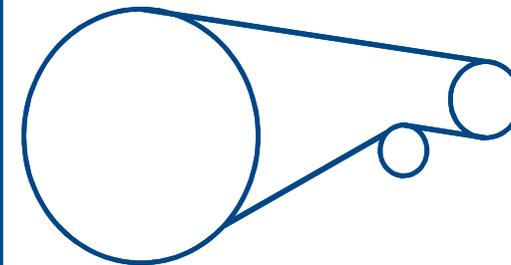
- I. 2 or more pulley
- II. Elastic or non elastic
- III. Timing belt

Examples of requirements:

- Large Translation
- High Torque [Nm]
- Low number of revolutions [ $n^{-1}$ ]



Optibelt **Delta Chain Carbon**



optibelt **RB elastic**



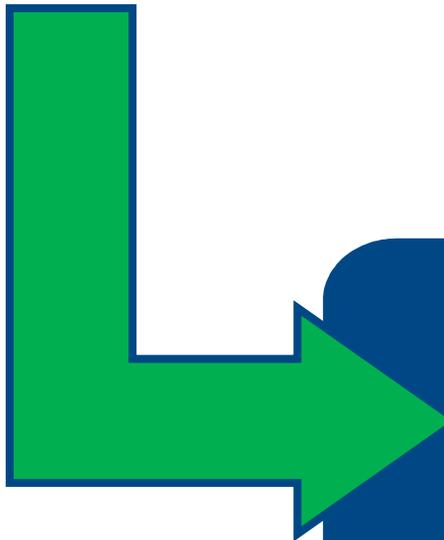
### 3. Special solutions

Use of  
magnetic brake system



generates

**Max.  
Temperatures  
Up to 100°C**



Development of  
improved  
Heat Resistance  
Execution





### 3. Special solutions

Best performances  
even at  
Highest Torques and Motor Powers



Noise Optimized  
Backside Execution





### 3. Special solutions

Optimized  
Running Properties

Quieter operation of  
Treadmills etc.

Omitting of  
Belt Marking





## 4. Others

### Optibelt Benchtest:

- Special internal test device for elastic ribbed belts
- Unique development by optibelt



$S_a$  →  
**Axis Force  
Measurement**





**Many Thanks for your attention!**



[www.optibelt.com](http://www.optibelt.com)

