

## WHY DO YOU NEED Sloopwheels?

Bringing together independent research studies, Loopwheels test results and customer research has helped us understand more about why Loopwheels can help with specific problems such as lower back pain and fatigue, as well as adding comfort to your ride.

#### Back pain and fatigue are big issues for many wheelchair users.

If you are a wheelchair user your risk of back pain is about 5 times higher than the overall population; around half of wheelchair users are affected. Back pain can be extremely limiting to day-to-day activities and affect your overall quality of life. Studies have shown an association between back pain and exposure to whole body vibration. Reducing the amount of vibration you're exposed to on a daily basis can be an important factor to consider as a wheelchair user.

"Fatigue can also have a negative impact on a person's life...and vibration is, again, an important factor here for anyone using a wheelchair on a daily basis."

"Customer surveys in 2022 showed that 65% of respondents who bought Loopwheels to manage back pain reported a noticeable improvement, and 42% who bought Loopwheels to help with fatigue also reported a noticeable improvement."

Read the full articles (with references) on our website:

Back pain



## WHAT DO OUR CUSTOMER THINK?

"Potholes, cracks, cobbles – when you have chronic pain, you feel every vibration like a knife. Loopwheels took only a few seconds to fit. They definitely reduce the pain of going over bumps, kerbs and cobbles and have made every trip out far more comfortable."

Libby Parfitt CPRS sufferer

"Loopwheels reduce almost all the bumps in the road. They make the ride very smooth and they also look very fashionable. I just love Loopwheels and they really changed my life. I can sit in my wheelchair for much longer now. The extra pain I used to feel is gone. I really love loopwheels and they are so amazing."

Lisa Hendrick Ehlers Danlos Syndrome sufferer

### **○**loopwheels

Because Loopwheels don't just work as wheels, they're also a suspension system, you'll notice they're different from rigid spoked wheels.

Loopwheels have more movement, both laterally and up and down. This isn't a flaw and it won't change during use – it's part of their unique design and brings with it lots of benefits.

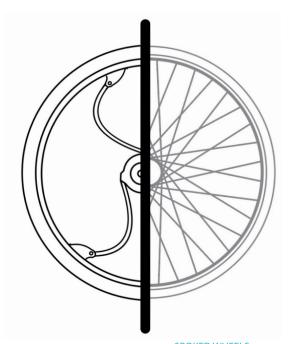
There's still a place for spoked wheels, especially if you usually travel on smooth surfaces and want something really lightweight. But if you want to get around more easily on any surface with less pain, more comfort and a reduction in tiring, damaging vibration, Loopwheels are for you.

## Rigid isn't always right

The benefits of Loopwheels vs.rigid spoked wheels

#### **LOOPWHEELS**

- Great suspension
- More comfort
- Reduced body impact
- Less tiredness
- Help manage pain
- Fewer vibrations
- Easier to move on uneven surfaces





Front profile

#### SPOKED WHEELS

- Great on smooth surfaces
- Lightweight
- Run 100% true to within 0.5mm (5mm for Loopwheels)
- Uncomfortable with long use
- Can cause lower back pain
- Vibration can affect bladder control and spasms
- No suspension or protection from impact

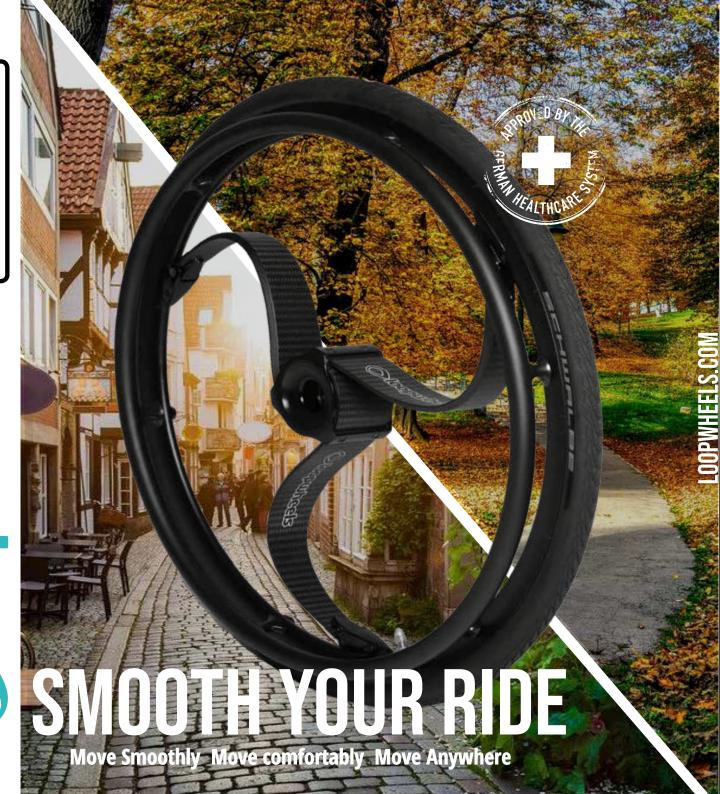
## Which Wheel?







Name	Loopwheels LT	Loopwheels Urban	Loopwheels Extreme
In Summary	A wheel designed for lighter users, offering exceptional comfort and protection from vibration, for manual or powerassist use.	An everyday wheel delivering exceptional comfort and protection from vibration. Ideal for manual use or with a front power attachment.	A wheel specifically designed for off road use, with a mountain bike tyre. Ideal for use with a front power attachment.
What Customers Love	The softer suspension Optimised for smaller/lighter bodies	The ease of pushing The appearance The supreme comfort of the ride	The off-road styling The supreme comfort The quality of ride
Speed Limit	25 Km/h	25 Km/h	25 Km/h
Wheel Diameters	24" (BSD: 540mm)	24" (BSD: 540mm) 25" (BSD: 559mm)	24" (BSD: 507mm)
Colour Options	Carbon with white reflective logo Green or black anodised parts	Carbon with Reflective logo Black or 3 colour options	Carbon with Reflective logo Black or 3 colour options
Weight	1.36kg (under 3lbs)	24": 1.36kg (under 3lbs)	1.3kg (under 3lbs)
Vibration reduction (measured against ISO-2631-1 1997 and compared with a Spinergy kevlar spoked wheel)	Excellent (106%)	Excellent (106%)	Excellent (106%)
Push Rim Fittings	6 Rivnut fitings 11 mm or 19 mm offset from wheel	6 Rivnut fitings 11 mm or 19 mm offset from wheel	6 Tab fittings 15 mm offset from wheel
Max Load	120Kg	120Kg	120Kg
Lateral stiffness	Very good (37% more than classic)	Very good (37% more than classic)	Very good (37% more than classic)





# Vibration-reducing wheels for everyday use.

#### Reduces the bumps, jolts and vibrations that you experience

#### The international safety standard - ISO 2631-1 1997

This safety standard defines the measurement, and the limits, of human exposure to vibration in a seated position before action is needed to reduce the risk of harm. During our testing on tarmac roads at 12kph we found that Loopwheels Urban can be used for over twice as long as a market leading spoked wheel. (See www.loopwheels. com for full details of our testing)



**Loopwheels Urban** is available in 3 spring strengths – **Soft springs, Regular springs** and **Stiff springs**. Use the chart above to estimate the most usual higher speed on the wheels and the fully-loaded weight of the chair.

This is a guide only: personal preference is important too.

#### PRODUCT SPECIFICATION

Wheel size: 24" (540mm) and 25" (559mm)

ETRTO number: 25-540 (24x1.00) and 25-559 (25x1.00)

**Axle bearing:** 1/2" (12.7mm) and 12mm

**Push rim:** 6 rivnut fitting

Rivnut centres measurement: 515mm and 539mm Spring/loop materials: Carbon fibre composite

Rim: Double-walled aluminium, black

Inner rim width: 16mm

Hub: CNC machined aluminium (Black or Colour)

sealed cartridge bearings

Bearing width at faces: 1.8" (45.8mm)

24" Wheel Weight: 1.36kg

NB Wheel weights without push rim, tyre, or axle

Maximum load (user and chair): 120kg (265lb)
Recommended tyres: Schwalbe Marathon Plus





# Go faster and explore further on uneven ground with the proven **lowest levels of vibration**.

#### The international safety standard - ISO 2631-1 1997

This safety standard defines the measurement, and the limits, of human exposure to vibration in a seated position before action is needed to reduce the risk of harm. During our testing on tarmac roads at 12kph we found that Loopwheels Urban can be used for over twice as long as a market leading spoked wheel. (See www.loopwheels.



**Loopwheels Extreme** is available in 2 spring strengths - **Regular Springs** and **Stiff Springs**. Use the chart above to estimate the most usual higher speed on the wheels and the fully-loaded weight of the chair.

This is a guide only: personal preference is important too.

#### **PRODUCT SPECIFICATION**

Wheel size: 24" (507mm)

**ETRTO** number: 47-507 (24x1.75)

Axle bearing: 1/2" (12.7mm) and 12mm

Spring/loop materials: Ultra lightweight carbon fibre

Rim: Double-walled aluminium, black

Inner rim width: 16mm

**Hub:** CNC machined aluminium (Black or Colour)

sealed cartridge bearings

Bearing width at faces: 1.8" (45.8mm)

Wheel weight: 1.36kg (3lb)

NB Wheel weights without push rim, tyre, or axle

Maximum load (user and chair): 120kg (265lb)



# DESIGNED FOR LIGHTER Move Smoothly Move comfortably Move Anywhere



# **Vibration-reducing wheels** for lighter users (40-60kg)

Reduces the bumps, jolts and vibrations that you experience

#### The international safety standard - ISO 2631-1 1997

This safety standard defines the measurement, and the limits, of human exposure to vibration in a seated position before action is needed to reduce the risk of harm. During our testing on tarmac roads at 12kph we found that Loopwheels Urban can be used for over twice as long as a market leading spoked wheel. (See www.loopwheels. com for full details of our testing)

**Loopwheels LT** is available in one spring strength –
This is to maximise comfort for our lighter weight customers



Loopwheels LT is available in black or with a colour anodised hub and rim hinge.

#### PRODUCT SPECIFICATION

Wheel size: 24" (540mm)

**ETRTO number:** 25-540 (24x1.00) **Axle bearing:** 1/2" (12.7mm) and 12mm

Push rim: 6 rivnut fitting

**Rivnut centres measurement:** 515mm and 539mm **Spring/loop materials:** Carbon fibre composite

Rim: Double-walled aluminium, black

Inner rim width: 16mm

Hub: CNC machined aluminium (Black or Colour)

sealed cartridge bearings

Bearing width at faces: 1.8" (45.8mm)

24" Wheel Weight: 1.36kg

NB Wheel weights without push rim, tyre, or axle

Maximum load (user and chair): 120kg (265lb)
Recommended tyres: Schwalbe Marathon Plus

RehaPro

#### RehaPro Sarl

Route de Jussy, 38C 1226 Thônex Tel +41 79 647 63 61 Email: info@rehapro.ch www.rehapro.ch

#### Loopwheels

Unit 202 Boughton Industrial Estate North, Newark, United Kingdom NG22 9LD

T: +44 (0) 1623 860909

E: info@loopwheels.com

W: loopwheels.com

To learn how Loopwheels can make the difference, visit loopwheels.com

Designed and Made in England

