



Developing top performing wheelchairs that are made to provide you the highest level of independence is our passion for years. We are convinced that your wheelchair not only has to meet the highest quality standards, it should also be a symbol for your active and independent lifestyle.

All our knowledge and user feedback influenced the development of the Nitrum® series. Not only stylish but lightest in its class and ultra-responsive to efficiently translate your energy into movement. This is how the Nitrum series makes your everyday life more limitless.



With its striking design, latest innovations and with new patents, the Nitrum elevates your ride to a whole new level. You feel it.



# **Nitrum Hybrid**

# ONE GOAL. TWO MODELS. FOUR FRAMES.

We have spared no effort to offer every user the frame variant that suits their individual preferences for the best custom fit and most efficient ride. You have the choice between four ultra-lightweight but stiff and option-rich wheelchairs: Nitrum and Nitrum Hybrid and the fixed welded options Nitrum Pro and Nitrum Hybrid Pro.

**Nitrum** – The lightest adjustable rigid aluminum wheelchair in class with a minimalistic open frame design which makes it easy to propel, extremely transport friendly, and easy to stow. But despite the super clean look, the Nitrum is suitable for users up to 125 kg and offers the full range of adjustability and options.

**Nitrum Hybrid** — Even with its reinforced front frame there is no need to give up on the proven lightweight construction. The Nitrum Hybrid is suitable for users up to 140 kg and combines extraordinary stability with a durable lightweight construction and full adjustability. This leads to an ultra-stiff frame design and an unrivalled rigid ride.

# DON'T COMPROMISE. WE DON'T DO IT EITHER.

For being the lightest without compromising stability and load ability, several components have to come together: innovative development work, leading-edge technology as well as high-level materials.

The frame is made of a specially processed 7000 series aerospace aluminium. Boasting exceptionally high strength-toweight ratio, we specially heat-treat the aluminium after welding to increase hardness and strength.

Nitrum's patented oval tubing is stronger than a conventional round tube. Less likely to flex under pressure, the frame is also lighter as the shape uses less material and clamps can't rotate on an oval shape, so there are less moving parts too!

The result is a hardened frame that can be significantly thinner and lighter without any sacrifice to strength and a wheel-chair that redirects your push directly into motion for an incomparable driving experience so that you can drive further and faster without getting tired.



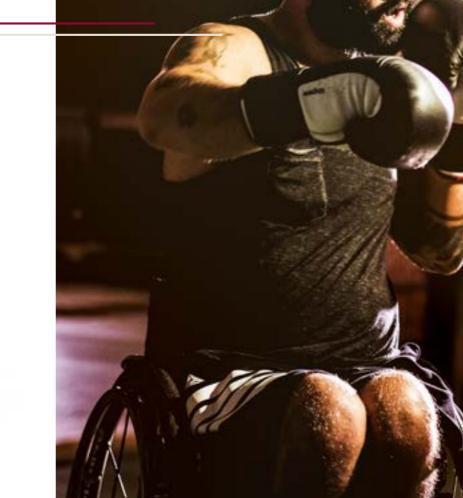




The compact frame geometry with the additional frame tubes increases the rigidity of the frame. These properties make the Nitrum Hybrid not only super stiff but also particularly suitable for various add-ons.

With a max. user weight of 140 kg and a seat width up to 500 mm, even a larger group of users can benefit from an ultra-lightweight chair.

We took special care of keeping the packsize as small as possible. The angled and raised reinforcement tubes make it easy to transport the Nitrum Hybrid in a car, as it can be placed on the passenger seat.



The more the frame can be individually modified for your personal needs and your anatomy, the better the wheelchair is at responding to you. An optimal posture leads to efficient propulsion, a uniform loading and unloading of your muscle groups and more independence. That's why the Nitrum series offers you the widest range of frame versions (32 in total) in its class - without any sacrifice to weight or rigidity:

- 4 frame versions
- 3 frame Angles: 88°, 92° or 100°
- 3 frame Insets: 0", 1" or 3"
- 2 frame Lengths (standard/+20 mm add. length)

Each Nitrum frame is different as it is produced and welded in Malsch/Germany according to the ordered configuration to ensure the perfect fit.



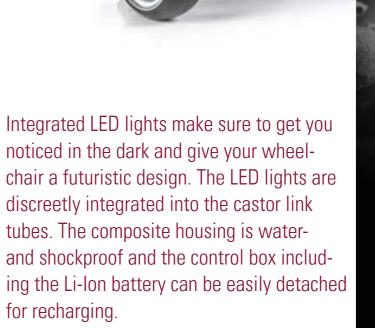
NITRUM – LIGHTEST WEIGHT IN ITS CLASS.



# FIRST INTEGRATED LED LIGHTS WITH REMOVABLE BATTERY.

The NEW patented innovative castor link design does not only impress with their sporty design and excellent driving characteristics, but also with a brilliant feature.

For the reinforced castor link tubes (design patent) we rely on a single hollow forged component in a matchless design instead of several welded parts. No moving parts give you an amazing driving performance — ultra lightweight yet strong, durable yet without compromising adjustability. An optimised castor position for each frame configuration ensures best handling, easy turning and maximised propulsion efficiency.









# THE DETAIL MAKES THE DIFFERENCE.

With the new backrest brackets, made of forged aluminium, we separated the angle adjustment and folding mechanism. This redesign resulted in optimized function, less play and higher strength. It is not wearing out over time and convinces you with a fabulous seating comfort.

# EASY OPERATION IN A BREATH.



## New Block-and-Tackle Seating System

Thanks to the block-and-tackle straps of the seat sling, you will need less force to tense the straps. Once tensioned, they remain taut for the best possible seat feeling even over a long period of time without wearing out.





## NEW Patented Innovative Design – Twist Lock Release

The optional twist lock release for the backrest folding mechanism is made for easy one hand (twist to fold) operation in one single movement.

Standard on all backrest versions is a release bar (push-up to fold) for an ergonomic and quick release of the folding mechanism. You can also choose between a lightweight version of the backrest and our proprietary, stylish Freestyle backrest.



# New Compact Brake EVO - reliable locking, less weight

The completely redesigned compact brake EVO offers a transfer-friendly design, improved stability and durability and locks safely under all conditions.

Also available as lightweight compact brake EVO for more weight-saving (180 g).



## NEW FLIP-BACK ALUMINIUM SIDEGUARDS

The new flip-back option available on the aluminium sideguard makes transfer and transport so easy!









# FRAME PROTECTION

The frame protection sleeves not only prevent your frame from gathering scratches, but also offer a layer of insulation to protect your legs from the cold frame tubes.



Nitrum Pro with the most simple, minimalistic frame design and the lowest weight or Nitrum Hybrid Pro with the highest level of rigidity possible — it`s your choice.

# THE PRO OPTIONS FOR EXPERIENCED USERS

During the development of the Nitrum series, we made it our goal to optimise each component in terms of weight savings and to achieve maximum rigidity - **Nitrum Pro** and **Nitrum Hybrid Pro** take this principle to extremes.

Both chairs are based on the same lightweight construction as Nitrum and Nitrum Hybrid, but are characterized by a the fixed welded backrest and fixed welded axle stems which save even more weight, increase the frame-stiffness and reduce moving parts. The formula is simple: Less moving parts mean less play, less maintenance and a lower weight.





# MAKE IT PERSONAL, MAKE IT YOURS.

Various options allow you to personalise your Nitrum to your individual needs. Choose between various eye-catching frame colours, attractive Floating Dots designs as well as backrest brackets, front castors and forks that are selectable in different colours for a unique look.

Or go for our choice of "superlight" options and choose between carbon composite castor wheels, titanium quick release axles or full carbon axle assemblies to lower your Nitrum's weight to a minimum.









Castor fork, Carbotecture®



EXO PRO backrest sling



Frame graphic





one-arm



Use our online visualiser to create the QUICKIE Nitrum of your dreams!

### TECHNICAL DATA

	Nitrum (Pro)	Nitrum Hybrid (Pro)
Max. user weight	125 kg	140 kg
Seat width	320 - 500 mm (in 20 mm steps)	320 - 500 mm (in 20 mm steps)
Seat depth	340 - 500 mm (in 20 mm steps)	340 - 500 mm (in 20 mm steps)
Front seat height	430 - 570 mm	430 - 570 mm
Rear seat height	370 - 500 mm	420 - 500 mm
Backrest height	250 - 450 mm	250 - 450 mm
Backrest angle	from -17,5° to +10°	from -17,5° to +10°
Total width	SW +170/240/300/370 mm at 0°/3°/6°/9° camber and 25" wheels The total width can exceed 800 mm in certain configurations.	SW +170/240/300/370 mm at 0°/3°/6°/9° camber and 25" wheels The total width can exceed 800 mm in certain configurations.
Total length	992 mm	992 mm
Total height	1000 mm	1000 mm
Max. pivot width	695 mm	695 mm
Max. safe slope for use of parking brakes	7°	7°
Frame versions	rigid frame, open frame adjustable & fully welded (Pro)	rigid frame, hybrid frame adjustable & fully welded (Pro)
Frame angle	100°, 92°, 88°	100°, 92°, 88°
Front wheel	3", 4", 5", 6"	3", 4", 5", 6"
Rear wheel	24", 25"	24", 25"
Wheelchair weight	7,5 kg & 7,2 kg (Pro)	8,4 kg & 8,1 kg (Pro)
Dismanteled weight	4,9 kg & 4,6 kg (Pro)	5,8 kg & 5,5 kg (Pro)
Mass of heaviest part	2,1 kg	2,1 kg
Removable parts	Rear wheels (for transportation)	Rear wheels (for transportation)
Frame colours	32 colours	32 colours
Crash tested	Yes (approved for transport in a vehicle according ISO 7176-19)	Yes (approved for transport in a vehicle according ISO 7176-19)
Transport without user	Fix the wheelchair firmly and securely in the vehicle (e.g. car or plane)	Fix the wheelchair firmly and securely in the vehicle (e.g. car or plane)
Intended use and environment	For people unable to walk and with limited mobility; inside and outside. Operation by user or assistant.	For people unable to walk and with limited mobility; inside and outside. Operation by user or assistant.



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