

NEURO SWING – Dynamic Balance and Stability



NEURO SWING – Dynamic and Multifunctional System Ankle Joints



plug+go
MODULARITY

NEURO SWING

THE ORIGINAL With its adjustable alignment and interchangeable spring units, the NEURO SWING is the ideal system joint for a flexible treatment. Another plus is the **plug + go** modularity, which allows the conversion to any other product in the **plug + go** series in just a few simple steps.



plug+go
MODULARITY

NEURO SWING 2

The NEURO SWING 2 has integrated noise reduction and is therefore the best choice for people who appreciate silent locomotion. Like the NEURO SWING, it is part of the **plug + go** series and can be converted in record time.



NEURO SWING H₂O

The NEURO SWING H₂O is the waterproof version of the NEURO SWING. With its adjustable alignment and interchangeable spring units it offers the same advantages as the NEURO SWING, but can also be used in wet and outdoor areas thanks to the carbon fibre-reinforced joint case.

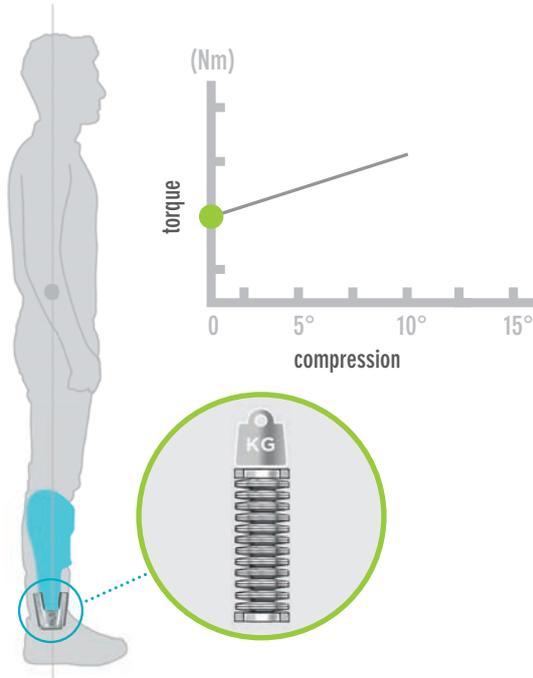
proven and scientifically tested system ankle joints to control spasticity
and/or rotational deviations caused by neurological disorders

NEURO SWING: Precompressed Spring Units Making a Big Difference

Precompressed

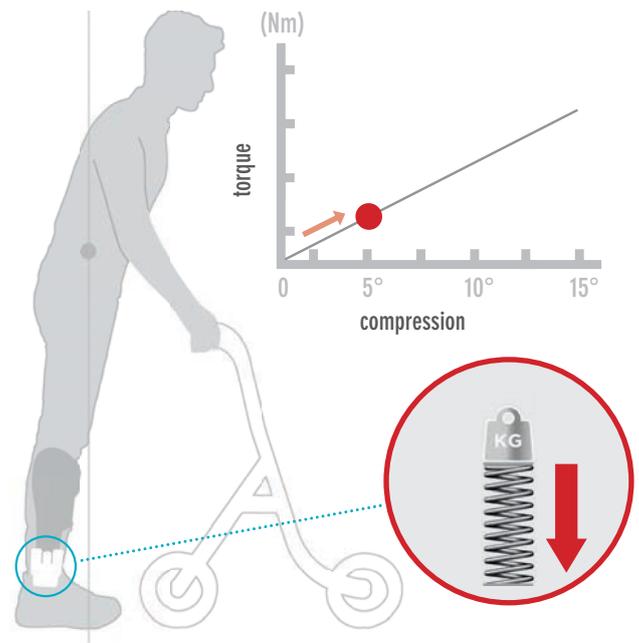
In order to bring a body into a stable balance, the forefoot lever must be activated. Precompressed spring units with high basic resistance provide dynamic balance and stability.

This allows for a secure stance and gait over different terrains. Since no medical devices other than the orthosis are required, the hands are free for everyday tasks.



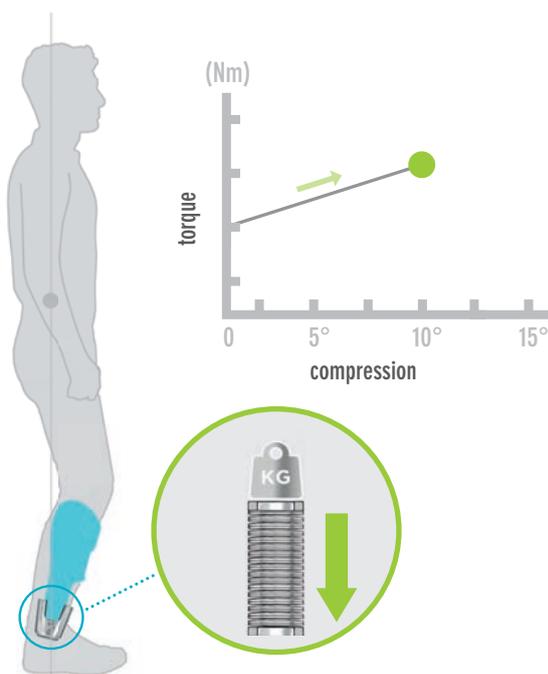
Not Precompressed

Commonly used standard coil springs must be heavily compressed to generate resistance. The nonexistent basic resistance due to the lack of precompression leads to a yielding of the spring when loaded during stance and, due to the missing security, to an unstable stance and gait. This requires the use of medical devices such as forearm crutches or walkers. The hands are therefore needed for support.



Precompressed + Dynamic

The precompressed spring units with the high basic resistance support the anatomical mobility in the ankle joint and a dynamic stance. This way, walking becomes fun again.



Energy Recovery

The high spring force ensures that the energy is returned and thus enables a physiological gait, recognisable by the heel lift.

Dynamic Heel Lift through Extremely High Spring Force



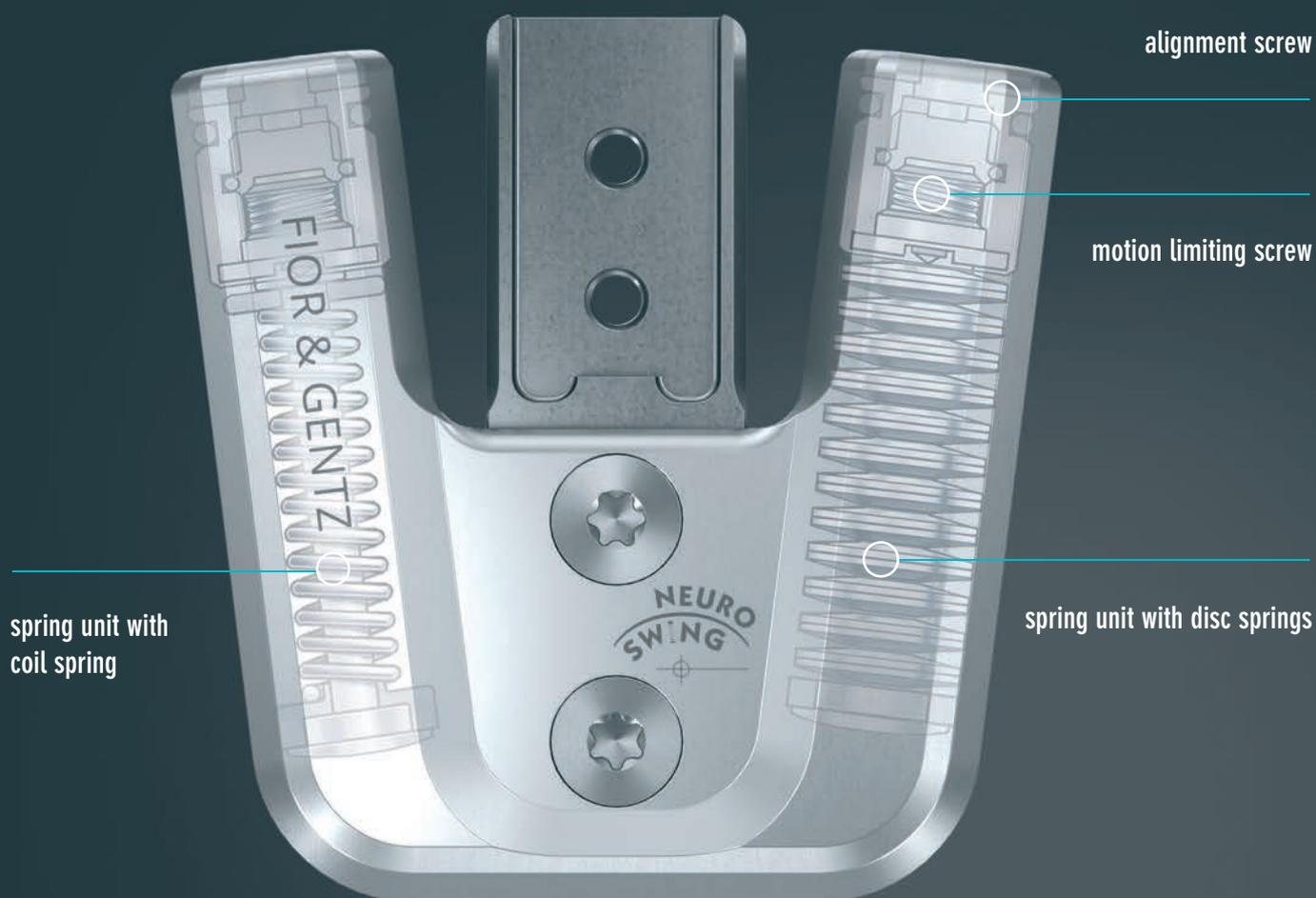
Calculation of the Spring Force

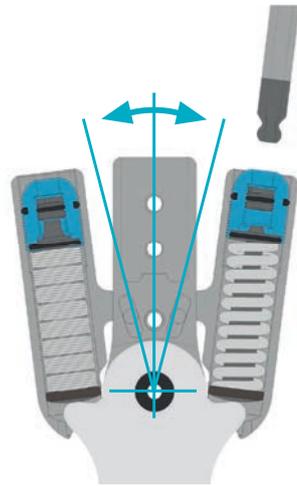
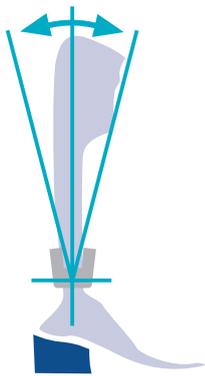
The FIOR & GENTZ Orthosis Configurator determines based on the muscle strength the spring force with the suitable precompression that is best suited for the needs of your patient.



The patented, individually adjustable, precompressed spring units compensate for the forces generated by the motion at every step, every speed, on every terrain and when standing. Thus, a constant, dynamic balance is achieved.

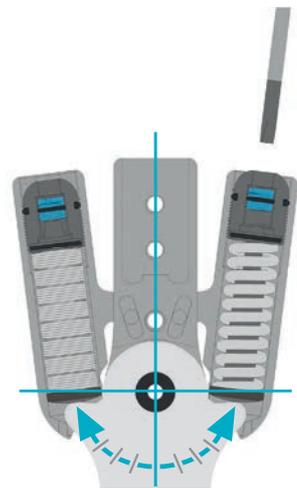
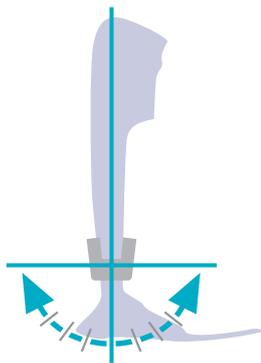
NEURO SWING – 3-Way Adjustable





1 Adjustable Alignment

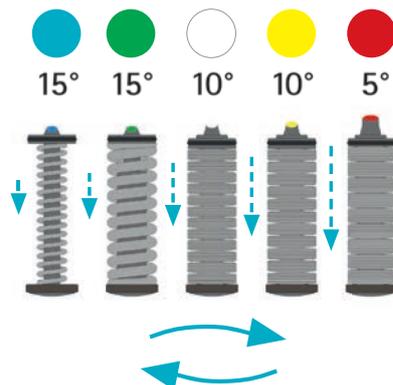
Thanks to the adjustable alignment of the **NEURO SWING** system ankle joint, the orthosis can be individually adjusted to the patient's pathological gait. And should the gait change, a quick response by a setting modification and tuning is easily possible.



2 Adjustable Range of Motion

In the early rehabilitation stages following a surgery, it may be necessary to partially or completely disable the range of motion of an orthosis and to only enable it at a later stage of therapy. Thanks to the motion limiting screw, which is integrated in the **NEURO SWING** system ankle joint, the predefined range of motion in plantar flexion and dorsiflexion can be completely blocked and gradually released again.

All adjustments can be made separately. They do not influence each other.

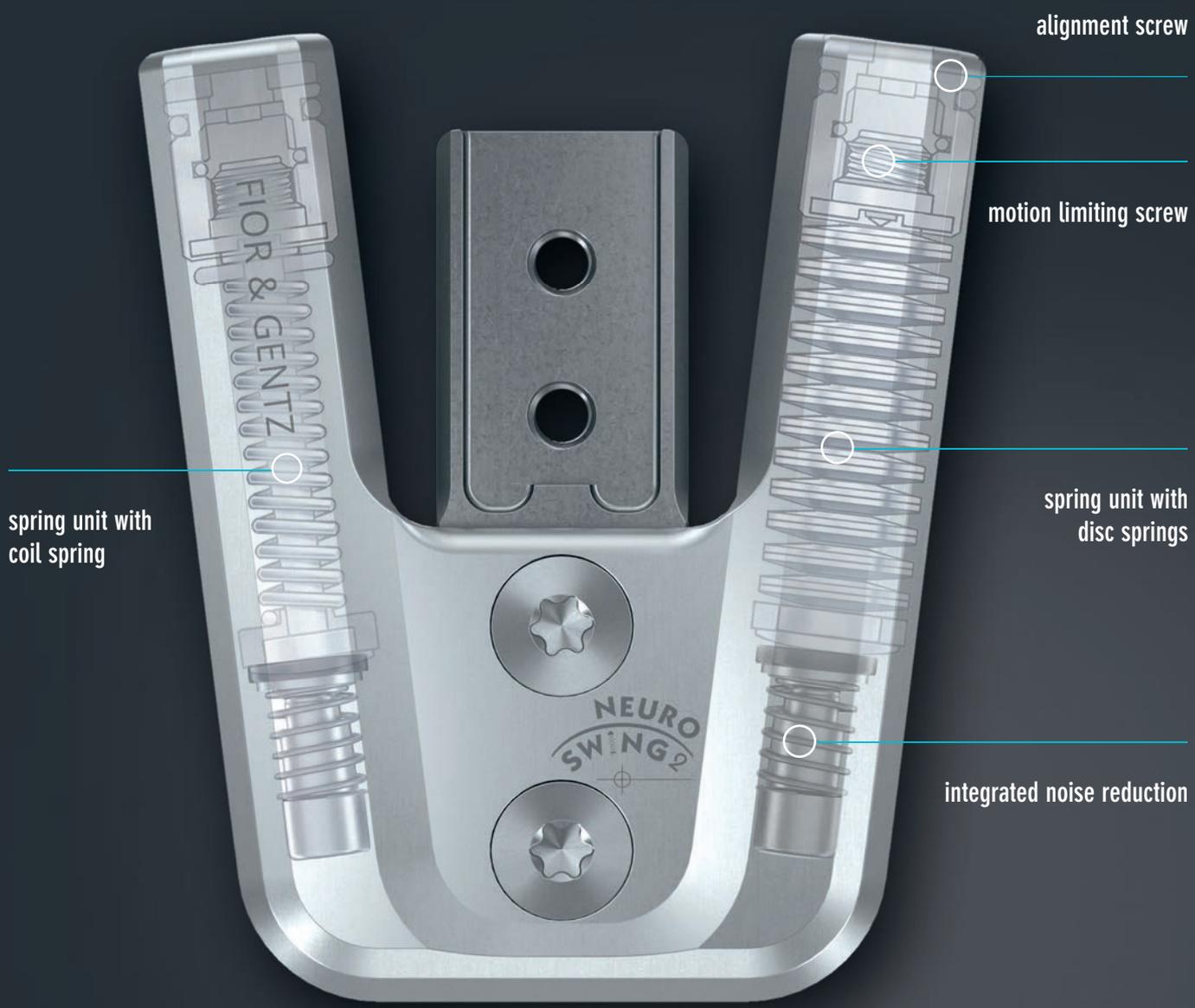


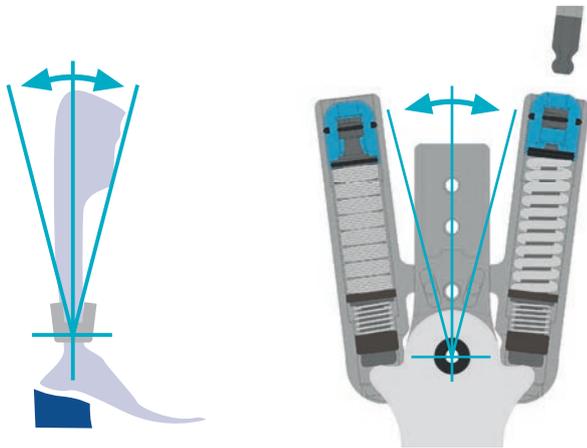
3 Variable Spring Force

The spring force in plantar flexion and dorsiflexion can be individually adjusted to the patient's needs thanks to the interchangeable spring units.

The product range comprises a total of five different spring units, with forces ranging from normal to extra strong and a range of motion from 15° to 5°.

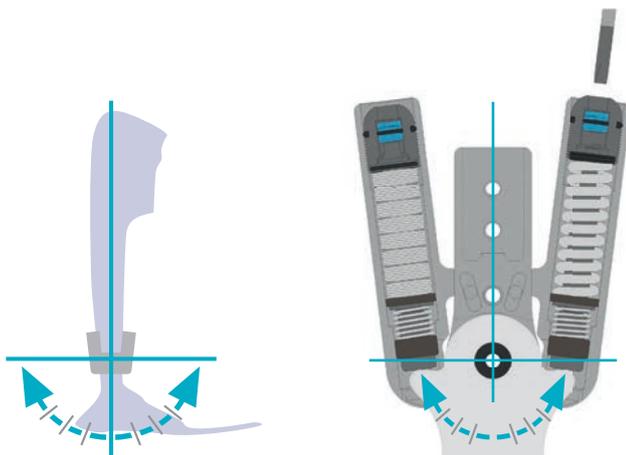
NEURO SWING 2 – Silent





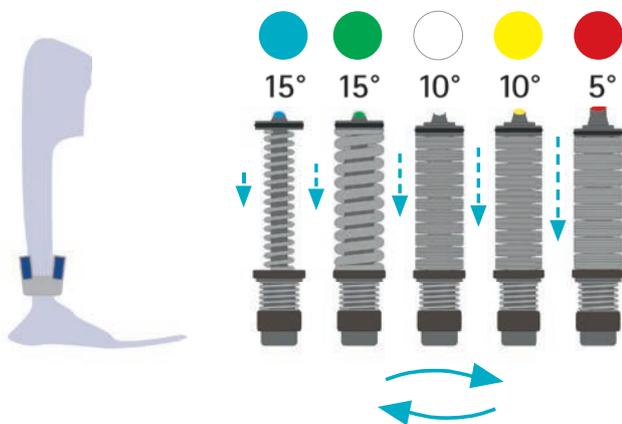
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2 Adjustable Range of Motion

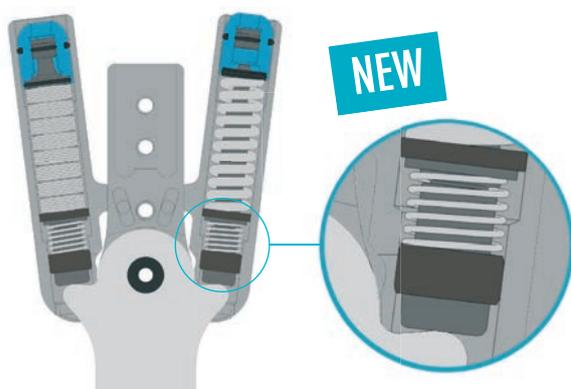
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Integrated Noise Reduction

A special feature of the NEURO SWING 2 system ankle joint is the integrated noise reduction, which reduces the clicking of the stops to a minimum. Thus, it is a perfect fit for people who want to be as quiet as possible in everyday life.

NEURO SWING H₂O – Water- and Dirt-Resistant



alignment screw

spring unit with disc springs

resistant to dirt
and water



12mm



14mm



16mm

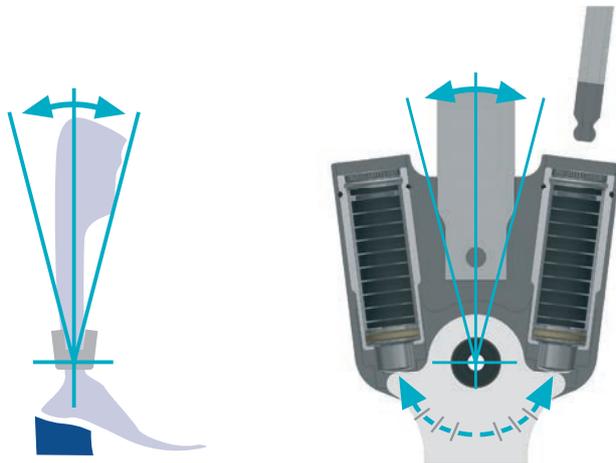


20mm



1 Features

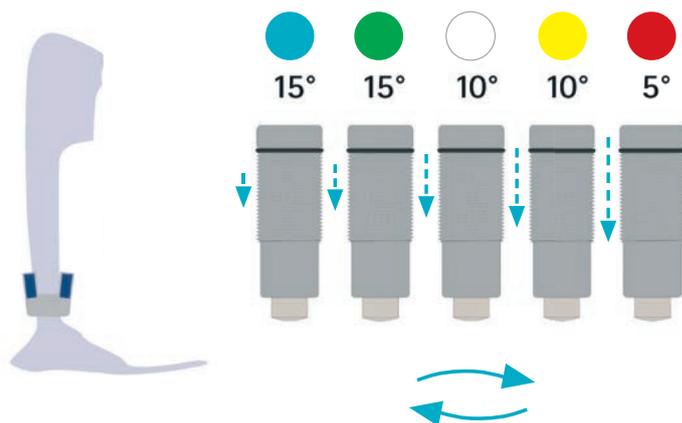
Many orthosis wearers are outdoor enthusiasts who do not want to limit their activities because of their orthosis. The NEURO SWING H₂O system ankle joint was developed for exactly this target group. Thanks to its robust carbon joint case, the water- and dirt-resistant spring unit sleeve and the seawater-resistant stainless steel screwing, it can be used in all weather conditions, on the beach as well as in the sea.



2 Adjustable Alignment

Thanks to the adjustable alignment of the NEURO SWING H₂O system ankle joint, the orthosis can be individually adjusted to the patient's pathological gait. And should the gait change, a quick response by a setting modification and tuning is easily possible.

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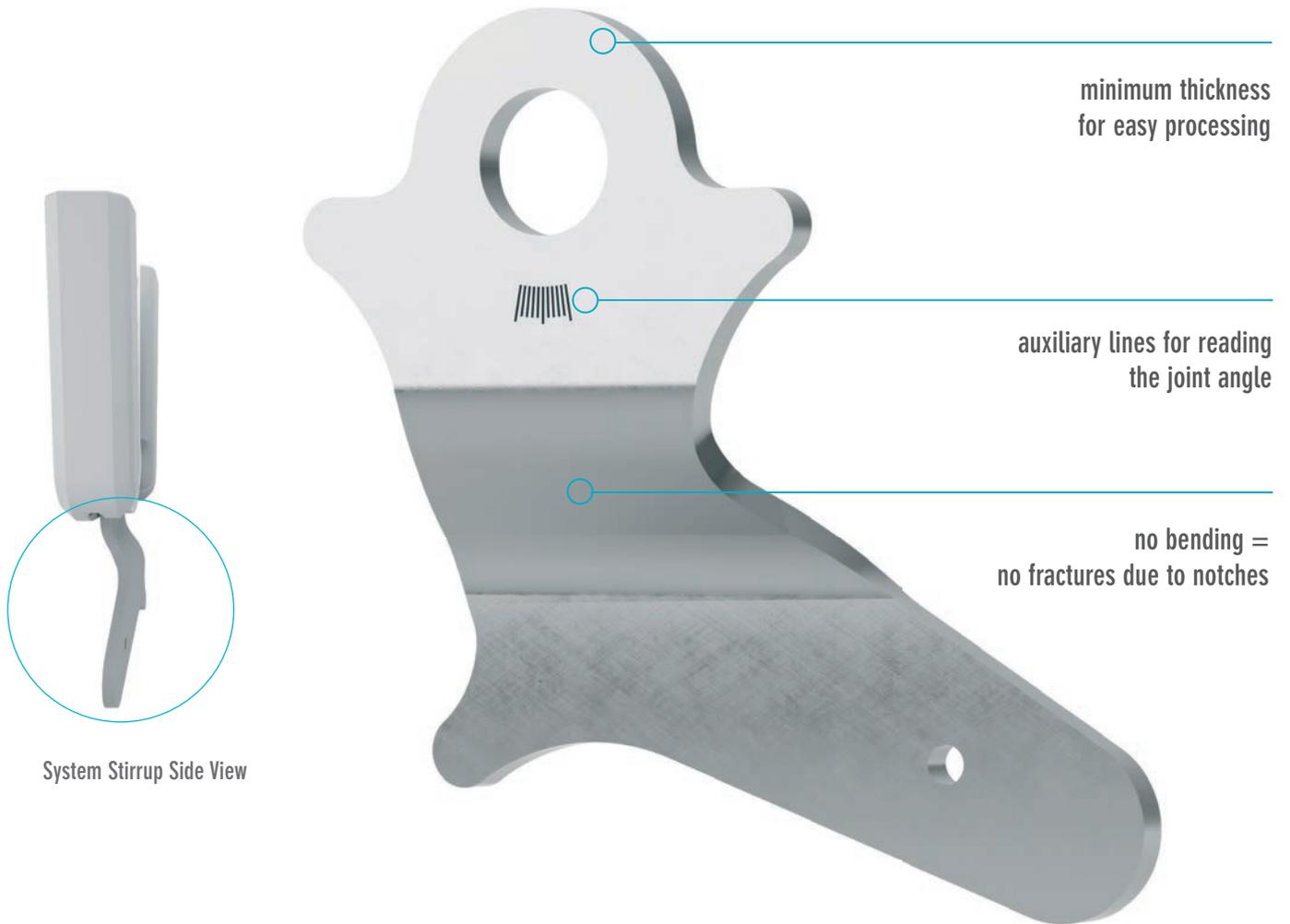


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NEURO SWING: System Stirrup

Example: Lamination/Prepreg Stirrup (Bent)



System Stirrup Side View

NEURO SWING: Examples of Use



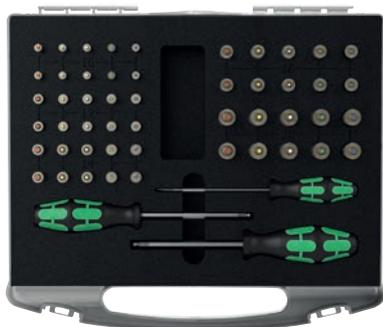
NEURO SWING: System Ankle Joints Compared

	NEURO SWING	NEURO SWING 2	NEURO SWING H ₂ O
material	steel / titanium	steel / titanium	carbon
adjustable alignment	+	+	+
adjustable range of motion	+	+	-
variable spring force	+	+	+
integrated noise reduction	-	+	-
water-resistant	-	-	+
plug + go modularity	+	+	-
inwards and outwards bent joint versions	+	+	-

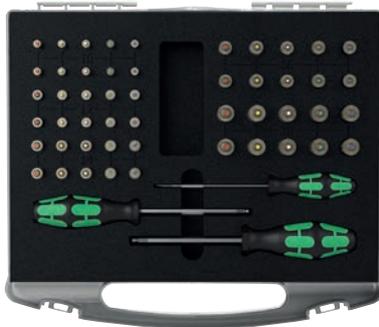
Spring Unit Cases

A practical spring unit case is available as an accessory for each of the three **NEURO SWING** versions. It contains two spring units per spring force for each system width as well as the necessary tools for exchanging the spring units. Your advantage: with this case, the effects of the different spring forces on the gait can be compared and a flexible reaction to the therapy progress is possible. The case can also be ordered empty for customised equipping.

NEURO SWING



NEURO SWING 2



NEURO SWING H₂O





NEURO SWING
System Ankle Joints –
Dynamic Balance and
Stability in Every Situation



NEURO SWING with Orthosis Shoe URBANSTREET



Water-Resistant Orthosis: NEURO LOCK H₂O and NEURO SWING H₂O



NEURO SWING 2 with Orthosis Shoe CROSSROADS



NEURO SWING with Orthosis Shoe CROSSROADS

Treatment Concepts with a NEURO SWING System Ankle Joint



MS Guide

A Concept for the Medical Patient History and Orthotic Treatment of Patients with Multiple Sclerosis



Stroke Guide

A Concept for the Orthotic Treatment of the Lower Extremity following a Cerebral Vascular Accident



CP Guide

A Concept for the Orthotic Treatment of the Lower Extremity in Cerebral Palsy



Guide to Spinal Cord Injuries

Evaluation of the Orthotic Treatment Options of the Lower Extremity following a Spinal Cord Injury

Use the Orthosis Configurator

to independently select the necessary system components for your orthosis. The Orthosis Configurator determines the appropriate system components and spring units for your patient by taking the patient data and the load capacity of the **NEURO SWING** system ankle joints into account.



www.orthosis-configurator.com