

# NanoStar<sup>®</sup> Family

THE ADVANCED  
Q-SWITCHED-LASER-FAMILY  
ON THE MARKET



## APPLICATIONS

- + Tattoo removal
- + Benign pigmentation removal
- + Skin rejuvenation

BROCHURE NOT FOR THE U.S.A.

**Asclepion**  
Laser Technologies



precise   
**EFFECTIVE**

NON - I N V A S I V E



## MILLIONS OF PEOPLE WITH TATTOOS

Stigmatisation by society for people with tattoos is a thing of the past: previously regarded as taboo symbols of »subcultures«, tattoos have increased tremendously in popularity – a phenomenon that can be seen across the world. More than 45 million US Americans sport this permanent body art, and 40% of 20 to 40 year-olds have at least one tattoo. Since the end of the 1990s, business has been flourishing in Europe, too. In France alone, the number of tattooists has increased ten-fold within a decade. Twenty percent of people between the ages of 25 and 34 have one. And in Germany according to estimates, approximately 10% of the population has tattoos – that is more than eight million Germans. Currently, about 75 million people in Europe have a tattoo. And the trend is on the up.



## HIGH-TECH LASERS FOR BEST RESULTS

Over time, various methods have been established for removing tattoos. Skilled cover ups are a satisfactory solution for only a few people. But methods such as surgically cutting away the affected skin area, scraping the tattoo off using strong microdermabrasion or chemical treatments where the upper layers of skin are removed with astringent substances, are often associated with severe pain, long-term healing processes and unsightly scars. The neighbouring tissue is also often affected.

In contrast to these processes, laser technology has established itself as a gentle, low-pain method of treatment achieving optimal results. For years, Asclepion has successfully used lasers from the TattooStar family to remove tattoos – with thousands of satisfied patients to attest to this.

## HIGH REVENUE POTENTIAL WITH TATTOO REMOVAL BY LASER

Providers of laser tattoo removal charge between 100€ and 500€ per treatment. The size, density of colour and type of tattoo all determine how many sessions are necessary. As a rule, five to ten sessions are needed. However, the treatment itself lasts from 30 seconds up to 15 minutes. Assuming a charge of just 200€ per session and 15 minutes per appointment, revenues of 800€ per hour can be achieved.



200€ per treatment  
15 min appointment time

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**800€ REVENUE / HOUR**

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200€ per treatment  
7 treatments needed

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**1,400€ REVENUE / PATIENT**

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**BEST  
RESULTS**

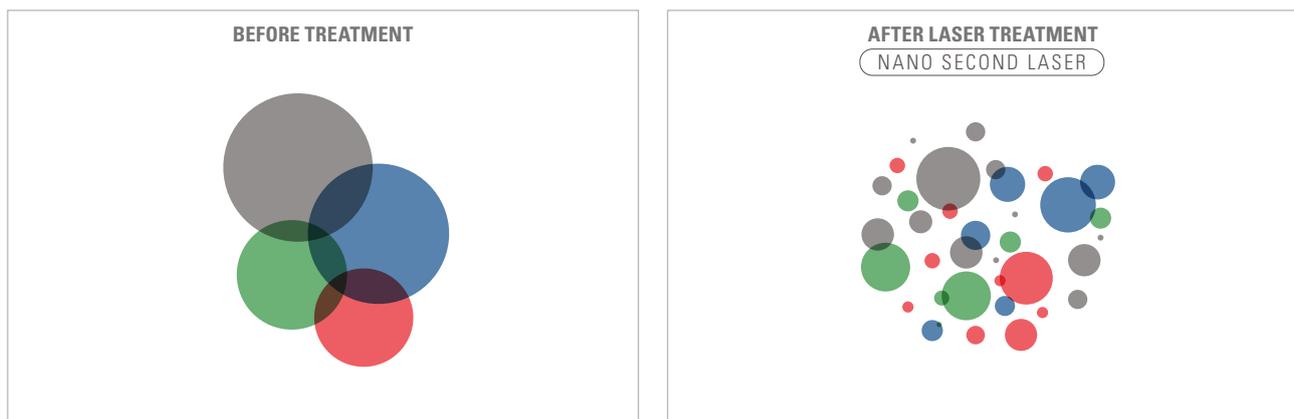


## MARKET FOR PIGMENT REMOVAL

Having perfect skin is our idea of beauty, but it is rarely achievable in reality. The »flaws« can appear in various shapes, sizes and colours and are not always unwelcome. Freckles (ephelides), for example, emphasise a natural, youthful look and give the appearance of summer freshness, even on cold days. In western cultures particularly, freckles are considered a «fashion accessory», which can even be applied artificially with a stencil and rollerball pen.

Yet many people consider these small brown dots to be an aesthetic impairment, especially when they appear in large quantities on their face, arms and legs. Other pigmentations such as age spots (lentiginos senilis) are also seen as cosmetically undesirable by those affected and, like wrinkles, they are considered to have an ageing effect. Whilst they are not a sign of age strictly speaking, but rather a sign of sun damage, they do usually occur later in life. And as a person gets older, the desire to look younger and more full of life increases and the demand for pigment spot removal is high.

As the name already suggests, age spots usually do not occur until one is older: from the age of 50, this condition affects 50% of women and 20% of men. From the age of 60, almost 90% of light-skinned people develop these spots. This makes them the most commonly occurring pigmentations in central Europe. But these unsightly spots can also occur in younger people. This is more often the case in people with fair skin colour. Sunburn can also encourage the development of age spots. Therefore, these pigmentations are also known as »sun spots« (lentiginos solaris) and occur in areas frequently exposed to the sun, i.e. the face, hands, chest and forearms.



## CHOOSING LASER: FOR AN OPTIMAL RESULT

Lightening creams, chemical exfoliants and cold treatments – there are lots of forms of therapy to remove pigment spots. However, the result is often unpredictable and the healing process protracted and painful. An exfoliant can even damage lower skin layers in too high a dose and result in an increased risk of infection or even scar formation.

It is also advisable to take care with lightening creams: if the product is applied inaccurately, parts of the skin nearby can be unintentionally lightened as well. Creams can also trigger the development of red patches of skin and irritations. There are of course gentler creams now that are supposed to help get rid of brown pigmentation problems, but in all but the rarest cases they fail to entirely remove the problem. Usually they only manage to lighten the discolouration.

In contrast, laser therapy has become established as a particularly effective method: in addition to almost painless treatment, the pigment spots are removed with precision. The nano second laser is frequently used in practice to treat natural pigment spots, as melanin, the main skin pigment, absorbs the rays of the laser particularly well and allows the blemishes to be removed in the long term. For years, the laser technologies from Asclepion have been used successfully to remove beauty flaws – as testified by thousands of satisfied patients.

NOW WE HAVE IMPROVED THIS TECHNOLOGY AND PRESENT THE ...

# NanoStar<sup>®</sup> Family

R Y C



**NanoStar<sup>®</sup>R**

Ruby Laser  
694 nm

Tattoo removal  
Pigment removal



**NanoStar<sup>®</sup>Y**

Nd:YAG Laser  
532 nm, 1064 nm

Tattoo removal  
Pigment removal  
Skin rejuvenation



**NanoStar<sup>®</sup>C /  
NanoStar<sup>®</sup>C MT**

Ruby & Nd:YAG Laser  
532 nm, 694 nm, 1064 nm

**UNIQUE MIXED-TECHNOLOGY**  
(ONLY FOR NANOSTAR<sup>®</sup>C MT)

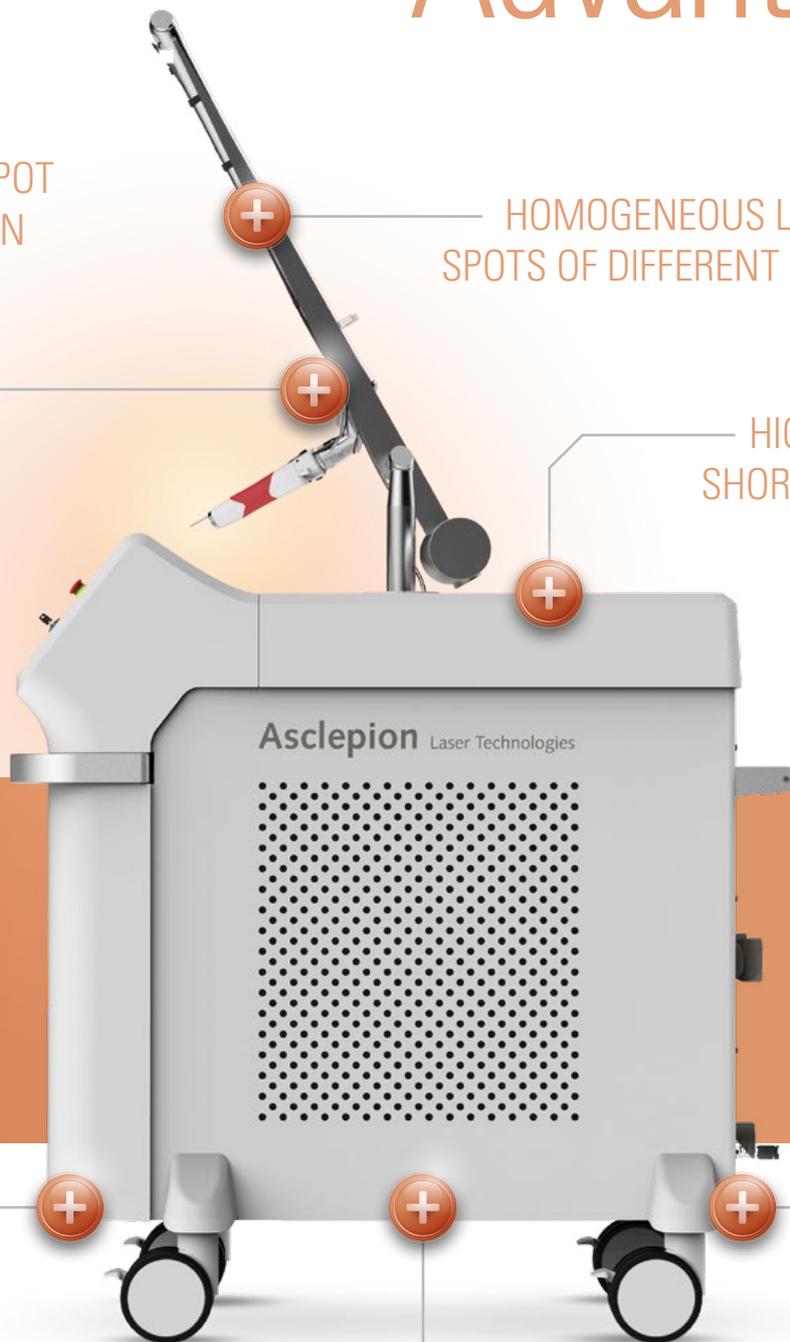
Tattoo removal  
Pigment removal  
Skin rejuvenation

# Advantages

AUTOMATIC SPOT  
SIZE DETECTION

HOMOGENEOUS LASER  
SPOTS OF DIFFERENT SIZES

HIGH ENERGY AND  
SHORT NANO PULSES



NO CONSUMABLES

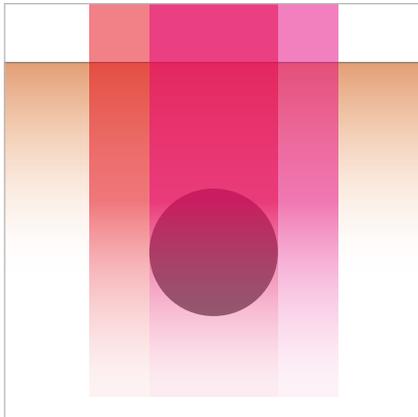
MIXED TECHNOLOGY

UP TO THREE  
WAVELENGTHS

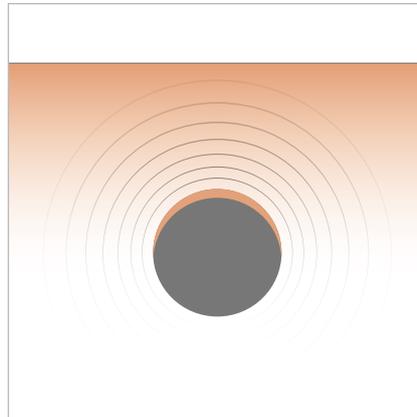
The NanoStar® Family comes in modern design and uses the well-known Q-Switched technology. The highest category, NanoStar® C MT, is a real revolution thanks to its three wavelengths and innovative Mixed-Technology. The different wavelengths can be delivered individually, sequentially or simultaneously, which guarantees high flexibility during the clinical treatment. This underlines the unique nature of the device and makes efficient treatments possible, not only for multi-coloured tattoos and pigmented lesions, but also rejuvenation processes.

## UNIQUE MIXED-TECHNOLOGY (ONLY FOR NANOSTAR®C MT)

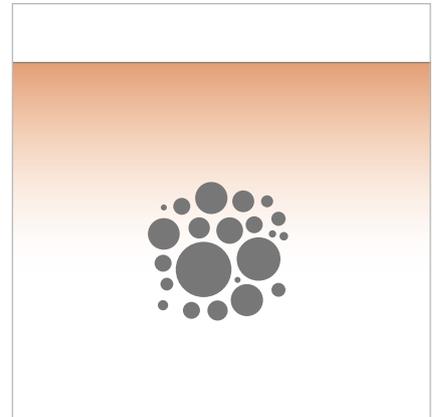
The NanoStar® C MT makes simultaneous emission of different Q-Switched laser sources possible, and provides ideal results for resistant colours such as dark blue and black.



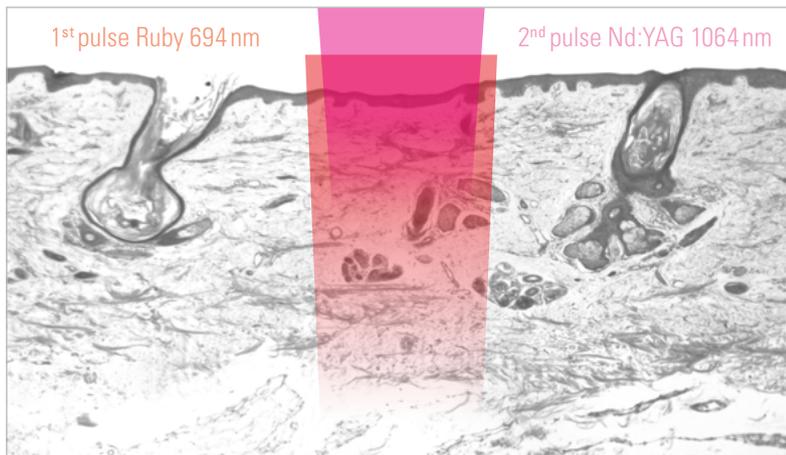
Simultaneous pulses:  
Ruby 694 nm + Nd:YAG 1064 nm



The rapid, local laser effect causes a big expansion, which creates acoustic shock waves.



The »dual« acoustic waves destroy colour particles effectively.



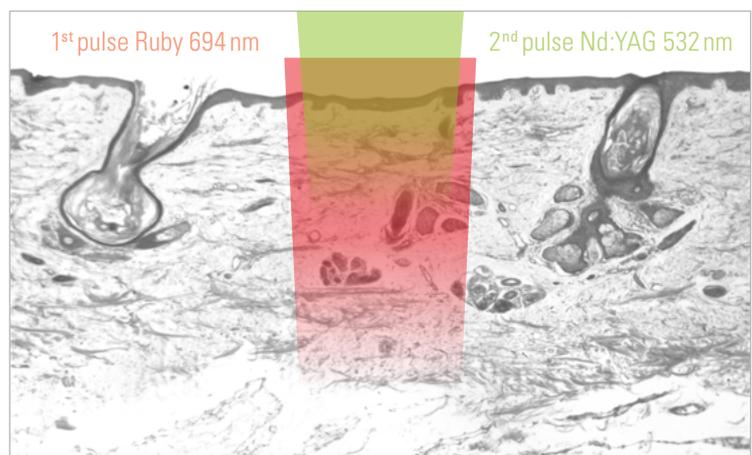
**+ ALL DEPTHS + NO PURPURA + HIGH EFFICACY**

### 694 nm + 1064 nm for skin pigmentation

For pigment treatments, Nd:YAG 1064 nm laser offers maximum safety because they are known for low melanin absorption and deep skin penetration. The additional use of Ruby 694 nm with lower penetration depth and higher melanin absorption makes removal of deep melasma possible. The NanoStar® C MT is therefore an ideal tool for this kind of treatment and will work with high effectiveness while providing maximum safety for the patient.

### 694 nm + 532 nm for superficial pigments

Nd:YAG 532 nm and Ruby 694 nm offer great advantages for the treatment of pigmentation. Melanin absorbs the 532 nm wavelength very well. The 694 nm wavelength on the other hand is characterised by great absorption by melanin and minimal absorption by blood. With the NanoStar® C MT, thanks to the sequential delivery or combination of both wavelengths, the melanin absorption can be combined with a lower risk of developing purpura, whilst providing maximum efficacy and safety.



**+ HIGH EFFICACY + LESS PURPURA**

Start

Nano

## GRAPHICAL USER INTERFACE

### Advantages

- + Big and clear 10.4 inch LCD touch screen
- + Big buttons and symbols that are clearly visible
- + Dark background for higher contrast and colour brilliance
- + Clear lines and rounded edges, similar to designed device
- + Variety of settings possible for maximum flexibility



# QUALITY

## STATE OF THE ART TECHNOLOGY

The NanoStar® Family comes with a variety of choices of flat-top and fractional handpieces. The OptiBeam II technology guarantees a highly precise beam profile and the fractional handpieces expand the treatment options. *DF* stands for «Deep Fractional» and it's particularly indicated for skin resurfacing and scars procedures. *HC* stands for «High Coverage» and it's particularly indicated for the treatment of photo-ageing and pigmentations.



OptiBeam II  
HANDPIECES



9mmØ HC

8mmØ DF

5x5mm

4x4mm

3x3mm

2x2mm

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# ASCLEPION

## COMPETENCE, EXPERIENCE, SUCCESS

Asclepion Laser Technologies has been operating for more than 40 years as a leader on the international medical laser scene as the manufacturer of advanced laser systems for dermatology, aesthetic medicine and surgery. Based in the Jena Optical Valley, famous throughout the world as the homeland of the German optics industry, the company invests continuously in research and development of new technologies. Today, customers in more than 70 countries trust in Asclepion's «Made in Germany» technology and its proven scientific expertise.

**NanoStar®**, the latest generation of Asclepion's nano technology, boasts an unmatched success all around the world, proof of its effectiveness, safety and high quality.

MORE THAN  
**10 000**  
users all around  
the world

MORE THAN  
**10 000 000**  
patients successfully  
treated

High quality also means a customer oriented philosophy for us. That's why we work hard every day in order to provide not only the best technology but also a full range of services, to support you at 360°.

### TRAINING & EDUCATION



Both regional and international trainings are permanently organized in our training center in Jena. That's how we provide our customers all the knowledge that they need for safety and effectively using our laser devices.

Find out more at:  
[www.asclepion.com/academy](http://www.asclepion.com/academy)

### MARKETING & WEBCLUB



A wide range of marketing tools is available on the AsclepionWEBCLUB, an online platform designed for giving you a real time access to all the latest news and important documents for the success of your practice.

Find out more at:  
[www.asclepion.com/webclub](http://www.asclepion.com/webclub)

### TECHNICAL SERVICE



Our highly specialized technical assistance, provided both directly and through a network of local distributors, follows the customer from the installation, to the assistance in case of defect, to the delivery of spare parts.

Find out more at:  
[www.asclepion.com/service](http://www.asclepion.com/service)

## TECHNICAL SPECIFICATIONS

	NanoStar® R	NanoStar® Y	NanoStar® C	NanoStar® C MT
Laser	Ruby, class 4	Nd:YAG, class 4	Ruby + Nd:YAG, class 4	
Wavelength	694 nm	532 nm; 1064 nm	532 nm; 694 nm; 1064 nm	
Frequency	Max. 3 Hz	Max. 10 Hz	Max. 10 Hz	
Pulse duration*	30 ns (QS) 2 ms (PT)	532 nm: 6 ns (QS) 6 ns + 6 ns (OP)  1064 nm: 6 ns (QS) 6 ns + 6 ns (OP) 300 µs (PT)	532 nm: 6 ns (QS) 6 ns + 6 ns (OP) 694 nm: 30 ns (QS); 2 ms (PT) 1064 nm: 6 ns (QS) 6 ns + 6 ns (OP) 300 µs (PT)	Only for NanoStar® C MT MIX QS 694 + 1064 nm: 30 ns + 6 ns MIX QS 694 + 532 nm: 30 ns + 6 ns MIX PT 694 + 1064 nm: 1.6 ms + 300 µs
Max. Fluence	30 J/cm <sup>2</sup> (QS) 50 J/cm <sup>2</sup> (PT)	532 nm: 12.5 J/cm <sup>2</sup> (QS) 15 J/cm <sup>2</sup> (OP)  1064 nm: 25 J/cm <sup>2</sup> (QS) 37.5 J/cm <sup>2</sup> (OP) 50 J/cm <sup>2</sup> (PT)	532 nm: 12.5 J/cm <sup>2</sup> (QS) 15 J/cm <sup>2</sup> (OP) 694 nm: 30 J/cm <sup>2</sup> (QS); 50 J/cm <sup>2</sup> (PT) 1064 nm: 25 J/cm <sup>2</sup> (QS) 37.5 J/cm <sup>2</sup> (OP) 50 J/cm <sup>2</sup> (PT)	Only for NanoStar® C MT MIX QS 694 + 1064 nm: 20 J/cm <sup>2</sup> + 17.5 J/cm <sup>2</sup> MIX QS 694 + 532 nm: 20 J/cm <sup>2</sup> + 8.5 J/cm <sup>2</sup> MIX PT 694 + 1064 nm: 32.5 J/cm <sup>2</sup> + 32.5 J/cm <sup>2</sup>
Handpieces	2x2; 3x3; 4x4; 5x5 mm <sup>2</sup> square Fractional Ø 8 mm (DF) with typical cover rate 3% – 10% (depending on wavelength) Fractional Ø 9 mm (HC) with typical cover rate 20% – 40% (depending on wavelength)			
Display	10.4" LCD Touchscreen			
Dimensions	53 cm x 108.1 cm x 110.2 cm (W x D x H)			
Weight	Approx. 150 kg			

\* QS = Q-Switched; OP = Opti-Pulse; PT = Photo-Thermal (All specifications are subject to change without notice)

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

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