

Second Skin - Laser Tattoo Removal 'Sapphire II' Nd:YAG Fact Sheet

Why does the ink stay in the skin when you have a tattoo?

When you have a tattoo the particles of ink are too large for the body to destroy, so instead, it encapsulates the particles of ink with a network of collagen fibres as the skin heals, and there the tattoo remains.

How does the YAG laser work to remove it?

The laser emits a pulse of light that is preferentially absorbed into certain colours of ink. The light enters the skin at a speed that is too fast to heat the skin (billionths of a second), instead, it produces a 'shock wave' effect and breaks up the ink particles into smaller pieces, the body then recognises these particles as something that shouldn't be there and attacks them, removing them naturally via the body's own natural elimination system.

Can you treat all colours?

No. Light is measured in nanometres and there are two wavelengths of light that are emitted from this laser – one is invisible infrared light (1064nm) and the other is visible green light (532nm). The infrared wavelength is preferably absorbed into black and dark blue inks, whereas the green light is absorbed by red ink. It is possible to treat some other colours although white, yellow and bright colours are difficult. This is not usually a problem however, as lighter colours cover very easily. If you wish to cover-up an existing tattoo then the darker colours will be faded or removed, allowing you greater choice of size and colour of the cover-up design you choose.

Why is it difficult to treat colours other than red and black?

The light will only see the colour ink it is attracted to as different wavelengths absorb into different things. It is not possible to produce a laser that can see all colours as some wavelengths are too shallow when absorbed to affect the ink, others can absorb into other matter and damage the skin in the process. Another reason is that all ink pigments contain certain levels of heavy metals. Some pigments may have a higher concentration of some of these than others, and these heavy metals can react with the laser light and carbonise in the skin, turning the ink black. It is very difficult to remove the ink when this has happened so, if you have other colours you would like treating, we will perform a test patch for you to see if it is possible before proceeding.

Will the tattoo be removed in one treatment?

No, the light can only shatter a certain amount ink in one treatment, so several treatments are needed at monthly to 6 weekly intervals to work through the layers. You will notice the tattoo fades more and more with every treatment you have. A test patch will be performed before a full session goes ahead to check how you react to the treatment. A professional tattoo can take an average of 10 treatments although some Indian ink and amateur tattoos can be removed within 6 treatments and sometimes only take 1 or 2. There are several factors that influence the number of treatments required, these can be down to how easily you heal, how deep the ink is in the skin, and the types of ink that were used. Generally speaking the longer you have had the tattoo and the darker it is, the easier it is to remove.

Will my tattoo disappear completely?

It is possible, but we cannot guarantee that your tattoo will be removed completely, this is due to the same factors that affect the number of treatments required, such as the depth of ink in the skin, type of ink, healing ability etc. certain areas may contain deeper 'pockets' of ink that are very difficult to remove.

What happens to my skin after treatment?

The immediate after effect of the treatment is that the skin turns temporarily white, this is due to water evaporation and disappears with 15 minutes. The skin also swells and feels like mild sunburn, this usually disappears within 24-48 hours. The body continues to remove ink after the treatment and the skin is usually back to normal within 2-4 days. Full aftercare instructions are given at the consultation.

Are there any side effects?

Sometimes bleeding and/or blistering can occur; again there are varying reasons why this happens. We will adjust the treatment to try to prevent this from happening so the skin can heal properly.

Will the laser treatment scar my skin?

No. If bleeding or blistering does occur it is very important not to pick any scabs that may result when the skin is healing – this could cause scarring, and should be avoided as scar tissue can make further treatments more difficult.

How much will it cost?

Prices generally start from £50 for a very small tattoo and increase in amount depending on the size of the tattoo. We will be able to give you a personal quote once we have assessed your tattoo in the consultation.

How long will the treatment take?

Treatment can take between 5 minutes to 20 minutes depending on the size of the tattoo. Large tattoos will need to be treated in several separate appointments to prevent too much trauma happening to the skin in one session.

Does it hurt?

The treatment feels similar to an elastic band being snapped at the skin and is easily tolerated by most people without any need for anaesthetic.