

uPATCH™ MINUS

The development of a microneedle applicator for facial application

Currently microneedle pimple patches are applied by hand. This frequently leads to uneven penetration of the needles and the needles bending, meaning the active ingredients inside the needles are not delivered effectively. There could also be no scientific evidence found that cosmetic microneedle patches penetrate the skin in realistic user conditions.

The uPATCH MINUS is a compact applicator for facial use for effectively applying microneedle pimple patches. It applies the patch with impact force powered by a spring. This spring is loaded by twisting the device. The internal mechanism locks the spring and can be released by pressing the button on top of the MINUS. The impact force at which the plunger hits the skin enables the microneedle to go through the stratum corneum making transdermal drug delivery by dissolvment of the needles possible.

The MINUS gives control to the user with the button and the loading system. The form and appearance of the applicator are luxurious and tool like with a semi medical appearance with a cosmetic touch.



Maan Roos Moeskops
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24 April 2026

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