

weneos

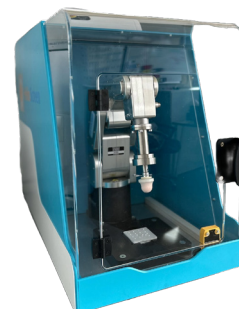
Sunscreen Testing Expertise

ex HelioScreen

SPREADMASTER

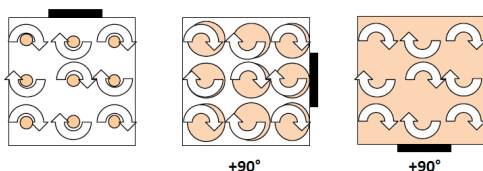
Automated sunscreen spreading

The SPREADMASTER is a robot which carries out the automatic spreading of the sunscreen on the substrate. It allows a total control of the product spreading and ensures the reproducibility of the In Vitro UV testing with a very low variability range. In compliance with : ISO/DIS 23675 – FPS in vitro, ISO/CD 23698 – HDRS, ISO 24443:2021 – UVAPF in vitro, FDA monograph 2011 – Broad Spectrum, U.S. Star Rating system 2011 – UVA/UVB ratio

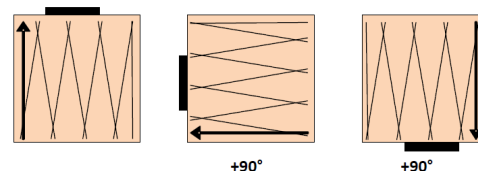


DESCRIPTION

First, 3 stages of distribution using small circular motions completed in about 30 s.



Second, 3 stages of rubs using alternating horizontal and vertical strokes completed in about 30 s.

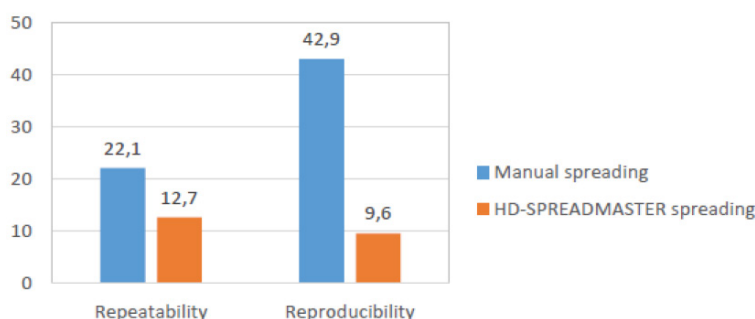


RESULTS

The manual spreading with 8 different operators has been compared to the robotic spreading on 36 sunscreen products (including: O/W emulsions, W/O emulsions, oils, creams, lotions and sprays) coming from different worldwide companies [1].

*repeatability: within operator

*reproducibility: between operators



TECHNICAL SPECIFICATIONS

General

Weight: < 25 kg

Power supply: 90-264 VAC / 50-60 Hz

Overall size (WxHxL):

317 mm x P : 687 mm x H : 583 mm

Material: Aluminium, Plastic

Power consumption: Approx. 40 Watts

IP Classification: IP40

Temperature: Operational 5 - 45°C



Sun protection field

Spreading time: 1 min

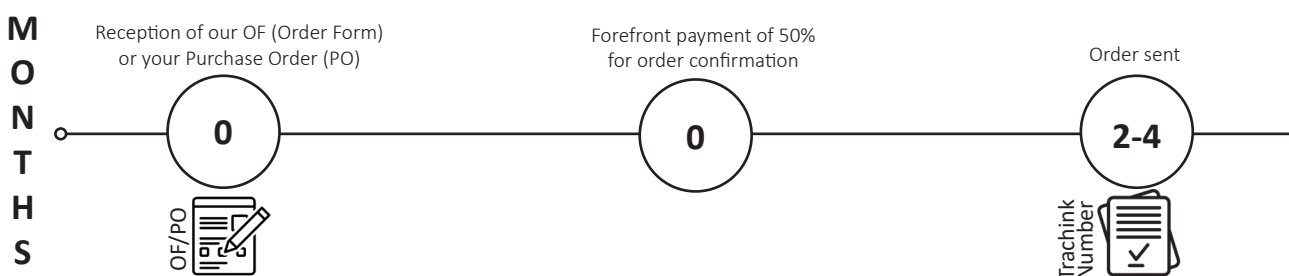
Repeatability : 5 µm

Spreading tool: Silicone material hardness 20-25 shores (to be replaced every 400 spreading)

Substrates: PMMA Molded Helioplates HD6
PMMA Sandblasted Helioplates SB6

Temperature control: HD-THERMASTER (option)

INFORMATION AND GENERAL TIMETABLE



MADE IN FRANCE

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[1] S. Miksa, D. Lutz and C. Guy, In vitro UV testing-robot vs. human spreading for repeatable, reproducible results. Cosmt. Toil. 128, 742-752 (2013)

Update: 03/2024