



# SOLAR PANEL CLEANER

The Solar Panel Cleaner for tractor attachment incorporates a hydraulic arm with 5 degrees of freedom, modular cylindrical brush, water storage and spray tank for wet cleaning, viewing cameras on the brush and optionally, the tractor, and distance-to-panel measurement sensors.



## Cleaning data

Brush size	3 metres	4 metres	5 metres
Layout of the panels	1V o 2H	1V o 2H	1V o 2H
Cleaning area/hour (m2/h)	4500 m/h	6000 m/h	7500 m/h
Driving speed	1,5 km/h	1,5 km/h	1,5 km/h
Controls	Manual	Manual	Manual

Last update: 25 february 2024

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# SOLAR PANEL CLEANER

## Characteristics

- Made of carbon steel, ground, primed and painted.
- Hydraulic arm with 5 movements: double slewing ring.
- Water storage tank.
- Does not support weight on the panel.
- The brush absorbs gaps, antennas and panel support elements.
- Viewing cameras.
- Proximity sensors on the brush.
- Cylindrical brushes with technical filament.
- Joystick to control the equipment.
- Attachable to three-point tractor.



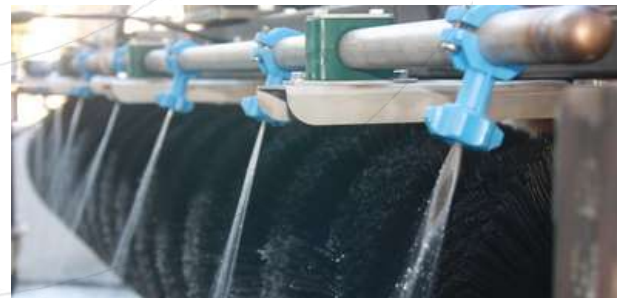
## Optional

- Installation of the joystick, screens and electrical box on the tractor.
- Supply of the complete system (brush + arm + tractor + water equipment).
- Three-point stabiliser.
- Calculation of the stability of the system and definition of counterweights and ballasts for the tractor.



## To be defined

- Category of the tripod.
- volume of the water tank.
- Working width of the brush.
- Type of tractor, which must ensure that it has working capacity and stability for the cleaning equipment.



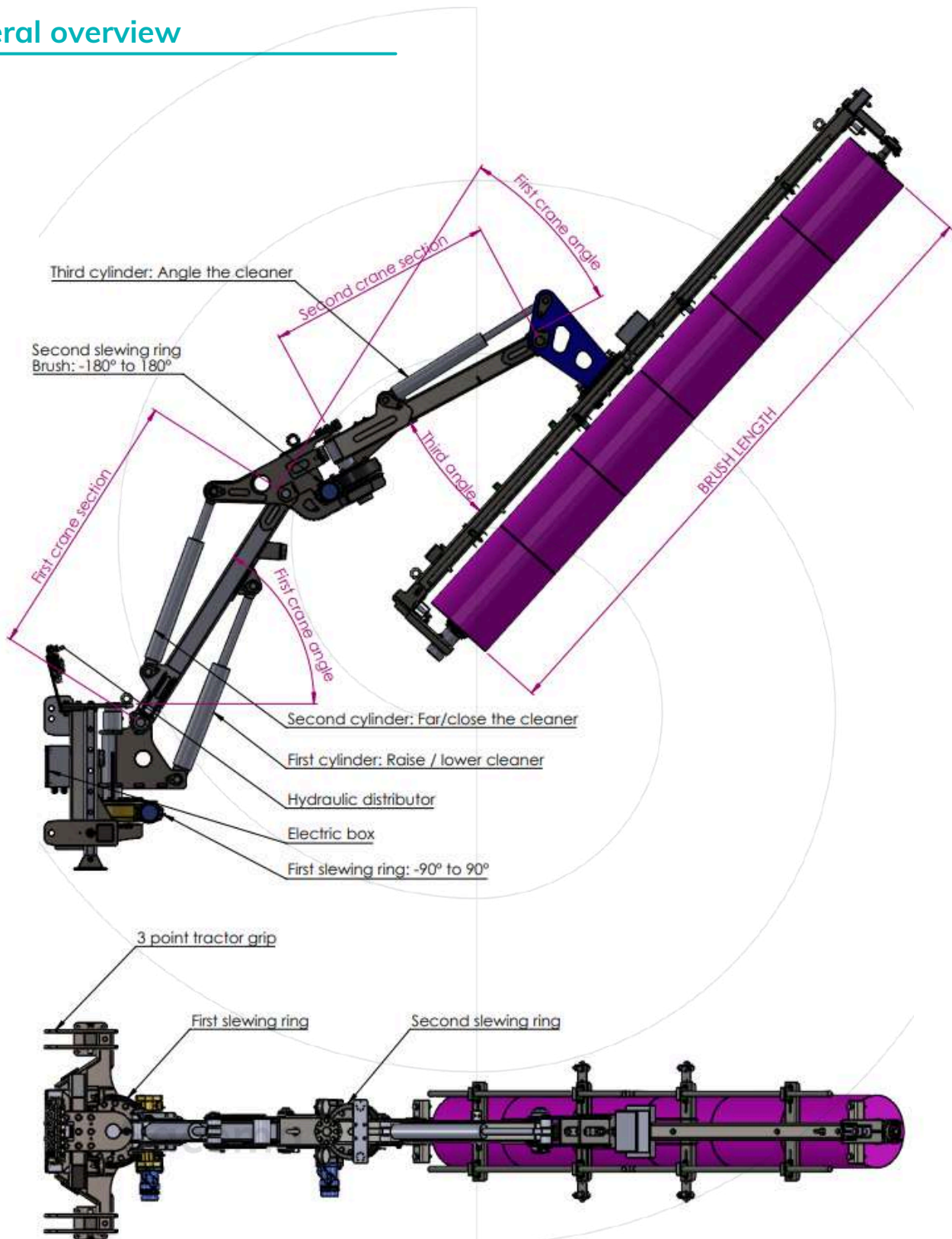
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# SOLAR PANEL CLEANER

## General overview



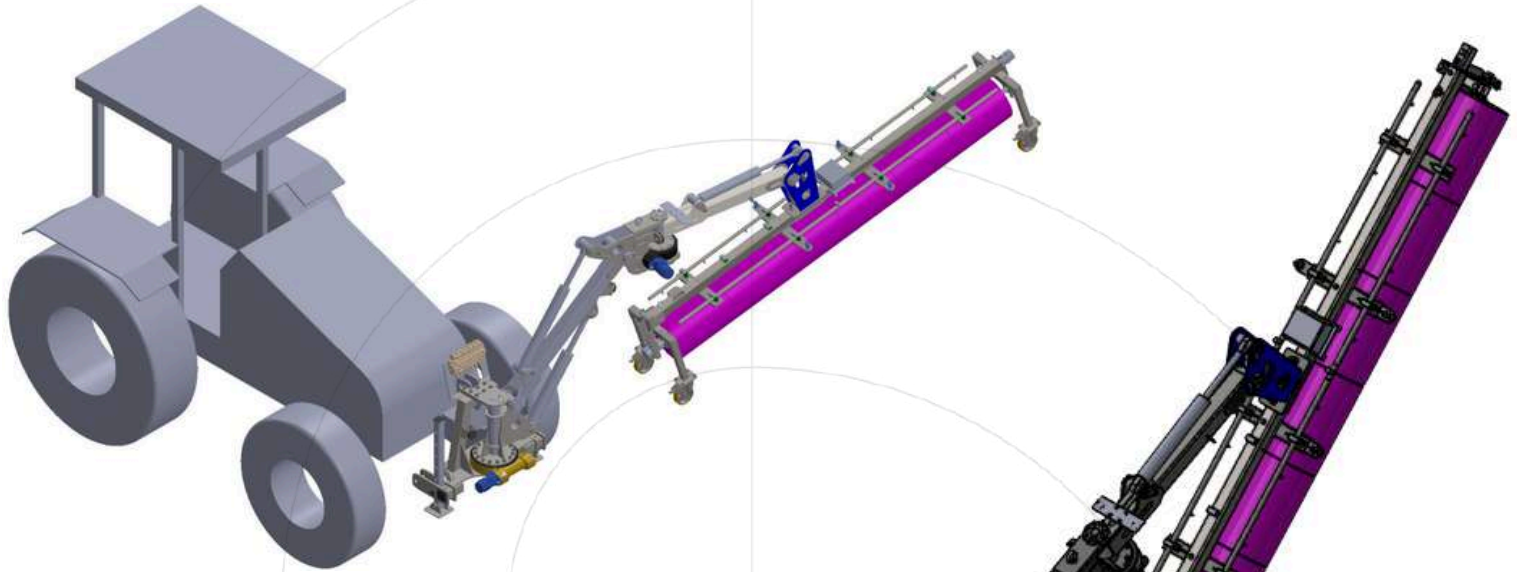
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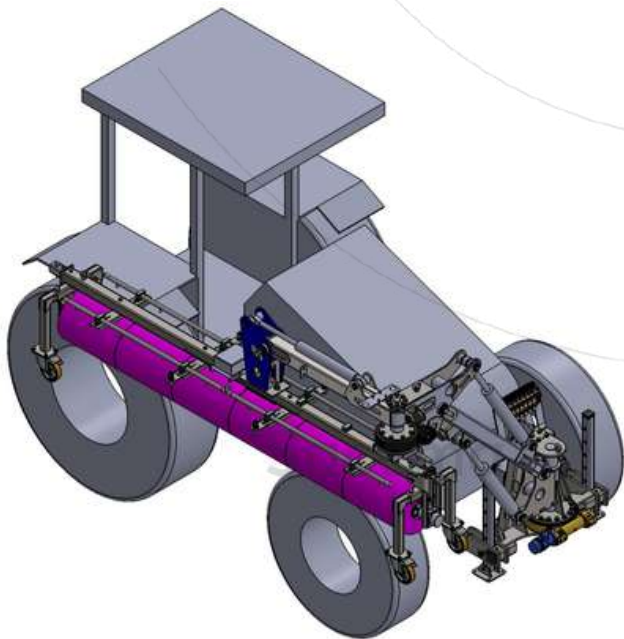
# SOLAR PANEL CLEANER

## General overview



- Support wheels for resting position and transport.
- Remove castors for cleaning.

## Transport position



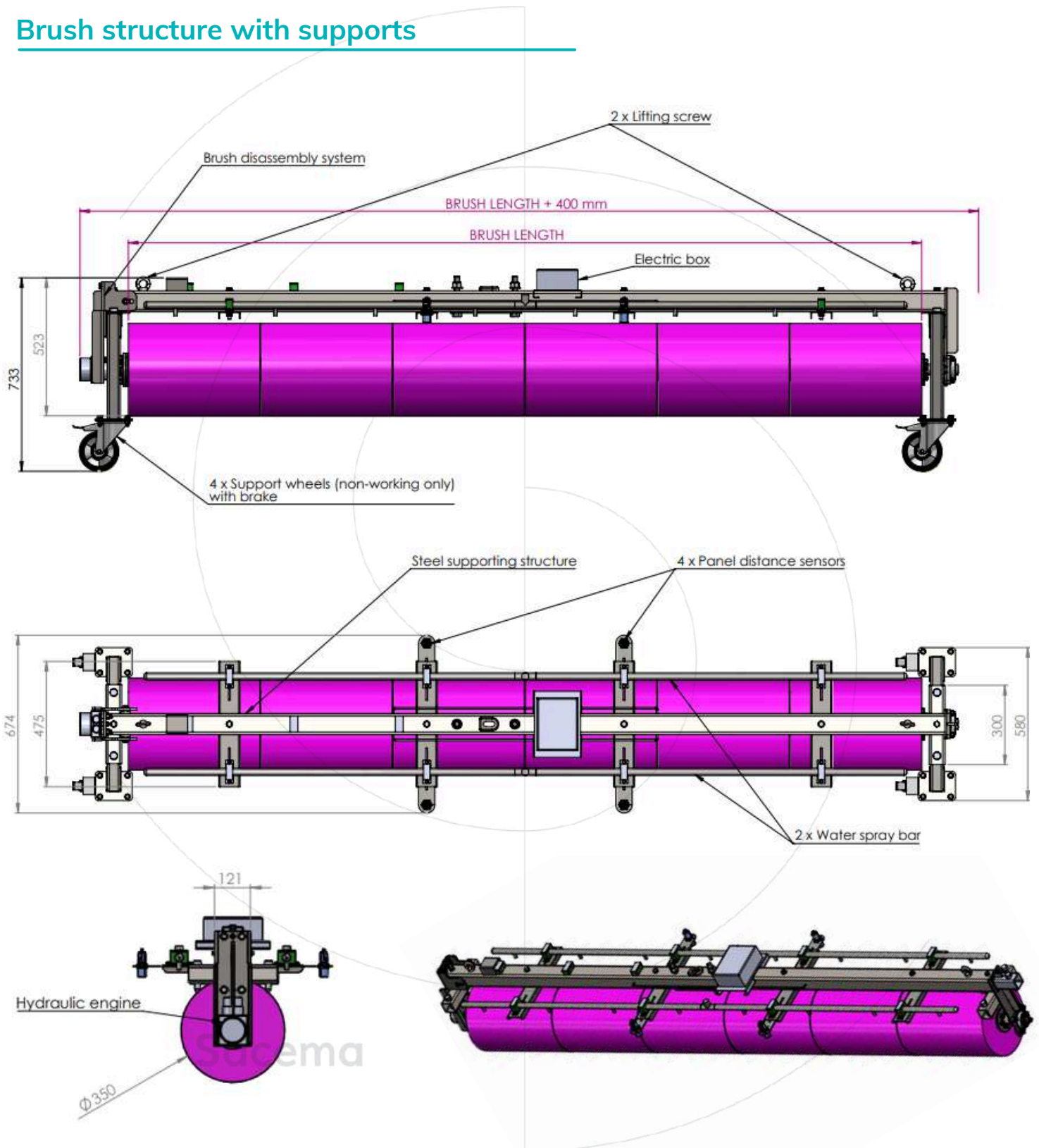
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# SOLAR PANEL CLEANER

## Brush structure with supports



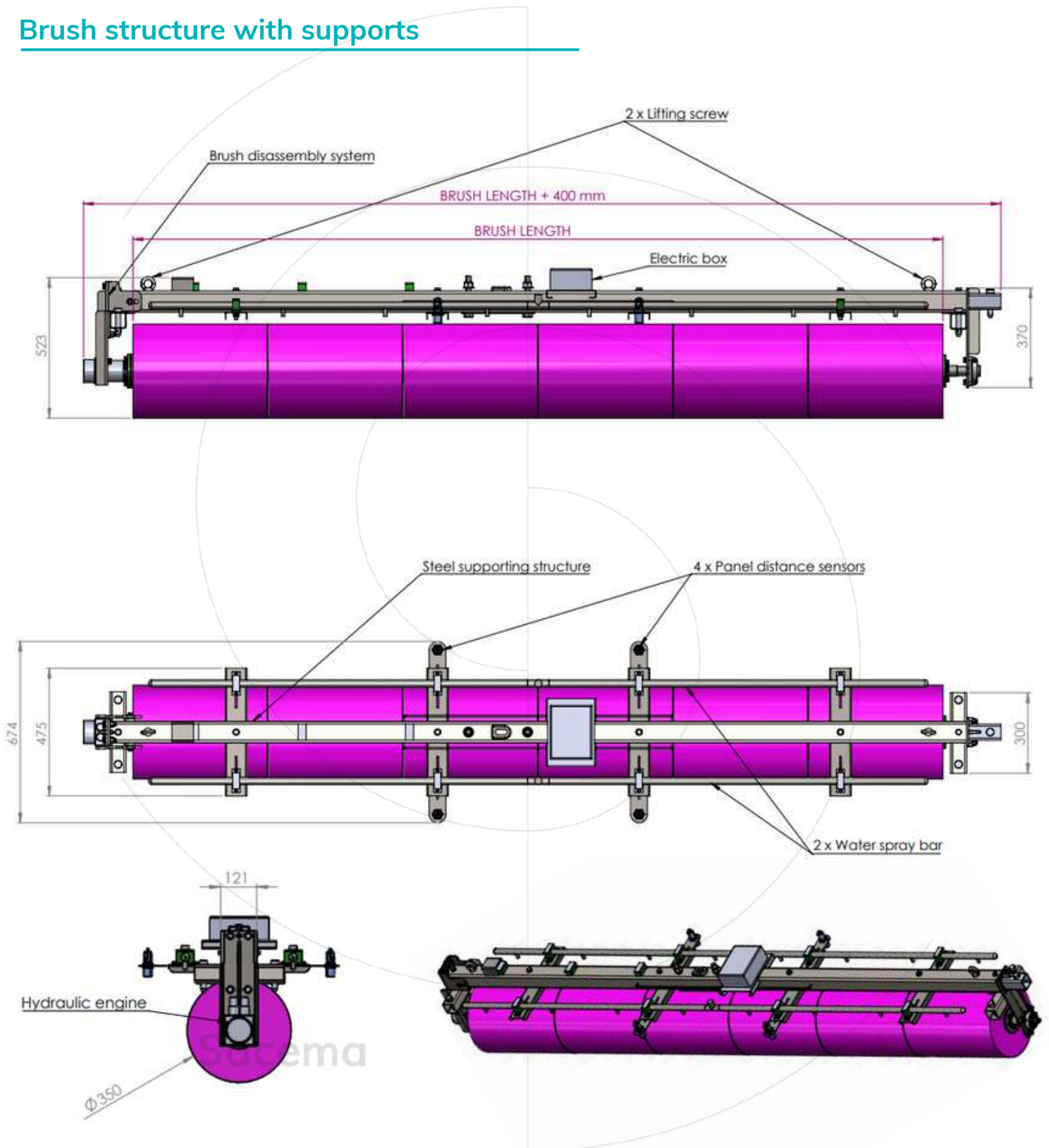
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# SOLAR PANEL CLEANER

## Brush structure with supports



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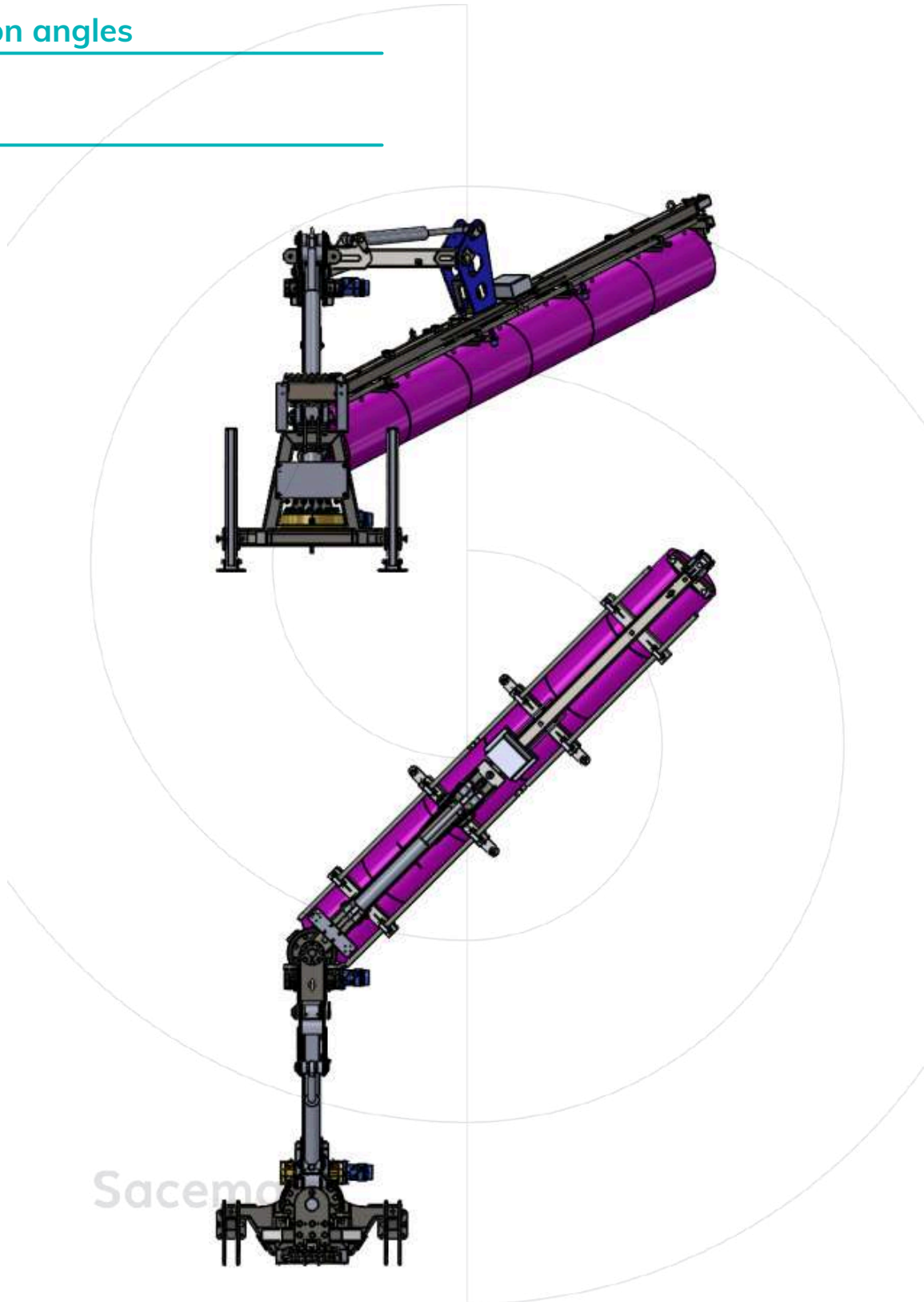
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# SOLAR PANEL CLEANER

## Rotation angles

0 + 45°



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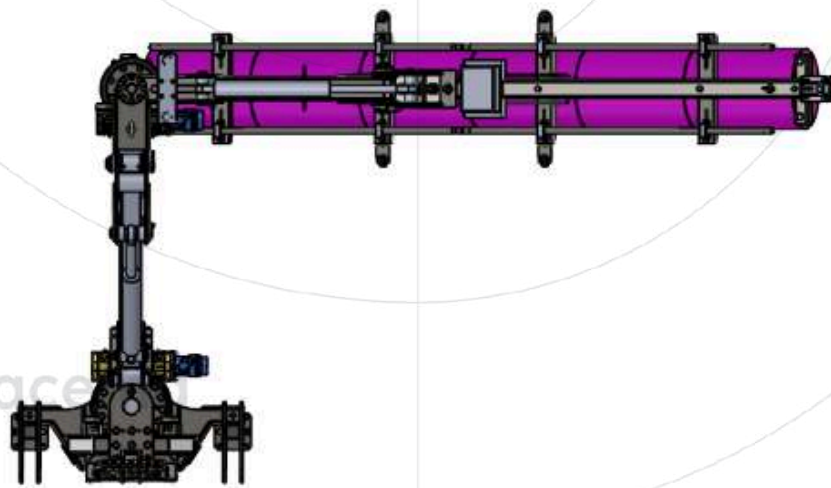
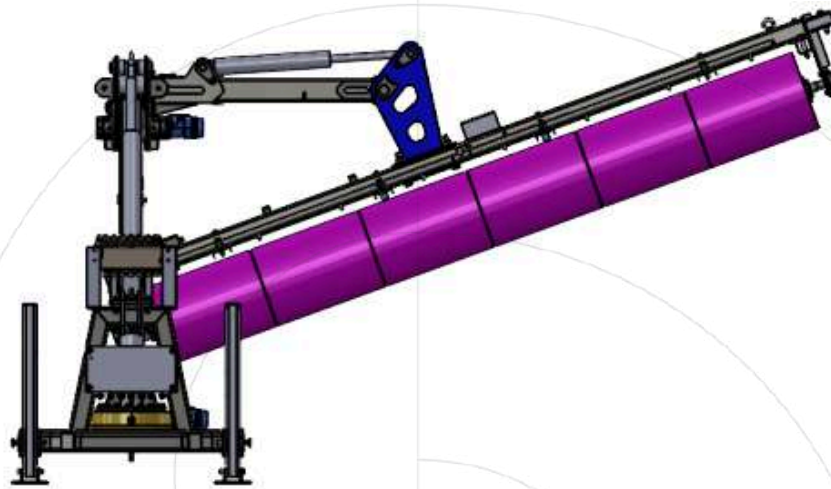
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# SOLAR PANEL CLEANER

## Rotation angles

0 + 90°



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# SOLAR PANEL CLEANER

## Rotation angles

+ 45° + 45°



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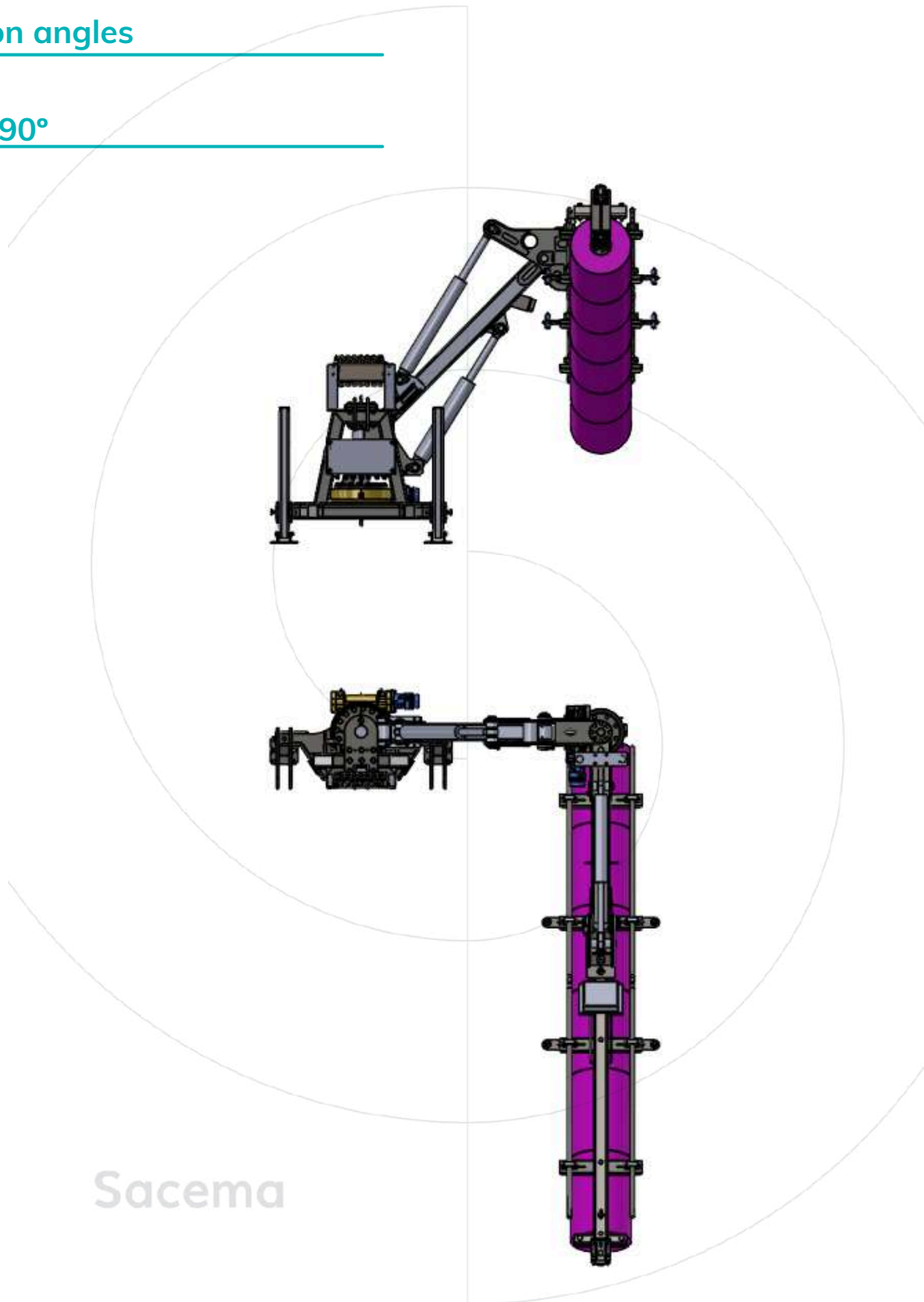
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# SOLAR PANEL CLEANER

## Rotation angles

+90° + 90°



Sacema

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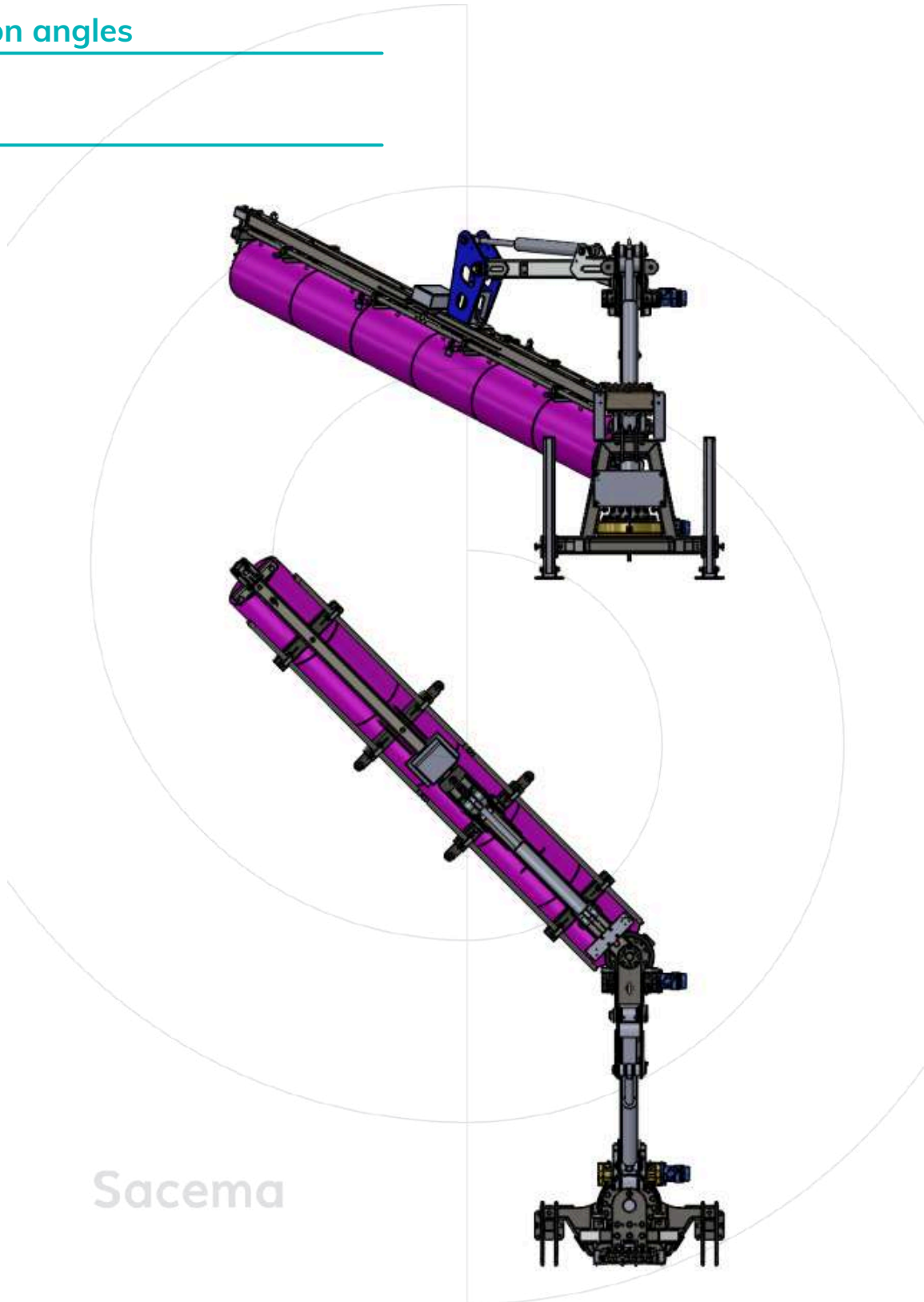
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# SOLAR PANEL CLEANER

## Rotation angles

0 - 45°



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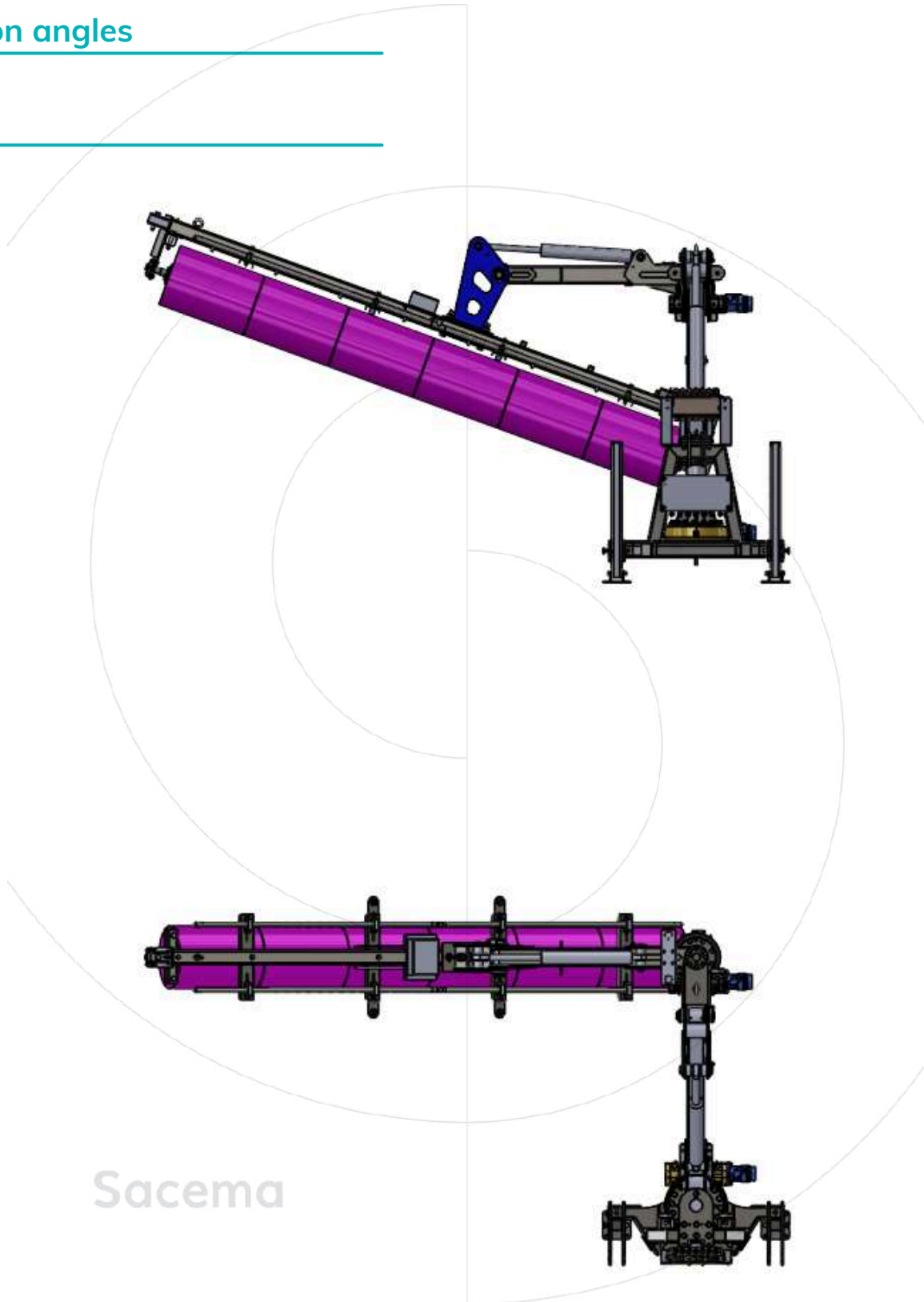
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# SOLAR PANEL CLEANER

## Rotation angles

0 - 90°



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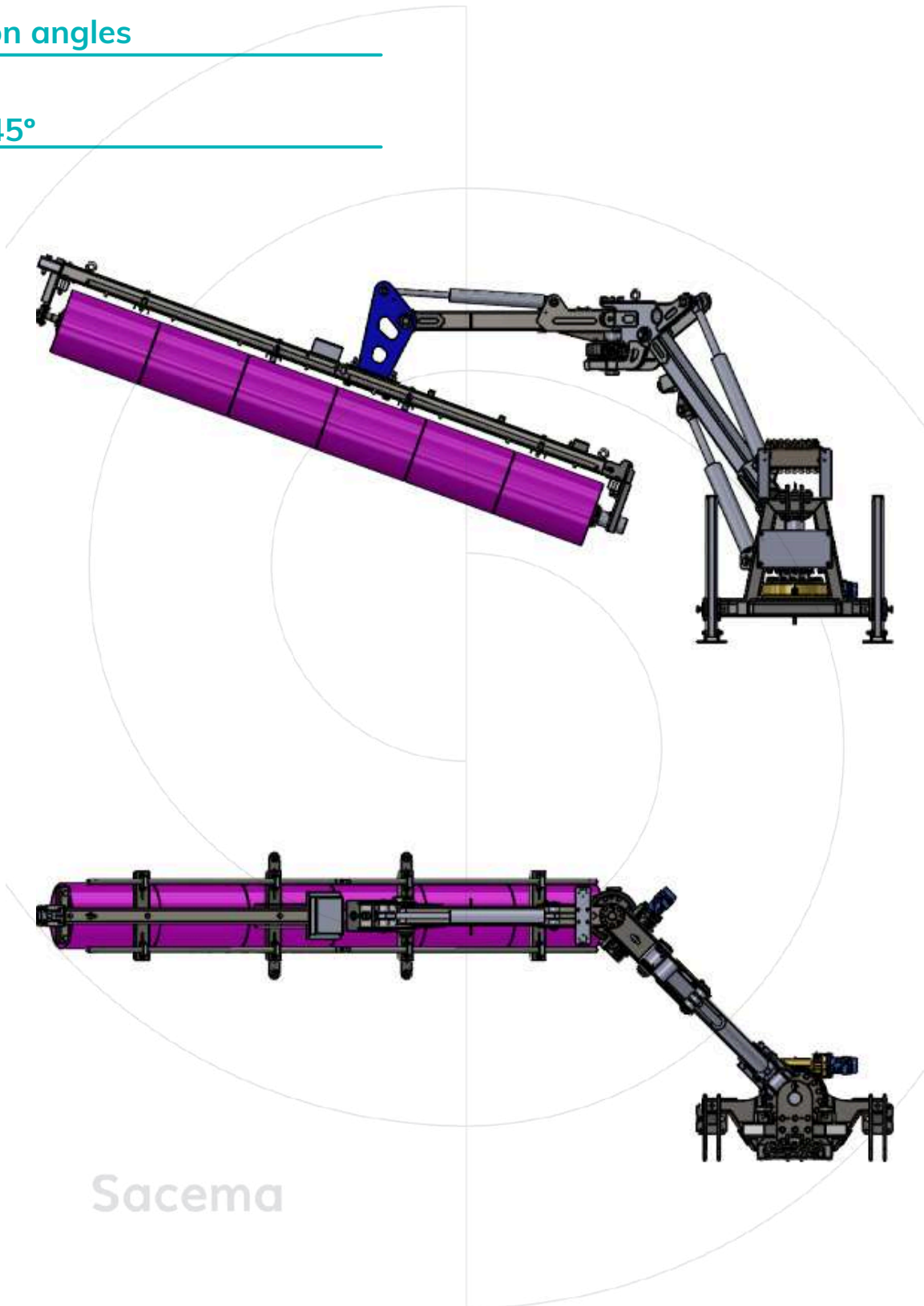
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# SOLAR PANEL CLEANER

## Rotation angles

-45° - 45°



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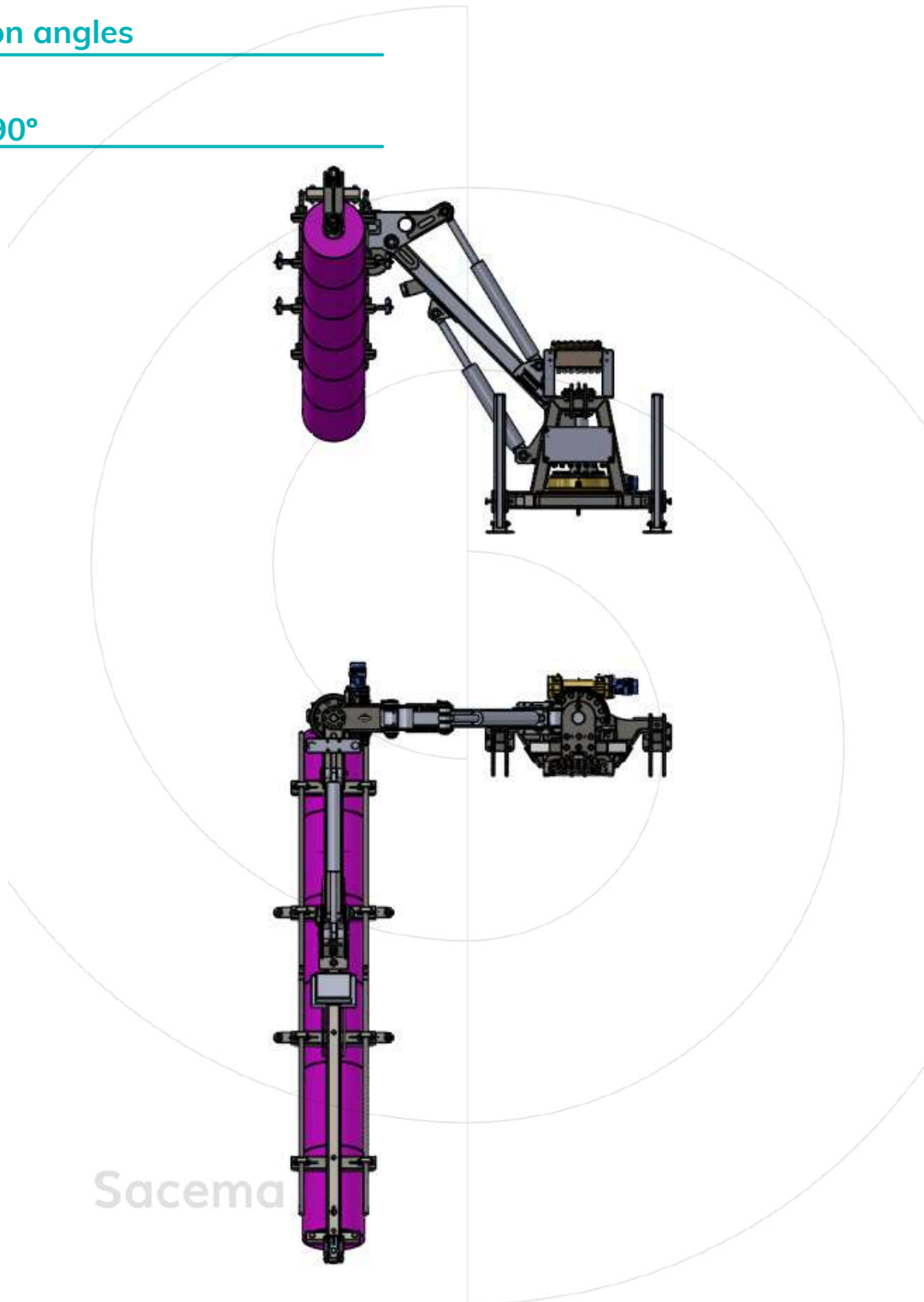
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# SOLAR PANEL CLEANER

## Rotation angles

-90° - 90°



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