

Bringing new levels of realism, durability and vehicle protection to VRU testing

# Soft Scooter 360™



The Soft Scooter 360 is a highly realistic and cost-effective surrogate scooter target that is stable up to speeds of 60 km/h. Its realistic shape, speed-matched rotating wheels and photorealistic vinyl skin increases recognition and detection by vehicle sensor systems, including camera, radar and lidar.

Key to the design of the Soft Scooter 360 has been a focus on reducing damage to vehicles under test. To achieve this goal, the target's structure is tubular surrounded by a lightweight foam and hard points have been minimised. The rider is also a separate piece to the scooter, reducing the potential for damage.

To help increase the repeatability of your test programme, the Soft Scooter 360 has a modular design, which means parts are easily replaced and a separate spares kit is also available with each unit to reduce downtime.



Recognised as a real scooter by sensing technologies including camera, radar and lidar



Complies with ISO/WD 19206-5 and compatible with C-NCAP 2021 protocols



Rotating, durable wheels produce speed-matched Doppler effect for radar sensors



Capable of withstanding impact speeds up to 60 km/h



Soft, lightweight structure minimises damage to target and test vehicle



Compatible with our LaunchPad™ product family



Modular design for easy reassembly, repairability and repeatability



Quick build time for less programme downtime

# Specifications

## Dimensions and weight

Wheelbase	1300 mm
Wheel diameter	400 mm
Total height	1605 mm
Width	641 mm
Weight	18 kg

## Performance

Max operation speed	60 km/h
Water resistance	Yes
Max frontal/rear impact speed	40 km/h
Max side impact speed	60 km/h

## Compliance

ISO/WD 19206-5	Yes
Radar, camera and lidar	Yes



The Soft Scooter 360 has been developed in response to the growing global demand for scooters and e-scooters. The target meets the ISO/WD 19206-5 standard and is compatible with C-NCAP 2021 protocols. The test scenarios it can be used for includes:

- Lane cut-in – where the scooter overtakes and cuts into the same lane as the test vehicle
- Blind spot – where the test vehicle attempts to change lanes with the scooter positioned in the test vehicle's blind spot
- Intersections – where the scooter and test vehicle (in close proximity) cross the intersection perpendicular to each other at the same time
- Turn across path – the test vehicle turns across the path of the scooter, requiring intervention to prevent a collision

## About AB Dynamics

AB Dynamics is a leading global provider of automotive test and verification solutions that facilitate the development of vehicles that are safer, more efficient and sustainable. As part of the AB Dynamics Group of companies we enable customers to develop and test in virtual environments, validate on the track and then evaluate vehicles on public roads.

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