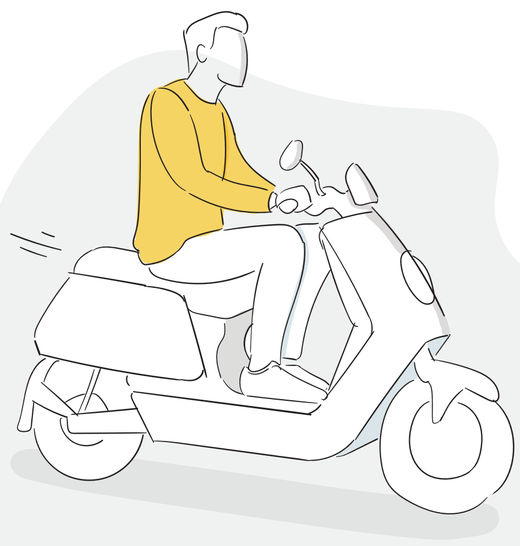
MICK

Universal wireless charger for shared electric mopeds

Mick is a wireless charger for shared electric mopeds. The charging solution provides an easy way of charging the batteries without taking them out. The product consists of a kickstand mounted to the moped and a tile that can be installed in the ground. With Mick, TILER creates a charging network for electric bikes and mopeds as the same tiles can be used. By using induction charging, the need for separate charging cabinets or battery swapping disappears: mopeds are charged through the pavement simply by parking them on the charger. The product is designed to be able to be mounted on different models of mopeds to make it universal. This is not only valuable for TILER, but also more understandable for the users as each shared moped provider can use the same way of charging.



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Wireless Charging

When the kickstand is placed on the tile, a current is passed through the coils inside the kickstand and tile. For the inductive charging to work, the coils need to be aligned. Therefore, an indent and yellow square on the tile guides the user to place the kickstand in the right location. When the moped is parked correctly, a light next to this square provides feedback to the user.

Innovative Charging

The new kickstand for electric mopeds eliminates the need to take the batteries out of the moped to charge them. Currently, shared moped providers execute a system with battery swappers, which is more prone to human error. This new charging system removed this part of the charging process and enhanced the mopeds' battery life. Moreover, this new charging method introduces a new interaction with the moped. The charging issues that providers of shared mopeds experience are solved by introducing 'parking equals charging'. This not only enhances the battery life of the mopeds but also reduces the costs of regulating a battery swapping service.

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