# **RoboDrive and Pin-Ring Drives**



#### TQ leads a new generation of high-torque off-road eBikes

## High performance technology for Pedelecs and E-Bikes

Under the trademark "cleanmobile" TQ develops and produces customer-specific drive systems and components for Pedelecs, E-Bikes and electric cargo vehicles.

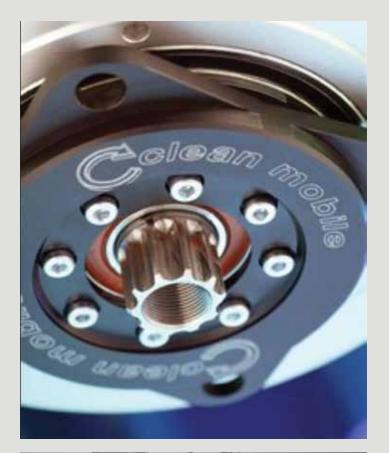
The core of the system is the patented pin drive. Thanks to this innovative technology, a high performance and a high torque with minimum dimensions can be achieved.

### The cleanmobile pin drive consists of the following components:

- Electric pin drive
- Customer-specific lithium ion battery
- Cable harness
- Display
- Speed sensor
- Torque sensor

#### Key funcitonalities of the pinring drive

- Above-average power density and high single-stage reduction
- Rotationally symmetrical and compact dimensions
- E-drive, gear, sensors and power electronics in a single unit
- Low weight
- Low noise





The M1 Spitzing achieves a stunning 47 MPH with an acceleration from 0 to 30 MPH in 7.5 seconds!