



## CUSTOMER STORIES

### BETTER BATTERY MANAGEMENT FOR eBIKES AND eSCOOTERS AS A RESULT OF BETTER RESISTOR SELECTION



**Multiple precision resistors in the 2 to 6 mOhm range establish Isabellenhütte as a preferred choice for both innovation and value**

#### CHALLENGE

*Competition in the eCycle space is stronger than ever—bringing pressure to continually optimize circuitry—especially in the area of battery management (BMS) and inverters for motor drives. Size and weight characteristics of key BMS components are gating factors, along with an ability to reliably source precision resistors in the 2 to 6 mOhm range. On top of this, the price/performance dynamic is always present.*

#### SOLUTION

Isabellenhütte currently has two extremely popular solutions in the market for eCycle innovators:

**The FMx Shunt Family**—full-metal, direct-solder shunts allow automated inspection of soldering points. FMx shunts offer great long-term stability, low temperature coefficients and low thermoelectric voltages.

**WAx Family of Roll-Clad Resistors**—New amplifiers make it possible to use low resistance values to measure current in many applications. WAx resistors help minimize generated power loss and measure higher currents in smaller footprints. They cover resistance ranges from 0.5 mOhm to 1 mOhm.

#### APPLICATION

eBikes, eScooters, eCycles