



# Case Study | Taiwan

# **Shalun Signaling**

## Requirements

Taiwanese Railway Administration TRA is running the Shalun Line between the stations of Shalun, Chang Jung Christian University and ZhongZhou. Local requirements prescribe the usage of equipment that must withstand high humidity and challenging environmental influences such as floods. In 2009 it was decided to install a Frauscher axle counter system.

#### **Solution**

Ever since the implementation of this first project in Taiwan more than ten years ago, the Frauscher solution including the Frauscher Axle Counting System ACS2000 and Wheel Sensor RSR180 have proven maximum reliability and availability under local requirements without a single malfunction to this day. Frauscher trackside equipment is developed and tested to withstand harsh environment and fully sealed according to IP68 and therefore also handles the local environmental requirements with ease.

#### **Benefits**

The flexibility and modularity of Frauscher's system enabled an individual, centralised design. By using the Frauscher rail claws the wheel sensors could be easily and quickly mounted without drilling the rail.

### **Project Details**

The Shalun Line is frequented by four-car-trains and located in the south of Taiwan, where the climate is mainly tropical, with high humidity and average temperatures between 22 and 28 degrees Celsius.

Within the established centralised architecture, no electronics had to be installed at track side, but in housings and cubicles at stations and depots, where they are protected from environmental influences.

Based on the satisfying results that have been achieved by installing this system, Frauscher has proven its ability to play a big role in improving the availability and reliability of railway networks even under harsh environmental conditions. This attracted TRA's attention as it opens new possibilities of modernizing their infrastructure using Frauscher's innovative solutions. As a result, Frauscher successfully delivered more than 1800 detection points with the Frauscher wheel sensor RSR180 and the Frauscher Axle Counting System ACS2000 over the years as they are 100% compliant with the TRA axle counting specifications. Frauscher solutions enable design of centralised architectures, offer IP68 rating of the wheel sensors and offer the advantage of absence of electronics at the track side.



Frauscher Wheel Sensor RSR180 mounted with rail claw



Electronics are protected in housings and cubicles



A centralised architecture was established

#### **Key Facts**

Operator	TRA Taiwan Railway Administration	Application	Train detection
Country	Taiwan	Scope of supply	Components, Installation and Commissioning
Segment	Main Line	Scope of project	Frauscher Axle Counting System ACS2000 Frauscher Wheel Sensor RSR180
Project Start	2009		