Multi Section Digital Axle Counter

MRVC

ACS2000 with IMC and RSR180

Country
India

Segment
Urban & Mass Transit

Application
Train detection

Project start
2012

CASE STUDY | EN

Requirement

Mumbai Railway Vikas Corporation Ltd. (MRVC) is a state owned company, which undertakes suburban rail enhancement projects in Mumbai. The city's 319 km network has being significantly upgraded to meet growing demand and provide urban regeneration. Modern axle counting systems should expand capacity and improve safety on key parts of Mumbai's commuter network, which is amongst all the busiest worldwide.

Solution

Proven and solid axle counting systems, which were perfectly adapted to customer needs, provide the basis for the Central and Western Railways' modernization. The use of Frauscher Axle Counting System ACS2000 together with IMC010 and Frauscher Wheel Sensor RSR180 is perfectly tailored to meet specific requirements of the Indian Railways.

Benefit

One of the key benefits of the Frauscher Axle Counting System ACS2000 is that the system still works in rain, floods, monsoon and other environmental influences. Frauscher provides reliability, availability and maintainability of the entire system in all applications of the Indian Railways.

FRAUSCHER
SENSOR TECHNOLOGY

Multi Section Digital Axle Counter
MRVC
ACS2000 with IMC and RSR180

RSR180

Parel station

Installation training

Project details

The Indian Railways is one of the largest networks worldwide. Indian Railways has 114,500 kilometres of total track over a route of 65,000 kilometres and about 7,500 stations.

In July 2011, a consortium consisting of Invensys Rail and Frauscher Sensortechnik won the major new contract of India's Mumbai Rail Vikas Corporation (MRVC), which created a solid basis in supplying the Central and Western Indian Railways with Frauscher axle counters.

The contract encompasses system design, delivery, installation, testing and commissioning of the axle counting system ACS2000 in 19 stations on the Chhatrapati Shivaji Terminus Mumbai (CSTM)-Thane, Kalyan & Ravli Junction Yard line within the Mumbai Division of the Central Railway and in the Jogeshwari area within the Mumbai Division of the Western Railway. The contract involves supplying more than 1400 track sections and about 1900 counting heads with the wheel sensor technology of Frauscher. The equipment for the first station will be delivered in May 2012. According to the plan most of the stations should be delivered by the end of the year.

A track section at KanjurMarg (Mumbai) was selected in order to perform an ACS2000 trial installation. This track section serves as a representative testing area including typical environmental conditions of the Indian Railways. The entire project is based on a combination of wheel sensor RSR180, evaluation board IMC010 as well as axle counting board ACB119 and ACB120, which provides the best solution for maximum safety and availability in the Indian Railways.

On 16.02.2012 the Research Design & Standard Organisation (RDSO) of the Indian Railway issued approval for the Fraucher Axle Counting System ACS2000. The approval process is based on the „Cross Acceptance" principle according to the regulations of the RDSO of the Indian Railway and lasts around a year. In July the first central railway station „Parel" in the heart of Mumbai was commissioned successfully.

Operator	Mumbai Railway Vikas Corporation Ltd
Client	Invensys Rail
Scope of Supply	Trial, Components, Training, Technical leadership of the consortium
Scope of Project	1400 track sections, 1900 counting heads
Axle Counting System	ACS2000 with IMC010, ACB119, ACB120
Wheel Sensor	RSR180

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