



Customer

BHEL EDN Bangalore
(www.bhel.com)

Location

India

Date of delivery

December 2008 (first system);
accompanying framework
agreement for 10 years

Summary

- Design and delivery of electrical systems
- Technology transfer to BHEL

ACEMU Electrical systems India

Strukton Rolling Stock is designing and supplying electrical systems for 225 ACEMU (25 kV AC Electrical Multiple Units) trains for Indian Railways. The principal is Bharat Heavy Electricals Ltd. (BHEL) in Bangalore. The assignment consists of designing the drive systems, on-board electricity supply systems and the train control and management system (TCMS) for the ACEMUs.

In addition to designing and delivering the electrical systems, technology transfer is an important part of the contract. Strukton Rolling Stock is designing the systems in cooperation with engineers from BHEL, subsequently delivering at least 225 systems to BHEL in various stages of completion. The framework agreement has a term of 10 years.





Assignment scope

The first assignment to supply one set, carried out in 2008 and 2009, involved the delivery of a drive system, on-board electricity supply system and TCMS. For the overall system, BHEL supplied the transformer, engines and a number of panels, amongst other things. The overall system test, integrating the parts supplied by Strukton and BHEL, took place in 2009 at BHEL's test site at the Bhopal establishment.

In the second quarter of 2010, BHEL received a 'Letter of Intent' for an order of 26 sets from Indian Railways (IR). IR is expected to place this order with BHEL during the third quarter of 2010. Within a month of receiving the order from IR, BHEL will place an order with Strukton Rolling Stock. The overall delivery relates to 225 sets consisting of on-board electricity supply systems, traction and TCMS: 10 complete built-up (CBU) sets, 15 semi-knocked down (SKD) sets and 200 complete knocked down (CKD) sets.

Further details

Bharat Heavy Electricals Ltd. was looking for a supplier that was willing to transfer knowledge related to the commissioned products as well. As such, the company hoped to increase its own knowledge of the products sufficiently to be able to maintain the equipment throughout its lifecycle. At the end of 2007, the intended cooperation between BHEL and Strukton was established and signed in the form of a Business Sharing Agreement. The agreement established all the details and structure of the order to supply a total of 225 sets of ACEMU systems. Part of the assignment involves a number of BHEL employees actively participating in the design, start-up and system test phases. Employees from BHEL and officials representing the body responsible for approval within Indian Railways (RDSO) will also be present when testing the different modules and systems.

