



## Trenitalia Presents „Rock“ EMU Mock-Up

On 15 September 2017 Hitachi Rail Italy and Trenitalia invited handicapped persons' associations and train users to the **Hitachi factory in Pistoia to evaluate the full-size mock-up of one of the new double deck EMUs to be built for middle-distance services in Italy** (see R 5/16, p. 8). In line with Trenitalia's current policy of music/dance type-themed train brand names the Hitachi-built EMUs are to be branded „Rock“.

Two basic versions of the „Rock“ EMUs are being built, the four-car Class ETR 421 and five-car Class ETR 521, work having started in January 2017 at Pistoia. The trains feature a new exterior design, while **the passenger accommodation will be brightly illuminated, comfortable, and easily accessible, with large windows** enabling good



views of the passing scenery. The wheelchair harness points will be located close to the entrance doors, and the latter will be fitted with retractable steps and ledges to bridge the horizontal and vertical gaps between train floor and platform. Capacious luggage storage spaces will be provided, together with facilities for bikes.

In October 2017 the mock-up started on a tour of the main Italian cities which the „Rock“ EMUs will eventually serve. From 7 October it shared space in the Piazza Maggiore in Bologna with the mock-up of the Coradia Stream „Pop“ EMU (see R 4/16, p. 13), being open to the public from 9 to 12 October. Next stop was Torino, from 3 to 8 November.

Hitachi Rail Italy has now completed its final batch of Vivalto double deck carriages, destined for push-pull services powered by Class E.464 electrics. The Vivalto story started around the turn of the millennium, when an initial batch of 450 carriages was built by the Corifer consortium, formed of four Italian manufacturers. The framework contract for



the second batch of 350 was awarded to AnsaldoBreda in 2010. In November 2013, March 2015 and November 2015 options were taken up for 356 more carriages, the contract then being worth 987 million EUR.

The work involved the AnsaldoBreda factories in Reggio Calabria and Pistoia (bodyshells, final assembly, fitting out and testing), and Napoli (most of the bogies). The second batch, including options, comprised in all 126 driving trailers and 580 intermediate trailers.

The final carriage of all rolled off the production line on 11 July 2017.

Known also as CDPTR (Carrozze Doppio Piano Trasporto Regionale) the Vivalto carriages are generally formed into rakes of between three and five intermediate cars, plus a driving trailer. Six-car rakes have a seating capacity of 725, and can carry up to 575 standees. With Class E.464 haulage top service speed is 160 km/h, the maximum for which the stock is designed.

**Hitachi Rail Italy**

In addition to the new „Rock“ EMUs, the late June 2016 framework contract under which these were ordered also anticipated the ordering of 50 DMUs from Stadler. **Trenitalia** then said that it would have to further evaluate Stadler's offer, and negotiations subsequently ground to a halt. In the end Trenitalia decided to announce on 16 May 2017 in the Official Journal of the European Union that it was planning to buy **between 70 and 135 new DMUs**, the contract to include 15 years of maintenance and the target price to be no higher than 1.6 billion EUR. It is possible that the new DMUs might be useful in Sicilia, Toscana and Sardegna, where there are still some elderly DMUs in service, approaching retirement age, and extensive non-electrified networks. By late October 2017 Trenitalia was preparing to formally complete the tender.

**Jan Dvořák**



## „Buy America“ But With European Roots

Siemens serves the whole of the USA and Canada from its Sacramento factory in California (see R 2/17, pp. 42-50), and is the only USA rail industry manufacturer which nowadays produces welded bogie frames. At present, Class SC-44 Charger diesel locomotives and Class ACS-64 AmtrakCitiesSprinter electrics are being built at Sacramento. Both have been designed completely to meet US standards but share a large number of technical features with the European Vectron family. In March 2014 the Ministries of Transportation of Illinois, California, Michigan, Missouri and Washington all signed a framework contract for up to 257 SC-44s.

SEPTA (Southeastern Pennsylvania Transportation Authority) awarded Siemens a contract for 13 ACS-64s, together with an option clause for five more (see R 6/15, p. 18). **The first of these is now being completed - the left-hand photo shows 901 on 18 October 2017.** The locomotive is to be finished in November 2017 and will be passed over to SEPTA on leaving the factory, to arrive in Philadelphia in December. Rigorous Type and Acceptance Testing will then take place prior to this machine being formally handed over in April 2018. Orders have now been placed for two of the five locomotives in the option. All 15 Class ACS-64s are scheduled for delivery by November 2018.

Like Siemens, Stadler is steadily penetrating the USA market. The Swiss company is currently building eight five-car FLIRT DMUs for TEXRail in Fort Worth (see R 4/16, p. 17). These will be equipped with power modules housing two 520 kW Deutz diesels with electric transmission, and are scheduled to enter service in December 2018 on suburban services between downtown Fort Worth and Terminal B of the Dallas/Fort Worth International Airport. **The right-hand photo, taken on 19 October 2017 shows three cars of these FLIRT DMUs, from left to right these being front end cars A and B of the second train and car B of the fourth train.** The first FLIRT of the batch to be completed was exhibited between 9 and 11 October at the APTA Expo in Atlanta.

These are the first trains for the USA that Stadler has built under the Buy America Act. They are being built in a factory leased from the Utah Transit Authority, where there is a workforce of 120, however Stadler is now putting

down its own roots in the USA. On 13 October 2017, not far from its current location and the Salt Lake International airport, the foundation stone of a completely new, Stadler-owned factory was laid. This will cover an area of 250,000 m<sup>2</sup>, and will eventually have a workforce of around 1,000.

The decision to build this factory was taken in August 2016, soon after Stadler was awarded a 551 million USD contract by Caltrain of Silicon Valley for an order of 16 double deck six-car KISS EMUs, the agreement including an option clause for another 96 KISS cars (see R 4/16, p. 17). Following the presidential elections, there was a degree of financial uncertainty regarding the federal funding of this contract, but eventually Caltrain managed to secure the necessary funding for the new trains. It is to be hoped that Stadler is now able to build on these foundations, and win further contracts from other operators.

**Jürg D. Lüthard, Jan Dvořák**  
**Photos: Jürg D. Lüthard**

