

## **INNOTRANS 2018, ROCK: THE NEW GENERATION OF REGIONAL TRAINS**

Berlin, 18th September 2018

Rock is the new high capacity regional train designed and manufactured by Hitachi Rail Italy for Trenitalia.

Rock is the result of the best Italian and Japanese technologies of Hitachi Group, it is completely assembled in Italy and follows up twenty years of experience in the manufacturing of over 200 EMUs and 700 passenger cars, all double decker, presently in service on the Italian rail network. It is capable of reaching 160 km/h max speed, with an acceleration of 1.10 m/sec<sup>2</sup> and can transport 1400 passengers with 700 seats.

### **Rock and environmental sustainability**

The choice of materials with high levels of recyclability (over 95%) and renewability, as well as the use of recycled raw materials and the low level of energy consumption, give the Rock train a particular environmental friendly character.



The architecture of the new Trenitalia commuter train is characterized by light alloy cars, distributed power, i.e. traction motors located along the whole train and not only at the ends, and wider spaces for the passengers.

Rock performances are unique on the market in terms of weight per passenger, high transport capacity per length unit, low energy consumption per passenger/km (30% less with respect to the more recent trains in service in Italy) and guarantees high flexibility by offering diversified solutions to meet specific regional transport requirements with the same type of train. The LED internal and external lighting system, the innovative air conditioning system, the Green Drive function (information system to the driver) and Smart Parking reduce energy consumption to the lowest possible level.

These technologies allow to lower the impact on the environment to only 5 grams CO<sub>2</sub>eq, the smallest environmental impact of any mass transport means in Italy at present.

### **Rock: more comfort for the commuters**

The Rock train has been especially conceived to enhance the travel experience of passengers, with new generation ergonomic seats to guarantee high comfort levels and more space for the legs, with the same distance between the seats. Rock has large glass surfaces of the compartments, with wider windows to maximize transparency to the outside. The comfort of passengers is also assured by numerous devices on the train, such as bike areas accessible directly from the vestibule, a dedicated nursery area, babies changing mat in the toilette and WI-FI.

### **Rock: technological innovation for better accessibility**



The Rock is a generation ahead of the double deck trains presently in service in Italy. The technological innovation of its components, the optimal accessibility in accordance with the most recent EU Interoperability Technical Specifications for Persons with Reduced Mobility (STI PMR), following which we have realized the lowest boarding gap of the whole Trenitalia fleet (for the benefit of all passengers, not only those on wheelchair). The positioning of the traction equipment on the train roof allows larger spaces in the interiors to be completely dedicated to the passengers.

Wheelchair areas are located immediately near the boarding doors, to reach them easier.

### **Rock: video surveillance and more information to the commuters**

Rock is equipped with a closed circuit video surveillance system, a passenger information system with monitors twice as large as the ordinary ones, a person counting system and dedicated cameras installed by all boarding doors.