



Customised solutions based on a modular system are one of the strengths of PFT. The builders of a new railway line for ICE trains have profited from the well-matched machine combination of PFT MULTIMIX and PFT ZP 3 V.

PFT TECHNOLOGY

Keeps ICE Trains on a Safe Track

In a very difficult construction project in South Germany, PFT managed to “keep things moving” once again. The consortium that is building the northern section of a new railway line for Inter City Express (ICE) high-speed trains between Nuremberg and Ingolstadt had a special task for PFT and the PFT construction machinery trader Hess, based in Hemau. The problem which Holger Schmidt, graduate engineer and supervisor of the consortium’s overground works, had to solve was how to fill the joints of 4,000 precast concrete elements used in tracklaying under high time pressure.

Tracklaying under Time Pressure

When working for a consortium of this kind, the greatest difficulty is usually the fact that each job has to be completed under enormous time pressure, so that a trouble-free interplay of all parties is ensured. In this case, the joints of 4,000 precast concrete elements used for the railway tracks

The power and water supplying units, the grouting material and the PFT machine combination were transported along the track on a lorry. This ensured an efficient joint filling procedure.



had to be filled in an efficient, economical and time-saving procedure in one night shift.

The only practicable solution that would guarantee optimal effectiveness was to mount the mixing and pumping system for the filling material on a vehicle.

To put this idea into practice, Michael Hess, the PFT construction machinery trader, and Otto Iff, the PFT Technical Consultant for Northern Bavaria, suggested moving the mixing and pumping system along the tracks on a lorry, together with a supply of material bags, to ensure an efficient operation.

Machine Combination Works Successfully

The mixing unit used was a PFT MULTIMIX com-

The remote control on the handle of the PFT ZARGOMAT glue gun allows the user to easily switch the material flow from the PFT ZP 3 V conveying pump on and off.



pulsory mixer. It made a homogeneous mixture of BETEC 180, a cementitious, microsilica-modified grouting material based on blast furnace cement. The mixture was pumped by a PFT ZP 3 V conveying pump (5.5 kW). The PFT MULTIMIX mixed approx. 80 litres of material and fed it to the PFT ZP 3 V. This machine pumped the material to the joints of the track structure through a hose, 35 mm in diameter and 5 m in length, at a rate of approx. 10 litres per minute. The material flow was controlled with the aid of a PFT ZARGOMAT glue gun and a lance. This allowed the workers to properly, quickly and efficiently fill the narrow gaps in the finished concrete elements. ■