Pipe throughpress process for tele-energy in Schieder-Schwalenberg, Germany

We don't believe in empty talk – we show you how to get things done. This alone has made PFT a leader in its own branch. PFT's northern Area Sales Manager Klaus Uffrecht in action.

Müller GmbH is a firm in Barntrup, Germany, that specializes in cable and pipe installation processes. It has a workforce of 50 employees. Walter Müller, who founded the company in 1984, now believes in joint management. He shares the position of Chief Executive with his son Frank Müller, and Hartmut Meier.

Müller GmbH carried out a large pipe throughpress project for conveying long-distance energy in the last few months that was located in Schieder-Schwalenberg, Germany. Pipe throughpress is a process that is used in the case of pipe installations where they cross many unseen underground obstacles. The pipes thus have to be pressed under the obstacles.

During this project, a large diameter pipe was pressed into the soil at first. Several smaller pipes for tele-energy conveyance were then drawn through it. The installation also included empty tubes for subsequent electrical wiring inside the large diameter pipe.

It was a challenging task to inject Dämmer® into the hollow gaps between the smaller pipes and tubes. Until this moment it had always been a major logistical exercise to place an order for the injection material at the mixing plant, have it delivered by mixing truck, and then mount the pressure pump on the job site.This was a process that could hardly be efficient or profitable.

Since the summer of 1998 Müller GmbH has developed a new process with distinct advantages. Now the mixed material comes from the company AZ BUT, Ennigerloh, and it is Dämmer® ! PFT dealers Menka & Krüger from Detmold provide support services whereby the mixing, injecting and pumping stages can be carried out directly at the job site. The required pressure is also produced on the job site. This easy solution was provided by the PFT MONOJET 3.35 machine that also uses an agitator, the ROTOMIX, for lump-free mixing of the very light bagged material. Apart from that it also uses the pumping system D 8-1.5 with a 35 mortar hose.

Technical Data	**PFT MONOJET 3.35**
Conveying capacity*	approx. 6-55 l/min
Conveying pressure*	approx. 30 bar
Conveying distance*	up to 50 m
Drive	5,5 kW
Power supply	400 V rotary current
Water connection pressure	2.5 bar min
Compressor performance	0,9 kW, 4 bar, 0,25 Nm³/min
Filling height	1.210 mm
Dimensions (length/width/height)	1.200/720/1.370 mm
Total weight	183 kg

* depending on type of pump, mortar quality, consistency and mortar hose diameter.

The initial pipes pressed through following this process (approx. ø 80 mm) were, firstly, a 42 m long advance pipe under a railway track. The second one was a 36 m long stretch under a road.

An advance pipe (ø 1.20 m) with a length of 80 m was pressed across the bed of the river Emmer at a depth of 7 m. There was no running water connection on this job site. Water was supplied from a 1.000 liter tank that was constantly refilled with water from the river using the PFT water pump AV 1.