

Pressure grouting casting mortar in a steel plant

The heat is on wherever steel is manufactured. Exposure to high temperatures when working with molten steel

Renewing the taphole has always been very strenuous and time-consuming. The worn-out taphole must be

for improving this process - that filling via a PFT machine is faster and more effective, and can even spare work

light, easy-to-operate mixing pump impressed the steel workers and reduced the taphole laying time at the



The PFT MINIJET has now undergone its "baptism by fire" during its application in steel plant. The task: Pressing casting mortar on a converter.



Pressure grouting is performed mechanically via the attached mortar hose.

cause a great deal of strain for the people who do this work, but the materials used must hold up under all circumstances. This extremely strenuous, repetitive activity can now be made much more tolerable: Renewing worn-out tapholes

One of the many production steps on the road to creating finished steel out of iron ore consists of purifying the raw iron generated in a blast, thus generating raw steel. This is done in a pear-shaped container, the converter, by injecting carbon dioxide. After this process is completed, the converter is tipped so that the melted material can flow through a pipe, the so-called taphole, into the transport container, the steel casting ladle.

This pipe is a wearing part which must be regularly replaced.

rebored and replaced by a new taphole set. Casting the new taphole always proves to be especially unpleasant. In this process, the steel worker must stand in front of a 1200 °C converter and use a long lance to transport a special casting mortar into the crack between the taphole set and the hot converter wall. In the steel plant Krupp Hoesch Stahl AG in Dortmund-Hörde, this strenuous, unpleasant work has been made significantly easier. The key information

material – came from the supplier of the casting mortar Runbinit 800, Didier-Werke AG.

PFT consultant Oskar Buchhorn solved the problem with the PFT MINIJET 3.34, the newest and smallest continuous mixing pump in the PFT product line. A mortar coupling was attached to the new taphole so that the filling can be performed mechanically. The PFT MINIJET mixes, pumps and presses the material in one work phase. The small,

converter. The PFT MINIJET has become indispensable in a very short time in the most varied building and restoration tasks, whether in interior plastering, exterior plastering or foundation work, because it can be easily transported to all locations and is easy to operate. It has now even survived a "baptism by fire" in the steel industry!

Technical data:	PFT MINIJET 3.34
Pumping capacity:	20 l/min
Operating pressure max.	30 bar
Drive:	4 kW
Electrical connection:	400 V rotary current
Connection cable:	5 x 2.5 mm ² , 16 A
Rotary speed:	375 U/min
Compressor:	0.9 kW, 0.26 m ³ /h, 1.5 bar
Water connection:	3/4"
Water pressure:	2.5 bar
Dimensions (L/W/H):	1000/700/1270 mm
Filling height:	1130 mm
Total weight:	162.5 kg

