

# PRISMA

[www.pft.de](http://www.pft.de)

- 230 V the PFT RITMO convinced
- PFT SWING II for pasty finish coat
- Cultural monument with PFT G 4 restores



WE KEEP THINGS MOVING



Georg Hildebrand has added a new PFT machine, the small 230 V mixing pump

PFT RITMO, to his already impressive machinery. Its easy transport, uncompli-

cated handling and neat spray pattern convinced him on the spot.

## Extending the System by a PFT RITMO



With 10 PFT G 4 mixing pumps and 9 PFT SILOMAT pneumatic conveying systems, the stuccoing business HiWo, based in Wollbrandshausen near Göttingen (Central Germany), is optimally equipped for a large variety of jobs.

Georg Hildebrand, the proprietor, has worked with PFT equipment since the establishment of his firm in 1982. In the course of the years, he has purchased a large number of machines to support the 15 to 20 workers of HiWo.

### PFT G 4 for Small-Scale Jobs?

Recently, Mr. Hildebrand has realised more and more often that the use of a PFT G 4 for small-scale jobs will be uneconomical. In many cases, the problem was simply the lack of three-phase current on small building sites. To be able to execute these orders, HiWo needed a mixing pump supplied with 230 V alternating current.

Rainer Friedrich, an employee of the local PFT construction machinery trader Kurt

König, based in Einbeck, knew that Mr. Hildebrand was looking for such a small machine. After the launch of the PFT RITMO at the BAUMA 2004 trade fair, Mr. Friedrich informed his customer HiWo about this new 230 V machine. He made an appointment with Mr. Hildebrand to demonstrate the PFT RITMO directly on a job site of HiWo and field-test the suitability of the "small one" for various applications.

### Systematic Extension of the Machinery

Mr. Hildebrand was already pleased by the easy transport of this small machine and its uncomplicated handling on the building site. After brief theoretical instructions, he connected the PFT RITMO to a 230 V socket. Mr. Hildebrand immediately used the spray gun himself, and after a short time it was clear that he would straight away keep the machine on the building site.

The PFT RITMO has been a clever and systematic addition to Mr. Hildebrand's PFT machinery. Now HiWo can easily carry out

rehabilitation projects and small-scale plastering jobs using ordinary 230 V alternating current. ■

Thanks to the new PFT RITMO, small-scale jobs, such as the plastering of this garage and carport, will continue to be profitable.





The handy PFT SWING II conveying pump proved that even small machines can be extremely powerful. It pumped a pasty finish plaster to the fourth floor of a building.

## Pumping Pasty Finish Plaster with the **PFT SWING II** Conveying Pump

There are more than 60,000 PFT G 4 users worldwide. One of them is Wallschläger GmbH, a painting business established in 1996 and based in Fürth (South Germany). Robert Wallschläger, the manager, has worked with this PFT mixing pump for three years. The PFT G 4 has been very helpful in many stuccoing and plastering jobs. Since Mr. Wallschläger had always received excellent support from the local PFT partner trader Gebr. Mayer, he asked Mr. Kriegs, a technician of Gebr. Mayer, for help with his latest project.

### Looking for a Conveying Pump

Mr. Wallschläger had been charged with the application of a finish coat to a block of flats in Feucht, near Nuremberg. Since the material to be used was a pasty Brillux silicate plaster, a mixing pump was unsuitable for this job: It was not necessary to

mix a dry material with water and pump this mixture - which is the speciality of the PFT G 4.

For this application, Mr. Wallschläger just needed a conveying pump which would pump the pasty material to the fourth floor.

Mr. Kriegs offered Wallschläger GmbH a PFT SWING II. This compact conveying pump, supplied with 230 V, is the ideal machine for the application of spray plasters, sealing slurries and numerous other materials up to 3 mm in grain size.

The operating principle of the PFT SWING II was quickly explained: The silicate plaster, delivered in buckets, was put in the 50 litre material hopper, fed to the mortar pump by the worm shaft and finally applied to the walls with the aid of a hose and a spray gun.

### Optimal Equipment for the Job

For Wallschläger GmbH, the conveying pump was equipped with a PFT SWING C 4 2 pump unit, which permits conveying capacities between 0.4 and 8 litres per minute. On the job site in Feucht, a 1 inch material hose with high suction pressure couplings, 22.5 metres in total length, was used. The silicate plaster was conveyed as far as approx. 23 metres at a mortar pressure of 12 bar.

Now that he has purchased the PFT SWING II, Mr. Wallschläger is no longer just a satisfied PFT G 4 customer; he will also profit from the help of a reliable conveying pump in a large variety of jobs. ■

The pasty Brillux silicate plaster, 2 mm in grain size, was easily applied thanks to the PFT SWING II conveying pump.





After years of manual work, the building firm Jänsch, based in Braunschweig (North Germany), gets to know the advantages of a plastering machine.

## Changing over to Machine-Application with a PFT RITMO



Thanks to the bag opener and the low filling height of the PFT RITMO, the bags were quickly opened and the material was neatly fed to the machine.

The construction firm Jänsch was established by Hans Werner Jänsch in 1998. In the field of building construction, the business specialises in new buildings, rehabilitation projects, heat insulation systems, extensions and alterations. About six years after the establishment of his firm, Mr. Jänsch decided to look for a suitable plastering machine that would help him with as many jobs as possible.

"Since competitive pressure is increasing, it is important to meet the schedules of construction orders. And usually, this cannot be achieved without the help of machines. Besides, a good machine will also make work easier for my employees," says Mr. Jänsch. For these reasons, he finally resolved to buy a plastering

machine.

### The Right Decision - PFT RITMO

Mr. Jänsch asked his local construction machinery trader Kurt König, Braunschweig, to give him an overview of the most popular plastering and conveying machines. Mr. Wendehake, an employee of Kurt König, presented the PFT product range to Mr. Jänsch. And to provide even more extensive information, Kurt König also invited Mr. Jänsch to the BAUMA, the world's largest construction machinery fair, in Munich.

At the PFT stand, Mr. Jänsch experienced for the first time a practical demonstration of PFT's smallest mixing pump, the PFT RITMO. After receiving professional advice, Mr. Jänsch made an appointment with Kurt König, concerning another demonstration of the machine on one of his building sites. The job to be done was the application of an exterior plaster to the walls of a vocational school.

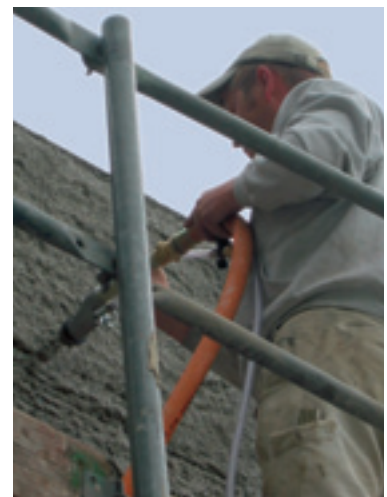
### The First On-Site Test

The first material applied with the aid of the PFT RITMO was an "MEP leicht" ce-

ment-lime plaster. Mr. Wendehake, the technician of Kurt König, explained all tips and tricks that would be relevant in connection with the use of this machine to Mr. Jänsch and his workers.

After they had used the PFT RITMO themselves and gained a first-hand experience of its practical advantages, the machine simply had to be purchased!

Since every end customer is entitled to a free, initial on-site maintenance service on the day of the first operation of a new PFT machine, it goes without saying that Mr. Wendehake immediately carried out this service and then left the machine directly on Mr. Jänsch's job site. ■



The PFT RITMO was ideal for the application of the "MEP leicht" cement-lime plaster used.



The restoration of Gravenhorst Abbey, near Hörstel (North Germany), showed how flexibly a PFT G 4 mixing pump can be used on a large building site.



## Restoring a Cultural Monument with the PFT G4

The charitable society "Förderverein Kloster Gravenhorst e.V." has undertaken the task of preserving Gravenhorst Abbey, built in 1256, as an important cultural monument in the region of Münster.

### Medieval Masonry

The company charged with the restoration of the natural stone masonry by the District of Steinfurt was Varelmann & Zekorn Bau GmbH, based in Hörstel. This building firm, specialising in rehabilitation and restoration, was confronted with the problem that very bad connections and large cavities between the inner and outer shells of the masonry impaired the stability of the walls under compressive load. The task to be performed by Varelmann & Zekorn was to consolidate the walls and restore the fa-

çade in the historical style.

To reinforce the walls, the inner and outer shells were connected by means of stainless steel anchors, i.e. by drilling 50 mm holes and inserting a stainless steel bar with a washer and a nut in each hole. The anchors were arranged in a grid pattern with a spacing of 80 cm.

### Using the PFT G 4 Mixing Pump

The drill holes had to be pressure-grouted after the anchors had been fixed. The workers of Varelmann & Zekorn used their PFT G 4, purchased in 1995, to inject the grouting material, a highly sulphate-resistant trass-lime mortar into the holes. The large cavities in the masonry were also filled with the aid of the PFT G 4.

Finally, the PFT G 4 was used to apply the historical-style plaster, a shell-lime mortar, which served as an exterior plaster and as a surface-accompanying slurry.

Mr. Varelmann was very satisfied with the solution to the problems of this restoration job - and with his PFT G 4. The mixing pump had once again proved its high



The drill holes for the stainless steel anchors, serving to reinforce the masonry, were mechanically grouted.

flexibility. Filling, grouting, injecting, plastering - all these tasks had been performed with one machine. Another great advantage of the high versatility of this machine was the fact that Mr. Varelmann had saved considerable amounts of money, because it had not been necessary to rent or buy additional equipment. ■



The PFT G 4 mixing pump proved its flexibility: During this restoration job, it was used to pressure-grout drill holes, fill cavities and apply a historical-style exterior plaster.



Grouting the joints of a paved square 4,300 m<sup>2</sup> in area was a demanding task.

But the machine combination of a PFT MULTIMIX compulsory mixer and a

PFT N 2 V conveying pump kept things moving smoothly, on Opera Square

in Hannover (North Germany).

## Opera Square Freshly Jointed



54 tonnes of pavement jointing mortar, 44 pallets altogether, a huge pile of 2,160 bags - this was the quantity of jointing material that Piegsa Strassen- und Tiefbau GmbH, a civil engineering company established in 1978 and based in Wunstorf, had to apply to the square in front of the Opera House in Hannover, approx. 4,300 m<sup>2</sup> in area. Erhard Piegsa, the manager, knew that it was impossible to mix and apply the material by hand. Besides, a tight schedule had to be met on this building site.

Since the material manufacturer VERGUSIT®, based in Bern (Switzerland), recommended machine-applying the pavement jointing mortar PFM 25, Mr. Piegsa asked the construction machinery trader Kurt König Baumaschinen, Hannover, about the suitable equipment. The only prerequisite for the use of the VERGUSIT® product was that mixing times of at least 3 minutes had to be ensured. Another recommendation from the

The pavement on Opera Square in Hannover, approx. 4,300 m<sup>2</sup> in area, was freshly jointed by the civil engineering firm Piegsa.



manufacturer: The homogeneous and lump-free mixture should be poured onto the pre-wetted pavement, and the joints should be filled with the aid of a rubber squeegee - a lot of work, considering that 4,300 m<sup>2</sup> had to be treated in this way.

Hence, Mr. Brandt, a representative of König Baumaschinen, suggested using a PFT MULTIMIX compulsory mixer, which permits a mixing time of 3 minutes, together with an additional machine, the PFT N 2 V conveying pump, which helps to apply the pavement jointing mortar and convey it over distances of up to 35 metres. With this combination and a suitable hose, the mixture could easily be supplied to the joints.

Mr. Piegsa rented the PFT MULTIMIX and the PFT N 2 V used on Opera Square in Hannover from König Baumaschinen. Mr. Brandt briefly instructed the two responsible workers of Piegsa Strassen- und Tiefbau GmbH how to use the machines, and then the jointing work began.

Using well-matched equipment:  
a PFT MULTIMIX compulsory mixer,  
combined with a PFT N 2 V conveying  
pump.

One man filled the compulsory mixer with the material and adjusted the water supply. After a mixing time of approx. 3 minutes, he opened the flat slide at the bottom of the PFT MULTIMIX container and fed the mixture to the material hopper of the PFT N 2 V. The N 2 V pumped the prepared material to the second man, who was up to 35 metres away. This man uniformly grouted the pavement joints with the mortar.



Thanks to the use of this open system, consisting of a compulsory mixer and a conveying pump, the Opera Square was finished in a very efficient way within a few days. ■

New applications require new equipment.

This is why a new family of pump units de-

signed for the PFT RITMO mixing pump

has been added to the PFT range of rotors

and stators.



## A New Pump Family for the PFT RITMO

Since the launch of the PFT RITMO mixing pump, the number of satisfied users and, as a result, the variety of applications has continuously increased.

A new and important field of use of the PFT RITMO mixing pump is the application of smoothing compounds and thin coatings.

For optimal efficiency in standard applications, pumping capacities of approx. 3–6 l/min, depending on the material and especially on the layer thickness, are needed.

The standard pump unit of the PFT RITMO, the B 4–1.5 L, features a volumetric flow rate of approx. 10.2 l/min at 400 rpm. This pumping capacity is too high for the application of smoothing compounds or thin coatings. Therefore, PFT has developed pump units featuring reduced flow rates: the A-pump family.

This family includes the two pump units A 2–2.5 L and A 3–2 L. The “small” pumps have capacities of approx. 2.1 l/min at 400 rpm (A 2–2.5 L) and approx. 4.3 l/min at 400 rpm (A 3–2 L).

### Advantage: Frequency Converter

The frequency converter integrated in the PFT RITMO mixing pump permits a continuous control of the pump drive and makes the machine extremely variable.

Thanks to this method of speed control, the conveying capacity for the mixing of powder material can be varied between approx. 2 and 14 l/min, depending on the pump unit used. The capacity can even be reduced to less than 1 l/min for ready-mixed materials, e.g. paints or smoothing compounds.

### Long Service Life Thanks to High-Quality Materials

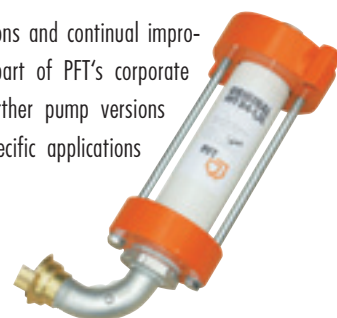
As for all PFT pumps, the tried and tested PFT rubber mixture, whose wear characteristics have been optimised in the course of decades, is also used for the stators of the B- and A-pumps.

The range of PFT RITMO rotors: The B 4–1.5 L rotors in chilled cast iron and stainless steel and the two stainless steel A- pump rotors.

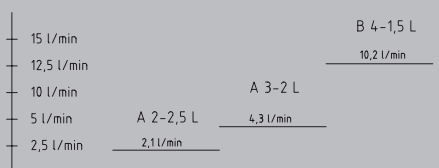


The PFT rotors are standardly made of chilled cast iron with a high content of chromium carbides (quality: W7S). The new feature of the B- and A pumps is the fact that the basic body of the rotor is made of stainless steel (1.4301) and its surface is coated with hard chromium. This optimises the wear resistance of the rotor and ensures a long service life. At the request of PFT's customers, the standard rotor B 4–1.5 L will be offered in both stainless steel and standard W7S quality.

Since innovations and continual improvements are part of PFT's corporate philosophy, further pump versions tailored to specific applications will follow. ■



The pump unit B 4–1.5 L, complete with flange, is standardly included in the basic equipment of the PFT RITMO mixing pump.



This chart shows the reduced volumetric flow rates of the new A pumps.



## Our Smallest Mixing pump PFT RITMO

The compact One-Person-Mixing pump with 230 V alternating current for spraying and laying on spray plasters, levelling compounds, dispersion paints and much more besides to 3 mm of granulation.



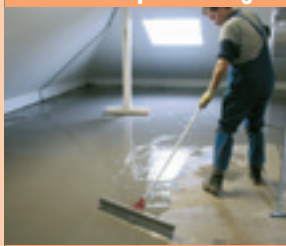
**Betokontakt**



**Dispersion paints**



**Interior plastering**



**Liquid filler**



**Restoration mortar**



**Levelling compounds**

## They would like to experience more to certain topics? No Problem!

Mark, over which topics you would like to experience gladly more.

Send us this back as fax:

Fax: +49 9323 31-770

- |   |   |
|---|---|
| <input type="checkbox"/> PFT RITMO      | <input type="checkbox"/> Ask for establishment of contact |
| <input type="checkbox"/> PFT G 4        | <input type="checkbox"/> Interest on                      |
| <input type="checkbox"/> PFT G 5        |   |
| <input type="checkbox"/> PFT HM 2002    |   |
| <input type="checkbox"/> PFT SWING II   |   |
| <input type="checkbox"/> PFT N 2 FC 400 |   |
| <input type="checkbox"/> Total brochure |   |

## Prices 2005

### We can also differently

Against the general trend it created PFT - to 01 January 2005 many products in the price to lower! Naturally also some price increases are inevitable by the risen stealing and energy costs. However many prices could be reduced by more rational manufacturing methods and more favorable purchase.

We pass cost savings on gladly to you - our faithful PFT customer! Inquire the new prices with its PFT specialist dealer!

We wish you good business for 2005!

Your PFT-team

#### Imprint:

© Copyright by:  
Knauf PFT GmbH & Co. KG  
P.O. Box 60, 97343 Iphofen  
Germany

Editorship: Knauf PFT GmbH & Co. KG  
Composition, Layout: StieberDruck

All rights and technical changes reserved. We provide guarantee as far as faultless and proper finishing of our machines is concerned. Figures given in relation to output, equipment and performance are based on experience and can vary in case of changing circumstances. Furthermore, the instructions of the material/mortar manufacturers must be observed. Alterations, reprints and photomechanical reproductions, even in extracts, require the permission of Knauf PFT GmbH & Co. KG.

© Copyright by PFT Iphofen. Printed in Germany.