



PAUL FORRER AG USES VANGUARD® BATTERY PACK TO POWER PIONEERING PUSH ROD SYSTEM SOLUTION

Paul Forrer AG has selected Briggs & Stratton's Vanguard 48V Fi5.0kWh lithium-ion battery pack to power a highly innovative steerable rod pusher, delivered in collaboration with DWL Baumaschinen AG.

Developed by DWL Baumaschinen AG, the P12 rod pusher is an industry first. Incorporating bespoke carbon cylinders manufactured by Paul Forrer AG, the unit weighs just 42kg; half the weight of comparable devices, but with the same performance.

"The main reason for developing the steerable rod pusher was to reduce workload, time and costs when laying pipelines," explains Philippe Leuzinger, Engineering Team Leader at Paul Forrer AG.

"With the P12, it's now possible for pipelines to be laid under asphalted roads, as well as under other pipelines, without having to tear up the roads or separate the pipelines. This saves a lot of time and money when installing new connections, for example, by existing buildings."

The P12 push rod system consists of two units – a rod pusher unit and a hydraulic power unit, which was developed by Paul Forrer AG. The integrated E-Powerpack comprises the Vanguard 48V Fi5.0kWh lithium-ion battery and an electric motor, with a peak power of 9kW.

"The reason why we chose Vanguard battery power over conventional engine power is because the P12 is mainly used in residential areas where low emission operation is required. Battery operation offers enormous advantages in terms of noise and exhaust fumes compared to combustion engine-fuelled alternatives, enabling machines to be used in inner cities where high emission standards apply or even indoors," explains Fabian Mori, Technical Consultant at Paul Forrer AG.



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THE REASON WHY WE CHOSE VANGUARD BATTERY POWER OVER CONVENTIONAL ENGINE POWER IS BECAUSE THE P12 IS MAINLY USED IN RESIDENTIAL AREAS WHERE LOW EMISSION OPERATION IS REQUIRED. BATTERY OPERATION OFFERS ENORMOUS ADVANTAGES IN TERMS OF NOISE AND EXHAUST FUMES COMPARED TO COMBUSTION ENGINE-FUELLED ALTERNATIVES, ENABLING MACHINES TO BE USED IN INNER CITIES WHERE HIGH EMISSION STANDARDS APPLY OR EVEN INDOORS.

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Fabian Mori
Technical Consultant at Paul Forrer AG

Briggs & Stratton's Vanguard-branded battery power solutions are designed with power and durability in mind. They are dust- and water-resistant and can endure extreme operating conditions and being pressure-washed. Meanwhile, the integrated battery management system, which is responsible for thermal runaway prevention and protection within each pack, monitors voltage, current, resistance and temperatures. The compactness of the 48V 15.0kWh Vanguard lithium-ion battery also means the overall design of the P12 is compact. As a result, it can be used in confined spaces, such as in between buildings within built up inner cities.

Developed over a period of five months, the P12 unit has been regularly put to the test with the help of Briggs & Stratton's battery experts, and has already proven itself time-and-again across the construction sector.

“The system is not just a further step towards the electrification of construction machinery, but is capable of delivering widespread advantages in relation to cost, time and emissions,” concludes Philippe Leuzinger.

“As a result of choosing Briggs & Stratton | Vanguard as our preferred battery supplier, the P12 has an extremely reliable, robust and powerful battery system on its side. During our extensive testing, uninterrupted directional drilling and core

drilling could be carried out for an entire day after just one battery charge. What's more: Briggs & Stratton's Vanguard power experts were competent partners prior and during the application as well as during the testing phase."

Paul Bramhall, Director - Electrification & Rental EMEA at Briggs & Stratton added: "The P12 push rod system powered by the Vanguard 48V Fi5.0kWh Lithium-ion battery is truly a pioneering project for the laying of pipelines. It not only enables pipes to be laid without having to tear up the roads or separate the pipelines, but thanks to the battery, the work can be undertaken while eliminating the noise and exhaust fumes associated with comparative products in the market. Furthermore, our robust diecast enclosure is protected against water and debris, ensuring optimal performance in any environment."



For details about the P12 push rod system, [visit the Paul Forrer AG Infopage](#). To see it in action, [watch this video](#).

For more information about Briggs & Stratton's Vanguard power solutions, visit <https://www.vanguardpower.com> or contact the Vanguard experts by sending an email to vanguardpower.emea@basco.com.

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AS A RESULT OF CHOOSING BRIGGS & STRATTON | VANGUARD AS OUR PREFERRED BATTERY SUPPLIER, THE P12 HAS AN EXTREMELY RELIABLE, ROBUST AND POWERFUL BATTERY SYSTEM ON ITS SIDE. DURING OUR EXTENSIVE TESTING, UNINTERRUPTED DIRECTIONAL DRILLING AND CORE DRILLING COULD BE CARRIED OUT FOR AN ENTIRE DAY AFTER JUST ONE BATTERY CHARGE. WHAT'S MORE: BRIGGS & STRATTON'S VANGUARD POWER EXPERTS WERE COMPETENT PARTNERS PRIOR AND DURING THE APPLICATION AS WELL AS DURING THE TESTING PHASE.

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Philippe Leuzinger
Engineering Team Leader at Paul Forrer AG

CONTACT US NOW

**TO FIND OUT HOW VANGUARD CAN HELP
YOU POWER YOUR EQUIPMENT**



Contact us via email to: vanguardpower.emea@basco.com



Find out more about Vanguard on: www.vanguardpower.com



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VANGUARD

BRIGGS & STRATTON

Wolleraustrasse 41
8807 Freienbach, Switzerland
+41 (0)55 415 1200
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WWW.VANGUARDPOWER.COM