Case Study | Construction

Wacker Neuson Wacker Neuson



global growth

For over 175 years, Wacker Neuson has helped shape the construction industry around the world. From their first blacksmith workshop in 1848, to developing the world's first electric rammer in 1930, to today's full range of construction site equipment, Wacker Neuson has led with innovation.

Today, Wacker Neuson has production sites and distributors around the world serving a wide range of industries, including construction, gardening and landscaping, municipal and industrial. With a wide range of products, including their flexible lineup of excavators, the Austrian company is doing more than ever before to meet equipment needs in nearly every major market.

Translating performance to a smaller scale

For Wacker Neuson, their original Dual View Dumper's (DV60, DV90 and DV100) flexible functionality was received as a revelation by their customers. By enabling users to change their seat and console position guickly and comfortably, the dumpers helped deliver a safer and more efficient view for operators while they worked on site.

To build on their initial success, the company listened to its customers and realised there was a demand for a similar machine with a smaller footprint. They selected on the 1.7-litre Perkins[®] 403J-E17T to power the more compact solution, the DV45 Dual View Dumper – moving from a 6-tonne dumper down to a 4.2-tonne version for more economical power.



Key Facts

Customer

Location

Linz, Austria

BPerkins®

Wacker Neuson



Introducing the DV45

"A big challenge was the available installation space. The key factor was to have a small engine with high power density and no-charge air cooler," says Alexander Pfefferkorn, senior engineer, Engine Integration.

The smaller DV45 Dual View Dumper allows users to navigate smaller worksites with greater ease and safety, without compromising on the power necessary to move heavy loads.

In addition to already proven safety features, further innovations and features have been realised in the DV45. The cabin is rotated via a button on the joystick and can also be used if it is turned sideways in a working mode with lower speed limit (called Multi View Mode). Furthermore, the hillhold function prevents the machine from rolling away when it is parked on a slope or the foot is taken off the accelerator. The seat-belt monitoring system is also available with a start prevention system to ensure, that the operator is using the seat belt before starting the machine. A noticeable reverse sound, the skip quard and the access and aggress in signal colour also account for additional safety features of the DV45. To ensure that the machine does not roll when its not supposed to, the operator has access to the hydrostatic break function. This function intervenes in the hydrostatic all-wheel drive during driving if the foot is taken off the accelerator and slows the machine down automatically, and activating the brake lights at the same time. Two available cameras in both directions (where the camera under the skip is installed as a standard) with included washing system, help expand the all-round view for the user.

"The DV45 Dual View Dumper is something we're very proud of. It sets new industry standards and sets us apart from the competition."

Stefan Bogner, managing director



Additionally, the Perkins engine used is equipped with an auto stop function which switches off the engine if the machine is not used for a pre-set time. This time can be set by the user and can also be turned off.

An expansive collaboration

A new addition to their wheeled excavator lineup, the 10-tonne EW100, utilises both the 2.8 and 3.6-litre Perkins engines to achieve the power and ability of a 14-tonne machine.

With a 100 kW Perkins engine in place, they have further helped users whose work demands they drive on shared roads to reach their job sites while minimising costly fuel consumption and delivering a lower CO_2 footprint.

"Within the development phase, you choose and select different manufacturers, and in the end it comes down to value, performance, and service network," says Ronald Ganzenhuber, product manager/mobile excavators, "and all of that made us choose Perkins as the engine supplier for this particular machine."

<u>Click here</u> to read the EW100 mobile excavator case study.

• Together, we power ahead.

The 3-cylinder Perkins® 403J



range was developed in consultation with original equipment manufacturers (OEMs) to deliver an ultra-compact, lightweight engine that successfully maintains the benefits customers have come to expect from this range.

The 403J is designed to deliver impressive performance, featuring great power density, fuel efficiency and low operating costs in a small, compact package ideal for a range of off-highway applications.

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