



THIS IS NO ORDINARY COMPACTOR

THIS IS A VANGUARD® POWERED COMPACTOR

WHEN INDUSTRY LEADERS TEAM UP TO CREATE THE NEXT GENERATION OF GAS COMPACTORS YOU GET A SOLUTION THAT IS EXTRAORDINARY.



THE CHALLENGE

It's not by chance that Boels Rental has established themselves as a European powerhouse in the equipment rental industry. They understand what their customers want and they deliver **world class solutions** to meet those stringent needs.

It was this, coupled with their commitment to **more sustainable power solutions** that drove Boels to challenge AMMANN and Vanguard to create the next generation of gas compactors. One that reduced environmental impact, increased productivity for their customers and lowered their total cost of ownership.

THE APPROACH

When Boels suggested using a Stage V Vanguard engine, our application experts worked with AMMANN to choose the **best power solution for the job – the Vanguard 160**, our commercial grade single-cylinder engine built from the ground up to deliver ultimate productivity with lower TCO.

The project required a fully collaborative approach, fusing Vanguards 100+ years of engine innovation with AMMANN's rich history in machine manufacturing and Boels' industry leading expertise in the rental market.

The result – a truly extraordinary compactor.

But it's not just the engine that makes a difference. Vanguard's **customer-first philosophy** was also considered. As well as 3 + 1 year commercial limited warranty, our team of application experts go above and beyond to make sure the engine and equipment work together to deliver maximum productivity.



Having worked with Vanguard in the past, we are familiar with their reliable, efficient and powerful engines. The new Vanguard 160 has a head start in so many areas, particularly with regards to ecological footprint – deciding to specify this engine was the logical choice.

We were so convinced about the advantages of Vanguard engines that we decided to exert as much influence as we possibly could. ”

Guy Cremer – Director of Fleet Operations – Boels Rental



As an immensely strong global operator, we are able to train employees in native language, a huge advantage for a business as far-reaching as Boels Rental. ”

Paul Bramhall – Director Marketing EMEA – Briggs & Stratton

THE SOLUTION

The AMMANN APF 14/50 powered by the all-new Vanguard 160.

The APF 14/50 is renowned in the industry for its robust ergonomic design and excellent productivity standards, and now powered by the most advanced single-cylinder commercial engine on the market.

Extraordinary power with ENVIRONMENTAL BENEFITS

- **Extended maintenance intervals** meaning less equipment downtime and more efficient use
- **Reduced environmental impact** resulting from less oil usage due to the advanced state of the art engine design and cooling
- **Easier, simplified starting & operation** reduces on-site issues and improves efficiency
- **TRANSPORTGUARD™** 3-in-1 ignition, fuel and throttle control eliminates oil and fuel dilution during equipment transportation
- **3+1 Year Commercial limited warranty** ensures the asset is fully covered
- **EU Stage V** emissions compliant by design

STAGE V
EMISSIONS COMPLIANT

**TRANSPORT
GUARD**

3
YEAR
LIMITED
WARRANTY

+1
WARRANTY
BONUS
YEAR



A SIMPLE SWITCH

All Vanguard engines are designed with productivity and bottom line in mind. Being a drop-fit replacement for AMMANN's existing APF 14/50 frame meant they could integrate the new power solution quickly and easily.

The compact design, standardized mounting pattern and on-going support from the Vanguard team made switching the engine **a simple task for AMMANN's engineers**. And with **exceptional performance** during testing, the project couldn't have run any smoother.

ANYTHING BUT ORDINARY!

Maximum uptime. Maximum ROI.

Teamwork is what made this project so successful. Industry leaders working together to create a solution that brings benefits to everyone: AMMANN, Boels and their customers – this is what Vanguard is all about.

Helping you get the job done. MORE EFFICIENTLY AND MORE PROFITABLY.

“

Redesigning products to fit new power solutions is costly and time consuming. The beauty of the new Vanguard 160 Engine from an engineering perspective is that it is a drop-fit replacement. That way we were able to keep development cost to a minimum.

The support from Vanguard was also exemplary which helped keep the project timeline on track. ”

Yannick Weiss – Design Engineer – AMMANN

THE EXPECTED RESULTS

By powering an existing fleet with Vanguard engines, Boels have cut the quantity of oil used and recycled by a **remarkable 50%**, reduced their environmental impact and lowered TCO by more than half. Results they can expect to see on the all new APF 14/50 compactor.

ENGINES WITH A CONSCIENCE

In the past 24 months alone, Vanguard single-cylinder powered applications have reduced **Boels Rental oil usage by over 150 gallons** - the equivalent of more than 215 return delivery trips and equates to a **saving of 1911 lbs of CO₂**

Based on an independent life cycle analysis by Climate Neutral Group, oil is the dominant contributor to the environmental impact of an engine accounting for over **80%** of the Global Warming Potential (GWP) during maintenance. Vanguard's extraordinary engine design with advanced engine cooling results in fewer oil changes over the life of the equipment. Oil service intervals have been extended to **200hrs** - **twice as long as the industry standard**.

In addition, the Vanguard 160 includes exclusive **TransportGuard** technology. The 3-in-1 lever shuts off the fuel supply automatically when the operator turns off the engine ignition. No more oil/fuel dilution. **Less oil waste**. Minimized downtime.

GAME CHANGING INNOVATIONS.

ALL THE POWER – LESS THAN HALF THE COST.

With Vanguard, fully cyclonic air filtration comes as standard, extending air filter replacements filters to **600 hours** – two times the industry standard.

Paired with up to **50% less oil wastage**, this engine significantly reduces maintenance and minimizes downtime, delivering the best performance without the additional cost.

Boels have seen a **68% reduction in TCO** overall.



“

We cut our service intervals in half, lowered our oil waste and recycling and reduced the environmental impact of our fleet.

The total cost of ownership is significantly lower with the new Vanguard engines. ”

Guy Cremer – Director of Fleet operations –
Boels Rental



“

This Compactor delivers everything the rental industry has been asking for and more. Reduced environmental impact, lower total cost of ownership, less maintenance and downtime, resulting in increased productivity and improved ROI.

The AMMANN APF 14/50 powered by the Vanguard 160 is the gas compactor designed for today's market needs.

We could not be prouder to see this in the Boels Rental fleet. ”

Paul Bramhall – Director Marketing EMEA – Briggs & Stratton