

More fuel-efficient

Research Initiative: New “green wheeled loader” in Hall Bo

Low-emissions, low fuel consumption and energy-efficient: All these qualities are becoming ever more important to the building industry and to manufacturers of construction machinery. So, what progress has been made? What new developments are there, and what can these machines still do? Less or more? Answers to these questions will be given at Bauma.

Since the introduction of the Exhaust Emissions Directive in 1999 the construction machinery industry has drastically reduced the emissions from its products. According to the German Engineering Federation, the VDMA, emissions of nitric oxide and diesel particulates have been reduced by more than 95 per cent. Despite what has already been achieved, there is still scope for further im-

provements to transmission systems in construction machinery – especially when manufacturers and suppliers combine their expertise.

Innovative operation strategy

This was the case in the TEAM project (development of technologies for energy-saving transmission systems in mobile machinery), which culminated in spring this year with the presentation of a “green wheeled loader”. For three years 18 machinery manufacturers and suppliers, five university institutes and the VDMA worked on an innovative operating strategy for linking parts of the drive system. A demonstration wheeled loader was presented which combines an optimised diesel engine, a powersplit trans-

mission system, displacement-controlled working hydraulics and a hydrostatic hybrid system in a new drive chain. In comparison to a current series machine this new development is over ten per cent more fuel-efficient in practical operation. At Bauma further information and details about this development will be presented live in the “Research Initiative” in Hall Bo.

Special power-split transmissions

Special power-split transmissions are definitely gaining ground in wheeled loaders. Prof. Dr.-Ing. Marcus Geimer, Chair in Mobile Machinery at the Karlsruhe Institute for Technology, comments: “In a wide variety of operations, these transmission systems deliver improved efficiency as com-



In comparison to a current series machine the new “green wheeled loader” is over ten per cent more fuel-efficient in practical operation.

Photo: Hydrive Engineering GmbH

pared to hydrostatic transmissions or switchable converter drives.” Geimer reports that corresponding prototypes and designs have already been pre-

sented at various specialist conferences. “Now I am keen to see which manufacturers will showcase these components at Bauma 2016,” he says.

Anzeige

EUROPAPREMIERE FÜR DEN POWERBULLY 15T

Die Kässbohrer Geländefahrzeug AG präsentiert ihren PowerBully 15T vom 11. - 17. April 2016 erstmals außerhalb der USA auf der weltweit größten Fachmesse der Baubranche, der bauma in München. Hierbei kann der PowerBully 15T mit seiner enormen Nutzlast und seinen mannigfaltigen Einsatzmöglichkeiten erstmalig auch in Europa überzeugen.

PowerBully sind Kettenfahrzeuge, die sich als Gelände- und Trägerfahrzeuge perfekt als mobile Plattformen für Bohraufbauten, Kräne, Hebebühnen, Knickarmkräne und Löffelbagger anbieten. Die Einsatzbereiche umfassen u.a. die Wartung von Gas- und Ölpipelines, Strom- und Telefonleitungen, Brandschutz, Bodenuntersuchungen oder Mulcharbeiten, um nur einige zu nennen. Die PowerBully Kettenfahrzeuge zeichnen sich durch geringen Bodendruck und minimale Einwirkung auf die Untergründe aus. Sie können unter widrigen Umständen eingesetzt werden.

Mit hohen Nutzlasten von 3-15 Tonnen werden PowerBully individuell den Kundenwünschen entsprechend gebaut. Zahlreiche Optionen wie z.B. hydrostatischer oder mechanischer Antrieb, ge-

schlossene oder vergitterte Fahrer- kabinen, verschiedene Ketten mit Stahl-Querstegen bieten den Kunden Flexibilität in der Anwendung.

Die Kässbohrer Geländefahrzeug AG präsentiert das neue PowerBully 15T mit einer Nutzlast von 15 Tonnen aus hochfestem Stahl, der über eine großzügig dimensionierte Plattform verfügt. Die meisten Zylinder sind auf dem PowerBully 15T mit dem Kran- aufbau des amerikanischen Herstellers Altec zu sehen sein.

Wir freuen uns, Sie in München im Freigelände am Stand der Firma Bergmann FGN.N 914/1 begrüßen zu dürfen!

Kässbohrer Geländefahrzeug AG will be presenting the PowerBully 15T for the first time outside the USA at the bauma in Munich, the world's largest trade fair for the construction industry, from 11th - 17th April 2016. PowerBully are track vehicles with high payloads for diverse applications.

As all-terrain and carrier vehicles they are the perfect mobile platform for drills, cranes, lifting



lines, power and telephone lines, for fire protection, soil analyses or mulching work, to name just a few

pressure platform you need from a tracked carrier. Our light footprint ensures you have the right vehicle to access those hard to reach locations, even in the most demanding of weather conditions. Our focus on safety, engineering and minimal environmental impact ensures PowerBully is the right tool to get your job done.

It's the first time ever in Europe, that Kässbohrer Geländefahrzeug AG presents its PowerBully 15T, a vehicle for extremely challenging work and high payloads. With a frame of high-strength steel, it has a generously sized platform that is able to take most attachments with ease. Kässbohrer Geländefahrzeug AG is showing off the PowerBully 15T at the trade fair with a crane superstructure made by American firm

We look forward to seeing you outside at our Bergmann stand FGN.N 914/1 in Munich!

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ramps, articulated jib cranes and excavators. They are used for the maintenance of gas and oil pipe-

examples. With payload capacities of up to 35,000 lbs, the rugged PowerBully has the low ground

