

Mitas

NEWSLETTER FOR CUSTOMERS AND FRIENDS OF MITAS



VF 380/90R46 HC 1000 tyres mounted on a John Deere self-propelled sprayer.

HC 1000: Mitas's response to modern sprayers

Self-propelled sprayers are a very special category of agricultural machines. They are unmistakable in the field thanks to their tall wheels and long, outstretched working arms that resemble the wings of a mythical bird. They usually operate between the rows of the crops being treated so as not to damage them, and this requires both unbelievable driving precision and the right tyres. These are therefore usually very narrow with a large diameter, even if some agricultural machinery manufacturers have recently been asking for wider versions for sprayers used outside the growing season. To ensure a sprayer can work as long as possible without needing its tank refilled, key characteristics of these tyres include high load capacities and operating speeds. The Mitas tyre offer includes the HC 1000 High Capacity (HC) radial tyres for this type of use. One secret of their success is the unique construction of the sidewalls and shoulder area.

The increasing weights and load capacities of the modern machines used by today's farmers have raised concerns about soil damage through compaction. Tyre manufacturers are thus faced with a seemingly impossible task – to deliver tyres capable of carrying large loads at high operating speeds yet also permitting significantly lower inflation pressures.

Flexibility is key

Such is the dilemma facing the designers of modern agricultural tyres. "It is something of an eternal struggle. Luckily in this case we have a solution in the form of narrow tyres with special construction that significantly increases sidewall flexibility, thus enlarging the footprint. The HC 1000 tyres use the VF

(Very High Flexion) construction," explains Pavel Kott, Product Manager for Mitas agricultural tires. The VF construction gives these tyres around 40% higher load capacity with better traction, ground protection and crop yields.

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The possibility of lower inflation pressure under the same loading significantly enlarges their footprint compared to radial tyres without the VF construction.

Of course not all tyres can safely operate at low inflation pressures. Their construction must be designed with high flexibility in mind, yet they also need sufficient strength and to be able to withstand any damage during operation. "The firm seating of the bead in the rim even under extremely low inflation pressures and high loading is ensured through the special bead construction used in Mitas VF tyres. This prevents the tyre from slipping in the rim and ensures safe tyre operation even under such extremely demanding conditions," Kott explains.

Two new products

Mitas is launching two new HC 1000 sizes based on demand from the North American market,



A Case self-propelled sprayer equipped with VF 380/105R50 HC 1000 tyres.

primarily intended for the latest generation of self-propelled sprayers with high load capacities and operating speeds. "Our latest tyres are ready for an entirely new generation of these machines, and in terms of size and specifications are ready to rise to the challenge," states Kott. Compared to the rest of the HC 1000 range, they have atypically wide dimensions (650 and 750 mm) and the special NRO (Narrow Rim Option) design. This brings users a significant benefit: although VF tyres need wider rims than standard tyres of the same size, the NRO version of VF tyres can be used on regular rims while retaining all the required characteristics and operational safety.

"At Mitas, we want to provide a reliable solution for all the work our customers do. Our newest additions to the HC 1000 range have already shown tremendous promise for US original equipment manufacturers on the latest generation of high-load and self-propelled sprayers. Seeing this initial success, we are excited to bring these tyres to customers worldwide," adds Pavel Kott. Another bonus is that in the HC 1000 range Mitas offers several sizes for sprayers that are simply not available from competitors, and is preparing the further significant expansion of this range in the future.

Between the rows

Mitas complements its offer of "narrow" tyres with the AC 85 and AC 90 radial cultivator versions for row crop care. Their width makes it easier to drive

between the crop rows, while the rounded tread shoulders and traction lugs combined with the tyre's height help protect both seeds and plants. The tall lugs provide excellent traction, better directional stability and high steering precision. Today, the AC 85 and AC 90 ranges for row cultivation include 27 versions for rims of 32 to 54 inches. (JB)

HC 1000 in brief

- two new sizes - the VF 650/65R38 and VF 750/60R46
- suitable for self-propelled and pull-type sprayers and machinery for working with row crops
- for rims of 38 to 54 inches
- maximum speed 65 km/h
- the most popular sizes are the VF 380/90R46 and VF 380/105R50



Bananas for Mitas tyres

When you head out to purchase some exotic fruit, remember that Mitas tyres could have helped get it onto your table. How come? It's very simple—large palm plantations use special machinery for pruning, harvesting fruit from trees, and other tree planting activities, and some of this equipment runs on Mitas tyres.

For this application Mitas has developed a new version of the MPT-03 multipurpose diagonal tyre in the already existing 12.5-20 size with a higher load index. Specifically, thanks to the use of more cord fabric in the new

MPT-03 tyre, any given machine can carry up to 1,300 kg more bananas depending on speed.

"The MPT-03 is a typical representative of Mitas multipurpose tyres, suitable for municipal, road, agricultural and special vehicles. It offers



We can find the Mitas MPT-03 multipurpose tyres on lifting platforms designed primarily for palm plantations, for instance. Photo by Afron Company.

users a universal tread pattern with good grip for on-road and off-road applications. In addition, the diagonal construction of the tyre, prioritising higher strength over flexibility, has proven very suitable for the conditions at palm plantations," says Jaroslav Musil, Mitas Product Manager for material handling & construction tyres.

Multipurpose tyres (MPT) are the largest product group among Mitas construction and handling equipment tyres and feature a very wide range of applications. They are manufactured in both radial and diagonal versions, while their characteristics and sizes allow them to be deployed on construction, agricultural and other machinery. A total of 12 Mitas MPT tyre tread patterns are manufactured today with 41 versions for a wide range of machinery and equipment. (JB)



Mitas MPT-03 tyres have a universal tread pattern for on-road and off-road application with good traction. They are suitable for municipal, road, agriculture and other special vehicles.





A Valtra tractor on Mitas HCM tyres during tough testing beyond the Arctic Circle.

Safe on and off snow

How do winter and agricultural tyres get on together? Even though most work in fields is done outside the winter season, the Mitas offer includes tyres for all-season use. These are the universal and quiet HCM (High Capacity Municipal) radial tyres designed for multipurpose tractors and other machines used, for example, for road maintenance, and for other municipal and load handling equipment. They take centre stage precisely during maintenance of roads and city streets in winter.

Ensuring optimal tyre operation in differing weather conditions and in all seasons is far from easy. It requires selecting the right rubber compound and tread pattern. Mitas HCM tyres owe their outstanding driving characteristics and universal useability specifically to their unique tread pattern and cascade tread lugs design. This combination ensures efficient traction under all conditions and improves capability on difficult terrain like muddy meadows and snow. The steel-belted radial construction also guarantees high puncture resistance and on-road stability.

Noise levels are likewise important for operation on paved roads, where municipal tractors and other vehicles can reach relatively high speeds. And here Mitas HCM tyres deliver. "The unique tread design helps reduce noise levels. The low noise benefit comes in addition to the excellent self-cleaning properties and good steering characteristics, even at high speeds, of HCM tyres," explains Pavel Kott, Product Manager for Mitas agricultural tires.



Watch the video from Mitas HCM tyres testing in Finland.

The reliability of these tyres was tested a few years ago beyond the Arctic Circle. The driving characteristics of the HCM tyres were thoroughly verified during tests carried out under extreme winter conditions at the Ivalo testing circuit in Finland. The tyres behaved perfectly beyond the Arctic Circle, highlighting their characteristics and suitability for winter operation in terms of braking distance, grip and traction.

HCM (High Capacity Municipal) are universal silent running tyres for all terrains and applications.

Their traction capabilities make HCM tyres suitable for the most varied terrains from paved roads, through soft meadow soils, to snow and ice. Their characteristics also make them a popular original equipment choice for respected manufacturers. "In our experience, users most appreciate the universal nature of these tyres and their excellent driving characteristics on a wide range of surfaces. This also makes them a great choice for winter maintenance vehicles, as they easily cope with the demanding conditions," Pavel Kott adds. (JB)



HCM in brief

- Universal radial tyres for all-season use
- the offer includes 15 versions with sizes from 18 to 42 inches
- maximum speed 65 km/h
- the latest new sizes:
 - 360/80R28 IND
 - 440/80R30 IND
 - 360/80R20 IND

Check the TOP 3 illustrations from the Mitas Draw Your Tyre challenge

How do our customers see Mitas tyres? It is apparent that Mitas agricultural tyres have many unique features not found in any others. We therefore invited all Mitas lovers to seek inspiration in our tyres and to create an illustration expressing one of their key properties.

The submitted works—drawings, graphic illustrations, paintings or collages—were displayed on the challenge website and on the Mitas Agri Facebook page for voting. From the

TOP 10 illustrations our panel of judges chose the TOP 3 based on how well and creatively the illustrators showed the tyre’s features that make a difference in their lives. The best design

was rewarded with a smartwatch, and the two runners up took home Mitas gear. Take a look at our tyres through the eyes of Mitas fans!

(JB)



By Juan Leandro Berlanga, Spain.



By Marco Tiberti, Italy.



By Octavio Florencia, Spain.

IN short



Employer of the Region

Trelleborg Wheel Systems Czech Republic was announced as the winner of the Sodexo Employer of the Region 2021 competition for Zlín Region. This survey awards the ability of companies to motivate, reward and develop their employees while successfully meeting economic indicators. Trelleborg’s “People First” motto has been more than fulfilled here and, even in this difficult period, has been shown to be more than a simple buzzword, highlighting that the local plant manufacturing Mitas tyres provides the best possible care for its employees.

We are adding new Agriterrass

The radial tyre product range for agricultural trailers with the Agriterra 02 tread pattern now includes two new versions, the 710/50R30.5 and the 620/40R22.5.

Both sizes are the result of demand from original equipment customers. The specific tread pattern and the rounded shoulders of the Agriterra 02 make it very gentle to grassland. At the same time, this tyre’s large footprint guarantees minimum noise levels even at speeds of up to 65 km/h. It is widely used on agricultural flat trailers, trailers, semi-trailers and tankers.

More languages for Mitas Moto

Additional language versions are now available for the Mitas motorcycle tyre website. Visitors have newly been able to browse the site in Polish, Russian and Slovenian since mid-December. These languages have been added to the existing language versions for customers from Italy, Spain, Portugal, France and the Czech Republic. “We have added these new language versions because Mitas motorcycle tyres have many fans in these markets, and this will make it easier for them to find all the information they need in their native languages,” says Janja Likar Čarman, Marketing Manager for Mitas motorcycle tyres. The www.mitas-moto.com website is currently available in ten language versions.



Mitas motorcycle and aircraft tyres are part of the Two Wheels & Specialty Tires business unit of Trelleborg Wheel Systems.

Mitas IN is published four times a year. This issue, volume 20, number 1/2022, was published by Trelleborg Wheel Systems Czech Republic a.s. (Švehlova 1900, Prague 10, Czech Republic) on February 8, 2022 in Prague. Telephone +420 224 210 206; e-mail press@mitas-tyres.com



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