

1.4

Don't compromise







Designed and developed for superior resistance to wear and tear

Durability or Economy? Don't compromise

The main causes of extensive abrasion and extended wear of harbour vehicle tyres are interlocking stones and rough concrete or asphalt surfaces. These can be heated by sunlight to very high temperatures. In its structure the new Continental Port Plus Compound was developed to noticeably reduce tyre wear and heat development in container-handling applications. Characteristic of the Continental Port Plus Compound is its outstanding resistance to wear and tear. This was achieved through the use of high concentrations of natural rubber and a special carbon black.



The result is exceptionally high mileage even under very hard conditions. The natural rubber gives the rubber compound outstanding resistance against the formation of cracks, even at the highest deformations. Nevertheless, under severe conditions, microcracks can occur. These are the smallest forms of damage that can only be observed at high magnification. In this case the special carbon black comes into play. Its special structure prevents the propagation of microcracks and thus the formation of larger cracks.

To avoid negative effects to the tyres' life span and in order to counteract the abrasion caused by aggressive surfaces, a special synthetic rubber was added to the Continental Port Plus Compound. Through its strong interaction with the carbon black, it is responsible for the exceptionally strong abrasion resistance of the compound.

formation of larger cracks.

Our unique synthetic rubber facilitates a strong interaction with the carbon black and it is responsible for the exceptionally strong abrasion resistance of the compound.



The vast number of short-chained sulphur connections serve as an adhesive between the polymer chains and make the compound elastic on the one hand and robust on the other.

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Economy or Technology?

If you had to design the perfect tyre, the goal would be something like this: "Unrivalled traction on wet and dry surfaces, in searing hot and freezing cold conditions. Zero wear, extreme stability, and a comfortable soft ride on any surface. And the best of all - the costs would be next to nothing."



Although this exaggerated scenario is still a long way off, Continental's V.ply technology is in fact a huge leap forward in the quest for the perfect tyre. Our V.ply design was inspired by racing tyre technology and executed through the extensive use of 3-D modeling and the Continental Group's Research & Development know-how. It was also extensively field-tested in real-life conditions.

V.ply technology combines the best of cross-ply and radial-ply design by integrating an innovative weaving pattern of multiple cords arranged at specially designed angles. The new Continental Port Plus Compound and a tread design developed specifically for port tyres deliver class leading tyre performance.

Breaker layers

Up to four V.ply breaker layers not only provide additional rigidity to the tread area, but they also function as an excellent bonding element between the outer rubber tread and inner tyre construction.

V.ply pattern

Up to 20 layers of high-resistance polymer fibre are aligned in a specially angled V-pattern. This unique technology is inspired by racing tyre design and means less inner movement for low rolling resistance.

Strengthened sidewalls

The V.ply technology allows for the design of exceptionally strong sidewalls. They provide low deflection for high damping, excellent driving stability, and nearly unmatched protection against damage.

Profiled inner bead

In contrast to beads with a single round wire, the V.ply design is based on three wire cores. The result is a wide bead which provides even load distribution and perfect rim fit.



Economy or Reliability?

ContainerMaster+ DockMaster+

The requirements of reach stackers, heavy forklifts, and empty container handlers are manifold. While lifting and stacking containers, they need to move with the agility of a compact car and the steadiness of a tank. And still they have to be reliable and economical in the process.



These vehicles handle enormous loads on single axles. Potholes and uneven surfaces can cause the vehicle to tilt. When handling such a container, the vehicle can become unstable, which increases the risk of an accident.

All in all, reach stackers, heavy forklifts, and empty container handlers require tyres with exceptional load capacity, high stability, and outstanding maneuverability for smooth and efficient operation in order to maximise their operating efficiency.



The **ContainerMaster+** is a robust all-rounder. The new Continental Port Plus Compound in combination with the unique V.ply technology makes it even better. Its exceptionally strong sidewalls mean less tilting, improved protection against damage, and a longer service life. Moreover, the advanced design of the V.ply tyre and the ultra-robust Port Plus Compound tread handles steering in a stationary position much better, reducing tread cracks to a minimum. In summary the ContainerMaster+ provides less tilting and better protection against damage compared to radial tyres plus lower rolling resistance compared to cross-ply tyres.



Like the ContainerMaster+, the **DockMaster+** benefits from the combination of the new Continental Port Plus Compound and the unique V.ply technology. As a specialist for extreme conditions this massive slick tyre is ideal for vehicles used at slow speeds like forklifts and rubber tyre gantry cranes (RTGs). Thanks to its robust tread rubber the DockMaster+ is the perfect choice for outstanding longevity, robustness, and puncture resistance.

Dimensions

TT/T	IND-4* (E4)	12.00-24
TT/T	IND-4* (E4)	14.00-24
T	IND-4* (E4)	16.00-25
T	IND-3* (E3)	18.00-25
T	IND-4* (E4)	18.00-25
Т	IND-4* (E4)	18.00-33

14.00-24 IND-3S* (E3) TT / TL 18.00-25 IND-4S* (E4) TL

MORE STABILITY MORE SAFETY MORE MILEAGE LESS COSTS





Economy or Durability?

CraneMaster

At first glance, harbour cranes and automated guided vehicles (AGVs) don't seem to have much in common, but when it comes to tyres, their requirements are pretty much the same. Both vehicles operate only at moderate speeds around gradual bends. With both vehicles the tyres have to carry enormous weight from two sources - firstly, the weight of the payload and secondly, the weight



of the machine itself. Additionally, there is the turning on the spot or at extreme angles, which puts tremendous stress on the tyres. Along with high durability, it is the rolling resistance of the tyres that has to be considered since it has a significant influence on energy consumption.

In summary, harbour cranes and AGVs require tyres with exceptional load capacity, outstanding maneuverability, and low rolling resistance for optimal operation at their full potential.



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Dimensions

14.00-24 IND-3* (E3)

16.00-25 IND-3* (E3)

18.00-25 IND-3* (E3)

21.00-25 IND-3* (E3)

21.00-35 IND-3* (E3)

The **CraneMaster** range of tyres makes use of the unique V.ply technology, which features an exceptionally sturdy tyre construction for lower rolling resistance and a longer service life. In terms of damping, this design enables a CraneMaster tyre to rely not only on compressed air but also on the exceptionally robust tyre construction itself. The well-distributed contact pressure in the tread area means a long tread life and superior maneuverability. Moreover, the advanced design of the V.ply tyres handles stationary steering maneuvers much better. CraneMaster tyres feature excellent resistance to casing damage and tread stress cracking. The unique V.ply technology ensures less tilting and provides better protection against damage compared to radial tyres plus lower rolling resistance compared to cross-ply tyres.

TL

ΤL

ΤL



16.00-25 IND-4* (E4) 21.00-25 IND-3* (E3)

16.00-25 IND-4* (E4)

StraddleMaster+

Straddle carriers are the ultimate high-tech wonder that combine height, weight, speed, and maneuverability in the terminal yard. However it is exactly these important characteristics and the extreme operating demands that place high levels of stress on the tyres, which can lead to premature tyre wear. In fact, premature tyre wear is only one issue but safety

Safety or Economy?

is another. For this reason, the damping properties of the tyres are crucial - only a tyre with the necessary and correct stiffness can prevent the slip-stick effect and its serious consequences yet also provide driving stability in a controlled and safe manner.

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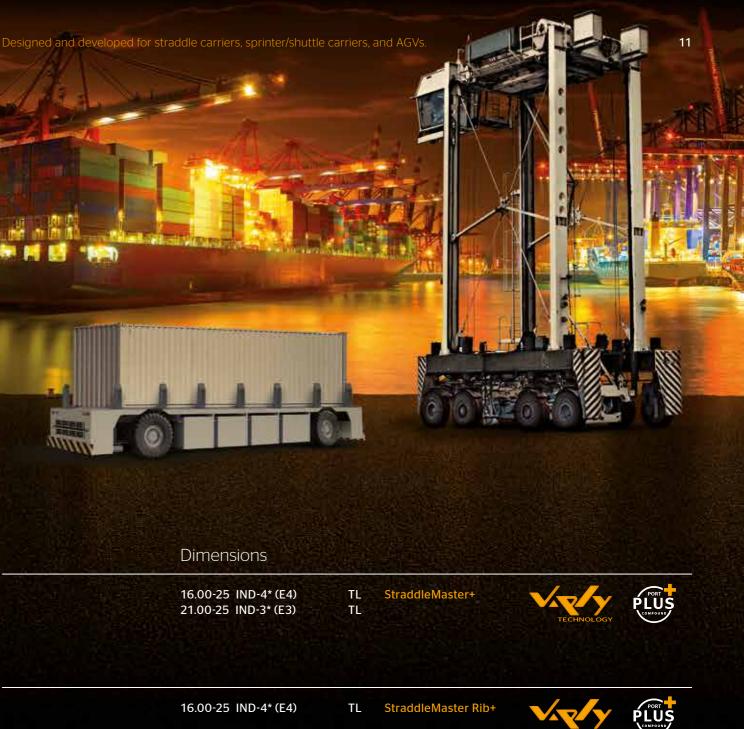
All in all: to use a straddle carrier to its full potential, tyres with optimum deflection properties plus outstanding maneuverability and braking capability are essential.



The StraddleMaster+ has been developed for use on straddle carriers, sprinter/shuttle carriers, and AGVs. The current version combines the new Continental Port Plus Compound in combination with the unique V.ply technology. The result is an even more robust tyre with an extremely stable carcass, exceptionally strong sidewalls, low rolling resistance, and outstanding deflection properties. Thanks to these two features the StraddleMaster+ handles steering in a stationary position much better and provides high resistance against tread cracks. Its extraordinarily high stability and low rolling resistance improve overall safety and handling, as well as reducing tyre wear and fuel consumption.







Please contact your Continental salesperson for specific information on applications.

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Dimensions

280/75 R 22.5	
310/80 R 22.5	
300/80 R 22.5	
12.00 R 20	
12.00 R 20	

TL TL TL TL

Speed or Safety?

TerminalMaster Terminal Transport ContiRV20 ContiRT20

There's no vehicle in the port that clocks up more mileage than a terminal tractor. This means that its tyres have to accelerate, brake and corner more often than any other kind of tyre in the port. They also have to operate in an environment that accelerates tyre wear and hastens tyre failure. Uneven surfaces with

different and sometimes highly abrasive surfaces, potholes, bumps, and foreign objects are just some of the reasons.

No wonder that only a fraction of all tyres used on terminal tractors reach the end of their projected service life. But it's not always the environment that ends the life of a tyre ahead of schedule. Since a vast number of tyres just aren't designed for use on terminal tractors, sometimes it is simply a case of the wrong tyre in the wrong place.



The **TerminalMaster** is the high-performance radial tyre for heavy tasks. Reinforced bead designs make light work of heavy loads. S-shaped cross ribs excel in all weather conditions, producing outstanding traction, while the closed shoulder design ensures an exceptionally quiet ride. What is more, the low-abrasion tread compound delivers outstanding mileage.



The **Terminal Transport** tyre is an all-rounder. This radial tyre with its closed shoulder design and proven tread pattern will perform on all the axle positions of a terminal tractor. It is ideally suited for an environment with newer and more even surfaces. It offers the advantages of low rolling resistance, excellent grip and traction in the wet, high ride comfort, and even wear – all at a reasonable price.



The **ContiRV20** is a massive radial tyre for demanding conditions. Its highly resistant tread compound and closed shoulder design deliver outstanding longevity. Tearing and uneven wear are eliminated. Offering outstanding ride comfort and excellent vehicle handling, the ContiRV20 is ideally suited for uneven surfaces involving a high risk of damage.



The **ContiRT20** is a radial tyre with an open shoulder design. This design ensures excellent traction also in the wet, when negotiating ramps, and crossing rails. Individual tread bars permit excellent maneuverability, particularly when turning on the spot. The low-abrasion tread compound and solid tread bars deliver outstanding mileage. The ContiRT20 offers excellent maneuverability coupled with outstanding stability in all conditions.





Radial Tyre intelligent tyre sensor inside

Radial Tyre

Radial Tyre

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Dimensions

12.00-20

SD

Dimensions

12.00 R 20 10.00-20 300/80 R 22.5 280/75 R 22.5 310/80 R 22.5

SD TL TL TL



SC20+ ContiRV20 Trailer Terminal Transport TerminalM

It doesn't have to transmit steering forces - all it has to do is its objects being thrown up by the tyres of the terminal truck job. The requirements of a tyre used on a terminal trailer may not be remarkably high, yet if a tyre on a loaded trailer fails, the consequences can still be very serious. Moreover, terminal trailers have to operate in an environment that accelerates tyre wear-out and tyre failure by way of uneven or highly abrasive surfaces, potholes, and bumps. Not to mention foreign

ahead. So it's no surprise that some tyres used at a port don't reach the end of their expected service life. But it's not always the port environment that shortens the life of a tyre. It is often merely a case of the wrong tyre in the wrong place, causing it to fail well ahead of its projected service life.





The Trailer is a solid slick tyre for superior handling and high mileage. The solid design and slick tread pattern effectively prevent heel-and-toe wear-out, the main cause of vibrations. The tyre is ideally suited for use in tough conditions and, thanks to its robust design, sets new standards in terms of cost efficiency and environmental compatibility.

The Terminal Transport tyre is an all-rounder. This radial tyre with its closed shoulder design and proven tread pattern will perform on all the axle positions of a terminal tractor. It is ideally suited for an environment with newer and more even surfaces. It offers the advantages of low rolling resistance, excellent grip and traction in the wet, high ride comfort, and even wear.



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The TerminalMaster is the high-performance radial tyre for heavy tasks. Reinforced bead designs make light work of heavy loads. S-shaped cross ribs excel in all weather conditions, producing outstanding traction, while the closed shoulder design ensures an exceptionally quiet ride. What is more, the low-abrasion tread compound delivers outstanding mileage.



Trailer



The new SC20+ offers improved mileage as well as increased resistance to damage. It maintains its predecessor's esteemed rolling resistance*, making it a leading product in efficiency. The proven tread design is based on the special combination of linear grooves and large blocks leading to excellent traction on any surface. The SC20+ offers increased robustness and cut resistance due to its new compound.

The ContiRV20 is a durable radial tyre. Its highly resistant tread compound and closed shoulder design deliver outstanding longevity. Tearing and uneven wear are eliminated. Offering outstanding ride comfort and excellent vehicle handling, the ContiRV20 is ideally suited for uneven surfaces involving a high risk of damage.

Dimensions

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ContainerMaster+

TT / TI				
IT/IL	ContainerMaster+	V.ply Tyre	Port Plus Compound	
TT / TL				
TL				Ľ
TL				
TL				
TL				
	TL TL TL	TL TL TL	TL TL TL	тL TL TL

DockMaster+

14.00-24 IND-3S* (E3) TT / TL DockMaster+ 18.00-25 IND-4S* (E4) ΤL

V.ply Tyre Port Plus Compound



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CraneMaster

14.00-24	IND-3* (E3)	TT / TL	CraneMaster	V.ply Tyre
16.00-25	IND-3* (E3)	TL		
18.00-25	IND-3* (E3)	TL		
21.00-25	IND-3* (E3)	TL		
21.00-35	IND-3* (E3)	TL		

StraddleMaster+

16.00-25 IND-4* (E4) TL 21.00-25 IND-3* (E3) TL

StraddleMaster+ V.ply Tyre Port Plus Compound



16.00-25 IND-4* (E4)

TL StraddleMaster+ Rib V.ply Tyre Port Plus Compound

Tractor tyres

80/75 R 22.5	TI
10/80 R 22.5	TI
00/80 R 22.5	TI
2.00 R 20	TI
2.00 R 20	ті

TerminalMaster Radial Tyre* Terminal Transport Radial Tyre* ContiRV20 Radial Tyre ContiRT20 Radial Tyre

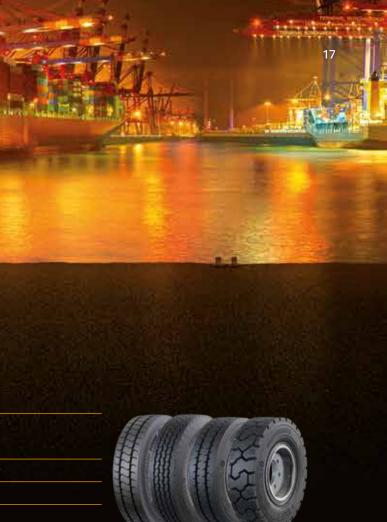
Trailer tyres

10.00-20	SD
12.00-20	SD
12.00 R 20	TL
300/80 R 22.5	TL
280/75 R 22.5	TL
310/80 R 22.5	TL

Trailer Solid Tyre SC20+ Solid Tyre ContiRV20 Radial Tyre Terminal Transport Radial Tyre* TerminalMaster Radial Tyre*



* ETRTO code new designation (Original designation in brackets)



* optional: intelligent tyre sensor inside



* optional: intelligent tyre sensor inside

ContiPressureCheck[™] Don't compromise.

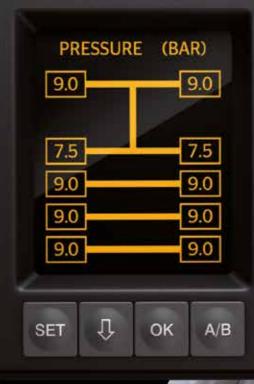
Single Vehicle Monitoring

ContiPressureCheck[™] is a direct measurement system fitted directly inside the tyre. If the inflation pressure decreases, the tyre might be subject to greater strain as it rolls, causing it to heat up, which can damage the tyre or even lead to a blowout. ContiPressureCheck[™] uses a sensor inside the tyre to continuously monitor the inflation pressure and tyre temperature to prevent this from happening.

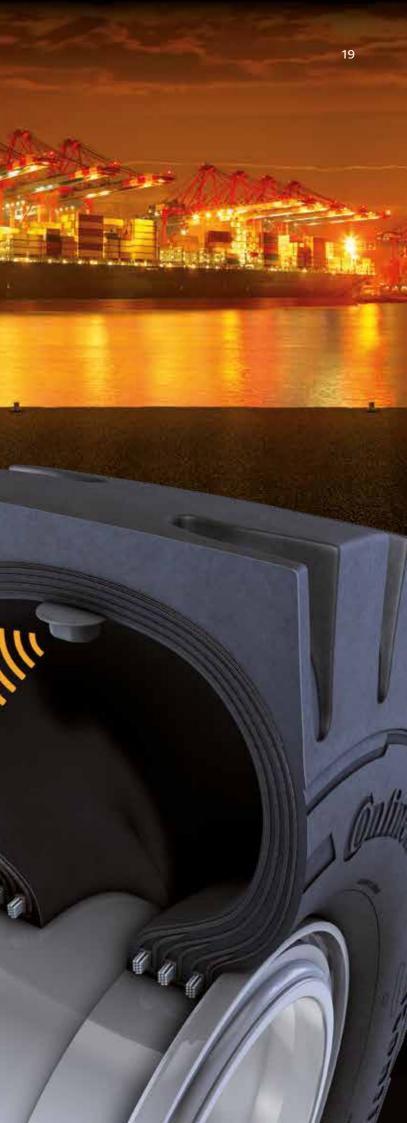
ContiPressureCheck™ immediately detects any changes in inflation pressure or temperature. The sensor inside the tyre sends the data wirelessly to the central receiver (central control unit – CCU), which processes the data, saves warnings, and sends them directly to the display in the driver's cab. As a result, the driver can immediately take corrective action and avoid a breakdown before it happens.

ContiPressureCheck™ integrates sensors and a communication and processing system into a single module that is contained inside a rubber container and glued to the inner surface of the tyre. The advantage of this system over sensors placed outside the tyre is that it avoids measurement errors due to heat radiation of the brakes. Moreover, the sensor inside the tyre is safer from theft, rough outside conditions, and damage.

ContiPressureCheck[™] is quick and easy to install and is robust and reliable. It is an inexpensive solution to automatically measure tyre inflation pressure and it pays for itself the first time it prevents a tyre breakdown.



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ContiConnect™ Don't compromise



Multiple Vehicle System

ContiConnect[™] takes digital tyre monitoring to the next level. The solution conveniently connects multiple vehicles and helps fleet managers switch from inflexible manual service routines to targeted in-time maintenance. Tyre issues are immediately identified upon return to the fleet yard or in real-time with any telemetry provider.

ContiConnect[™] light is the ideal entry level solution for drivers. It displays tyre pressure and temperature via the Hand-Held tool, whilst allowing manual data upload later on to the ContiConnect[™] web portal.

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data whenever your trucks return to the yard. The yard reader station wirelessly picks up the sensor data and transmits it to the ContiConnect[™] web portal via a cellular network.

ContiConnect[™] web portal allows fleet managers to conveniently access low pressure alerts, track data over time or view detailed reports and analytics. If low tyre pressure or high temperatures are detected, you will receive an alert in order to proactively fix the problem.



ContiConnect™ Yard receives all tyre

ContiConnect™ Live provides real time online integration with the web portal and is compatible with multiple telematics providers/devices.



Pioneering eco-friendly innovations

GreenTec Awards

Continental works on pioneering renewable resources such as Taraxagum, and has already received the European environmental prize "GreenTec Award" for this successful initiative. The tyre manufacturer also meets the European Chemicals ordinance REACH, which specifies the registration, authorisation and restriction of use of chemicals.

Continental Commercial Specialty Tyres (CST) continuously invests in the development of sustainable innovations for economically and ecologically efficient mobility. In addition to reducing fuel and energy consumption, the tyre manufacturer focuses on improving tyre performance in order to achieve an extended lifecycle. Durable tyres consume less energy throughout the entire production process as well as when in use. In addition, Continental CST strives to utilise the most environmentally friendly raw material sources.

Continental CST will continue to work on enhancing the sustainabile performance of its tyres so as to make a valuable contribution to the protection of the environment and a cleaner future.







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