

# BIG MOVES

Industrial  
Pneumatic Tires



# YOUR NEXT BIG MOVE

## Business under pressure

Airports, logistics, ports - different business sectors facing the same challenges: how to increase operational performance while meeting growing demands for individual solutions, strict safety requirements and digitized services.

## Big moves with pneumatic tires

When you're making big moves you need technology that keeps you going. Continental supports you with high-performance industrial pneumatic tires to withstand the pressure of your daily operations. Our innovative industrial pneumatic tires give you reliability and efficiency at high and low speeds, over long and short distances and on various surfaces.

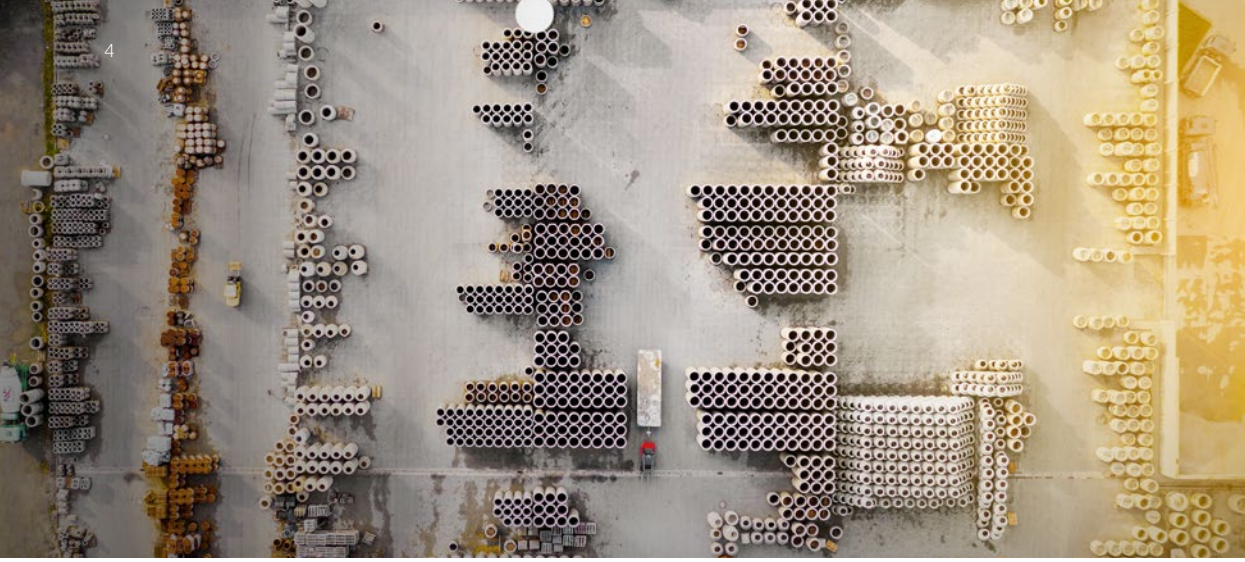
## German engineering and expertise

150 years of enhanced tire knowledge, 50 years of industrial pneumatic expertise and millions of industrial pneumatic tires delivered worldwide. Our history of precision German engineering is backed by a promise for the future: to continue to produce tires that allow you to make your big moves, whenever you want it.

**Make your next big move with Continental.**







# INDUSTRIAL



# PNEUMATIC



# TIRES

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# BIG CHALLENGES

Nothing could be more diverse or complex than current demands. Our aim is to help you overcome the various challenges of your daily operations – with our comprehensive product range, advanced tire technology and digital solutions.

## Increase productivity

With a strong and robust design and a high resistance to damage and cuts, even under extreme conditions, our tires ensure your operations keep running, 24/7.

## Provide individual, tailor-made solutions

Our industrial pneumatic tire portfolio offers the opportunity to meet individual demands with customized solutions – for forklifts, tow tractors, heavy load transport, airport ground support vehicles and trailers.

## Manage increasingly complex operations

Strong, reliable, powerful – our tires are ready to manage the tough tasks waiting for them in various industrial operations including the steel, concrete, paper, automotive and airport sectors.

## Meet stringent safety requirements

Effective grip and outstanding traction, even on the slipperiest surfaces, means our industrial pneumatic tires meet the strictest safety requirements.

## Achieve challenging sustainability goals

Our industrial pneumatic tires are designed to reduce fuel consumption and therefore help to improve your carbon footprint and reduce your overall costs.





# OUR BIGGEST AIM: YOUR SUCCESS

## Customer Services

Reliable support combined with sustainable solutions

Every day we aim to make your mobility safer, smarter and more sustainable. With excellent tires and reliable solutions, we strive to be your perfect service partner for industrial pneumatic tires.

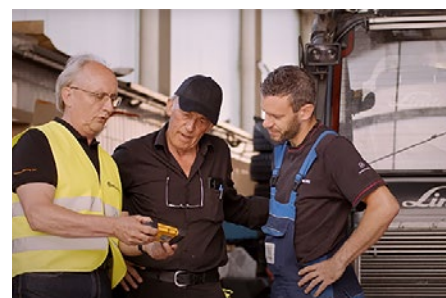
Our sustainable solutions add value to your company and to society. To put them in practice we put our customers first. Whether it is consultancy about the right tires for your applications, or on-site assistance with tire testing and digital solution implementation, we are there for you.

We believe "tire business is people business." Together we can shape a sustainable future.



**"We have been working very closely with Continental for over 20 years. If you call them, they will always get back to you. The support from Continental is top-notch."**

Jospeh Gensler, former Workshop Manager at Krenzer Paletten



### Technical Customer Services

- Warranty support - from Basic to Advanced
- Monitoring systems for evaluation and prediction of tire performance
- Technical consultancy and trainings

### Fleet Services

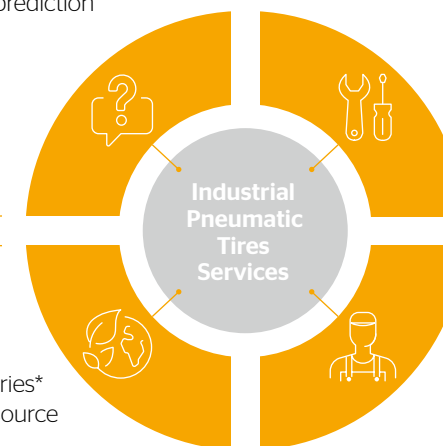
- Conti360° fleet solutions with a network of around 1,000 service partners in multiple countries across Europe
- Fleet administration tools to help automate data intake
- Advanced fleet management back office platform

### Sustainability (Targets until 2050)

- 100% carbon neutrality along our entire value chain
- 100% emission-free mobility and industries\*
- Circular economy with 100% closed resource and product cycles
- 100% responsible value chain
- Our ambition: 100% renewed and recycled tires

### Experts at Work

- Highly trained employees in every position - from Sales to R&D
- Close connection to customers to fulfill our conviction "tire business is people business"
- Advanced training tools - online, live and hybrid



\* Emission-free\* refers to zero emissions like greenhouse gases or NOx but does not include harmless emissions like water vapor emissions, non-toxic biodegradable particulate emissions or a minimum of noise emissions.



# DRIVEN BY BIG DATA

## Why Digital Tire Monitoring?

One Example: Savings for a fleet of 20 forklifts.

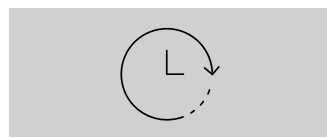


<sup>1</sup> vs. a tire that is 10% underinflated <sup>2</sup> Analysis by Continental based on customer experiences

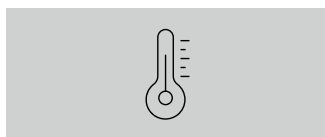


**Tire Sensors**  
mounted onto the inner liner:  
**measure pressure and temperature** from inside the tire.

## Challenges



**Lack of time** for frequent manual tire checks due to 24/7 shifts.



Maneuvering in small areas and high turn rate put high stress on tires and **can lead to high tire temperatures.**



Application based **driving** behavior.



A wide variety of different processes and applications both **indoor and outdoor.**

## Solution

- Receive real-time status by e-mail and SMS alerts or check your tire pressure in the web portal before vehicles go into operation to **reduce risk of breakdowns.**
- Properly inflated tires **save you up to 1% on fuel** compared to a tire just 10% underinflated. Additionally, it increases casing life by up to 20%.\*
- Get precise information on the tires' temperature **to help prevent tire damage and breakdowns.**
- Ensure **correct inflation pressure** during vehicle operations.
- Get system-supported tire information to increase safety and **save working hours** by eliminating manual pressure checks.

\* Please refer to the tire manufacturer's load and inflation information to determine the tire's weight capacity and proper air pressure.

## Choices

### ContiPressureCheck

Single Vehicle Monitoring ContiPressureCheck is a system for monitoring tire pressure and air temperature via a sensor in the tire. This system displays the collected data in the driver's cabin and sends a signal when tire pressure is not optimal. ContiPressureCheck is a driver-centric system for single vehicles and can be integrated into third-party telematics solutions by enabling long-distance, wireless data transmission.

#### Single

- Display
- Hand-Held Tool (HHT)
- Central Control Unit (CCU)
- Tire sensors

#### Integrated

- Hand-Held Tool (HHT)
- Central Control Unit (CCU)
- Tire sensors
- In vehicle telematics integration proprietary

### ContiConnect

Multiple Vehicle Solution ContiConnect is a solution that easily connects multiple vehicles and helps fleet managers move from rigid, manual maintenance. The tool includes a yard reader/telematic unit that enables remote data collection and transmission. This information is transmitted to the Continental backend and then uploaded to the ContiConnect web portal. This way, drivers and fleet managers can check the data anytime and anywhere on the web.

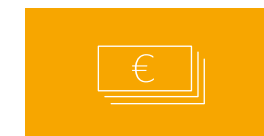
#### Yard

- ContiConnect Web Portal
- Hand-Held Tool (HHT)
- Yard-Reader-Station (YRS)
- Tire sensors

#### Live

- ContiConnect Web Portal
- Hand-Held Tool (HHT)
- Yard-Reader-Station (YRS)
- Central Control Unit (CCU)
- Tire sensors

## Benefits



**Increase efficiency**



**Monitor your assets**



**Maximize uptime**



**Safety**



**Sustainability**



# BIG TIME FOR TECHNOLOGIES

## Radial Tires

Motion and distance

A **radial tire** has a carcass which contains several layers of steel reinforcements. The main steel carcass layer runs directly from bead to bead. The sidewall and the tread area work independently of each other, which in turn enables the contact patch to be stiffer, flatter, wider, more stable with less tread movement while driving. This leads to lower heat build-up and lower wear rate, making a radial tire the optimum choice for longer distance applications.

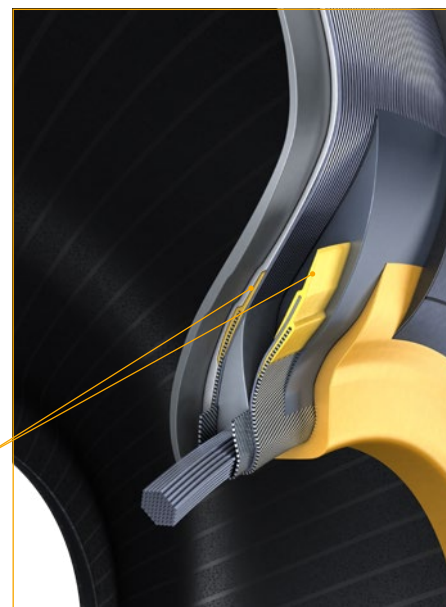
### StaBLe Bead\*

Re-engineered construction at bead area for maximum robustness

- Open steel cord ends and bead reinforcements are covered with an edge protection component to reduce potential bead area damage
- Special adhesion agents in the protection component enhance the chemical and mechanical interaction between reinforcements and compounds to deliver high robustness

\* In selected tire sizes implemented.

Edge protection component



Edge protection component for very high resistance against crack propagation and mechanical stress

## Cross-ply Tires

Motion and stability

In a **cross-ply construction**, the carcass consists of multiple layers of fabric, running diagonally from one bead to the other. Tread and sidewall are coupled to form a single unit. All shock-absorbing movements of the sidewall are transferred into the tread, meaning that the contact patch width varies in size and shape according to the ground surface. The multiple carcass layers result in a very robust side sidewall construction. Cross-ply tires are therefore flexible and have very high damage resistance. They are best suited to industrial tractors, airport vehicles and self-powered lift vehicles.

Tread  
Textile carcass  
Innerliner  
Sidewall  
Apex, chafer, bead and wire cores



Depicted: IC40



# SO BIG, SO SAFE



## Tubeless Sealing Ring (TSR)

Improved safety and mobility

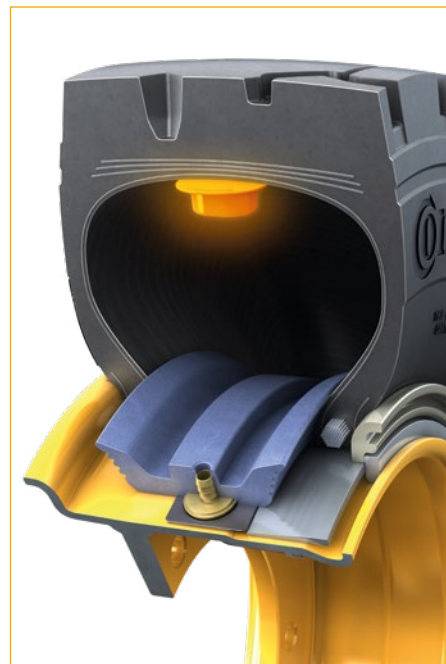
The Tubeless Sealing Ring (TSR) enables the mounting of Continental industrial radial tires on standard industrial vehicle rims. Their construction requires mounting with a tube and a flap. The TSR consists of a rubber ring with an integrated valve. The rubber ring sits on the cylindrical part of the rim between the beads of the tire and ensures an airtight interface, sealing the tire chamber without the use of a tube and flap.

The TSR works as an enabler for the usage of ContiPressureCheck in combination with a multi piece rim (tube type). ContiPressureCheck uses a sensor inside the tire to continuously monitor the inflation pressure and tire temperature to prevent tire failures and damage and maximize fuel efficiency.

Off-centered valve position (OC) for rims with a short valve slot.



Standard centered valve position for rims with a long valve slot.



## How does it work?

A rubber sealing ring is mounted inside the tire between the beads that seals the air when inflated.



### Disadvantages of tube tires

- Rapid deflation upon puncture
- Risk of valve rip-out
- Instant failure and increased downtime
- Risk of load and equipment damage

### Advantages of tubeless tires

- No sudden air loss upon puncture
- Equipment remains safe, mobile and productive
- Elimination of sudden weight transfer
- Turning on the rim is not critical
- Low profile tires have increased durability
- Simplified and quicker mounting
- Fewer parts than a tubed tire
- Optimized CO<sub>2</sub> footprint and maximum sustainability of the tire/vehicle system.



# ENJOY BIGGER POWER

## ContiRT20

### Power and durability

The ContiRT20 is characterized by outstanding mileage due to the low abrasion tread compound and resistance to damage and cuts even under extreme conditions.

The construction of this tire is specially designed to offer maximum tilting stability and therefore safety when lifting and transporting heavy and fragile loads. Its intricate tread design with a high number of tread edges ensure excellent traction together with high comfort via reduced vibration.

In general, the ContiRT20 is the perfect choice when it comes to high productivity and minimal operating costs in tough working conditions.

**Accessories for Continental industrial pneumatic tires** (e. g. tubes, flaps and valves) are available. Detailed information can be found in our Technical Data Book for Material Handling and Port Operations Tires.



## Radial Tires



### Product highlight

High number of tread edges

### Customer benefits

- Improved transmission of tractive force
- Increased mileage by reducing vibration-induced abrasion
- High durability
- Resistance to severe wear and tread cracking
- Special tread design for high levels of traction on both smooth and uneven ground surfaces







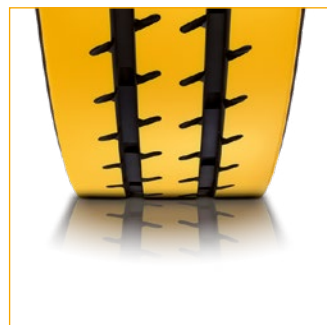
# BIG IN ALL CONDITIONS

## ContiRV20

Speed and grip

The ContiRV20 offers high productivity and minimal operating cost in fast moving material handling applications such as airports and logistics.

Safety is also in focus with improved wet grip and traction ensuring shorter stopping distances and better grip on slippery or sloping surfaces such as ramps. In addition, an industrial strength radial casing together with a closed outside-shoulder three-rib design provides excellent durability and lifetime as well a high degree of ride comfort and handling.



**Product highlight**  
Ribbed tread pattern for smooth road contact

- Customer benefits**
- Reduced energy consumption and CO<sub>2</sub> emission output
  - Wet grip and traction
  - Ride comfort and even wear



## ContiRV20 All Season

Traction and comfort - all year round

ContiRV20 All Season offers extra traction and performance in winter conditions.

Its three-rib tread with multiple sipes ensure maximum ground contact and traction on typical hard and flat airport surfaces and ramps that can get slippery when wet or covered in snow or slush.



**Product highlight**  
Angled pocket sipes for optimum traction performance and steering capabilities in all weather conditions

- Customer benefits**
- Optimum traction performance and steering capabilities in both summer and winter conditions
  - Increased traction and better braking performance in all weather conditions
  - High comfort and steering capabilities





# MADE FOR BIG JOBS

## TerminalMaster

### Strength and traction

Port terminal operations are very demanding for tires. Terminal tractors with their short wheelbase are designed for tight turns with a lot of tire abrasion. Ground conditions are additionally synonymous with a high amount of debris and uneven kerb and rail surfaces. Conditions are especially harsh with a high risk of tire damage. It is therefore recommended to use a tire specially developed for this application.

The Continental TerminalMaster is designed for this type of heavy-duty application combining a high load carrying capacity, extra deep tread and added damage protection from foreign objects.



#### Product highlight

Closed shoulder design tread ribs

#### Customer benefits

- ➊ Outstanding traction due to distinctive S-shaped cross ribs
- ➋ Increased mileage and excellent protection against foreign obstacles
- ➌ Reduced impact of corner scrub during turns



## TerminalTransport

### Resistance and endurance

The Continental TerminalTransport is an all-rounder. This radial tire with its closed-shoulder design and proven tread pattern will perform on all terminal tractor and trailer axle positions.

At home in the port terminal or freight shunting environment the TerminalTransport offers the advantages of low rolling resistance, excellent grip and traction in the wet, high ride comfort and even wear - with an excellent price-performance ratio.



#### Product highlight

Special tread pattern and tread compound

#### Customer benefits

- ➊ High damage resistance
- ➋ Traction on even and uneven surface
- ➌ High mileage







# THE BIG CHOICE

## TerminalMaster AP

Durable and efficient

The tire is used for pushback tractors or tugs (so called "pushbacks") operating in an airport.

**Customer benefits**

- High mileage and long service life
- Reduced fuel consumption and carbon emissions
- Excellent traction

## IC70

Flexible and energy-saving

The IC70 is the universal industrial tire for all wheel positions available in 8" rim diameters.

**Customer benefits**

- Good traction
- Excellent ride comfort
- Energy saving

## ConRad HT1

Tough and long-lasting

The ConRad HT1 is a twin fitment solution for large forklifts.

**Customer benefits**

- Tire durability
- Lower rolling resistance
- Longer wear
- Cost efficient

## IC 10 / IC 12

Sturdy and comfortable

The sturdy construction provides protection from tread punctures.

**Customer benefits**

- Good ride comfort
- High mileage

## IC 40

Robust and durable

The tire for demanding applications, where high mileage and durability are critical.

**Customer benefits**

- High loading capability
- Good tire stability
- Optimized damage resistance



## Cross-ply Tires





## Digital Tire Monitoring Components



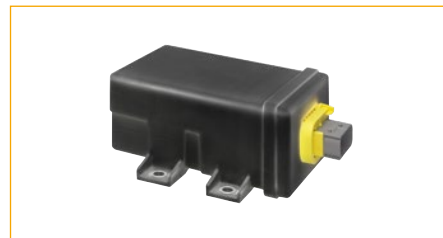
### Driver's cockpit display

- Display shows the status of the tire and indicates 7 different types of warning and the related tire position in the driver's cabin



### ContiConnect Web Portal

- Browser-based web interface for access to data, statistics and reports



### Receiver/Central Control Unit (CCU)

- Receives and evaluates signals from tire sensors
- Generates warnings and provides them for display - up to 24 tires fitted on up to 6 axles



### Hand-Held Tool

- Initial configuration of entire system
- Wireless communication with tire sensors
- Synchronizes tire sensors to each wheel position
- Wired communication with CCU



### Additional Receiver

- Integrated antenna and receiver to be used if:
  - Vehicle has an axle spread of more than 6m
  - Vehicle has more than 3 axles
  - A trailer is docked



### Yard Reader Station (YRS)

- The connectivity component that wirelessly receives data from the tire sensor upon returning to the yard



### Central Telematic Unit (CTU)

- The Telematic Control Unit receives processed data from the CCU and transmits it along with a GPS signal to ContiConnect web portal while the vehicle is moving in operation.



### Tire Sensor

- Integrated battery-powered tire sensor with radio frequency transmitter - individual coding per running wheel
- Sends data every 2 minutes



### Cleaning Scraper and Mounting Tool (for retrofitting sensor)

- Scraper for pretreating the inner layer of the tire
- Pressing tool including insert
- Tool for pressing on the tire sensor during bonding

## Digital Tire Monitoring Make your modular choice

	Description	Article No.
● <b>Basic Kits</b>	Kit 1.2: without additional receiver	17 34 115
	Kit 3.2: Trailer	17 34 117
● <b>Sensor Kits</b>	Kit 4.2.4: 4 tire sensors	17 34 118
	Kit 4.2.6: 6 tire sensors	17 34 119
● <b>Advanced Kits</b>	Kit 6.2: TireView (Display)	17 34 121
	Kit 7.2: TireConnect (Telematics cable)	17 34 122
<b>Tire sensor mounting and spare parts</b>	Cleaning Scraper	17 34 130
	Mounting Tool (tire sensor)	17 34 019
	Insert - Mounting Tool	17 34 022
<b>System configuration and spare parts (Hand-Held Tool)</b>	Set Hand-Held Tool incl. accessory	17 34 052
	Set Tire Sensor Container 12	17 34 072
	Set Tire Sensor Container 24	17 34 073
<b>ContiConnect</b>	KIT YardReader Station	*
	CTU (Central Telematic Unit)	1734199

\*Please contact our sales team for detailed information  
Additional mounting equipment and spare parts available. Detailed information can be found in the Technical Data Book for Material Handling and Port Operations.

### Components needed by solution

	Single		Integrated		Yard		Live	
	● 1.2	● 4.2.6	● 1.2	● 4.2.6	● 4.2.6	● YR	● 1.2	● 4.2.6
	● 6.2						● CTU	● 6.2
	● 1.2	● 4.2.6	● 1.2	● 4.2.6	● 4.2.6	● YR	● 1.2	● 4.2.6
	● 6.2						● CTU	● 6.2
	● 1.2	● 4.2.6	● 1.2	● 4.2.6	● 4.2.6	● YR	● 1.2	● 4.2.6
	● 6.2		● 7.2				● CTU	● 6.2
	● 1.2	● 4.2.6	● 1.2	● 4.2.6			● 1.2	● 4.2.6
	● 6.2		● 7.2				● CTU	● 6.2
	● 1.2	● 4.2.6	● 1.2	● 4.2.6	● 4.2.6	● YR	● 1.2	● 4.2.6
	● 6.2		● 7.2				● CTU	● 6.2
	● 3.2	● 4.2.4			● 4.2.4	● 4.2.4	● 1.2	● 4.2.4
	● 4.2.4				● YR		● 4.2.4	● CTU



## Dimensions

### Article Program Radial Tires

Size	PR	LI	SSY	Tread Pattern	Tire Type
<b>8" Rim</b>					
5.00 R 8	10	111	A5	IC70	TL
125/75 R 8    15x4 1/2R8	12	100	A5	IC70	TL
150/75 R 8    16x6R8	16	113	A5	IC70	TL
180/70 R 8    18x7R8	16	125	A5	ContiRT20, ContiRV20	TL
<b>9" Rim</b>					
6.00 R 9	12	121	A5	ContiRT20, ContiRV20	TL
<b>10" Rim</b>					
6.50 R 10	14	128	A5	ContiRT20, ContiRV20	TL
225/75 R 10    23x9R10	20	142	A5	ContiRT20, ContiRV20	TL
<b>12" Rim</b>					
7.00 R 12	16	136	A5	ContiRT20, ContiRV20, IC70	TL
250/75 R 12    27x10R12	20	152	A5	ContiRT20	TL
<b>13" Rim</b>					
165 R 13		102	A6	ContiRV20	TL
<b>15" Rim</b>					
7.00 R 15	14	143	A5	ContiRT20, ContiRV20	TL
7.50 R 15	16	146	A5	ContiRT20, ContiRV20	TL
8.25 R 15	18	153	A5	ContiRT20, ContiRV20, ConRad HT1	TL
225/75 R 15    28x9R15	16	149	A5	ContiRT20	TL
250/70 R 15	18	153	A5	ContiRT20, ContiRV20, IC80	TL
315/70 R 15	22	165	A5	ContiRT20, ContiRV20	TL
355/65 R 15	24	170	A5	ContiRT20	TL
<b>16" Rim</b>					
225/75 R 16	10	116	A8	ContiRV20, ContiRV20 All Season	TL
<b>16.5" Rim</b>					
8.75 R 16.5	12	128	A8	ContiRV20, ContiRV20 All Season	TL
<b>20" Rim</b>					
10.00 R 20	18	166	A5	ContiRT20	TL
11.00 R 20	18	169	A5	ContiRT20	TL
12.00 R 20	20	176	A5	ContiRT20, ContiRV20, ConRad HT1	TL
365/80 R 20		175	A5	TerminalMaster AP	TL
<b>22.5" Rim</b>					
280/75 R 22.5		168	A8	TerminalMaster	TL
300/80 R 22.5		172	A8	TerminalTransport	TL
310/80 R 22.5		175	A8	TerminalMaster	TL
<b>24" Rim</b>					
12.00 R 24		178	A5	ContiRT20	TL, TT
14.00 R 24		193	A5	ContiRT20	TL, TT

## Dimensions

### Article Program Cross-ply Tires

Size	PR	LI	SSY	Tread Pattern	Tire Type
<b>4" Rim</b>					
3.00-4	4	51	A5	IC10, IC35	TT
4.00-4	6	77	A5	IC10	TT
21x4	4	98	A5	IC10	TT
<b>8" Rim</b>					
4.00-8	6	90	A5	IC10	TT
4.00-8	10	97	A5	IC10	TT
5.00-8	8	106	A5	IC10, IC40	TT
15x4 1/2 - 8	12	100	A5	IC36	TT
16x6-8	16	113	A5	IC12	TT
18x7-8	16	125	A5	IC12, IC40	TT
<b>9" Rim</b>					
6.00-9	12	121	A5	IC10, IC40	TT
21x8-9	14	131	A5	IC40	TT
21x8-9	16	134	A5	IC12	TT
<b>10" Rim</b>					
6.50-10	14	128	A5	IC10, IC40	TT
7.50-10	12	133	A5	IC10	TT
23x9-10	14	134	A5	IC12, IC30	TT
23x9-10	20	142	A5	IC12, IC40	TT
<b>12" Rim</b>					
7.00-12	14	134	A5	IC10, IC40	TT
7.00-12	16	136	A5	IC10, IC40	TT
27x10-12	14	143	A5	IC12, IC30, IC40	TT
27x10-12	20	152	A5	IC12, IC40	TT
<b>13" Rim</b>					
21x4	4	98	A5	IC10	TT
22x4 1/2	4	101	A5	IC10	TT
23x5	6	113	A5	IC10, IC40	TT
25x6	8	126	A5	IC10, IC40	TT
<b>15" Rim</b>					
7.00-15	12	138	A5	IC10	TT
7.50-15	14	144	A5	IC40	TT
7.50-15	16	146	A5	IC10	TT
8.25-15	18	153	A5	IC10, IC40	TT
28x9-15	14	146	A5	IC12, IC40	TT
200-15	12	139	A5	IC12	TT
250-15	18	153	A5	IC12, IC40	TT
300-15	22	165	A5	IC12, IC40	TT
355/65-15	24	170	A5	IC12, IC40	TL
<b>20" Rim</b>					
10.00-20	18	166	A5	IC40	TL
12.00-20	20	176	A5	IC40	TL





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