



## **ROADTEC Z6**

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### **INTERACT**

### **ROADTEC Z6 INTERACT™ : Technical Release**

#### **PRODUCT CHARACTERISTICS**

ROADTEC Z6 INTERACT™ represents Metzeler way of innovation. Instead of pushing on a single element of the tyre like the compound which is then subjected to wear, Metzeler established that is more effective to improve the whole tyre system. Making the tyre elements interact to the maximum level means improving the interaction between the tyre and the ground, the tyre and the bike, the tyre and the external environment.

This is the key of the new INTERACT™ technology.

ROADTEC Z6 was perfection, ROADTEC Z6 INTERACT™ is the evolution, the fine tuning which guarantees it to be the perfect tyre for the new generation of bikes and riders.

#### **Structure**

The Structure represents the backbone of the product and its most critical element because it bears all stress and the strain generated by the bike during the ride.

Up to now it has been very difficult to ream stresses in order to differentiate the tyre behaviour in different areas but Metzeler technicians, working over the years on the 0° steel belt winding process, have made another huge step forward.

The new winding process allows to progressively ream stresses in the different areas of the tyre; as the result, every single steel string has been designed with a pre-defined resistance to stress for a specific performance requested.

As a result, we now have a real interaction between carcass and belts thanks to the modular string winding tension from zenith to the shoulder: no compound at all would allow itself this level of result. The key of performance is the entire tyre design with no discontinuity in terms of performance due to wear or to different lean angles.

The number of steel strings inside the tyre guarantees an homogeneous differentiation of performances, avoiding any “step effect” typical of multi compound technology.

Lower tension creates more flexibility and therefore higher energy absorption, the compound increases the temperature and in a certain sense becomes softer.



Basically we are discussing high steel belt winding tension for maximum stability in the centre of the tyre and a progressive reduction of steel belt winding tension allowing maximum agility whilst tipping in and higher flexibility for maximum grip at full lean

Another important aspect which contributes to making ROADTEC Z6 INTERACT™ the new market benchmark is represented by the comfort aspect. The ability to create a differentiated, tailored behaviour of the tyre means optimizing the self-damping characteristic so that riding on the tyre is always a pleasure, whether on long motorway journeys or fast and demanding rides over twisty roads.

ROADTEC Z6 INTERACT™ front and rear represent the latest application of the patented 0° steel belt platform, which has been the success of the German radials for years.

This technology offers important benefits for Sport-Touring use as the 0° metal belt translates immediately into appreciable top handling. The tyre is more stable and handles in a uniform manner, even in high speed riding conditions, yet when fully loaded it is more balanced in a corner, more stable under braking.

ROADTEC Z6 INTERACT™ keeps two different construction typologies for the different technical characteristics of all Sport-Touring bikes (>240 kg or <240kg bikes approx. weight of unloaded bike).

## Profile

ROADTEC Z6 INTERACT™ benefits from the profile of the world famous Contour Modelling Technology (CMT) that has been world wide celebrated with the ROADTEC Z6.

The immediately perceptible result for the motorcyclist is neutral and smooth handling in all manoeuvres: in agile and fast changes of trajectory, the motorcycle always remains predictable, with never anything other than total reliability in the motorcycle-system and its interaction with the road's surface.

## Tread pattern

**ROADTEC Z6 INTERACT™** keeps the same tread pattern of the ROADTEC Z6 adopting the same philosophy of combining the drainage and mileage characteristics but with the basic concepts that sustain the sporting vocation of the sport tyre.

Linear sea/land ratio distribution on contact patch at different lean angles features excellent water drainage for smooth and homogeneous riding (see Fig. 3)





*Fig. 3: Land Sea ratio*

In dry conditions, the performance equilibrium that inspires the ROADTEC Z6 INTERACT™ in all its aspects is manifested in perfect combination between sports grip and mileage, within the logic of the use of a Sport-Touring bike. The pre-defined stress distribution all along the profile helps to keep open all the grooves even under the high load which is typical of sport touring bikes; the perfect interaction between structure and tread pattern design ensures the perfect water drainage even in the hardest conditions.

### **Compound**

Compound is not a stand alone element of the tyre, the tread compound must work as an element of the whole complex.

The modular string winding tension effect on compound is evident.

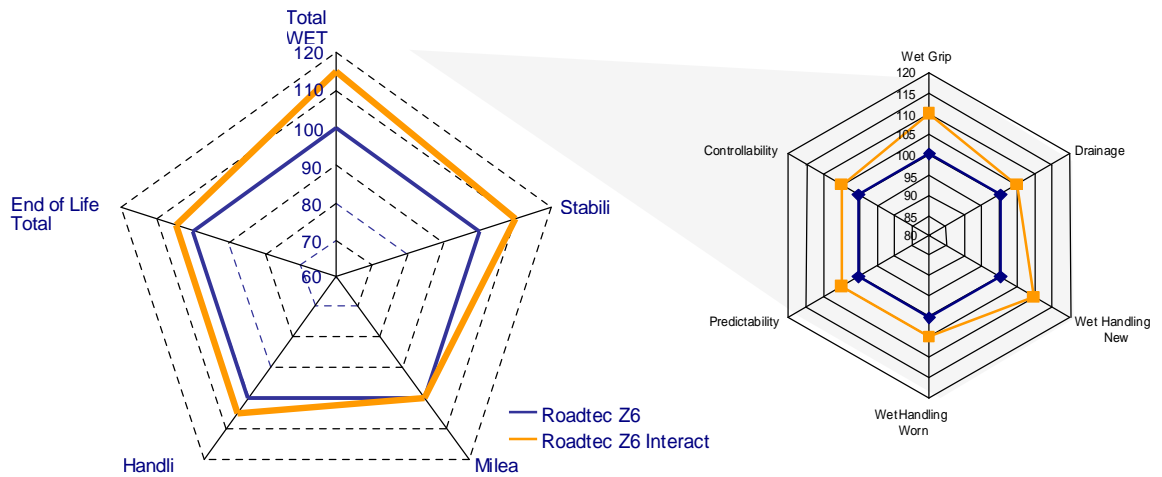
On the straight, the high tension on the belt which provides the maximum stability also reduces tread compound movements and thus its temperature.

This prevents tyre wear and the jelly effect. While tipping-in the balanced movement provide an exceptional contact feeling and at full lean the reduced tension of the steel belts allow it to work properly for maximum grip.

Other important benefits come from the highly efficient mixing process that guarantees maximum micro dispersion and uniform distribution of all ingredients. With a better quality and dispersion of all the fillers and a better control of physical and chemical parameters there is always a perfect interaction with the structure in terms of reaction, grip and smoothing. New compound is characterized by the application of latest generation of materials in front and rear tyre polymers, fillers and a new Silica ratio for improved stability and grip, without affecting the mileage level of ROADTEC Z6 and also assuring a fast warm-up combined with a high thermal stability. A new Silica ratio (65% versus ROADTEC Z6 30%) and the use of synthetic polymers with a balanced glass transition guarantee an improved wet grip in the full typical range of temperature conditions and the application of a special resin ensure the same mileage of ROADTEC Z6.

### **Product Benefits**

The key product benefits are summarized in the following radar chart, which compares the features of the ROADTEC Z6 INTERACT™ with ROADTEC Z6, actual internal reference in the segment.



ROADTEC Z6 INTERACT™ confirms all of the outstanding features of Roadtec Z6 like Mileage enhancing to the utmost: stability, handling, total wet behavior and performance lasting till the end of the product life

**Technical Data:** Data according to E.T.R.T.O.

IPCODE	Service Description	Product Name	F/R	Width (mm)	Diameter (mm)	Measuring rim (inches)	Permitted Rim (inches)	Max Load (kg)	Tread depth (mm)	Tyre weight (avg, kg)
1826800	120/70 ZR17 M/C (58W) TL	Roadtec Z6 Interact Front	F	122	600	3,5	3,00 ; 3,50 ; 3,75	236	4,5	4,2
1826900	120/70 ZR17 M/C (58W) TL	Roadtec Z6 Interact Front G	F	122	600	3,5	3,00 ; 3,50 ; 3,75	236	4,5	4,2
1827000	160/60 ZR17 M/C (69W) TL	Roadtec Z6 Interact	R	161	624	4,50	4,25 ; 4,50 ; 5,00	325	6,5	5,6
1827100	170/60 ZR17 M/C (72W) TL	Roadtec Z6 Interact	R	168	636	4,50	4,25 ; 4,50 ; 5,00	355	6,5	6,5
1827200	180/55 ZR17 M/C (73W) TL	Roadtec Z6 Interact	R	178	630	5,50	5,00 ; 5,50 ; 6,00	365	6,5	6,2
1827300	180/55 ZR17 M/C (73W) TL	Roadtec Z6 Interact C	R	178	630	5,50	5,00 ; 5,50 ; 6,00	365	6,5	6,7