

# MC Windfeld Ti

Exclusive Moving Coil Cartridge



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PW<sup>2</sup>Ti



Ortofon has extended the range of the Exclusives Series to include the brand new MC Windfeld Ti phono cartridge

In continuation of the Ortofon design tradition and the new paradigm in engineering and manufacturing, we are proud to introduce the MC Windfeld Ti, a new moving coil phono cartridge in the absolute high-end class.

At the heart of the MC Windfeld Ti lies a revolutionary customized Selective Laser Melting (SLM) manufacturing technology pioneered by Ortofon for manufacturing of the legendary MC A90 in 2007.

Our extensive knowledge of vibration properties, characteristics in different shapes and materials, competences in magnetism, mechanical design and new technologies have been applied for optimization of the MC Windfeld model. The new MC Windfeld Ti has gone to the next level by reducing unwanted vibrations and increasing the dynamic capability of the cartridge.

Those who choose to adopt the MC Windfeld Ti will experience the lifelike, dynamic and open sound, with exceedingly clear midrange. The MC Windfeld Ti remains extremely musical while paying close attention to micro dynamic details, with its delicate, but also analytical nature.



## Benefits of high end materials and advancements in technology

The SLM technology and high precision process eschews traditional techniques: considered an engineering breakthrough, the SLM process welds fine particles of Titanium together, layer by layer, to construct a single piece body devoid of extraneous material. This technique allows for precise control of the density of the body material, allowing for extremely high internal damping. The final result provides freedom over vibrations within the cartridge body material.

The use of Titanium in the MC Windfeld Ti has provided a further improvement to the overall rigidity of the structure, the cartridge weight and its dynamic capability.

The magnet system is based on an extremely strong, compact neodymium magnet, which makes the generator system both compact and lighter through its minimal dimensions.

Using Ortofon's Aucurum coils of gold-plated, 6NX oxygen free copper allows for zero-loss transmission of the diamond's movements via its Boron cantilever. This combination combines low moving mass with an extremely high degree of rigidity.

Inspired by the elements of MC A95 design, the MC Windfeld Ti employs a specially designed armature used to achieve extreme

precision in each coil turn in all layers. This enables the MC Windfeld Ti to achieve a higher degree of channel separation, while simultaneously offering lower distortion and better channel balance.

## Increase in dynamics, resolution and richness in detail

Ortofon's Field Stabilizing Element (FSE), a small cylinder of conductive material strategically placed inside the magnet system, guarantees that the force field remains stable regardless of the movement of the armature. FSE improves the channel separation, while at the same time minimizing dynamic distortion and intermodulation. The result: fantastic dynamics and even more elbow room between the musicians. You simply experience greater breadth, height and depth in the sound scenario between the high-end system's loudspeakers!

One of the important components is Ortofon's patented Wide Range Damping system (WRD), in which a small, heavy platinum disc is sandwiched between two rubber absorbers, both with different properties. This ensures not only an exceptional tracking performance, but also creates a perfect damping through the entire frequency range. Because of this, distortion and resonance are virtually eliminated.

As featured in the entire Exclusive Series, the MC Windfeld Ti makes use of Ortofon's Replicant 100 diamond, known for its thin and light profile and extraordinarily large vertical contact surface. Since the Replicant 100 is closest to the shape of the cutting stylus, it can trace with accuracy unparalleled by any other stylus in existence. Special polishing of the diamond along with the use of a Boron cantilever offer remarkable transparency, speed, and responsiveness beyond that of any other combination.

## Flexibility and performance with a range of compatibility

Historically, Ortofon has always followed its own path with regard to the mechanical design of the cartridge housing, because mechanical rigidity and total freedom from resonance in the audible range are a precondition for optimal sound quality. In the MC Windfeld Ti the cartridge's contact with the tonearm takes place through three hard, well-defined contact points placed on the fastening section of the cartridge. This means that the mechanical integration of the cartridge and the tonearm arm is always absolutely perfect.

With optimized weight and moderate compliance to suit the majority of modern tonearms, the MC Windfeld Ti is easy compatible with an endless array of contemporary high-end turntable equipment. A low output impedance of 7 ohm and a low

output voltage of 0.2 mV makes the Ortofon MC Windfeld Ti a perfect partner for most MC pre-amps as well as step-up transformers, including the Ortofon ST-80 SE.

When combined with Ortofon's world-class knowledge in analogue sound reproduction, The MC Windfeld Ti will undoubtedly provide sound which simply has to be experienced.

## Design

The MC Windfeld Ti is also unique in cosmetic terms: the parts of the cartridge housing are produced with matte black surfaces. The fastening section made in raw Titanium is distinct in silver color. The underside facing the record is covered by a new shield, which reinforces the mechanical structure. Per Windfeld's characteristic initials in silver accompanied by the letters "Ti" (Titanium) adorn the sides of the cartridge housing, paying tribute to Windfeld's legacy while at the same time signifying the technological advancements which create a new standard of analog performance.



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## Technical Data

Output voltage at 1,000 Hz, 5 cm/sec.	0.2 mV
Channel balance at 1 kHz	0.5 dB
Channel separation at 1 kHz	25 dB
Channel separation at 15 kHz	20 dB
Frequency range at -3 dB	10 Hz – 50 kHz
Frequency response	20 Hz – 20 kHz +2 / -1 dB
Tracking ability at 315 Hz at recommended tracking force	90 µm
Compliance, dynamic, lateral	13 µm/mN
Stylus type	Nude Ortofon Replicant 100, special polished on Boron cantilever
Stylus tip radius	r/R 5/100 µm
Tracking force range	2.0 – 2.5 g (20 – 25 mN)
Tracking force, recommended	2.3 g (23 mN)
Tracking angle	23°
Internal impedance, DC resistance	7 Ohm
Recommended load impedance	> 10 Ohm
Cartridge body material	SLM Titanium, Stainless steel
Cartridge colour	Titanium/Black
Cartridge weight	11 g