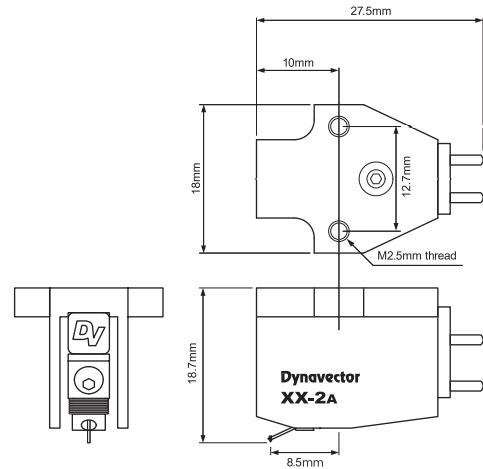




*New  
2024*

**Dynavector**  
 Specially Annealed Magnetic Circuit  
**MC Phono Cartridge**  
**XX-2A**

sounds more natural and dynamic



< **Specifications** >

<b>Type</b>	Low output moving coil cartridge with Alnico magnet and Flux damper	<b>Output Voltage</b>	0.28mV (at 1KHz,5cm/sec.)
<b>Channel Separation</b>	30dB(at 1KHz)	<b>Channel balance</b>	1.0 dB(at 1KHz)
<b>Frequency response</b>	20 - 20,000Hz (± 1dB)	<b>Compliance</b>	10 mm/N
<b>Tracking force</b>	1.8 - 2.2g	<b>Impedance</b>	6 ohms
<b>Recommended load impedance</b>	> 30 ohms	<b>Cantilever</b>	6mm length 0.3 mm dia.solid boron
<b>Stylus tip</b>	PF Line contact shape, stylus radius : 7x30 micron	<b>Weight</b>	8.9g

# Dynavector's Cartridge Legacy

Established in 1978, Dynavector has been at the forefront of high-end audio manufacturing, introducing a multitude of high-performance cartridges to the market. Our approach to development is deeply rooted in academic engineering theory, a tradition passed down by our founder(1). Since the 1990s, we have pioneered the development of cutting-edge vibration systems, including ultra-fine wire high-output coils and gemstone cantilevers. Central to our focus has been the refinement of magnetic circuits. As a result, Flux Damper (2) to stabilise magnetic flux and Softened Magnetism (3) to reduce magnetic flux fluctuations were developed and installed into our cartridges.

In 2024, we achieved a significant breakthrough by enhancing the physical properties of our magnetic circuits, resulting in unparalleled sound quality.

## Introducing the Special Annealing Magnetic Circuit

While an exceptional vibration system is essential for a high-performance MC cartridge, we emphasise the critical role of the magnetic circuit. The cartridge's output signal is intricately tied to the movement of the vibration system within the magnetic circuit, where electricity is generated as the coil vibrates amidst the magnetic flux.

To ensure optimal output, it is imperative that the magnetic flux maintains high density and stability. We employ pure iron for our magnetic circuit due to its high magnetic permeability and exceptional stability, resulting in a distortion-free output. However, the processing of metal parts often distorts the crystal structure at the atomic level, leading to a loss of magnetic permeability.

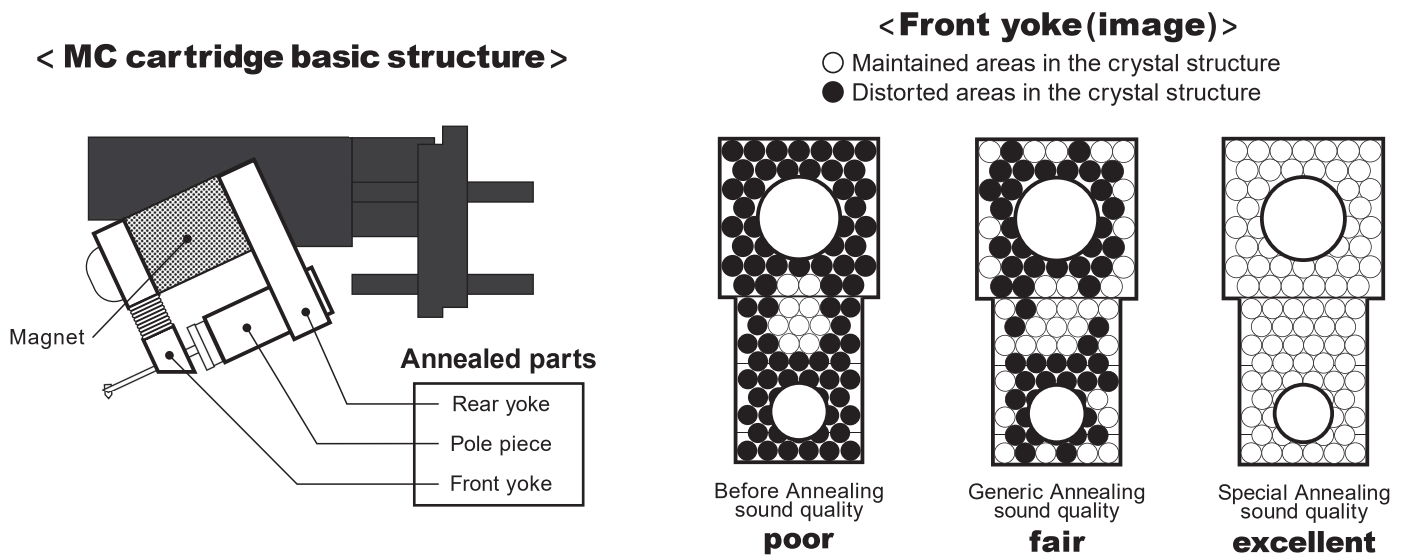
Magnetic annealing, a process of heating and cooling processed parts, is crucial for restoring the distorted metal crystal structure and regenerating magnetic permeability. However, a generic magnetic annealing cannot fully restore distortions in the crystal structure. The magnetic annealing conditions vary depending on the parts material, size, shape, etc.

Our recent development focused on finding the best magnetic annealing process, including temperature, environment, duration, and heating and cooling rates. This meticulous approach has enabled us to unleash the full potential of pure iron's unique magnetic performance.

The new magnetic circuit has significantly enhanced sound quality, delivering unrivalled resolution, smooth wide-range expression, and expansive sound field. Experience the natural and dynamic sound of the Dynavector XX-2A cartridge, where an exceptional vibration system harmonises seamlessly with an optimised magnetic circuit.

## Benefits of Magnetic Annealing

Magnetic annealing rejuvenates the distorted crystal structure, restoring magnetic permeability to its original state.



**(1) Founder:** Dr. Noboru Tominari (1927~2002), Doctor of Engineering Tokyo University, Former Professor at the Department of Mechanical Engineering Tokyo Metropolitan University

**(2) FLUX DAMPER:** By wrapping a closing coil on the front yoke, the flux damper stabilizes flux disturbance caused by the vibration power from the cantilever and coil, giving a more natural sound. (Patented)

**(3) SOFTENED MAGNETISM:** High-power magnets like neodymium have extremely high internal magnetic resistance, which causes large fluctuations in magnetic flux density and deteriorates sound quality. A highly permeable material is attached to the magnet to reduce the magnetic resistance of the magnetic circuit while maintaining magnetic force, preventing magnetic flux fluctuations and improving sound quality. (Patented)