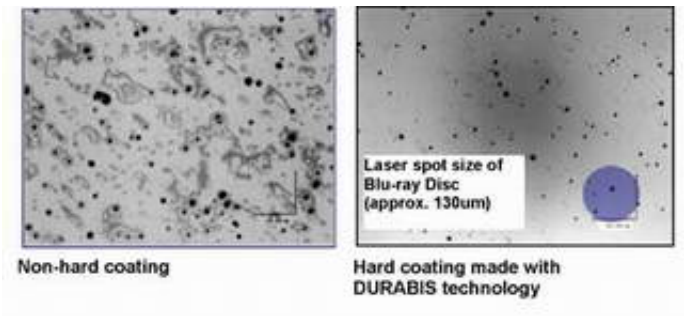
Exclusive TDK Durabis Coating Technology Makes Cartridge-Free, Ultra-Durable Blu-Ray Discs a Reality

January 9 2005



DURABIS Protective Coating Eliminates the Need for Disc Cartridges;
Exclusive Formulation Attains Unprecedented Recording Speeds and Capacities

At CES 2005, TDK, a world leader in digital recording solutions, is unveiling DURABIS, an exclusive coating technology that significantly increases the durability of the Blu-ray Disc, eliminating the need for cumbersome cartridges to protect the media's recording layer. TDK will provide briefings on exclusive technological developments that deliver capacity and recording speed breakthroughs for the recordable Blu-ray Disc format.

Image above: An oily, fingerprint-like substance was applied to the recording surfaces of two discs. The recording surface of the disc without hard coating technology was heavily contaminated by the substance. In contrast, the recording surface of the disc with DURABIS technology successfully prevented the substance from adhering.

As a founding member of the Blu-ray Disc Association, TDK is playing a key role in the development of the new format. Because the Blu-ray Disc format can store up to 25GB of data on a single disc that is the same size as a standard DVD, unprecedented recording media stability and precision are mandated. To realize the narrow track pitch and high recording density required by Blu-ray Disc without sacrificing reliability, TDK has developed new disc formulations and manufacturing technologies.

"TDK has committed massive engineering resources to enhancing the durability, capacity and recording speed of the Blu-ray Disc," commented Bruce Youmans, TDK Vice President of Marketing. "Consumers will adopt the format because we've made bare recordable Blu-ray Discs a reality. Our efforts to maximize the potential of this groundbreaking format have allowed the company to redefine and extend the capabilities of optical media."

TDK has unified its super hard coating technology under the name DURABIS, and has produced a logo to identify it. DURABIS, which was coined by combining the words "durability" and "shield," conveys the high durability of products that include the hard coating technology. Durability, Capacity and Speed: TDK Advancements Unlock Blu-ray Disc's Potential

TDK's DURABIS coating technology makes recordable Blu-ray Discs possible, as it provides protection to the recording layer, which is very close to the disc surface. DURABIS technology resists scratches, which

can cause recording and playback errors. The coating also resists other common contaminants such as fingerprints and dirt. Because the DURABIS coating technology rapidly discharges static electricity, the discs also resist the accumulation of dust. Eliminating the need for a cartridge will contain manufacturing costs, keeping Blu-ray Disc pricing in line with today's standard recordable DVD discs. With DURABIS coating technology allowing bare Blu-ray Discs, the format will instantly feel familiar to consumers.

TDK technologies are redefining the state-of-the-art optical media specifications and performance. The company's advanced sputtering technology has already enabled creating 50GB dual layer and 100GB quadruple layer optical recording media. TDK can apply the same technology to creating Blu-ray Discs.

Additionally, TDK has developed a new CuSi inorganic film formulation that provides absolute stability with narrow track pitches and high recording densities, such as those employed by the Blu-ray Disc format. The material is so precise that TDK has already been able to achieve 6x (216Mbps) recording speed in the lab with blue laser media.

TDK Blu-ray Discs make it possible to record a full-length feature film, complete with advanced features and interactive bonus material, in high-definition on a single disc. Compatible with the widest range of Blu-ray Disc recorders, TDK Blu-ray Discs will provide the ultimate solution for capturing HDTV broadcasts. In addition, movie and gaming studios are planning to release content on pre-recorded Blu-ray Disc, further driving consumer adoption of the format. Advanced copy protection features will provide consumers with flexible usage options while protecting the rights of content providers.

TDK Blu-ray Discs will be available in the United States in 2005.

TDK DURABIS Hard Coating Technology Benefits

1. Resists Scratches

DURABIS hard coating technology gives TDK Blu-ray Discs industry-leading scratch resistance. Mishandling and wiping away grime can easily damage standard, untreated discs, but TDK Blu-ray Discs with DURABIS technology are protected.

2. Resists Grime Including Fingerprints and Smudges

DURABIS hard coating technology provides superior resistance to grime such as fingerprints and smudges, which can accumulate during normal, day-to-day use. Reducing grime helps ensure that the laser can properly interact with the disc's recording layer.

3. Resists Dust

DURABIS hard coating technology enables TDK Blu-ray Discs to release static charges much faster than other media. The reduction of static charges makes it difficult for dust to bind to a disc's recording surface. Keeping the recording surface dust-free enhances reliability.