

Imation 3480 and 3490E Half-Inch Tape Cartridges

From the innovator of 1/2"
tape cartridge technology

Proven History

Over
200 Million Sold
Worldwide



Commercializing the first computer tape was just the beginning of our partnership with industry leaders like IBM and StorageTek. Backed by more than 50 years of data storage expertise, Imation continues to meet the demands of data centers by working in tandem with leading drive manufacturers around the world. It's these relationships, together with our reputation for dependability and superior technology, that make Imation the most preferred brand of removable data storage media for the data center.

Imation 3480 and 3490E Tape Cartridges

Imation Black Watch™ and Royal Guard™ 3480 and 3490E Tape Cartridges are designed to help 3480, 3490E, Timberline 9480 and 9490 and 3480-/3590E-compatible tape drives meet your high-performance data center requirements. For accurate and reliable tape processing, backup and archiving of your data, choose Imation cartridges.

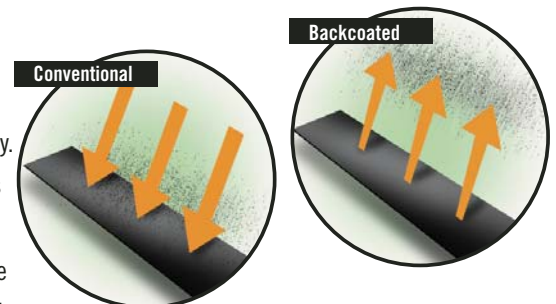
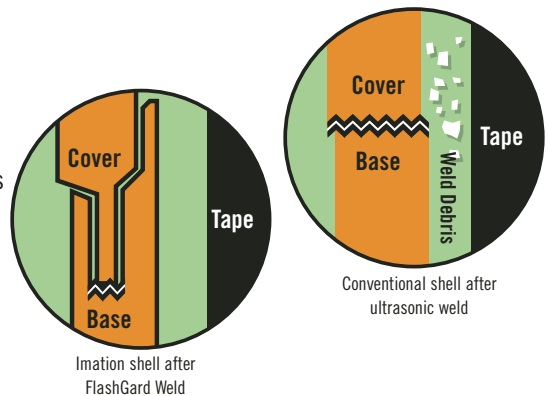
- **Proven History**—Over 200 million cartridges sold worldwide since 1984.

Imation patented cartridge design features:

- **Patented Imation FlashGuard™ Weld**—Creates a "wall within a wall" to trap unwanted weld debris or "flash," keeping it away from the tape pack. This process also enhances cartridge ruggedness and helps protect against drop damage.
- **Precision Tape Spool**—Imation's sleek spool design, ensures optimal tape pack winding.
- **Finger Grips**—Allow for easy cartridge handling and recessed label area allows for secure cartridge stacking.

Plus:

- **Proprietary Backcoating**—Imation's textured backcoating on Black Watch brand cartridges safeguards your data by repelling error-causing static electricity. Imation's backcoating also acts like a cushion to safely absorb wound-in debris to decrease the chance of data loss and minimizes inter-layer slippage for uniform signal output.



- **OEM Interchange**—Specifically designed for use in 3480/3490E drives. Proven through the decades by data center users worldwide.
- **Limited Lifetime Warranty**

#1 Manufacturer of 3480/3490E Tape Cartridges Worldwide—committed to the data center

In order to protect our loyal customers from future product shortages, in 2003, Imation invested millions of dollars to purchase an estimated 8 to 10 year supply of chromium dioxide pigment (chromium dioxide pigment is a key raw material required in the production of 3480 and 3490E cartridges). As a result of this strategic purchase, customers around the world can take comfort knowing Imation will be able to supply 3480 and 3490E cartridges well into the future.

Co-developed with IBM

Launched in the mid 1980s by IBM, 3480 cartridge technology entered the market as the first square tape format creating a revolution in data center management. Less than a decade later, IBM introduced 3490E drive technology, securing the longevity of the half-inch square tape platform leading to ongoing tape technology development to support the data center user.



The world trusts Imation for data storage

Data storage can make or break a business. And as the world's information needs continue to intensify, millions of data center managers, IT professionals and computer users look to Imation for the proven quality, reliability and performance they need to manage, store and secure their data.

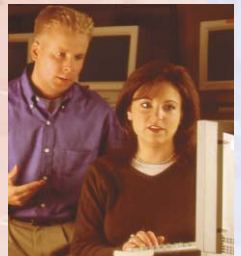
It all started more than 50 years ago when we introduced the world's very first computer tape in 1952. And we continue to meet the demands of today's data centers by working with IBM, StorageTek and other industry leaders. It's that history, along with our reputation for dependability and superior technology, that makes Imation's full line of products the most preferred media for data center, network and desktop customers all over the world.

Three reasons to buy Imation 3480/3490E tape cartridges:

- 1. Proprietary backcoating (Black Watch brand cartridges)**—protects against harmful static electricity and wound-in dust and debris
- 2. FlashGard weld**—prevents weld debris from contaminating the tape pack and minimizes drop damage
- 3. Superior technical support**—dedicated customer 800# (800.328.9438) and Imation's exclusive Tape Performance Analysis

Imation data center solutions

Let our over fifty years of experience in data storage media design and manufacturing work for you. We offer collaborative, solid solutions to your data center challenges, helping you streamline your operations and improve efficiency. Contact your Imation sales representative for complete details about this program.



Imation 3480/3490E cleaning cartridge

Imation 3480/3490E cleaning cartridges provide up to 500 cleanings. Imation's dry cleaning cartridges are compatible with all 3480- and 3490E- compatible drives. Imation's static dissipating tape spool minimizes the transfer of static during the cleaning process, providing protection against static-related failures. Imation 3480/3490E cleaning cartridges comply with the mechanical properties required by the IBM Cleaning Cartridge Specifications.



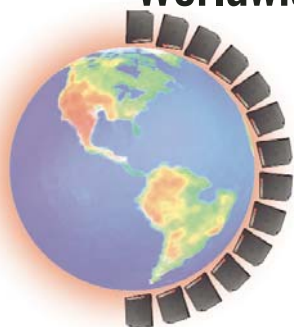


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**Over
 200 Million Sold
 Worldwide**



Placed side by side, that's enough
 3480/3490E cartridges to reach
 halfway around the world.

Product Specifications

3480/3490E Half-Inch Tape Cartridges

	3480 Cartridge	3490E Cartridge
Physical Characteristics		
Substrate	PET (Polyethylene terephthalate)	PET (Polyethylene terephthalate)
Thickness		
Backcoated		
Substrate	0.92 mils nominal (23.4 microns)	0.52 mils nominal (13.2 microns)
Magnetic coating	0.14 mils nominal (3.6 microns)	0.10 mils nominal (2.5 microns)
Nonmagnetic backcoating	0.04 mils nominal (1.0 microns)	0.04 mils nominal (1.0 microns)
Total	1.10 mils nominal (28 microns)	0.66 mils nominal (16.8 microns)
Nonbackcoated		
Substrate	0.92 mils nominal (23.4 microns)	0.44 mils nominal (11.6 microns)
Total	1.10 mils nominal (28 microns)	0.53 mils nominal (13.7 microns)
Durability	One coincident dropout (See Error Characteristics) that persists more than 10 consecutive read passes	
Long Length	2,000+ read-forward passes	2,000+ read-forward passes
Short Length	120,000+ read-forward passes	120,000+ read-forward passes
Magnetic Characteristics		
Intrinsic Coercivity (Hc)	520 Oersteds (39.8 kA/m) ±30 Oe using VSM with time constant of 0.3 seconds	520 Oersteds (39.8 kA/m) ±30 Oe using VSM with time constant of 0.3 seconds
Broad Band	30 dB minimum	30 dB minimum
Signal-To-Noise (average signal power to average integrated broad band [floor] noise power)		
Safety Characteristics		
Toxicity	Non-hazardous to human health in anticipated use	
Cartridge Shell Conditions		
Leader Block Loading/Unloading	Minimum of 5,000 load/unloads	
Cartridge Drop Test	Suitable for single use after drop of up to 39.4 inches (1m)	
Environmental Recommendations		
Operating Conditions	60°F to 90°F (15°C to 32°C) 20% RH to 80% RH 78°F (26°C) wet bulb maximum	
Storage Conditions of recorded tape (4 weeks maximum)	40°F to 90°F (4°C to 32°C) 5% RH to 80% RH 80°F (27°C) wet bulb maximum	
Transportation Conditions of Unrecorded Tape (10 days maximum)	-10°F to 120°F (-23°C to 49°C) 5% RH to 80% RH 80°F (27°C) wet bulb maximum with no condensation	
Transportation Conditions of Recorded Tape (10 days maximum)	40°F to 100°F (4°C to 38°C) 5% RH to 80% RH 78°F (26°C) wet bulb maximum with no condensation	

Ordering Information

	Standard	Labeled	Labeled & Initialized
3480 Cartridges			
Black Watch 3480 (210MB, 575')	12514	45799	45800
Black Watch 3480 (220MB, 600')	12726	46113	46114
Royal Guard 3480 (210MB, 575')	40213	45700	45701
Royal Guard 3480 (250MB, 656')	40467	45730	45731
Royal Guard 3480 (300MB, 807')	43401	45760	45761
3490E Cartridges			
Black Watch 3490E (810MB, 1100')	46138	11525	11358
Royal Guard 3490E (810MB, 1100')	42473	45851	45853

For more information about Imation 3480 and 3490E Half-Inch Tape Cartridges or data center services, contact your authorized Imation dealer or your sales representative, or visit www.imation.com/3480