

NATIONAL SECURITY AGENCY
CENTRAL SECURITY SERVICE
FORT MEADE, MARYLAND



Degausser Evaluated Products List

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Introduction

1. The Degausser EPL (Evaluated Products List) specifies the current models of commercial equipment that satisfy NSA/CSS requirements for erasure of magnetic storage devices retaining any level of classified or sensitive data. Listing on the Degausser EPL does not constitute endorsement of the product by the USG or NSA/CSS; it only states that the evaluated degausser has met the applicable NSA/CSS performance requirements. Neither does the listing guarantee continued performance; customers should have their equipment re-tested periodically according to the manufacturer's recommendations.
2. Magnetic storage devices are defined in this document by a magnetic property called coercivity in units of Oe (Oersteds). Degaussers listed in this document are rated by the coercivity of the magnetic storage devices they can securely erase (tape and disk storage devices). Tape storage devices are defined as any product that contains magnetic tape as the recording medium. Disk storage devices are defined as any product that contains a flexible or rigid disk as the recording medium. The correct use of these degaussers will ensure that any level of classified or sensitive data is irretrievable.
3. There are two categories of disk storage devices: Longitudinal (L) and Perpendicular (P). These names state how data is stored on a disk storage device and each requires different magnetic field configurations to erase them. See chart on page 9 for the years of manufacture and coercivities for the different technologies. **Degaussers capable of erasing the latest technology tape and disk storage devices are colored green.**
4. Degaussers cannot erase optical and solid state storage devices. There are also two products that resemble magnetic hard disk drives but require special consideration. The first is a hybrid magnetic/solid state disk drive containing a magnetic component inside the disk drive housing which can be erased by degaussers and a solid state component on the external circuit board which cannot be erased by degaussers. The second is a solid state disk drive containing solid state storage devices that cannot be erased by degaussers. Hybrid drives were first released in 2006 and solid state drives were first released in 2008.

NOTE: IN ADDITION TO DEGAUSSING, CERTAIN ADMINISTRATIVE PROCEDURES MAY BE REQUIRED BEFORE DEGAUSSED MAGNETIC STORAGE DEVICES MAY BE DECLASSIFIED. CONSULT YOUR SECURITY OR INFORMATION TECHNOLOGY OFFICER FOR GUIDANCE IN THIS REGARD.

5. Proper use of this equipment is necessary to prevent inadvertent disclosure of any level of classified or sensitive information. Any questions about equipment operations should be directed to the manufacturer. Questions regarding security requirements should be addressed to your Security or Information Technology Officer.
6. Included in this list is a NSA/CSS evaluated magnetic field verification device used to measure a degausser's magnetic field to verify proper degausser function.
7. Companies wishing to submit a product for evaluation or customers that have queries regarding magnetic storage device erasure and/or degaussers should contact:

National Security Agency

ATTN: Center for Storage Device Sanitization Research
9800 Savage Road, Suite 6877
Fort George G. Meade, MD 20755-6877

Voice: 301.688.1053; Email: csdsr@nsa.gov

Introduction

Glossary

1. **Coercivity**: The intensity of an applied magnetic field required to reduce the magnetization of a ferromagnetic material to zero after the material's magnetization has been saturated.
2. **Degausser**: An electrical device or permanent magnet assembly which generates a magnetic force for the purpose of degaussing magnetic storage devices.
3. **Degaussing**: Returning the magnetization of a magnetic storage device to a zero state by applying a reverse magnetizing force.
4. **Oersted (Oe)**: A unit of magnetic field strength.

Product Listings

Electromagnetic Degausser Equipment

Electromagnetic Tabletop Degaussers

These are electromagnetic tabletop degaussers that provide automatic one pass operation for tape and disk storage device erasure (except where noted). On hard disk drives, all extraneous steel shielding materials (e.g., cabinets, casings, and mounting brackets), but not the hard disk assembly, must be removed before degaussing. The degaussers must be operated at their full magnetic field strength. Erasure of hard disk drives causes damage that prohibits their continued use.

(NOTE: ADAPTORS MAY BE NECESSARY TO ACCOMMODATE THE VARIOUS SIZES OF STORAGE DEVICE PRODUCTS.)

Manufacturer / Distributor	Model	Tape (Oe)	Disk (Oe)
Advanced Design Corp. P.O. Box 3327, Fremont, CA 94539 408.888.1889 ATTN: Michael Nguyen <i>michael.nguyen@cinqm.com</i>	MagiWiper MW-1B	3000	L-5000, P-5000
Data Security, Inc. 300 S 7th Street, Lincoln, NE 68508 402.434.5959 / 800.225.7554 <i>www.datasecurityinc.com</i> ATTN: Renee Schafer <i>rschafer@telesis-inc.com</i>	Type I, 911-0000	350	Not Tested
	Type II-A, 930-0000	1000	Not Tested
	Type III, 943-0001	1700	Not Tested
	HD-5T	3000	L-5000, P-5000
Garner Products, Inc. 10620 Industrial Ave, STE 100 Roseville, CA 95678 800.624.1903 / 916.784.0200	2700	350	Not Tested
	CF750	750	Not Tested
	TS-1	3000	L-5000, P-5000
Intimus International P.O. Box 357, Wabash, IN 46992 617.447.5510 <i>www.intimus.com</i> ATTN: Peter Dempsey <i>peter.dempsey@intimus.com</i>	INTIMUS 20000	2800	L-5000, P-5000
Proton Engineering, Inc. P.O. Box 1852, Palm City, FL 34991 772.223.1685 <i>www.protondata.com</i> ATTN: William Olliges <i>proton@bellsouth.net</i>	T-4	3000	L-5000, P-5000

Addendum

Coercivities

Magnetic Storage Device	Oersted (Oe)
9-Track Reel-to-Reel Computer Tape	300
TK50, TK70	350
3480, 3490E	520
SLR1, SLR2, TR-1, DC2120, DC6150, DC6525	550
SLR3, SLR4, SLR5, TR-3, DC9100, DC9120, ID-1, SLR24, SLR32, TR-4, ADR30, ADR50, ADR2-120	900
Mammoth 8mm, AIT-1 8mm, VXA-1 8mm	1320
M2 Mammoth2 8mm, VXA-2 8mm 230m	1350
AIT-2 8mm	1380
AIT-3 8mm, AIT-4 8mm, S-AIT-1 ½"	1400
Redwood SD-3	1515
DLT Tape III, DLT Tape IIIXT	1540
DD-2 19mm	1550
DTF-1	1579
DDS1: 4mm60m, 4mm90m	1590
D8: 8mm 112m, 8mm 160m	1600
MagstarMP: 3570-B, 3570-C, 3570C/XL, Magstar: 3590, 3590-E, STK-9840, STK-T9940	1625
TR-5, SLR40, SLR50, SLR60, SLR100, TR-7 (Travan 40 GB), SLR75, SLR140	1650
DDS2 4mm 120m	1750
DLTtape IV, DLTtape VS1, NCTP, DD-2QD (Quad Density) 19mm, LTO-Ultrium1	1850
SuperDLTtape1	1900
LTO-Ultrium2	2150
DDS3 4mm 125m	2250
DTF-2	2300
DDS4 4mm 150m, DAT-72 4mm 170m	2350
Enterprise 3592, STK-T10000 (T10K)	2500
Super DLTtape II	2600
DLTtape S4, LTO-Ultrium3	2650
LTO-4	2800
LTO-5	2800
LTO-6	3000
5 ¼" 360KB DD Minidisk	300

Addendum

Coercivities

Magnetic Storage Device	Oersted (Oe)
3.5" 720KB DD Microdisk, 5 1/4" 1.2MB HD Minidisk	650
3.5" 1.44MB HD Microdisk	720
SuperDisk 120MB	1500
Zip 100 MB Disk	1550
Zip 250 MB Disk, Zip 750 MB Disk	2250

Figure 1

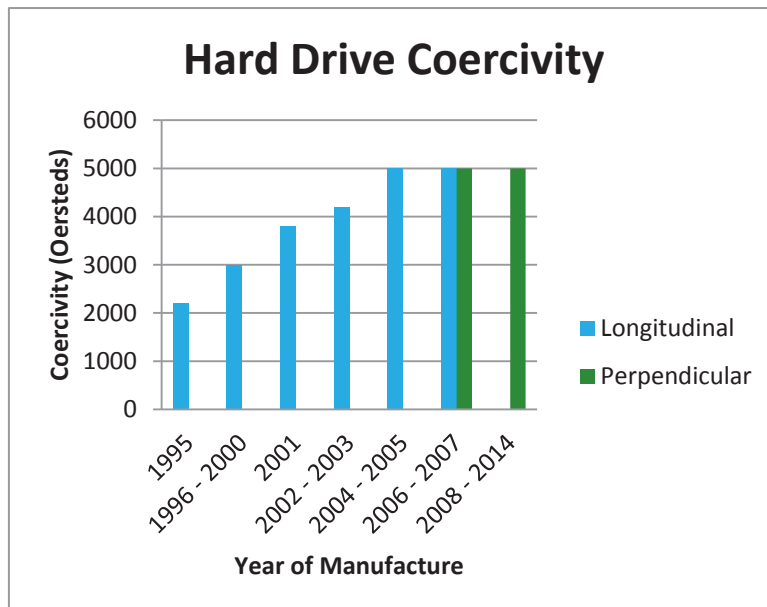


Figure 2

