

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, E-mail csdsr@nsa.gov

Electromagnetic Degausser Equipment

1.) <u>Tabletop Degaussers:</u> 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.

NOTE: ADAPTORS MAY BE NECESSARY 1	O ACCOMMODATE THE VAR	RIOUS SIZES OF STOR	AGE DEVICE PRODUCTS.
Manufacturer / Distributor	Model	Tape (Oe)	Disk (Oe)
Advanced Design Corp.	MagWiper MW-1B	3000	L-5000, P-5000
P.O. Box 3327, Fremont, CA 94539			
408.888.1889			
ATTN: Michael Nguyen			
michael.nguyen@cinqm.com			
Data Security, Inc.	Type I, 911-0000	350	Not Tested
300 S 7th Street, Lincoln, NE 68508	Type II-A, 930-0000	1000	Not Tested
402.434.5959 / 800.225.7554	Type III,943-0001	1700	Not Tested
www.datasecurityinc.com	HD-5T	3000	L-5000, P-5000
ATTN: Renee Schafer			
rschafer@telesis-inc.com			
Garner Products, Inc.	2700	350	Not Tested
10620 Industrial Ave, STE 100	CF750	750	Not Tested
Roseville, CA 95678	TS-1	3000	L-5000, P-5000
800.624.1903 / 916.784.0200			,
Martin Yale Industries	INTIMUS 20 000	3000	L-5000, P-5000
251 Wedcor Ave, Wabash, IN 46992		3000	2 3000) 1 3000
260.569.7226			
www.intimus.com			
ATTN: Greg German			
greg.german@martinyale.com			
Proton Engineering, Inc.	T-4	3000	L-5000, P-5000
P.O. Box 1852, Palm City, FL 34991			,
772.223.1685			
www.protondata.com			
ATTN: William Olliges			
proton@bellsouth.net			
Security Engineered Machinery, Inc.	EMP 1000-HS	3000	L-5000, P-5000
5 Walkup Drive, Westboro, MA 01581			
800.225.9293			
www.semshred.com			
ATTN: Terry Creek, VP Federal Sales			
VS and Associates	SDD Master	2800	L-5000, P-5000
3160 Texas Hill Rd, Placerville, CA 95667			
530.626.6924			
ATTN: Linda Schiro			
<u>Linda.schiro@vssecurityproducts.com</u>			

Electromagnetic Degausser Equipment - Continued

Manufacturer / Distributor	Model	Tape (Oe)	Disk (Oe)
Whitaker Brothers Business Machines, Inc.	Datastroyer 105 Hard	3000	L-5000, P-5000
3 Taft Court, Rockville, MD 20850	Drive Degausser		
800.243.9226 / 301.354.3000			
www.whitakerbrothers.com			
ATTN: Lauren Rossi			
<u>Irossi@whitakerbrothers.com</u>			

2.) <u>Standalone Degaussers:</u> These are standalone electromagnetic degaussers that provide automatic one pass operation for tape and disk storage device erasure. 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.

Manufacturer / Distributor	Model	Tape (Oe)	Disk (Oe)
Data Security, Inc.	HD-6600	3000	L-4200
300 S 7th Street, Lincoln, NE 68508	HD-1T	3000	L-5000, P-5000
402.434.5959 / 800.225.7554			
www.datasecurityinc.com			
ATTN: Renee Schafer			
rschafer@telesis-inc.com			

Permanent Magnet Degausser Equipment

1.) Hand Degaussers: These are hand held permanent magnet degaussers. To degauss disk storage devices, wipe the degaussing wand onto each side of the disk platter so that the active magnetic portion of the degaussing wand completely covers the recording surface of the disk from hub to perimeter. Wipe at least three times always maintaining physical contact between the degaussing wand and the disk platter. If disks are part of a sealed hard disk drive assembly, they must be removed for degaussing. Erasure of hard disk drives causes damage that prohibits their continued use.

Manufacturer / Distributor	Model	Tape (Oe)	Disk (Oe)
Applied Magnetics Laboratory, Inc. 1404 Bare Hills Road Baltimore, MD 21209 410.583.2100	AML-6KG	Not Tested	L-5000, P-5000
Proton Engineering, Inc P.O. Box 1852, Palm City, FL 34991 772.223.1685 www.protondata.com ATTN: William Olliges proton@bellsouth.net	1100	Not Tested	L-5000, P-5000
Whitaker Brothers Business Machines, Inc. 3 Taft Court, Rockville, MD 20850 800.243.9226 / 301.354.3000 www.whitakerbrothers.com ATTN: Lauren Rossi Irossi@whitakerbrothers.com	Datastroyer 102-DG	Not Tested	L-5000, P-5000

2.) <u>Single Pass Slot Hand Degaussers:</u> These are enclosed permanent magnet degaussers that provide automatic one pass operation for tape and disk storage device erasure. Erasure of hard disk drives causes damage that prohibits their continued use.

Manufacturer / Distributor	Model	Tape (Oe)	Disk (Oe)
Applied Magnetics Laboratory, Inc.	Magnastroyer AML-MS1	2150	L-750
1404 Bare Hills Road	Magnastroyer AML-MS2*	3000	L-5000, P-5000
Baltimore, MD 21209	* NOTE: IN THIS DEGAUSSER I	ERASURE OF TAPE ST	ORAGE DEVICES REQUIRES
410.583.2100	THAT THE TAPE BE REMOVED	FROM THE CARTRIE	OGE, THREADED INTO THE
	~1MM GA	P, AND PULLED THRO	OUGH.
Data Security, Inc.	LE-1	Not Tested	L-5000, P-5000
300 S 7th Street, Lincoln, NE 68508	TE-1*	2800	Not Tested
402.434.5959 / 800.225.7554	* NOTE: IN THIS DEGAUSSER I	ERASURE OF TAPE ST	ORAGE DEVICES REQUIRES
<u>www.datasecurityinc.com</u>	AN ADDITIONAL STEP FOR SEC	URE ERASURE; AFTEI	R THE FIRST ERASURE PASS,
ATTN: Renee Schafer	REMOVE THE TAPE CARTRI	DGE, ROTATE THE CA	ARTRIDGE 90 DEGREES,
rschafer@telesis-inc.com	REPLACE IN THE T	TRAY, AND ERASE A S	ECOND TIME.

3.) <u>Dual Pass Slot Hand Degaussers:</u> These are enclosed permanent magnet degaussers that provide two pass operation for disk storage device erasure. To properly degauss disk storage devices, pass the disk through the entry slot, turn the disk 90 degrees and slide the disk through the slot again. Erasure of hard disk drives causes damage that prohibits their continued use.

Manufacturer / Distributor	Model	Tape (Oe)	Disk (Oe)
Proton Engineering, Inc	1090	Not Tested	L-750
P.O. Box 1852, Palm City, FL 34991			
772.223.1685			
www.protondata.com			
ATTN: William Olliges			
proton@bellsouth.net			

4.) <u>Tabletop Degaussers:</u> These are enclosed tabletop permanent magnet degaussers that provide automatic one pass operation for tape and disk storage device erasure. 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. Erasure of hard disk drives causes damage that prohibits their continued use.

Manufacturer / Distributor	Model	Tape (Oe)	Disk (Oe)
Data Security, Inc.	HPM-1	3000	L-5000, P-5000
300 S 7th Street, Lincoln, NE 68508	HPM-1A	3000	L-5000, P-5000
402.434.5959 / 800.225.7554	HPM-2	3000	L-5000, P-5000
<u>www.datasecurityinc.com</u>	HPM-4	3000	L-5000, P-5000
ATTN: Renee Schafer rschafer@telesis-inc.com	HPM-4E	3000	L-5000, P-5000

5.) Conveyor Degaussers: These are enclosed permanent magnet degaussers that are continuous duty conveyor belt types and provide one pass erasure for tape and disk storage devices. 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. Erasure of hard disk drives causes damage that prohibits their continued use.

Manufacturer / Distributor	Model	Tape (Oe)	Disk (Oe)
Data Security, Inc.	LM-1	3000	L-5000, P-5000
300 S 7th Street, Lincoln, NE 68508	LM-1C	3000	L-5000, P-5000
402.434.5959 / 800.225.7554	LM-4	3000	L-5000, P-5000
www.datasecurityinc.com	LM-4E	3000	L-5000, P-5000
ATTN: Renee Schafer rschafer@telesis-inc.com			
Dexter Magnetic Technologies	U5000	2800	L-5000, P-5000
400 Karin Lane, Hicksville, NY 11801			
908.668.4821			
ATTN: Thomas Devaney			

Degausser Magnetic Field Verification Device			
Manufacturer / Distributor	Model		
Data Security, Inc.	Field CheckR		
300 S 7th Street, Lincoln, NE 68508			
402.434.5959 / 800.225.7554			
www.datasecurityinc.com			
ATTN: Renee Schafer			
<u>rschafer@telesis-inc.com</u>			

Degaussers No Longer Manufactured

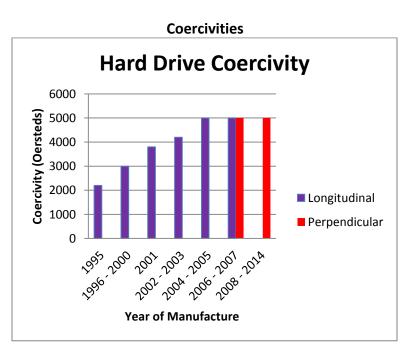
Manufacturer / Distributor	Model	Tape (Oe)	Disk (Oe)
Ampex Corporation	SE20	350	Not Tested
	SE750	750	Not Tested
Applied Magnetics Laboratory, Inc.	Data Muncher	Not Tested	L-350
Bell & Howell Company	TD-2903-4B	350	Not Tested
CMC Technology Corporation	TD-800	350	Not Tested
Computer Link Corporation	CF750	750	Not Tested
	515	350	Not Tested
	520	350	Not Tested
	530	350	Not Tested
	538	350	Not Tested
	540	350	Not Tested
Consolidated Electrodynamics	TD-2903-4A	350	Not Tested
Data Devices International	Cambrian	350	Not Tested
Data Security, Inc.	APM-10	2800	L-5000, P-5000
	Type HD-2000 940-0001	750	L-1500
	Type HD-3000 905-0001	750	L-1800
	HD-6000	2500	L-3800
	Type II, 900-0001	750	Not Tested
	Type II, 902-0001	750	L-1800
Datatape, Incorporated	HDD-2000	750	L-1500
	TD-1700	1700	Not Tested
	TD-2903-4B	350	Not Tested
	TD-350	350	Not Tested
	TD-500	350	Not Tested
	TD-750	750	L-1800
	TD-900	900	L-1800
Electro-Matic Products Company	2PTFB15-17	350	Not Tested
	2PTFB15-18	350	Not Tested
	2PTFB15-113	350	Not Tested
	HE15FB-4	750	Not Tested
Garner Products, Inc.	REM-1400NSA	2800	L-5000, P-5000
General Kinetics Incorporated	K80	350	Not Tested
	К90	350	Not Tested
Hewlett Packard Company	3603A	350	Not Tested
Integra Technologies Corporation	D530	350	Not Tested
	D538	350	Not Tested
	D538-II	750	Not Tested
	D540	350	Not Tested
	1600-F4	Not Tested	L-350
IXI, Incorporated	5661c	350	L-2200
J.C. Nickels, Incorporated	1084 Bit Scrubber	Not Tested	L-350
KYBE Corporation	1100	350	Not Tested

Degaussers No Longer Manufactured – Continued

Manufacturer / Distributor	Model	Tape (Oe)	Disk (Oe)
Metrum-Datatape	HDD-2000	750	L-1500
	TD-1700	1700	Not Tested
	TD-350	350	Not Tested
	TD-750	750	L-1800
	TD-900	900	L-1800
Precision Methods, Incorporated	2000	Not Tested	L-350
Proton Engineering, Inc.	1084	Not Tested	L-350
Red River Computer	ME-RRC3	2800	L-5000, P-5000
	ME-RRC3M	2800	L-5000, P-5000
Rimage Corporation	5661C	350	L-2200
Security Engineered Machinery /	ME-P3	2800	L-5000, P-5000
Toshiba	ME-P3R	2800	L-5000, P-5000
	ME-P3E	2800	L-5000, P-5000
	ME-P3M	2800	L-5000, P-5000

Glossary

- 1.) <u>Coercivity:</u> 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.) <u>Degausser:</u> An electrical device or permanent magnet assembly which generates a magnetic force for the purpose of degaussing magnetic storage devices.
- 3.) <u>Degaussing:</u> 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.



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
3.5" 720KB DD Microdisk, 5 ¼" 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