

NATIONAL SECURITY AGENCY CENTRAL SECURITY SERVICE FORT MEADE, MARYLAND

04 December 2007

Degausser Evaluated Products List

DEGAUSSER EVALUATED PRODUCTS LIST

INTRODUCTION

- 1. The *Degausser* Evaluated Products List (DEPL) specifies the model identification of current equipment units that were evaluated against and found to satisfy the requirements for erasure of magnetic storage devices that retain sensitive or classified data. A commercial production unit of each model of degausser was evaluated against NSA/CSS requirements for erasure of sensitive or classified magnetic storage devices. Listing of a product on the DEPL does not constitute endorsement of the product by the U.S. Government or NSA/CSS. It merely indicates that the evaluated degausser has met the applicable NSA/CSS performance requirements. Moreover, though listed in the DEPL, customers that acquire these products should have them re-tested periodically according to manufacturer's recommendations.
- 2. Magnetic storage devices are defined by their magnetic *coercivity* in units of *Oersteds* (Oe). Degaussers listed in this document are defined by the coercivity of the magnetic storage devices that can be erased. Degaussers in the DEPL are defined by the ability to erase tape storage devices and the ability to erase 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 degausser products will ensure that classified or sensitive data is no longer retrievable.
- 3. Degaussers capable of erasing disk storage devices are broken into two categories: Longitudinal (L) and Perpendicular (P). Longitudinal disk storage devices have been the norm, but since CY2006 perpendicular disk storage devices have been available. Longitudinal and perpendicular disk storage devices will be marketed side by side for a few more years and then perpendicular disk storage devices will be the norm. Due to the different magnetic fields required to erase each technology, degaussers are capable of either erasing longitudinal disk storage devices or both longitudinal and perpendicular disk storage devices.
 - 4. Degaussers are ineffective in erasing optical and solid state storage devices.

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

5. Proper use of this equipment is necessary to ensure inadvertent disclosure of classified or sensitive information does not occur. Accordingly, users having operational questions about the equipment should direct their questions to the manufacturer. Questions regarding security requirements should be addressed to your Security Officer or Manager.

6. Companies wishing to submit a product for evaluation should contact in writing:

National Security Agency

ATTN: LL43 Media Technology Center, Suite 6877

9800 Savage Road

Fort George G. Meade, MD 20755-6877 Voice 301.688.1053, Facsimile 301.725.8007

ELECTROMAGNETIC DEGAUSSER EQUIPMENT

7. Drawer Type Degaussers: These are electromagnetic degaussers that provide automatic one pass operation for tape storage device erasure. Models certified for disk storage device erasure can be used to erase disks 3.5" or smaller. The disk must be placed horizontally, degaussed once, turned over and degaussed a second time. 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. The 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	MODEL	TAPE (Oe)	DISK (Oe)
Data Devices International	Cambrian	350	Not Tested
2600 Mission Street			
San Marino, CA 91108-1676			
626.799.6545			
ATTN: David Partridge			
Data Security, Incorporated	Type I, 911-0000	350	Not Tested
729 Q Street			
Lincoln, NE 68508			
402.434.5959			
800.225.7554			
www.datasecurityinc.com			
ATTN: Renee Schafer			
rschafer@telesis-inc.com			7 1 700
Data Security, Incorporated	Type HD-2000,	750	L-1500
	940-0001		Y 1000
Data Security, Incorporated	Type HD-3000,	750	L-1800
C P 1	905-0001	750	NI (T) (1
Garner Products	CF750	750	Not Tested
620 Commerce Drive Suite C			
Roseville, CA 95678			
800.624.1903			
Data Security, Incorporated	Type II-A,	1000	Not Tested
	930-0000		

MANUFACTURER	MODEL	TAPE (Oe)	DISK (Oe)
Data Security, Incorporated	Type III,	1700	Not Tested
	943-0001		

8. Conveyor Type Degaussers: These are electromagnetic degaussers that are continuous duty conveyor belt types and provide one pass erasure for tape storage devices.

MANUFACTURER	MODEL	TAPE (Oe)	DISK (Oe)
Garner Products	2700	350	Not Tested
620 Commerce Drive Suite C			
Roseville, CA 95678			
800.624.1903			

9. Chamber Type Degaussers: These are electromagnetic degaussers that provide automatic one pass operation for disk and tape storage device erasure. They can be used to erase disks 3.5" or smaller. 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. The erasure of hard disk drives causes damage that prohibits their continued use.

MANUFACTURER	MODEL	TAPE (Oe)	DISK (Oe)
Data Security, Incorporated	HD-6600	2600	L-4200
729 Q Street			
Lincoln, NE 68508			
402.434.5959			
800.225.7554			
www.datasecurityinc.com			
ATTN: Renee Schafer			
rschafer@telesis-inc.com			
Data Security, Incorporated	HD-1T	2600	L-5000
_			P-5000

PERMANENT MAGNET DEGAUSSER EQUIPMENT

10. Hand Degaussers: These are hand held permanent magnet degaussers. To degauss disk storage devices, insert the degaussing wand into the disk pack so that the active magnetic portion completely covers the recording surface of the disk from hub to perimeter. Wipe each active disk surface (top and bottom) at least three times with the magnet. If disks are part of a sealed hard disk drive assembly, they must be removed from the assembly for degaussing. The erasure of hard disk drives causes damage that prohibits their continued use.

MANUFACTURER	MODEL	TAPE (Oe)	DISK (Oe)
Applied Magnetics Laboratory, Inc.	AML-6KG	Not Tested	L-5000
1404 Bare Hills Rd.			
Baltimore, MD 21209			
410.583.2100			
Proton Engineering, Incorporated	1100	Not Tested	L-2870
P.O. Box 1852			
Palm City, Florida 34990			
772.223.2184			
info@protondata.com			
Security Engineered Machinery	1100	Not Tested	L-2870
4420-B Lottsford Vista Road			
Lanham, MD 20706			
800.645.1157			
301.735.7100			
ATTN: Terry Creek			
Whitaker Brothers Business	102-DG	Not Tested	L-5000
Machines, Inc.			
12410 Washington Avenue			
Rockville, MD 20852			
800.243.9226			
301.230.2800			
www.whitakerbrothers.com			
ATTN: Vivian Kambanis			
gsa@whitakerbrothers.com			

11. Single Pass Slot Degaussers: These are enclosed permanent magnet degaussers that require one pass for proper erasure. The erasure of hard disk drives causes damage that prohibits their continued use.

MANUFACTURER	MODEL	TAPE (Oe)	DISK (Oe)
Applied Magnetics Laboratory, Inc.	Magnastroyer	2150	L-750
1404 Bare Hills Rd.	AML-MS1		
Baltimore, MD 21209			
410.583.2100			

12. Dual Pass Slot Degaussers: These are enclosed permanent magnet degaussers. 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. The erasure of hard disk drives causes damage that prohibits their continued use.

MANUFACTURER	MODEL	TAPE (Oe)	DISK (Oe)
Proton Engineering, Incorporated	1090	Not Tested	L-750
P.O. Box 1852			
Palm City, Florida 34990			
772.223.2184			
info@protondata.com			

MANUFACTURER	MODEL	TAPE (Oe)	DISK (Oe)
Security Engineered Machinery	1090	Not Tested	L-750
4420-B Lottsford Vista Road			
Lanham, MD 20706			
800.645.1157			
301.735.7100			
ATTN: Terry Creek			

13. Drawer Degaussers: These are enclosed permanent magnet degaussers that provide automatic one pass operation for disk and tape storage device erasure. All extraneous steel shielding materials (e.g., cabinets, casings, and mounting brackets), but not the hard disk assembly, must be removed before degaussing. The erasure of hard disk drives causes damage that prohibits their continued use.

MANUFACTURER	MODEL	TAPE (Oe)	DISK (Oe)
Data Security, Incorporated	APM-10	2600	L-5000
729 Q Street			P-5000
Lincoln, NE 68508			
402.434.5959			
800.225.7554			
www.datasecurityinc.com			
ATTN: Renee Schafer			
rschafer@telesis-inc.com			
Data Security, Incorporated	HPM-4	Not Tested	L-5000
			P-5000
Garner Products	REM-1400NSA	2600	L-5000
620 Commerce Drive Suite C			P-5000
Roseville, CA 95678			
800.624.1903			
Red River Computer	ME-RRC3	2600	L-5000
85 Mechanic Street			P-5000
Lebanon, NH 03766			
603.448.8880			
www.redriver.com			
ATTN: Kurt Gantrish			
Red River Computer	ME-RRC3M	Not Tested	L-5000
_			P-5000
Security Engineered Machinery/	ME-P3	2600	L-5000
Fujitsu			P-5000
4420-B Lottsford Vista Road			
Lanham, MD 20706			
800.645.1157			
301.735.7100			
ATTN: Terry Creek			
Security Engineered Machinery/	ME-P3E	2600	L-5000
Fujitsu			P-5000

MANUFACTURER	MODEL	TAPE (Oe)	DISK (Oe)
Security Engineered Machinery/	ME-P3M	Not Tested	L-5000
Fujitsu			P-5000

14. Conveyor Type Degaussers: These are enclosed permanent magnet degaussers that are continuous duty conveyor belt types and provide one pass erasure for disk and tape storage devices. All extraneous steel shielding materials (e.g., cabinets, casings, and mounting brackets), but not the hard disk assembly, must be removed before degaussing. The erasure of hard disk drives causes damage that prohibits their continued use.

MANUFACTURER	MODEL	TAPE (Oe)	DISK (Oe)
Data Security, Incorporated	LM-4	Not Tested	L-5000
729 Q Street			P-5000
Lincoln, NE 68508			
402.434.5959			
800.225.7554			
www.datasecurityinc.com			
ATTN: Renee Schafer			
rschafer@telesis-inc.com			
Dexter Magnetic Technologies	U5000	Not Tested	L-5000
400 Karin Lane			P-5000
Hicksville, NY 11801			
908.668.4821			
ATTN: Thomas Devaney			

DEGAUSSERS NO LONGER MANUFACTURED

MANUFACTURER	MODEL	TAPE (Oe)	DISK (Oe)
Ampex Corporation	SE20	350	Not Tested
Ampex Corporation	SE750	750	Not Tested
Applied Magnetics Laboratory,	Data Muncher	Not Tested	L-350
Incorporated			
Bell & Howell Company	TD-2903-4B	350	Not Tested
CMC Technology Corporation	TD-800	350	Not Tested
Computer Link Corporation	CF750	750	Not Tested
Computer Link Corporation	515	350	Not Tested
Computer Link Corporation	520	350	Not Tested
Computer Link Corporation	530	350	Not Tested
Computer Link Corporation	538	350	Not Tested
Computer Link Corporation	540	350	Not Tested
Consolidated Electrodynamics	TD-2903-4A	350	Not Tested
Data Security, Incorporated	HD-6000	2500	L-3800
Data Security, Incorporated	Type II, 902-0001	750	L-1800
Datatape, Incorporated	HDD-2000	750	L-1500
Datatape, Incorporated	TD-1700	1700	Not Tested

MANUFACTURER	MODEL	TAPE (Oe)	DISK (Oe)
Datatape, Incorporated	TD-2903-4B	350	Not Tested
Datatape, Incorporated	TD-350	350	Not Tested
Datatape, Incorporated	TD-500	350	Not Tested
Datatape, Incorporated	TD-750	750	L-1800
Datatape, Incorporated	TD-900	900	L-1800
Electro-Matic Products Company	2PTFB15-17	350	Not Tested
Electro-Matic Products Company	2PTFB15-18	350	Not Tested
Electro-Matic Products Company	2PTFB15-113	350	Not Tested
Electro-Matic Products Company	HE15FB-4	750	Not Tested
General Kinetics Incorporated	K80	350	Not Tested
General Kinetics Incorporated	K90	350	Not Tested
Hewlett Packard Company	3603A	350	Not Tested
Integra Technologies Corporation	D530	350	Not Tested
Integra Technologies Corporation	D538	350	Not Tested
Integra Technologies Corporation	D538-II	750	Not Tested
Integra Technologies Corporation	D540	350	Not Tested
Integra Technologies Corporation	I600-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
Metrum-Datatape	HDD-2000	750	L-1500
Metrum-Datatape	TD-1700	1700	Not Tested
Metrum-Datatape	TD-350	350	Not Tested
Metrum-Datatape	TD-750	750	L-1800
Metrum-Datatape	TD-900	900	L-1800
Precision Methods, Incorporated	2000	Not Tested	L-350
Proton Engineering, Incorporated	1084	Not Tested	L-350
Rimage Corporation	5661C	350	L-2200

DEFINITIONS

- 15. <u>Coercive Force</u> A negative or reverse magnetic force applied for the purpose of reducing magnetic flux density.
- 16. <u>Coercivity</u> A property of magnetic material, measured in Oersteds, used as a measure of the amount of *coercive force* required to reduce the magnetic induction to zero from its remanent state. Generally used as a measure of difficulty with which magnetic storage devices can be degaussed.
- 17. <u>Degausser</u> An electrical device or permanent magnet assembly which generates a coercive magnetic force for the purpose of degaussing magnetic storage devices or other magnetic material.
- 18. <u>Degaussing</u> (or Demagnetizing) Process for reducing the magnetization of a magnetic storage device to zero by applying a reverse (coercive) magnetizing force,

rendering any previously stored data unreadable and unintelligible, and ensuring that it cannot be recovered by any technology known to exist.

19. Oersted (Oe) – The unit of measure of a magnetic field.

COERCIVITIES

Magnetic Storage Device	Oe
9-Track Reel-to-Reel Computer tape	
TK50, TK70	
3480, 3490E	
SLR1, SLR2, TR-1, DC2120, DC6150, DC6525	
SLR3, SLR4, SLR5, TR-3, DC9100, DC9120, ID-1, SLR24, SLR32, TR-4, ADR30, ADR50, ADR2-120	
Mammoth 8mm, AIT-1 8mm, VXA-1 8mm	
M2 Mammoth2 8mm, VXA-2 8mm 230m	
AIT-2 8mm	1380
AIT-3 8mm, AIT-4 8mm, S-AIT-1 1/2"	
Redwood SD-3	1515
DLTtape III, DLTtape IIIXT	
DD-2 19mm	1550
DTF-1	1579
DDS1: 4mm60m, 4mm90m	1590
D8: 8mm 112m, 8mm 160m	1600
MagstarMP: 3570-B, 3570-C, 3570-C/XL, Magstar: 3590, 3590-E, STK-9840, STK-T9940	
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	
DDS3 4mm 125m	
DTF-2	
DDS4 4mm 150m, DAT-72 4mm 170m	2350

Enterprise 3592, STK-T10000 (T10K)	2500
Super DLTtape II	2600
DLTtape S4, LTO-Ultrium3	2650
5 ¼" 360KB DD Minidisk	300
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

