

UNCLASSIFIED

NATIONAL SECURITY AGENCY  
CENTRAL SECURITY SERVICE  
FORT MEADE, MARYLAND



25 February 2010

## Evaluated Products List - Degausser

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**EVALUATED PRODUCTS LIST – DEGAUSSER****INTRODUCTION**

1. The EPL-*Degausser* (Evaluated Products List – Degausser) 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 EPL-Degausser does not constitute endorsement of the product by the USG or NSA/CSS. It merely indicates that the evaluated degausser has met the applicable NSA/CSS performance requirements. Moreover, though listed in the EPL-Degausser, 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 Oe (*Oersteds*). Degaussers listed in this document are defined by the coercivity of the magnetic storage devices that can be erased. Degaussers in the EPL-Degausser 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. Additional equipment included is a NSA/CSS evaluated magnetic field verification device used to detect and measure a degausser's magnetic field.

7. 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**

8. 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.*

| <b>MANUFACTURER</b>   | <b>MODEL</b>              | <b>TAPE (Oe)</b> | <b>DISK (Oe)</b> |
|---|---------------------------|------------------|------------------|
| Data Devices International<br>2600 Mission Street<br>San Marino, CA 91108-1676<br>626.799.6545<br>ATTN: David Partridge   | Cambrian                  | 350              | Not Tested       |
| Data Security, Incorporated<br>729 Q Street<br>Lincoln, NE 68508<br>402.434.5959<br>800.225.7554<br><a href="http://www.datasecurityinc.com">www.datasecurityinc.com</a><br>ATTN: Renee Schafer<br><a href="mailto:rschafer@telesis-inc.com">rschafer@telesis-inc.com</a> | Type I, 911-0000          | 350              | Not Tested       |
| Data Security, Incorporated   | Type HD-2000,<br>940-0001 | 750              | L-1500           |

| <b>MANUFACTURER</b>  | <b>MODEL</b>              | <b>TAPE (Oe)</b> | <b>DISK (Oe)</b> |
|--|---------------------------|------------------|------------------|
| Data Security, Incorporated  | Type HD-3000,<br>905-0001 | 750              | L-1800           |
| Garner Products<br>620 Commerce Drive Suite C<br>Roseville, CA 95678<br>800.624.1903 | CF750                     | 750              | Not Tested       |
| Data Security, Incorporated  | Type II-A, 930-0000       | 1000             | Not Tested       |
| Data Security, Incorporated  | Type III, 943-0001        | 1700             | Not Tested       |

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

| <b>MANUFACTURER</b>  | <b>MODEL</b> | <b>TAPE (Oe)</b> | <b>DISK (Oe)</b> |
|--|--------------|------------------|------------------|
| Garner Products<br>620 Commerce Drive Suite C<br>Roseville, CA 95678<br>800.624.1903 | 2700         | 350              | Not Tested       |

10. 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.

| <b>MANUFACTURER</b>   | <b>MODEL</b> | <b>TAPE (Oe)</b> | <b>DISK (Oe)</b> |
|---|--------------|------------------|------------------|
| Data Security, Incorporated<br>729 Q Street<br>Lincoln, NE 68508<br>402.434.5959<br>800.225.7554<br><a href="http://www.datasecurityinc.com">www.datasecurityinc.com</a><br>ATTN: Renee Schafer<br><a href="mailto:rschafer@telesis-inc.com">rschafer@telesis-inc.com</a> | HD-6600      | 2800             | L-4200           |
| Data Security, Incorporated   | HD-1T        | 2800             | L-5000<br>P-5000 |

| <b>MANUFACTURER</b>   | <b>MODEL</b>       | <b>TAPE (Oe)</b> | <b>DISK (Oe)</b> |
|---|--------------------|------------------|------------------|
| Proton Engineering Inc.<br>P.O. Box 1852<br>Palm City, Florida 34991<br>772.223.1685<br>ATTN: William Olliges<br><a href="mailto:proton@bellsouth.net">proton@bellsouth.net</a> | T-4                | 2800             | L-5000<br>P-5000 |
| Security Engineered Machinery<br>4420-B Lottsford Vista Road<br>Lanham, MD 20706<br>800.645.1157<br>301.735.7100<br>ATTN: Terry Creek   | EMP 001 Eliminator | 2800             | L-5000<br>P-5000 |

### **PERMANENT MAGNET DEGAUSSER EQUIPMENT**

11. 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.

| <b>MANUFACTURER</b>  | <b>MODEL</b> | <b>TAPE (Oe)</b> | <b>DISK (Oe)</b> |
|--|--------------|------------------|------------------|
| Applied Magnetics Laboratory, Inc.<br>1404 Bare Hills Rd.<br>Baltimore, MD 21209<br>410.583.2100   | AML-6KG      | Not Tested       | L-5000           |
| Proton Engineering, Inc.<br>P.O. 1852<br>Palm City, Florida 34991<br>772.223.1685<br>ATTN: William Olliges<br><a href="mailto:proton@bellsouth.net">proton@bellsouth.net</a> | 1100         | Not Tested       | L-5000           |

| <b>MANUFACTURER</b>  | <b>MODEL</b> | <b>TAPE (Oe)</b> | <b>DISK (Oe)</b> |
|--|--------------|------------------|------------------|
| Whitaker Brothers Business Machines, Inc.<br>12410 Washington Avenue<br>Rockville, MD 20852<br>800.243.9226<br>301.230.2800<br><a href="http://www.whitakerbrothers.com">www.whitakerbrothers.com</a><br>ATTN: Vivian Kambanis<br><a href="mailto:gsa@whitakerbrothers.com">gsa@whitakerbrothers.com</a> | 102-DG       | Not Tested       | L-5000           |

12. 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.

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

13. 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.

| <b>MANUFACTURER</b>  | <b>MODEL</b> | <b>TAPE (Oe)</b> | <b>DISK (Oe)</b> |
|--|--------------|------------------|------------------|
| Proton Engineering, Inc.<br>P.O. Box 1852<br>Palm City, Florida 34991<br>772.223.1685<br>ATTN: William Olliges<br><a href="mailto:proton@bellsouth.net">proton@bellsouth.net</a> | 1090         | Not Tested       | L-750            |

14. 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.

| <b>MANUFACTURER</b>   | <b>MODEL</b> | <b>TAPE (Oe)</b> | <b>DISK (Oe)</b> |
|---|--------------|------------------|------------------|
| Data Security, Incorporated<br>729 Q Street<br>Lincoln, NE 68508<br>402.434.5959<br>800.225.7554<br><a href="http://www.datasecurityinc.com">www.datasecurityinc.com</a><br>ATTN: Renee Schafer<br><a href="mailto:rschafer@telesis-inc.com">rschafer@telesis-inc.com</a> | APM-10       | 2800             | L-5000<br>P-5000 |
| Data Security, Incorporated   | HPM-1        | 2800             | L-5000<br>P-5000 |
| Data Security, Incorporated   | HPM-1A       | 2800             | L-5000<br>P-5000 |
| Data Security, Incorporated   | HPM-4        | 2800             | L-5000<br>P-5000 |
| Data Security, Incorporated   | HPM-4E       | Not Tested       | L-5000<br>P-5000 |
| Garner Products<br>620 Commerce Drive Suite C<br>Roseville, CA 95678<br>800.624.1903  | REM-1400NSA  | 2800             | L-5000<br>P-5000 |
| Red River Computer<br>85 Mechanic Street<br>Lebanon, NH 03766<br>603.448.8880<br><a href="http://www.redriver.com">www.redriver.com</a><br>ATTN: Kurt Gantrish  | ME-RRC3      | 2800             | L-5000<br>P-5000 |
| Red River Computer  | ME-RRC3M     | 2800             | L-5000<br>P-5000 |
| Security Engineered Machinery/<br>Toshiba<br>4420-B Lottsford Vista Road<br>Lanham, MD 20706<br>800.645.1157<br>301.735.7100<br>ATTN: Terry Creek   | ME-P3        | 2800             | L-5000<br>P-5000 |

| <b>MANUFACTURER</b>                       | <b>MODEL</b> | <b>TAPE (Oe)</b> | <b>DISK (Oe)</b> |
|---|--------------|------------------|------------------|
| Security Engineered Machinery/<br>Toshiba | ME-P3E       | 2800             | L-5000<br>P-5000 |
| Security Engineered Machinery/<br>Toshiba | ME-P3M       | 2800             | L-5000<br>P-5000 |

15. 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.

| <b>MANUFACTURER</b>   | <b>MODEL</b> | <b>TAPE (Oe)</b> | <b>DISK (Oe)</b> |
|---|--------------|------------------|------------------|
| Data Security, Incorporated<br>729 Q Street<br>Lincoln, NE 68508<br>402.434.5959<br>800.225.7554<br><a href="http://www.datasecurityinc.com">www.datasecurityinc.com</a><br>ATTN: Renee Schafer<br><a href="mailto:rschafer@telesis-inc.com">rschafer@telesis-inc.com</a> | LM-4         | 2800             | L-5000<br>P-5000 |
| Data Security, Incorporated   | LM-4E        | Not Tested       | L-5000<br>P-5000 |
| Dexter Magnetic Technologies<br>400 Karin Lane<br>Hicksville, NY 11801<br>908.668.4821<br>ATTN: Thomas Devaney  | U5000        | 2800             | L-5000<br>P-5000 |

#### **DEGAUSSER MAGNETIC FIELD VERIFICATION DEVICE**

| <b>MANUFACTURER</b>   | <b>MODEL</b> |
|---|--------------|
| Data Security, Incorporated<br>729 Q Street<br>Lincoln, NE 68508<br>402.434.5959<br>800.225.7554<br><a href="http://www.datasecurityinc.com">www.datasecurityinc.com</a><br>ATTN: Renee Schafer<br><a href="mailto:rschafer@telesis-inc.com">rschafer@telesis-inc.com</a> | Field CheckR |



**DEGAUSSERS NO LONGER MANUFACTURED**

| <b>MANUFACTURER</b>                        | <b>MODEL</b>      | <b>TAPE (Oe)</b> | <b>DISK (Oe)</b> |
|--|-------------------|------------------|------------------|
| Ampex Corporation                          | SE20              | 350              | Not Tested       |
| Ampex Corporation                          | SE750             | 750              | Not Tested       |
| Applied Magnetics Laboratory, Incorporated | 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       |
| 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       |
| 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           |

| MANUFACTURER                     | MODEL  | TAPE (Oe)  | DISK (Oe) |
|----------------------------------|--------|------------|-----------|
| 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

16. Coercive Force – A negative or reverse magnetic force applied for the purpose of reducing magnetic flux density.

17. Coercivity – 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.

18. Degausser – 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.

19. Degaussing (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.

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

## COERCIVITIES

| Magnetic Storage Device  | 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 |
| DLTtape III, DLTtape IIIXT   | 1540 |
| DD-2 19mm  | 1550 |
| DTF-1  | 1579 |
| DDS1: 4mm60m, 4mm90m   | 1590 |
| D8: 8mm 112m, 8mm 160m   | 1600 |

| Magnetic Storage Device  | Oe   |
|--|------|
| MagstarMP: 3570-B, 3570-C, 3570-C/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  | 2710 |
| 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 |

