

# NSA/CSS Requirements for Paper Disintegrators Devices

## 1 (U) Introduction

(U) Paper Disintegrators must pass an evaluation by meeting requirements set by the NSA/CSS for the disintegration of paper with notations to those devices also approved to destroy punched (key) tape, and CDs. NSA/CSS will primarily evaluate the device's operational ability to disintegrate paper, punch (key) tape and CDs so that no classified information can be extracted. Secondly the operational, administrative, power, safety, environmental and mechanical areas will be evaluated to minimize the potential risk.

(U) Once the evaluation is successful the NSA/CSS will include the device in the next release of the "NSA/CSS Evaluated Products List for Paper Disintegrators". The Evaluated Products List (EPL) is meant to serve as guidance, inclusion in this document is not an endorsement by the NSA/CSS or the U.S. Government. All listed products sanitize TS/SCI and below.

## 2 (U) Purpose and Use

(U) This document should be used by a vendor of as a guide for the NSA/CSS evaluation. In order to be included in the NSA/CSS Evaluated Product List for Paper Disintegrations a vendor must satisfy all appropriate requirements in this document. The paper disintegration device will be evaluated against a random assortment of types of paper it claims to disintegration.

## 3 (U) Descriptions

- **(U) CD:** Compact disc (CD), a molded plastic disc containing digital data that is scanned by a laser beam for storage. Computers can read and write to CD drives.
- **(U) Evaluator:** The destruction engineer performing the evaluation.
- **(U) Operator:** The person using the paper disintegrator to perform the destruction of paper, punch (key) tape or CDs.
- **(U) Paper:** Paper is a material manufactured in thin sheets from the pulp of wood or other fibrous substances, used for writing, drawing, or printing on, or as wrapping material. Paper is categorized by thickness, weight and size:
- **(U) Punched (key) tape:** Punched tape or perforated paper tape is a form of data storage that consists of a long strip of paper in which holes are punched. Now effectively obsolete, it was widely used during much of the 20th century by governments to store cryptographic keys.
- **(U) Paper Disintegrator:** Paper Disintegrator are used for high volume destruction needs. These machines usually have more precise controls, totally enclosed, sound proof, powerful fan cooled motors and

performance knives. The device will reduce paper, punched tape or CD to a small edge size so that classified data can't be extracted. Devices that meet NSA/CSS sanitization specifications for the following paper, punch (key) tape or CDs will be identified with the following approval ratings:

- o P = Paper,
- o K = Key (punched) tape (plastic or paper),
- o C = CDs.

## **4 (U) Operation Requirements**

### **4.1 (U) Disintegrate**

(U) The paper disintegrator must reduce paper, punched tape or CD to an edge size of 3 millimeter by 5 millimeter, or less.

### **4.2 (U) Operational Time**

(U) The paper disintegrator must be able to operate continuously for one hour while destroying at least 250 miscellaneous pieces of paper, punched tape or CDs. A jam must be cleared within 5 minutes.

### **4.3 (U) Paper**

(U) A paper disintegrator must define the maximum paper thickness, weight and size it will disintegrate.

## **5 (U) Administrative Requirements**

### **5.1 (U) Labels**

(U) The paper disintegrator must have a label that can be easily viewed and includes:

- (U) Company Name,
- (U) Model,
- (U) Serial Number.

### **5.2 (U) Feature Claims**

(U) The paper disintegrator vendor must specify the paper, punch (key) tape or CDs it will destroy and the requirements it will satisfy. If a paper, punch (key) tape or CD is not claimed it will be not be evaluated and will not be approved to destroy that classified paper, punch (key) tape or CD. If a requirement is not supported the paper disintegrator may not be allowed to go through evaluation.

### **5.3 (U) User/Operator Guide**

(U) The unit must have an English version of the user/operator manual. The manual must include the following:

- Accurate description of the paper disintegrator,
- Definition of paper, punch (key) tape or CDs it will disintegrate,
- Accurate summary of each feature and function,
- List of specifications (i.e., power consumption, motor size etc.),
- Maintenance procedures:
  - Changing Filters,
  - Remove a jam,
  - Lubrication,
  - Safety procedures.

## **6 (U) Power Requirements**

### **6.1 (U) Electrical**

(U) The paper disintegrator will be approved for a power source that is evaluated in testing. Every power source for a paper disintegrator must be individually tested to claim approval.

### **6.2 (U) On/Off Switch**

(U) The paper disintegrator must have On/Off Switch within easy access of the operator.

### **6.3 (U) Power Indication**

(U) The paper disintegrator must have a power indication display that can be clearly seen by the operator.

## **7 (U) Safety and Environmental**

### **7.1 (U) Emergency Off**

(U) The paper disintegrator must have an emergency stop mechanism within easy reach of an operator. The emergency procedure must be document.

### **7.2 (U) Operator Protection**

(U) The paper disintegrator must protect the operator. The operator must not come into contact with any moving parts during operation.

### **7.3 (U) Reverse**

(U) A paper disintegrator that has a automatic feeder for optical devices must either automatically or manually allow the optical disk to be reversed and extracted.

### **7.4 (U) Debris Collection**

(U) The internal design of the paper disintegrator must deposit the majority (95%) of the paper particles into debris bin.

## **7.5 (U) Debris Full**

(U) The paper disintegrator must have a debris full indicator and must automatically shut off. This must be a actual measurement of the level of debris that is the bin and not based on time or other criteria.

## **7.6 (U) Debris Handling**

(U) The paper disintegrator must have the ability to easily removed and emptied the debris.

## **7.7 (U) Noise**

(U) Sound levels for the paper disintegrator must be less than 85 dBA while operation. This level meets both the National Institute for Occupational Operational and Health (NIOSH) and the Occupational Operation and Health Administration (OSHA) standards of less than 85 DBA and less the 90 dBA respectively.

# **8 (U) Mechanical**

## **8.1 (U) Fit and Finish**

(U) The paper disintegrator should have a tight fit with no gaps between panels, loose panels, faulty doors, loose windows or sharp edges that could cause safety or operational issues.

(U) The paper disintegrator should be a production unit that is complete and all features should be operational.

## **8.2 (U) Vibration**

(U) The effects of vibration can be severe. Unchecked vibration can accelerate rates of wear (i.e. reduce bearing life) and damage equipment. Vibrating machinery can create noise, cause safety problems and lead to degradation in plant working conditions.

(U) The paper disintegrator must not exhibit a vibration measurement of over ? Hz. The measurements will be taken at four random locations around the paper disintegrator using a digital vibration meter.

## **8.3 (U) Heat Generation**

(U) A heat signature will be taken using a heat signature camera on each side of the paper disintegrator. The signature should show no high temperature activity (red areas) on the paper disintegrator that could be dangerous to the environment or injure an operator.

## **8.4 (U) Calibration or Maintenance**

(U) Any machine will require calibration and maintenance during its lifetime. If the paper disintegrator requires calibration or maintenance by the operator if must be safe and easy to accomplished. The following are some specifics:

- (U) Unit Jamming must be cleared within 5 minutes.

## Unclassified

- (U) Filters must be change within 5 minutes without using special tools.
- (U) Must be able to reset within 10 minute after a thermo shutdown.
- (U) Lubricant should be able to be applied, refilled or replaced within 5 minutes.