

NSA/CSS Requirements for Paper Shredders

1 (U) Introduction

(U) Paper Shredders must pass an evaluation by meeting requirements set by the NSA/CSS for the shredding of paper with notations to those devices also approved to shred CDs. NSA/CSS will primarily evaluate the device's operational ability to shred paper and/or 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 in these areas.

(U) Once the evaluation is successful the NSA/CSS will include the paper shredder in the next release of the "NSA/CSS Evaluated Products List for Paper Shredders". The 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 Shredders a vendor must satisfy all appropriate requirements in this document. The Paper Shredder will be evaluated against a random assortment of types of paper and/or CDs it claims to shred.

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 shredder to perform the destruction of paper 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) Paper Shredder:** The device must reduce paper, or CDs to particles that classified information cannot be extracted
- **(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.

4 (U) Operation Requirements

4.1 (U) Shredding

(U) The device must shred paper or CDs to an edge size of 1 millimeter by 5 millimeter, or less.

4.2 (U) Operational Time

(U) The evaluation will includes the timed destruction of conventional office copy paper (letter size, 20-lb weight, uncoated) or CDs for a period of 1 hour. The vendor must define the volume classification of the paper shredder:

- Low volume = 0-4 reams/hour
- Medium volume = 5-9 reams/hour
- High volume = 10+ reams/hour

4.3 (U) Storage Media

(U) A Paper Shredder must define the maximum thickness, weight and size of the paper it will shred.

(U) It must define if it will shred CDs.

5 (U) Administrative Requirements

5.1 (U) Labels

(U) The paper shredder 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 shredder vendor must specify the paper or CDs it will destroy and the requirements it will satisfy. If it's not claimed it will be not be evaluated and will not be approved to disintegrate. If a requirement is not supported the paper shredder may not be allowed to go through evaluation.

5.3 (U) User/Operator Guide

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

- Accurate description of the paper shredder,
- Definition of paper or CDs it will disintegrate,
- Accurate summary of each feature and function,
- List of specifications (i.e., power consumption, motor size etc.),
- Maintenance procedures:

- o Changing Filters,
- o Remove a jam,
- o Lubrication,
- o Safety procedures.

6 (U) Power Requirements

6.1 (U) Electrical

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

6.2 (U) On/Off Switch

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

6.3 (U) Power Indication

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

7.2 (U) Operator Protection

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

7.3 (U) Reverse

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

7.4 (U) Debris Collection

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

7.5 (U) Debris Full

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

7.7 (U) Noise

(U) Sound levels for the paper shredder 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 shredder 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 shredder 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 shredder must not exhibit a vibration measurement of over ? Hz. The measurements will be taken at four random locations around the machine 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 shredder. The signature should show no high temperature activity (red areas) on the paper shredder 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 shredder requires calibration or maintenance by the operator if must be safe and reasonable easy to accomplished. The following are some specifics:

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