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YOUR PERSONAL GUIDE TO SHREDDING AND SHREDDERS



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For your notes:



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1. Introduction

The correct use of shredding machines, in the light of increasing identity theft and corporate fraud, has become an absolute necessity both in business and within the home. However, choosing the most suitable machine can be very difficult, especially for beginners.

To give you a little background as to why we feel qualified to help guide and educate you through this product category our Company Don Ruffles Limited's ShreddingMachines.co.uk website is now the most used, informative, and popular independent specialist Shredder website in the UK. Our Staff have held senior positions for well over 100 years collectively in the roles of Sales, Marketing and Customer Support for major Shredder Manufacturers and within the aligned Security Industry. Personally, I was the Managing Director and Vice President for International Sales for one of the largest shredder manufacturers and was responsible for shredder sales worth in excess of £100,000,000 worldwide.

We have a customer base now that includes all of the larger Retail, Wholesale and Global Distributors, the majority of Local and Central Government departments, and have in some way supplied most of the largest Businesses in the UK. We currently purchase product from every major Shredder manufacture, and even supply exclusive products which we source directly from lesser known manufacturers, who themselves produce for the Global brands, some of which are UK Government approved to the highest security level. As no one single shredder manufacturer offers the ultimate product line, we decided to develop a shredder website showcasing the very best of the best. The result now is that we have an unparalleled choice of the absolute latest, cutting edge and technically advanced shredding machines available from all of the world's major shredder manufacturers – all available at highly discounted prices, under one roof.

We hope that the enclosed information will help you to cut through the 'SHRED SPEAK' and make you feel comfortable in choosing or recommending the most suitable machines for your requirements.

After reading the enclosed, why not customise your requirements using our unique 'Shredder Wizard' situated on the home page of the website where you can input some simple details like:

- What security level do you require?
- How many sheets would you like the shredder to cut per pass or per day?
- How much you want to pay?

Our proprietary search engine will immediately show you all of the models that would suit your needs at the very best pricing. Alternatively, just call us for help on 0845 5555 007 - we look forward to helping you

Kind regards,

Michael Knight

Managing Director, Don Ruffles Limited

P.S. Please also remember that it is the media disk or 'platter' in the hard drive of your PC or laptop which stores all of your sensitive information. Always consider how this platter is destroyed or completely wiped at the end of its lifespan or shredding the paper that it produces may in-fact be a waste of time!



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2. Why Shred?

"Identity theft is Britain's fastest-growing white-collar crime, increasing at nearly 500% a year." - BBC TV's Money Programme

The use of shredding machines has become an absolute necessity in today's business and within home, with identity theft reported to be the fastest growing crime In the UK. As the level of sophistication of criminality increases, purchasing appropriate destruction machinery, and / or suitable services, is essential.

We are all aware how vitally important it is to protect ourselves, our families and our businesses from unscrupulous individual's intent on harm. It seems a basic human instinct to provide as many preventions as possible to deter unwanted attention - at home we lock doors, install burglar alarms, and join neighbourhood watch schemes. Businesses spend millions of pounds every year on CCTV, key or card entry systems, the most sophisticated electronic surveillance equipment, including employing highly trained security guards, all to stop criminals entering their premises and stealing their possessions.

'So why then are we guilty of simply throwing our highly prized personal details, the 'life blood' of our companies, out of the back door?

Sensitive business paperwork e.g. sales forecasts, company future plans, customer lists, cost prices, staff salaries information are all things a competitor could use to steal your customers and ruin your business.

In extreme cases, information of National importance falling into the wrong hands could potentially be far more serious!

It is reported by Price Waterhouse Coopers that Fortune 1000 Companies lost more than \$45,000,000,000 (\$45 Billion), as far back as in 1999, due to theft of proprietary information – and the situation today is far worse.

Therefore, it is little wonder in extremely tough and challenging times that IDENTITY THEFT, CORPORATE FRAUD and INDUSTRIAL ESPIONAGE are increasing at such alarming ratespeed.

A new language is entering society - which phrases such as "personal identity", "bin raiding", "victim fraud", "credit thieves", "dumpster diving" - but the sad truth is that most individuals only really worry about identity theft and corporate fraud after it has affected them... 'It will never happen to me'.

We have heard of a large aeronautic company who believed that they had an infallible system for destroying their corporate secrets with *their own employee taking sensitive waste to the external shredding service and then witnessing the destruction.*

50 Bags Collected – 50 Bags Destroyed and a Certificate of Destruction Received

What they were unaware of was that the employee was making a small detour and dropping off those 50 bags of their most sensitive information to a competitor. He then loaded up 50 bags of unrelated waste, and an hour later collected his Certificate of Destruction.

It was estimated to have potentially cost this Company in excess of £50,000,000.00!

Leave shredding to the professionals... In situations like this, we recommend you try our "shred on site" service below:

Mobile shredding
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**Ruffles Mobile Shredding
Service**



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3. Identity Theft, Corporate Fraud and Data Protection

Identity Theft

Most individuals have no idea how easy it is for criminals to obtain their personal data without the need to even break into their homes:

- In public places, for example, criminals may engage in "shoulder surfing" watching you from a nearby location as you punch in your telephone calling card number or credit card number or listen in on your conversation as you read out your credit-card number over the telephone to a hotel or rental car company.
- The area near Homes and Offices are typical 'Crime Scenes':
- Criminals engage in "dumpster diving" or "bin raiding"- sifting through waste bins to obtain copies of cheques, credit card and bank statements, or other personal records that typically bear names, address's, telephone numbers, passwords or even dates of birth.
- With this information it's easy for criminals to gain control over Banks Accounts, apply for Driving Licences, Credit Cards, or even Passports - and from there assume your identity

For example, if you receive applications for "pre-approved" credit cards, and discard them without destroying correctly it is easy for criminals to activate them without your knowledge. Credit Card Companies activate cards by asking for Security Questions like:

Your Full Name, First Line of Your Address, Post Code, Mothers Maiden Name, Telephone Numbers, Date of Birth etc.

With enough identifying information about an individual, a criminal will take over their Identity to conduct a wide range of crimes - false applications for Loans and Credit or Store Cards, fraudulent withdrawals from Bank Accounts, fraudulent use of Telephone Calling Cards, or by obtaining other Goods and Privileges which the criminal would be denied if they were to use their own identity.

Criminals can then very easily take steps to ensure that subsequent Bills, Invoices or Bank Statements showing the unauthorized withdrawals, are sent to an address other than the victim's, and the victim will not become aware of what is happening until the criminal has already inflicted substantial damage on their assets, credit, and reputation.

In recent years, the Internet has become an appealing place for criminals to obtain identifying data including Passwords and Banking information. Many Individuals respond to 'Spam' in the guise of unsolicited e-mails may be informing you that your bank account may have been compromised.

The email may ask you to log in and supply information like your Bank Account Number, Password, and Pin number.

What you do not know is that unwittingly you are supply the thief with all of the information required to access your real account and within minutes **your Bank Account will be emptied!**





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4. What is Corporate Fraud?

The words **INDUSTRIAL ESPIONAGE** and **CORPORATE FRAUD** seem like a scene from a James Bond movie!

Not so – this is happening in Businesses and organisations across the UK in many different facets at this very moment. Ask yourself ‘Could someone be ‘scamming’ My business now?’.

“Having spent time dealing with a high number of the most secure installations throughout the UK, and in the company of extremely Senior Government/Military Personnel, the level of sophistication is mind blowing. As the stakes get higher and as technology improves, the ways of obtaining the most sensitive information is in fact becoming extremely easy.” - Michael Knight www.ShreddingMachines.co.uk

With current economic conditions worsening, and business becoming extremely difficult and competitive, it is not surprising that individuals are resorting to the most devious means to gain an edge:

- GSM Monitoring
- Email / Internet Monitoring
- Radio Monitoring
- Voice Bugging
- Video Surveillance
- Fax Duplication
- Data encryption

.... The list goes on and on and crimes are committed daily in most Organisations

Either by the most advanced means, like an “audible bugging system” that can pinpoint a single conference Room and monitor Research and Development plans, or very simply the unsophisticated theft of Paperwork from Desks by Cleaning Staff throughout the night.

If you fall into any of the following categories it is imperative that you take time to assess the specific impact of a loss of sensitive information and how it would affect you personally as you are could be being targeted at this very moment.

These Categories include:

- Defence, International Relations, Security and Intelligence
- Public Order, Public Safety and Law Enforcement
- Trade, Economics and Public Finance
- Public Services
- Critical National Infrastructure (CNI)
- Personal / Citizen

There are many reported incidents of Paper Theft – a copy of a draft tender response can be very useful to a Competitor or simply very embarrassing if Medical Details of Staff were to leak. The Golden Rule is to **NEVER ALLOW CONFIDENTIAL INFORMATION TO LEAVE YOUR PREMISES IN A READABLE FORMAT UNLESS BY A SECURE APPROVED PROVIDER.**





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5. UK Data Protection Act

'Businesses and Individuals have a Legal responsibility through current Legislation to protect Staff and are may be liable to a fine or even imprisonment if the appropriate principles are simply ignored'

A summary of the Data Protection Act 1998:

The Data Protection Act sets out eight protection principles which form the legislative framework and with which a data controller must comply.

1st: Personal data shall be processed fairly and lawfully.

2nd: Personal data shall be obtained only for one or more specified and lawful purposes.

3rd: Personal data shall be adequate, relevant and not excessive in relation to the purpose or purposes for which they are processed.

4th: Personal data shall be accurate and where necessary, kept up to date.

5th: Personal data processed for any purpose shall not be kept for longer than is necessary for that purpose.

6th: Personal data shall be processed in accordance with the rights of data subjects under the Act.

7th: Appropriate technical and organizational measures shall be taken against unauthorized or unlawful processing of personal data and against accidental loss or destruction of or damage to personal data.

8th: Personal data shall not be transferred to a country or territory outside the European Economic Area...

IMPORTANT - Interpretation of the 7th principle:

The Seventh Principle of the Act states that "appropriate technical and organizational measures" must be taken to protect personal data, and gives advice on appropriate security measures. The list of security controls to be considered include... "Is printed material disposed of securely, for example by shredding?"

'Breaches of this act may result in criminal proceeding against the Data Controller and the award of Financial Compensation to the Data Subject in respect of Personal Data which now includes data in a relevant filing system, and not just computers'





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6. GDPR – The General Data Protection Regulation

What is the GDPR all about: The European Union (EU) has changed the way that all businesses must deal with their data protection rules. The changes are now law, and they will go live across the EU on 25 May 2018. These new rules are called the General Data Protection Regulation, or in short – GDPR, and will apply to all public authorities and any size or type of business.



What is EU Data Protection: In the EU there are existing legal rules regarding the collection and processing of personal data. Anyone who collects, processes or holds any personal data has a duty to protect it from misuse and comply with a range of legal requirements. GDPR simply upgrades the existing rules, and the new rules enhance how businesses currently deal with their data protection, corporate fraud and identity theft requirements.

Do these new rules apply to electronic data as well as paper copies? Yes, the GDPR will apply to electronic data (like emails and databases) and to hard copy files with a few exceptions. This means that you will have the responsibility to protect not just all paper-based files, but also information held on other data carrying media. You will need to keep all media holding sensitive and personal information like paper, SIM or smart cards and microform, physically secure from other staff, and when not required any-more, dispose of it securely, for example with suitable cross-cut paper shredders, so data is no longer visible. If your current shredder only produces strips that could easily be put back together, consider the use of a more secure, higher security shredder. Other data media carriers which hold sensitive and personal data like hard drives, digital memory, and magnetic tapes, will all need to be wiped clean (degaussed) or shredded through more specialist machines so information cannot be accessed and viewed.

What kind of fines can my business face for breaching the rules: This is the very scary part! Under the new regime, data protection regulators can impose massive fines for infringing on the new rules. The highest level of fine can be either a maximum of £18 million or 4% of your businesses global annual turnover, whichever is the higher. Although not every breach will result in the highest fine being imposed, we are urging all of our customers to set out a plan to make sure that they follow the rules, as not doing so could be potentially disastrous.

Will businesses have to do more: Yes, every organisation will have more responsibilities and your obligations under the new rules, in particular to implement technical and organisational measures to make sure that data is processed properly, will inevitably need reviewing. To assess the correct level of security required in storage, secure destruction and the potential viewing of sensitive information by others, you must consider all of the risks that are presented. You will also need to be able to show what measures you have taken, if a regulator should ask. An important part may be to check who you are sending personal data to. For example, you may need to check the processes of people you share information or work with, like mailing houses, external shredding companies and employment agencies to see if the personal information you are sending them could potentially be viewed by others?

What should I do now: Don't leave it any longer to start to implement the processes to become GDPR compliant. It is recommended that you start to address the following ten top compliance issues as soon as possible:



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- Start to map all the sensitive data that your business uses or retains, and determine what are the areas of potential risk
- Thoroughly review all your vendor contracts to cover potential security breaches of your data help outside of your control
- Update your system and prepare new detailed documentation and records for future regulatory inspection
- Review key aspects of data processing, data retention as well as physical and visual data security within your business
- Plan to securely destroy any redundant data you hold, including all types of data carrier – paper, disks, hard drives etc.
- Ensure policies and procedures include explicit consent, the right to be forgotten, data portability and the right to object
- Develop and rehearse your data breach notification procedure, including detection and response capabilities
- Consider appointing a Data Protection Officer who will be responsible for setting policy and advising your staff
- Set up and undertake regular compliance audits in order to identify and rectify any potential issues
- Train staff on all GDPR aspects as they need to know, and data protection regulators will pay special attention to this



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7. Media to be Destroyed – it is not just Paper Based Products!

Magnetic Media, Hard Drives, and Magnetic Tapes includes removable Magnetic Hard Drives, ZIP Drives, Floppy Disks, SCSI Drives and Software-encrypted Disks commonly found on Desktop or Lap Top Computers, Videotape, Audiotape, Computer Back-up tape include procedures as follows:

CD's, DVD's and Blu-ray Disks includes CD-ROMs, CD-Rs, CD-RWs, DVD-ROMs, DVD-Rs, DVD-RWs, DVD+Rs, DVD+RWs, DVDRAMs, BD-ROMs, BD-Rs and BD-Rs:

Microform includes microfiche, microfilm and other reduced image photo negatives:

Dynamic RAM (DRAM), EEPROM and EPROM - electrically Erasable PROM

Flash Drives - USB Sticks, Hybrid Hard Drives, SD Cards

FPGA (non-volatile and volatile)

Monitors - CRT, Plasma, LCD Screens

Network Devices - switches, routers, interface cards, enterprise networks

Office Equipment - Printers, Scanners, Faxes, Photocopiers, Multi-function Devices

Personal Electronic Devices (PEDs) - Mobile Phones, Smart Phones, Personal Digital Assistants (PDAs)

Screen Controllers - Graphics Cards, Chipsets, Dedicated Graphics Controllers

Smart Cards and SIM Cards - Key Cards, Tablet PCs

Static RAM (SRAM) - Battery-backed or Capacitor-backed SRAM and SRAM without power





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8. What Should You Shred?

Personal or home users should start by asking a simple question: "Would you like your next-door neighbour or any complete stranger to read this information?"

Individuals deal with an increasing number of sensitive documents on a regular basis that if they were to fall into the wrong hands, would be potentially damaging, including Bank Statements, Utility Bills, Junk Mail, Pre-Approved Credit Applications, Medical information, Mortgage Details, Personal Letters. These documents should either be kept in a secure place, like a suitably locked safe or, if not required anymore, disposed of correctly through a suitable shredder.

Always Shred:

- When sent any information containing your name, address or other personal details.
- Credit card slips, bills, receipts etc. when no longer needed.
- When you're finished with statements or expenditure breakdowns.
- When clearing out files, cupboards etc.
- Before moving to a new house
- After a bereavement



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Always Remember:

- Under the self-assessment tax system, all taxpayers are required to keep financial records of their Income and Capital Gains for a set period of time – normally up to 6 years. Please check with your tax advisor regarding details.
- Generally it is advisable that Bank Statements, Household Bills and Purchase Receipts are retained for a minimum of one year – if you want to compare expenditure over a period
- **Business users should simply consider:** 'How much damage it would do to your business if your competitor were given any of the following?'
- Sales Forecasts, Business Plans, Research and Development information, Customer Lists, Cost prices, Profit Margins, Order fulfilments rates, Staff Salaries, Competitor Analysis, Bank Statements, Launch plans, Draft Tender Information, Store openings, Security Guard patrol times

Could your Business be affected adversely if any of the above were to become public knowledge?

Always Shred:

- Every day to get rid of excess paper and unwanted mail
- When clearing out files, cupboards etc.
- At the end of the financial year
- When you have photocopied too many documents
- Once stored records have exceeded the date they need to be kept till
- When moving offices
- When clearing a desk after a member of staff has left



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Always Remember:

- By law Businesses are required to retain certain documents for a period of time – please refer to your Company accountants for more details.



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9. Choosing and Recommending the Most Suitable Shredder

Always remember the most expensive part of any shredder is the person using it!

To help choose the most suitable shredder we list models into various Categories. Machines listed are capable of shredding a much higher volume than those stated in the Daily Capacity Section and are not necessarily those as stated by the Manufacturers, but this guarantees that they can cope with spikes and reasonable future increases in trends.

Before considering the most appropriate category, ask a few basic questions first:

- **What type of item needs to be shredded?** - Do you need just to shred Paper or do you have other types of media to destroy like CD/DVD's Disks, Plastic Cards or Hard Drives? Never try to shred items that your machine is not designed for or your warranty will be void.
- **What are the size of the items to be destroyed?** - Determines the entry throat of the machine - all Paper Shredders will shred A4 sheets but check to see if there is a requirement to destroy wider paper like A3, computer width or even wide format plans. Remember that it is usually better to shred paper portrait rather than landscape as this will mean that the lines of print are cut more often with both strip and cross-cut machines, making it much more secure.
- A4 Paper Size: 210mm (8 1/4") short side x 295mm (11 3/4") long side
- A3 Paper Size: 295mm (11 3/4") short side x 420mm (16 1/2") long side
- Computer Print Out or Listing Paper Size up to 360mm (14 1/2")
- **What is the security level required?** How small the shredded piece is cut is directly related to the Level of Security required. This is because the larger the particle size, the more information can be viewed.
- Strip Cut or Spaghetti Cut are long cuts normally the length of the paper being shredded.
- Cross, Particle or Confetti Cut chops the paper in 2 directions into several particles.
- Crypto or High Security Cut is the Highest Level available – up to 20,000 pieces an A4 Sheet



Please also note that generally the smaller the shred size the longer it takes to shred. Remember that not only will a Cross-cut Shredder give you a better Security than Strip-cut, but from a practical level will compact waste better in the collection box, giving you up to 5 times more shredded waste saving time emptying and using far fewer collection bags.

Please see sections 11 and 12 below where Security Levels are explained in detail.



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- **How many sheets can be shredded in 1 pass?** – This is the thickness of paper that the motor will shred before the machine jams. Always remember that Manufacturers tend to quote the number of sheets a machine will shred using 70-gram paper but most copier paper is 80 grams, so the number of sheets that your machine will actually accept may be less than you may expect. Remember all Machines capacities will decline with age so regular oiling of the Shredders Cutting Head will increase how many sheets you can shred in one pass.

‘Riding a bicycle with the chain greased is much easier than riding when it is dry’

- **How many Sheets of Paper or CD’s per Day?** – This information gives a general guide as to what type or size of Machine is needed. ‘The larger the requirement to shred the larger the Shredder required’. All machines will be capable of coping with much higher capacities than manufactures recommend, to cope with a natural increase in volumes over time and to allow for spikes at certain times of the year.
- **How many People will use the Machine?** – The number of users normally equates directly to the size of model required, although a judgment call may need to be made here as some single users may need to destroy more paper than several other users in another office.
- **What is the budget?** – a very good place to start as some Customers are happy to spend longer shredding than others and may accept a machine that does not shred so quickly.



Why not make life easy and use our exclusive shredder wizard?



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10. Machine Categories and Types of Shredder

This is an arbitrary list that is been developed exclusively by www.ShreddingMachines.co.uk – for additional help see attached questionnaire.

- **Entry Level/Home Use Shredder** – Recommended for Individual use and very low volume of shredding: typically about 25 x A4 sized sheets of paper per day.
- **Personal Use Shredder** – Generally 1 User wanting to shred about 50 sheets per day: The machine Shredder Head would normally need to be lifted off the Waste Collection Bin to be emptied rather than by opening a door. This can sometimes create a little more mess
- **Desk Side Shredder** - Up to 10 sheets of paper can be shredded per pass and a requirement to destroy about 100 sheets of paper per day: The Shredder Waste Collection Bin can normally be emptied through a door without the requirement to lift off the Shredder Head which helps reduce the possibility of shreds falling on the floor
- **Small Office Shredder** - Can easily destroy 250 sheets of paper per day and good for up to 6 users. Machines generally shred between 10-20 sheets of paper per pass and depending on the model specification, and shred size, may destroy CD's, DVD's and Credit Cards
- **Medium Office Shredder** - Suggested for up to 12 users in a Busy Office wanting to destroy on average 1 ream or 500 sheets of paper per day. Normally Medium Office Shredders will destroy up to 20-30 sheets per pass depending on the shred size chosen and are available in most Security Levels 1 to 6
- **Large Office Shredder** – Perfect for about 25 users requiring shredding up to 1000 sheets or 2 reams of A4 and A3 sized paper per day. These Shredders would normally cut up to 30 sheets of paper per pass and depending on the shred size would destroy Optical Media including CD's, and some Magnetic Media like Floppy Discs
- **Departmental Shredder** – Higher throughput Shredders that are recommended for 50 Users as a Centralised Shredding System in a Large Office capable of destroying complete paper files including the cardboard covers up to a maximum of 50 sheets per pass. Departmental Shredders are designed to shred wider format paper including A3 and in some cases full width Computer Listing Paper or Plans
- **High Security/Crypto Cut Shredders** - Designed to the highest specifications and capable of destroying paper documents to the very smallest particles sizes – perfect for Government or Military installations where documents must be shredded to avoid espionage and where lost information may undermine State Defense. Generally, these products destroy one A4 Sheet of paper into 10-20,000 pieces and are approved to Security DIN Levels 5 and 6
- **Specialist Shredder** - Special Units for the destruction of non-paper media including products that shred Multimedia like CD's, DVD's, Floppy Disks and ZIP Discs. Also available are Cardboard Shredders to make packaging materials by recycling Cardboard boxes into reusable mats perfect when wrapping and protecting goods needed to be posted, and Digital Shredders to wipe contents from Hard Drives
- **Industrial Shredder** – Centralised Destruction Systems to destroy paper or non-paper media - perfect for complete Office Blocks. The waste would normally be transported to the Shredder from



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individual Departments and destroyed centrally. Available to shred between 100kg – 2100kg of waste per hour, including single, double, and triple stage Shredders which will pre-shred bulky items including complete files, some with metal inserts, prior to transporting to a fine Shredder. Machines can normally be adapted to include Front Conveyor Systems to help load the Shredder automatically, & Rear Conveyors capable of taking waste to Compaction Units like Compactors or Baling Systems

- **Industrial Shredder Balers** – Centralised Shredders which combine with Waste Baling Systems to also compact shredded paper into Bales saving space as are easily stackable for onward recycling. Baling Presses are 'waste reducers' that compact many types of waste including paper, clothing, plastics etc. and can be supplied in Vertical and Horizontal or Channel formats. Balers can be either manually or automatically tied. Some into Bags.
- **Optical and Magnetic Media Destroyers** – Designed to shred CD's/DVD's/Blu-ray, Computer Hard Drives and PC Boards, Carbon Tapes, Paper, Cardboard, Syringes, Tin & Plastic Cans, PET Bottles & Cups, Glass files, Industrial Waste, Plastic Housings etc.
- **Waste Reduction Units** – Special High Capacity machines designed for the recycling and easy transportation of Wooden Boxes & Pallets, Car & Truck Tyres, Plastic Bottles, Cans, Cables and Electronic Waste, Barrels & Canisters, House & Industrial Waste, Foils, Plastic Housings, Car Pieces etc.
- **Cardboard Shredder** – Shredder that shred Cardboard boxes that produce mats that can be used for Packaging Material – This helps to Save Money and Recycle Waste Products
- **Signal Waste Shredder** – Specifically designed Shredder for Military Installations to shred Crypto Code Tapes to the Highest Security Level 5 or 6.
- **Disintegrators** – Machines designed to destroy all types of waste with a choice of different sized adjustable screens for large quantities of material including paper, credit cards, CD/DVD/BluRay, Floppy-Disks, cardboard, carton boxes, aluminium cans and plastic bottles
- **Hard Drive Shredder & Granulators** – High Capacity machines that shred complete Hard Drives including the Metal Casings, Magnets and Platters which hold the Data, to strips or granulate through specifically sized screens to a minimum size of up to 6mm for Secret and Top-Secret requirements
- **Degaussing and Hard Drive Erasure** – Digitally erase every piece of data from a Hard Drives and Tape Drives
- **Shredder Oil and Sacks** – Consumables to be used with Shredder including Waste Collection Bags of varying sizes and thicknesses, lubricating Oil Bottles and Sheets which helps the smooth running of the Cutting Systems, Cleaning Kits and Waste Collection Boxes.



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Shredder**



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11. The Different Types of Shreds

The fundamental part of any Shredding Machine is that the paper and other data carriers are cut into smaller pieces, so that the Confidential information contained on that carrier cannot easily be seen, which in turn rendering the information illegible.

The shredded pieces are cut into a variety of set sizes, which are determined by the various type and design of the Cutting System or Cylinders that are incorporated within the Shredder - essentially the smaller the shred size produced, the higher the Security Level achieved.

At www.ShreddingMachines.co.uk we generally class the types of shred produced into 4 main Categories – Strip Cut, Cross Cut, Micro Cut and High Security Crypto Cut:

Strip Cut Shredding

The Strip Cutter is generally seen as the most basic type of Shredding System but can be more than adequate for the less sophisticated user or for where there is a requirement to shred very large quantities of Sensitive Waste. A good example would be a Home user who requires a reasonably Low level of Security but is determined to protect information from possible Identity Theft, or a Corporate Account Shredding Waste to be sent for recycling.

Strip Cut, or Spaghetti Cut means that the Shredding Paper or Media like Credit Cards or CD's are cut into Long Parallel Lengths. The length of the Strips will tend to be as long as the type of media that you intend to cut. For example, if you put a sheet of A4 paper into your Shredder you will be left with approximately 30-50 parallel Strips the length of the A4 sheet.

It would be technically possible if you were Shredding a continuous Computer Printout for the length of the Shreds to be as long as the continuous sheet.

It is possible to choose how wide the Strips are normally in multiples of about 2mm, dependent on Shredder that is chosen – 1.9mm, 3.8mm or 5.8mm

The advantages of a Strip-cut over Cross-cut Shredder are that they would tend to be cheaper, as cutters cost less to produce, plus they will shred more sheets of paper per pass.

Cross Cut Shredding

The cutting cylinders not only cut the paper widthways, but also lengthways too. The results are small particles that look like confetti. Depending on the Security Level chosen you will be left with between 300 to 1500 tiny pieces from a single A4 sheet of paper.

Cross-cut Shredders have now become much more popular and always out sell the equivalent Strip-cut Shredders. The use of cross cut or confetti cut Shredders are always recommended over Strip-cut as the shredded waste is much more secure as it is harder to reconfigure the information, and the waste shreds will compact better in the waste bin which requires emptying less frequently and saves costs by reducing the number of waste bags required.

Micro Cut Shredding

Like Cross Cut but a better Security Level 4

Crypto Cut or High Security Shredding

Crypto Cut Shredders are usually used by Government or Military installations where the data is extremely sensitive. These Shredders cut to Din Level 5 or 6 and will shred a single piece of paper into 10-20,000+ pieces. Some of these machines will even shred CDs and DVDs. New Models can scrape the surface of CD's into dust making reading impossible



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12. DIN Security Levels Explained

DIN is a European internationally recognised and registered Association promoting Standardisation, Quality Assurance and Environmental Protection to guide individuals and businesses in making an informed choice

DIN 32757-1 STANDARD (NOW SUPERCEDED AS BELOW)

Level 1 GENERAL - LOW SECURITY (DIN LEVEL 1)

This level of Security is generally acceptable for Home use. Machines will normally shred into long strips cutting a sheet of A4 paper into about 40 parts. The shred widths of the strips can vary, normally up to 12mm or about 1/2 inch wide, and can be as long as the paper inserted. This Security Level is useful for destroying very low level general information but not for information that may contain bank account details or passwords etc. Machines of this Security Level are also sometimes used to produce packaging material.

Level 2 INTERNAL - Low to Medium Security (DIN LEVEL 2)

This level of Security would still produce long strips but would tend to be of a much narrower size than Level 1 - cutting a sheet of A4 into approximately 100 strips. Shred sizes would be under 6mm or 1/4 inch which is designed for all Internal Documents at Home or within a Small Office area. Again, this size of shred could be used for Packaging Material. Typically documents that should be shredded include Credit Card Receipts, Bank Statements, Utility Bills, Purchase Receipts, and even Pre-Approved Applications.

Level 3 CONFIDENTIAL – Medium Security (DIN LEVEL 3)

Level 3 machines normally cut paper waste into very narrow strips under 2mm or more commonly into Cross-Cut Particles - like confetti. This Security Level is the most common used by Commercial Organisations. Cross-Cut Shred Particles must be a maximum of 4mm wide and 80mm long, with a maximum Particle area not exceeding 320 sq. mm

Level 3 is recommended for all Confidential Documents including Staff Personnel details and Salary Information, Company Secrets, Internal Memos, Sales and Marketing Plans and Budget details

Level 4 SECRET – Medium to High Security (DIN LEVEL 4)

All Level 4 Shredding Machines must shred documents into Cross Cut particles with a maximum width of 2mm and length of 15mm. The Particle area must be 30mm² or under. This Security Level is recommended for destroying Secret Documents which may include documents that would jeopardise personal or institutional safety if they were to fall into the wrong hands. Typically this type of machine would be used in Government Buildings or to destroy individuals Medical Records

Level 5 TOP SECRET – High Security (DIN LEVEL 5)

Level 5 machines are designed to shred to a maximum Cross Cut particle width of 0.8 and length of 13mm. The maximum particle area must not exceed 10 sq. mm. These products are usually supplied to Government/Military installations where documents must be shredded to avoid espionage and where information may undermine State defence. Typically, an A4 document shredded to Level 5 would be cut into at least 10,000 pieces. Please note that specifically for MOD requirements other conditions apply like the minimum volume of sheets required to be destroyed per colour allowed to be mixed in the Shredder Box



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Level 6 MAXIMUM – Highest Security or Crypto Cut

Level 6 is an unofficial extension of the DIN Standard and is specifically developed by the American Department of Defence where Cross Cut particles must not exceed a width of 1mm and length of 4mm with a maximum particle area of 5 sq. mm. It is recognised as being the very highest Security Level available for Government or Military installations.

DIN 66399 EUROPEAN STANDARD for Data Bearing Media

www.ShreddingMachines.co.uk presents their easy understanding the new DIN 66399 Standard for the Secure Shredding of Data Media - Sept. 2012

There is now a new European Security Standard for the Shredding or Destruction of all types of Data Media, the DIN 66399 which, as of the 1st September 2012, supersedes the previous DIN 32757 and DIN EN 15713 standards. This new DIN Standard, developed by the Deutsche Industrial Norm (DIN) sets out new responsibilities regarding the Protective Security required for Commercial Organisations, Government Departments, and Individuals to help make an informed choice of the correct equipment to guarantee all levels of Secure Destruction. The new DIN 66399 Standard has now been expanded from just 5 security levels to include advice on the level of protection required for all types of Media and includes:

Three Protection Categories:

- Class 1 is for the Normal Protection required for Internal Data where disclosure would have a negative impact on a Company or a risk of Identity Theft of an Individual.
- Class 2 is for the Higher Protection for Confidential Data where disclosure would have a considerably negative effect or could breach legal obligations of a Company or offer a risk of adverse social or financial standing of an individual.
- Class 3 Is for Very High Protection for Confidential and Top-Secret Data which if disclosed could have terminal consequences for a Company or Government Entity, and have a health and safety or personal freedom risk to individuals.

Six Media Categories:

- **P** Paper Based Products
- **F** Film Based Products including Micro-film, Microfiche, and Slides etc.
- **O** Optical Media including CD's, DVD's and Blu-ray Disks etc.
- **T** Magnetic Data Media like Floppy Discs, ID Cards, Magnetic Tapes, and Cassettes etc.
- **H** Hard Drives from Computers, Laptops, and External Devices
- **E** Electronic Data Media like memory sticks, cards, solid state drives, mobile phones

Seven Specific Security Levels:

P = Paper Media Requirements

- P-1 → 12mm Strips or max. Particle surface area of 2,000 mm²
- P-2 → 6mm Strips or max. Particle surface area of 800 mm²
- P-3 → 2mm Strips or max. Particle surface area of 320 mm²



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- P-4 → Cross-Cut Particle area max. 160mm² with max strip width 6mm =6x25mm
- P-5 → Cross-Cut Particle area max. 30mm² with a max. strip width 2mm =2x15mm
- P-6 → Cross Cut Particle area max. 10mm² with a max. strip width 1mm =1x10mm
- P-7 → Cross Cut Particle area max. 5mm² with a max. strip width 11mm =1x5mm

Maximum Shred Sizes for other Media:

Class	Film	Max.	Optical	Max.	Media	Max.	Magnetic	Max.	Electronic	Max.
Class 1	F-1	160 mm ²	O-1	2000 mm ²	T-1	Inoperable	H-1	Inoperable	E-1	Inoperable
	F-2	30 mm ²	O-2	800 mm ²	T-2	Split	H-2	Damaged	E-2	Split
Class 2	F-3	10 mm ²	O-3	160 mm ²	T-3	2000 mm ²	H-3	Deformed	E-3	160 mm ²
	F-4	2.5 mm ²	O-4	30 mm ²	T-4	320 mm ²	H-4	2000 mm ²	E-4	30 mm ²
Class 3	F-5	1 mm ²	O-5	10 mm ²	T-5	160 mm ²	H-5	320 mm ²	E-5	10 mm ²
	F-6	0.5 mm ²	O-6	0.5 mm ²	T-6	10 mm ²	H-6	160 mm ²	E-6	1 mm ²
Class 3	F-7	0.2 mm ²	O-7	0.2 mm ²	T-7	2.5 mm ²	H-7	10 mm ²	E-7	0.5 mm ²



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13. UK Business Impact Level (BIL) Explained

Generally introduced for Central Government Departments, the Security Policy Framework (SPF) sets out new responsibilities regarding the Protective Security and Risk Management required, whilst recognising the wider implication for the Commercial Sector, which handle Government Assets on a regular basis.

Business Impact Levels provide a very handy seven-point scale allowing Departments, Agencies and Commercial Customers to make a balanced assessment of what Countermeasures would be required to effectively meet their Risk Management requirements of confidentiality and integrity. The below is our interpretation of the regulations and it is implicitly recognised that all Organisations should consult with their Security Advisors for specific advice on their individual Requirements. In many cases these recommendations are minimum requirements as organisations must determine whether a Higher Impact Level, and therefore Greater Protection may be required.

Business Impact Level Sector Tables

The CESG, the National Technical Authority for Information Assurance, in conjunction with the Cabinet Office have issued a Non-Protectively Marked Document which makes available details of Business Impact Level Tables to help Organisations and Individuals assess the Specific Impact of a Loss that would relate to various Sectors within the UK.

These Sectors include:

Table 1 – Defence, International Relations, Security and Intelligence

Table 2 – Public Order, Public Safety and Law Enforcement

Table 3 – Trade, Economics and Public Finance

Table 4 – Public Services

Table 5 – Critical National Infrastructure (CNI)

Table 6 – Personal / Citizen

An example of Business Impact Level may include:

Business Impact Level 0 (BIL0) – NO IMPACT

- Not likely to cause any specific loss but may cause some embarrassment if information were to fall into the wrong hands

Business Impact Level 1 (BIL1) – UNCLASSIFIED or NON-PROTECTIVE assets

- To cause a Financial Loss to the Public Sector of up to £1,000.00
- Likely to cause a Minor Financial Loss to any party – for example under £100.00 for an Individual or Sole Trader or up to £1,000.00 for a Larger Business





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Business Impact Level 2 (BIL2) – PROTECT (Sub-national security marking) assets:

- Likely to cause distress to individuals
- Breach undertakings to maintain confidence of information provided by third parties
- Breach statutory restrictions on the disclosure of information
- Cause financial loss or loss of earning potential, or to facilitate improper gain
- Unfair advantage for individuals or companies
- Prejudice the investigation or facilitate the commission of crime
- Disadvantage government in commercial or policy negotiations with others
- Likely to cause inconvenience or loss to an individual
- Would undermine the Financial Viability to UK Small and Medium sized Enterprises
- Can potentially cause a Financial Loss to the Public Sector of up to £10,000.00
- Likely to cause a Moderate Financial Loss to any party – for example under £1,000.00 for an Individual or Sole Trader or under £10,000.00 for a Larger Business

Business Impact Level 3 (BIL3) – Criteria for assessing RESTRICTED assets:

- Affect Diplomatic relations adversely
- Cause substantial distress to individuals
- Make difficult to maintain operational effectiveness or security of UK or Allied forces
- Cause financial loss or loss of earning potential for individuals or Companies
- Prejudice the investigation or facilitate the commission of crime
- Breach proper undertaking to maintain confidence of information by third parties
- Impede the effective development or operation of government policies
- Disadvantage government in commercial or policy negotiations with others
- Undermine the proper management of the public sector and its operations
- Likely to cause a risk to an Individuals Safety and Liberty
- Would undermine Financial Viability of a Minor UK based or UK owned Organisation
- Can potentially cause a financial loss to HMG/Public Sector of up to £1million
- Likely to cause a Significant Financial Loss to any party – for example £10,000.00 for an Individual or Sole Trader or under £100,000.00 for a Larger Business

Business Impact Level 4 (BIL4) – Criteria for assessing CONFIDENTIAL assets:

- Materially damage diplomatic relations (i.e. cause formal protest or other sanction)
- Prejudice individual security or liberty



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- Cause damage to the operational effectiveness or security of United Kingdom or allied forces or the effectiveness of valuable security or intelligence operations
- Work substantially against national finances or economic and commercial interests
- Substantially to undermine the financial viability of major organisations
- Impede seriously the development or operation of major government policies
- Shut down or otherwise substantially disrupt significant national operations
- Likely to cause a risk to a Group of Individuals Safety and Liberty
- Would undermine the Financial Viability of a Major UK based or owned Organisation
- Can potentially cause a financial loss to HMG/Public Sector of up to £10million
- Likely to cause a Significant Financial Loss to any party – for example under £100,000.00 for an Individual or Sole Trader or under £1million for a Larger Business

Business Impact Level 5 (BIL5) – Criteria for assessing SECRET assets:

- Raise international tension
- To damage seriously relations with friendly governments
- Threaten life directly, or seriously prejudice public order, or individual security or liberty
- Cause serious damage to Operational effectiveness or Security of U K/Allied Forces or the continuing effectiveness of highly valuable security or intelligence operations
- Cause substantial material damage to National Finances or economic and commercial interests



CPNI

Centre for the Protection of National Infrastructure

Business Impact Level 6 (BIL6) - Criteria for assessing TOP SECRET assets:

- Threaten directly the internal stability of the United Kingdom or friendly countries
- Lead directly to widespread loss of life
- Cause exceptionally grave damage to the effectiveness or security of United Kingdom or allied forces or to the continuing effectiveness of extremely valuable security or intelligence operations
- Cause exceptionally grave damage to relations with friendly governments
- Cause severe long-term damage to the United Kingdom economy





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14. Security Standards and Associated Information

EN BS 15713:2009 Standard for Secure Destruction of Confidential Material

This British and European Standard gives recommendations for the management and control of confidential material destruction, to ensure that such material is disposed of securely and safely. The recommendations apply to a company's main business premises and any holding sites. For more details contact 0845 5555 007

DIN 66399 Standards for Data Bearing Media

See section 12 (for more details contact 0845 5555 007)

Business Impact Levels Cabinet Office HMG IA Standard No.1

See section 13 (for more details contact 0845 5555 007)

CPNI Standard UK Government Physical Destruction

The Centre for the Protection of National Infrastructure have produced a document which has the remit to provide security advice relating to the Secure Destruction of Sensitive Items for UK Government Departments

Successfully evaluated security products are now branded by a CPNI logo

SEAP 8100 Destruction Equipment

Security Equipment Assessment Panel, June 1998 superseded by CPNI Standard above

SEAP 8200 Central Destruction Facilities

Security Equipment Assessment Panel, June 1998 superseded by CPNI Standard above

CSE Catalogue of Security Equipment

Successfully evaluated security products are listed in the CSE which is the CPNI's Catalogue of Security Equipment produced for use by Central Government Departments

HMG IA Standard No. 5 Protective Marking Level

The Cabinet Office HMG's Security Policy Framework (SPF) defines the UK Government's security and risk strategy by mandating the requirements that HMG Agencies and Departments must follow relating to the Secure Sanitisation of Protectively Marked or Sensitive Information. Sensitive data must be destroyed in line with HMG Information Assurance Standard No. 5

CESG - The National Technical Authority for Information assurance

The CESG protects the vital interests of the UK by providing policy and assistance on the security of communications and electronic data, working in partnership with industry and academia.

CAS-D CESG Approved Assured Service





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CESG Assured Service (CAS) is CESG's approach to gaining confidence in the security of commercial IA and ICT Services. Destruction Services aim to provide appropriately audited secure destruction of HMG Media and Assets (as listed in Appendix A of HMG IA Standard No. 5) in line with relevant HMG IA policy and guidance

DIPCOG Defence Infosec Product Co-Operation Group (UK)

DIPCOG is a UK Ministry of Defence forum run by a committee composed of representatives primarily from the MoD and CESG. DIPCOG approves products and services as being suitable for use specifically by the MoD

BSIA British Security Industry Association

The British Security Industry Association is the trade association for the private security industry in the UK where members adhere to strict quality standards. The BSIA Information Destruction (ID) Section consists of Companies that securely destroy a range of confidential information, including paper, DVDs and computer hard-drives.



NAID National Association for Information Destruction

NAID is an international association of Companies whose members assist all types of organisations to fulfil their legal obligation by offering data destruction services to securely destroying all types of discarded media, including paper, film, computer hard drives and other electronic devices in a highly efficient and environmentally responsible manner



NSA National Security Agency Central Security Service

The NSA produce a list of evaluated products (EPL) that meet specific NSA performance requirements for sanitizing, destroying, or disposing of media containing sensitive or classified information. Whilst inclusion on a list does not necessarily constitute an endorsement by NSA or the U.S. Government, products listed would tend to be deemed as to be approved for use by Government Departments and Organisations. The NSA has determined that High Security Disintegrators listed on the EPL provide adequate security for the destruction of paper, optical media (CDs and DVDs), and punched tape, and also recommends that paper be mixed with the optical media during destruction.





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15. Should I consider a Security Shredding Service?

There are a number of Companies now who will either collect your waste paper and media, and shred it in a truck on-site at your premises or alternatively transport it to a secure location where it will be shredded and recycled. Whilst we always endorse the shredding of confidential information at source there are also some compelling arguments in certain circumstances to outsource this service and this is why Don Ruffles can offer a **Nationwide Mobile Security Shredding Service** – MobileShredding.co.uk

We can provide a physical destruction service to every possible security level by offering Secure Mobile Shredding, Disintegrating and Degaussing of all types of sensitive media, irrespective of Security Requirements – for Individuals, Commercial Organisations, Government Agencies and UK National Infrastructure for:

P - Paper Based Products

F - Film Based Products including Micro-film, Microfiche, and Slides

O - Optical Media including CD's, DVD's and Blu-ray Disks

T - Magnetic Tapes, Data Media, Floppy Discs, ID Cards, Cassettes

H - Hard Drives from Computers, Laptops, and External Devices

E - Electronic Data Media, memory sticks, cards, solid state drives, phones

Mobile Security Shredding Services have the following advantages:

- Complete peace of mind that all documents and media can be shredded immediately on site
- Shredding can be witnessed by your own personnel guaranteeing destruction
- A full audit trail of your documents is supplied complete with "Certificate of Destruction" which can be issued On-site
- No need to tie up Staff doing unproductive work
- Documents once shredded are then recycled creating a closed loop service
- Documents can be stored in sacks and secure containers until collected for destruction
- Our Staff are trained and vetted and wear photo and ID badges for security
- We meet your obligations under the Data Protection Act 1998
- Shredding truck can process up to 2 tonnes of waste per hour

Security Shredding Services are normally able to offer:

- Mobile Onsite Shredding
- Purge, add-hoc, or one-off Shredding
- Off-Site Shredding
- Commercial and Industrial Shredding
- Shredding for Private Individuals
- Nationwide Shredding
- Office and IT Recycling



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16. How to dispose of Hard Drives and Electronic Media?

HARD DRIVE and DATA MEDIA SHREDDING:

Do not shred your paper and then simply discard your electronic media, as the amount of information and data stored is in an easily accessible and in a very handy format for 'Data Thieves' to steal your identity and company secrets. The amount of information that businesses keep on computer hard drives nowadays is unprecedented, and it is therefore vital that a hard drive destruction shredder or shredding service be used whenever a hard drive has reached its end-of-life. Full details of Hard Drive Destroyers can be obtained at Don Ruffles www.ShreddingMachines.co.uk or www.MobileShredding.co.uk.



Ruffles Mobile Shredding Service

HARD DRIVE and DATA MEDIA DEGAUSSING:

A Degausser produces an erasing field that permanently destroys all information stored on magnetic media, such as hard drive disks and backup tapes used in laptops, computer systems, photocopiers and printers. The magnetic storage of media uses different patterns of magnetisation to store information on the recording medium of video and audio cassette storage and backup tapes, hard drive/floppy disk platters and magnetic strips on credit cards. The correct use of a suitable Degausser will ensure that the information is completely wiped and is no longer retrievable.



Ruffles Mobile Shredding Service

Full details of Hard Drive Destroyers can be obtained at Don Ruffles

Degaussers.eu or MobileShredding.co.uk



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Degaussers.eu

Magnetic Media Degaussers approved up to the Highest Level

Mobile shredding

MobileShredding.co.uk Powered by **Ruffles**



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17. Technical Advantages – ‘When is a Shredder not just a Shredder’!

Please see below just some of the exciting new technical features currently incorporated into some of the more sophisticated Products. Some new features coming include – Automatic Paper Feeding Systems, 20-year Cutter Warranties, Patented SafeSense technology to switch off machines when paper entry is touched, Continuous Sensing Jam Free stopping you shred too much and more...

- **24 hours Continuous Duty Motors** - specifically useful for Professional Customers requiring long shredding operations. Models can be operated for any length of time, without interruption or inconvenient due to overheating
- **Special Carbon Hardened Steel Blades and Metal Chain Drive Systems** – both designed to ensure exceptional reliability and resistance to stress and misuse.
- **Patented Turbo Boost System** - increases the Shredder capacity to up to 30% at a time which eliminates the need for reversing the jam out of the machine saving time, mess and frustration
- **E5energy Smart System** - the most advanced Energy Saving System in the world. When the machine has not been used for 8 seconds the Shredder goes into automatic power saving standby mode which can be restarted automatically by simply inserting more material into the machine. Saves valuable energy resources
- **Maximum Power Saving** - offers the most advanced Automatic Disconnection from the Mains when the machine has not been used for four hours, even switching off the Energy Smart light so the machine is completely powered down when not used
- **Two Separate sets of Cutting Knives** – 2 entry throats 2 sets of Cutting Cylinders for the separate insertion and Shredding of Paper, and Media into the Double Waste Bin System
- **Removable Double Waste Bin** – to separate Shredded Paper from Credit Cards, CD/DVD Blu-ray and Floppy Disks to be recycled + no need for plastic bags
- **Automatic Reverse System** – automatically detects the thickness of paper and reverses and rejects the excess material
- **‘ShredGuard’ Metal Detection System** - warns when Metal objects of any size are accidentally inserted into the entry opening and stops the machine before they reach the cutting knives in order to protect the knives
- **Automatic Oiling System** – eliminate the need to manually oil your Shredder especially useful in making sure machines are protected in areas with many different users
- **TS – Touch screen technology** - all functions are activated by simply touching the required command on the touch screen. The TS range is supplied with EPC – Electronic Power Control System which indicates and controls the Shredding load by means of a series of illuminated optical indicators to avoid paper jams at the same time as optimising the Shredding Speed. Other features allow the machine to Shred Transparent Material and warn the Operator when the Cutting Knives require Oiling





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18. Shredder Terminology Guide

As with most industries a new language has been borne around the product. Let us help you cut through the 'Shred Speak' as below.

- **Auto Reverse** returns paper that is too thick or too many sheets for the Shredder to accept.
- **Auto Shut-Off** means that the Shredder will automatically switch itself off after a short period of non-use to conserve power.
- **Auto-Feed Technology** automatically shreds a stack of paper with no user intervention by automatically feeding one sheet at a time.
- **Auto-Oiling** oils the cutting head automatically when required to provide a better shred performance and a longer Shredder life.
- **Bin Capacity** is the size of the receptacle that the shredded paper falls into.
- **Compaction Technology** allows the shredded paper to automatically compact in the waste bin. More Shredding - Less Emptying.
- **Continuous Operation Shredders** can be run continuously with no cooling period required when the motor heats up meaning no wasted time waiting for the machine to cool down.
- **Continuous Run Time or Duty Cycle** is the time a machine will shred before the motor heats up and cuts out. If this occurs leave the machine to cool down and it will reset itself automatically. 24-hour motors will run continuously.
- **Cross / Confetti / Particle Cut** is when paper is shredded into small pieces or particles.
- **Crypto Cut** is the highest security Cross Cut Shredders are called "Crypto Cut" and the paper is shredded into tiny particles. Normal Security Level 5 and 6.
- **Cutting Speed** is how quickly a machine cut the paper. Twice the speed = double the throughput.
- **Daily Capacity** is a Guide to the approximate number of sheets recommended per Shredder.
- **DIN Standard** is a registered classification of security levels stating the maximum allowable size of shreds to suit each security level.
- **Easy Empty Bin** is a pull-out bin makes emptying fast and simple without having to manually lift up the Shredder head for emptying.
- **Easy Paper Feed** has the Shredder head at an angle for shredding under a worktop.
- **Jam Boost** incorporates a button that when pressed increases the power to clear a jam.
- **Large Bin Capacity** incorporates an extra-large bin for less emptying.
- **Mercury Jam Free** means that the Shredder mouth illuminates to warn when there is too much paper inserted, and the Shredder will not start, therefore preventing paper jams.





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- **Motor Cool Down Time** is how long it takes for a motor to reset itself after cutting out.
- **Recycling Bags** are used instead of plastic ones for the easiest way to empty and recycle your shredded paper.
- **Security Level** relates to size that the cutting cylinders will cut the paper too.
- **Self-Cleaning cutters** are self-clean to remove loose pieces of paper to prevent paper jams
- **Sheet Capacity** is the number of sheets (normally 70-gram A4) that a Shredder will accept per pass - in one go,
- **Straight / Strip / Ribbon / Spaghetti Cut** is when paper is cut into long strips.
- **Throat Width or Entry Throat** is the size of the opening into which the paper is fed. This determines the size of the paper that can be used without folding it.
- **Ultra Quiet** are Shredders that are designed to be ultra-quiet in operation - perfect for shared environments and busy offices where employees are on the phone.
- **Waste Sack or Bags** are used to collect the shredded paper for onward disposal. Available in various sizes and thicknesses.
- **What are S1 – S2 – S3 – S4 – S5 – S6?** The Security Levels a Shredder can be supplied with. The higher the number the smaller the shred size and more secure the Shredder.





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19. What to do when your shredder arrives?

Prior to your shredder arriving, please notify our team on 0845 5555 007 if there will be a significant amount of lifting required so that we can make the relevant arrangements.

How to unpack and set up - If your shredder weighs over 15kg, we suggest you get someone to help you unpack the machine. Ensure that you do not throw away the box contents immediately, as they will be needed if you need to return the machine for any reason.

Familiarise yourself with safety features - Read the safety instruction manual that comes with the machine to ensure that you are aware of the implications of using electrical products. All of our machines go through stringent testing to ensure that our machines are safe and operationally fit for purpose.

Read-don't shred your instructions - Believe it or not, this is a common problem that our phone centre hears about. Once the shredder is unpacked, there is a temptation to shred the instructions because it is the piece of paper in the user's hands.

Fix instructions to shredder for when others need to read - Shredding machines, when instructions are followed, have a long-life expectancy. This is because the user is aware that the machines must be regularly oiled and maintained. Problems usually occur when the shredder is passed into the care of someone without the appropriate knowledge collateral (e.g. instruction manual) of how to care for the machine

How to insert your first collection bag on frame or in box - We always recommend that a waste sack is used within the box so that the shreds can be more easily removed. Sacks can be reused in some cases.

To insert the sack in the box you will need to open the machine door and pull out the box. Alternatively, your machine may lift off the box. Either way open out the sack, insert it in the box, make sure it is fully pushed to the bottom, and finally fold the remaining over the edge of the top of the box. Always make sure any excess is fully folded over the top and down the sides of the box every time a sack is changed, as if this is not done you may affect the system which makes the machine cut out when the sack is full. Please note that this may negate your warranty.

Make sure box is pushed back so door interlock works - A common reason for users calling our phone centre is when the shredder has been set up correctly, but it is not working when plugged into the mains. A security function of many of our machines with doors ensures that the box must be pushed fully back in place to ensure that the door interlock works.

Why use waste sacks with your shredder? - The use of waste sacks with your shredding machine, whilst not always necessary on all paper shredders, is always recommended by ShreddingMachines.co.uk.

Shredding machines generally discharge waste in two different ways; either into a collection box or a waste sack that is normally held under the shredder head by a metal or plastic ring.

Collection Box - The most common way to collect and remove waste shreds is by using a collection box. The strip or cross-cut shreds normally fall directly into a container placed within the cabinet under the shredder head or for less expensive machines, a waste basket. These containers, which vary in size and volume, hold the shreds until they require emptying.

Placing a waste sack into the collection box or waste basket has a number of distinct advantages:



Dust - all shredders produce dust. The process of shredding will multiply this depending on how many particles or strips are ultimately produced. The use of a waste sack, which can be tied off, means that the dust is collected within a sealed unit along with the shreds and cannot escape.

Volume - by using a waste sack it is possible to increase the amount of waste produced before your shredder requires emptying. Depending on the type of shredder chosen and the level of security that you use, the resultant shreds will make air pockets within the collection box.

Mess - The use of a plastic bag will eliminate the possibility of shreds blowing away, generally causing untidy mess.



Be Careful - Always use sacks as recommended by ShreddingMachines.co.uk. Each sack has been tested to its fullest capacity and will not break or tear under normal circumstances. In some cases, sacks are colour coded to make the reordering much easier.

Oil cutting head (different types)

Why oil your shredder - It is very important to keep your shredder running at peak condition and the oiling of the cutting cylinders is always recommended, especially for all cross-cut shredders. Placing the specially formulated lubricant onto the cutters you will prolong the life of your shredder, and also save time when shredding. Shredders that are not oiled regularly will start to process paper waste much more slowly after just a couple of days. This is because most cutting cylinders are designed to run more smoothly if kept slightly lubricated. Other advantages include the elimination of annoying squeaks that sometimes occur, after a build-up of paper or paper dust, with strip-cut shredders.

After a period of time shredding machines that are not oiled will. This will:

- Start to shred fewer sheets of paper per pass and per minute
- Make the destruction process much longer and more tedious
- Ensure the machine is prone to jamming, resulting in more mess after reversing
- Cost more to service with more frequent visits
- Negate the manufacturer's warranty

Also, remember that shredders that destroy waste to High Security (DIN 5) can cut a single sheet of paper into over 10,000 particles so they will require oiling much more frequently than Medium Security (DIN 3) machines producing up to 500 particles.

There are 3 types of oil that are generally available:



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Bottled Oil - can either be applied into the cutting entry throat directly onto the cutting cylinders, or by running some lines onto a piece of paper and shredding it.

Spray Oil - a lighter formulated oil using either an aerosol or pump spray

Lubrication Sheets - very popular individual Sachets that are impregnated with oil that once shredded, release the lubricant directly onto the cutting cylinders. This eliminates any mess and is extremely effective.

NB. All manufacturers (with the exception of Rexel) recommend that you oil your shredder regularly using either bottles or cans of oil or lubrication sachets. Rexel recommend that you only use lubrication sachets to lubricate their machines.

Be careful

Always use oil that is recommended by shredder experts - ShreddingMachines.co.uk. All products are formulated with special lubricant that will not cause a build-up of paper dust which would reverse the benefits of oiling and are available with COSSH sheets on request.

Try with 1 sheet of paper - It is best to trial the shredder with 1 sheet of paper to make sure the machine is running the correct way. If the machine does not 'grip' the paper and pull it in call an engineer immediately. Check that the shreds produced are the correct size. Remember to lubricate a sheet of paper with shredder oil to get yourself into the best practice of oiling the machine regularly.

Test to the limits to reverse - When you are happy that the machine is running correctly try putting in more paper to the limit of the machine in stages. Always check the Manufacturer's Operator Instructions for more details of all features and limitations

Don't try to continuously overload - Depending on the quality of product chosen your machine is incredibly durable, but never continuously push to the limit as it is not in the best interests of the machines lifetime to constantly overload the machine. Also this may affect your warranty as 'jamming' a machine will eventually wear parts like timing gears. Your instruction manual will give you a suggestion of how much use the machine can realistically take, alternatively please give Ruffles a call on 0845 5555 007.





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Do you need a Preventative Maintenance Contract? - To facilitate the longevity of your machine, we recommend you take out a suitable maintenance agreement. Although it requires a small cost outlay throughout the machine's life, there are long term benefits whereby time, money and downtime are saved on unnecessary machine breakdowns. A number of real advantages in having machines covered under a Preventative Maintenance Contract include:

1. The machine will last much longer and won't need replacing with a newer model, which can be very expensive.
2. You should not pay for any additional breakdowns or service callouts, as the engineer will adjust belts, grease gears, lubricate parts, check sensors etc., as well as anything else that may require attention.
3. If still within the manufacturers guarantee period, you will not negate your warranty.
4. We can pre-empt any expensive replacement parts and take suitable preventative action.
5. A fully cleaned and vacuumed machine and surrounding area, reducing dust and the potential of breakages.
6. Importantly, we check to make sure all of the safety guards, trip switches and sensors are working properly so that you do not violate your health & safety requirements.



What to do if you have an issue? - If you do have an issue, it is possible to report it to us in multiple ways.

- **Call:** +44 (0) 845 5555 007
- **Fax:** +44 (0) 845 5555 008
- **Email:** Sales@DonRuffles.co.uk or <http://www.shreddingmachines.co.uk/contactus.asp>
- **Live Chat:** <http://www.shreddingmachines.co.uk> – instant message with members of the Ruffles expert team between 9am and 5pm Monday – Friday.

Try to recycle shredded paper - Remember that it is possible to recycle paper that has been fed through shredding machines. The environmental advantages from this are important, and we at Ruffles always try as hard as possible to recycle.





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20. Our Guide to Common Questions and Answers

How do I choose a Shredder? There are lots of factors to consider when deciding which Shredder to choose. For more information visit the SHREDDER WIZARD on ShreddingMachines.co.uk.

The General Questions to answer will include:

- What type of item needs to be shredded?
- The size of the items to be destroyed?
- Security level required?
- How many sheets can be shredded in 1 pass?
- How many sheets of paper or CD's, per day?
- How many people will use the Machine?

What is your budget? - REMEMBER the most expensive part of any shredder is the person shredding

My machine will not start, what can I do?

- If you have recently purchased the machine make sure you have read instruction manual.
- Ensure that the machine is plugged into the mains and that the lead is plugged into the back of the machine.
- Ensure that the waste container is engaged properly.
- Check that the machine door is not open.
- Check to see if the waste container is full. If it is then empty it and try again.
- Check that the power fuse in plug has not blown.
- If the machine runs for a long time then the motor may over-heat and cut out. Allow the machine to cool down and it will work fine again.
- If you are still having problems contact 0845 5555 007
- My machine will not stop, what can I do? - Paper may be jammed and covering the electronic sensor. To fix this, switch the machine off at the mains and remove and clean the sensor located in the entry throat.

My machine is jammed with paper, what can I do?

- If paper is jammed in the entry throat then switch the machine into reverse mode. It may be necessary to use the forward and reverse buttons several times until the paper is released.
- Paper may be jammed in the entry throat because the machine has been running for a long time and the motor may have over-heated and cut out. Allow the machine to cool down and it will work fine again.
- Paper may be jammed in entry throat because the waste container is full. Empty the waste container and try again.



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My waste container is full, how do I empty it? Depending on the model lift off the Shredder head or open the front door and remove the container. Shake the waste bin slightly to level off the waste shreds to reduce spillage. Then remove the waste sack and through away. Now all you have to do is replace the waste container and a new sack to their original positions. If you still require help, then look at the instruction manual that came with the machine.

How often should I oil cutting head and how do I do it? - It is recommended that you oil the cutters every day for Cross-Cut machines and weekly for Strip-Cut. Good housekeeping suggests that oiling the cutters once a day before the machine is first used is advantageous especially if it is used by several users, to make sure that this task is performed. This can easily be done by taking a sheet of paper and covering it with oil, then simply shred the paper as you normally would. Alternatively, you can spray or pour the oil into the entry throat as directed on the can. It is important to use non-flammable oil. Do not use lubricant that is not recommended as shredder oil is a certain viscosity. If you use the wrong type of oil dusts will collect and has an adverse effect perhaps negating your warranty.

My machine will not cut the correct number of sheets of paper:

- Remember that all of the specifications provided by the manufacturers assume that you are using 70 gram paper whereas most copier paper will be heavier duty.
- New machines will shred more than older ones.
- Machines will shred more if the cutters are oiled regularly

It's worth using the analogy of riding a bike:

'You can ride a bike without oiling the chain, but it makes the peddling much harder and the chain will eventually break'

What are the advantages of Cross-Cut over Strip-Cut? Cross Cut shredding is much more secure than Strip-Cut with the waste particles being cut 2 ways as opposed to one. Also - waste compacts under its own weight meaning that the bin has to be emptied less often with far less waste collection bags being required.

What are the advantages of Straight / Strip / Ribbon Cut? - Strip-Cut Shredding Machines can generally shred more paper at a time than their equivalent Cross -Cut versions and they tend to be cheaper to produce as the cutting systems are not so sophisticated.

How do I Maintain a Shredder? - Shredders are easy to maintain and will provide years of good service if you follow the Manufacturer's instructions. PLEASE NOTE that failure to follow these guidelines would normally void your guarantee:

- Normally the regular oiling of the cutting cylinders will prolong the life of all Shredders.
- To avoid jamming the cutting cylinders, every day of shredding, run the machine in reverse and forward 3 or 4 times without any paper being shredded. This will clear our any build-up of shreds which can cause stoppages
- Do not regularly try to shred more than the machines capabilities
- Do not shred items that your machine is not designed for – perhaps plastic, clips, tags
- Regularly check Safety Features. If your machine works with the door open or without the base connected, or the entry throat cracked, or bending DO NOT USE



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- As a guide it is recommended that Machines over £1000 at RRP are placed under a suitable Preventative Maintenance Contract the check Safety Features, Grease and Adjust internal gears, Chains and Belts etc.

[Click here to view information on our competitive maintenance contracts](#)

Can I shred metal items like staples? - Most Shredders do accept small clips and staples although if you are unsure always check the Manufacturer's Instructions which will be provided with each model. Depending on the size of your machine the shredding of large staples and clips may damage the cutting cylinders. The shredding of metal items may negate your warranty as normal wear and tear items like cutters, gears, bearings etc. may not be included if items other than paper are shredded.



Can I shred Credit Cards and CD's? - Only certain machines are suitable to shred CD's, DVD's, Blu-ray and Credit Cards - please refer to the specifications provided with each product on our web site.

How do I know when the Waste Bin is full? - Larger Shredders have a bin full indicator or will automatically stop when the bin is full. With smaller, less sophisticated models it is necessary to open the machine door occasionally to check to see if the bin is full or not. Some units have a see-through panel on the front to view the level of the waste.

I have emptied my Shredder and it will not switch on - why? - Shredders have built in safety interlocks so that the machines can only operate when the head is positioned correctly on the collection base or when the entry door is closed. If you have a bin top Shredder check that the head is positioned the correct way around and that it is sitting snugly on the bin. If you have a larger Shredder check that the door is fully closed. In some cases, the shreds tend to fall behind the waste bin over time when being emptied. This can result in the bin stopping the door closing correctly.

Are Shredders safe to use? - All Shredders on the www.ShreddingMachine.co.uk website come from established Suppliers and are manufactured to very highest Safety Standards with a wide variety of safety features included to allow you peace of mind. The entry slot where the paper enters the machine is narrow and the cutting heads are enclosed in the machine head to prevent them being touched. Cross cut models have an automatic cut out when the head is removed from the bin or the door is open. If your Shredder head or entry throat is damaged in any way it is recommended that you cease using the Shredder and report the fault immediately. It is always recommended that the machines safety features are checked, and larger models are placed under a suitable Maintenance Contract.

Do Shredders have guarantees? - All New Shredders are guaranteed subject to the correct operation of the machine as stated within the Manufacturers' instructions. Machines are normally guaranteed for all Parts for a period of time with an additional part only warranty (labour is not included) on the Cutting Cylinders. PLEASE NOTE most models DO NOT include General Wear and Tear, dependent on the type of products being shredded and a very common to negate warranties are if machines are not correctly oiled. For further details see the specifications for each machine on our site.



Is my Shredder warranted if I jam it? - Whilst machines will generally reverse normal jams where too much paper is shredded in one pass, machines can become stuck. This only tends to happen if machines are not correctly oiled, if they are continually overfed, or if the cutting heads



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are not regularly cleared by reversing regularly. If this is the case jams will not be covered under the warranty

Why do I need a Waste Sack? - In many cases it is not absolutely necessary to use a waste sack, however it will make it much easier to empty the waste shreds and definitely reduce the amount of mess caused when emptying the Shredder. Waste sacks are designed to let air out to maximise the capacity of the bag but to keep the dust in. There are different sized bags for different sized Shredders - these are listed under the specifications for each machine on the site.

Can I shred small pieces of paper? - A4 and A3 Shredders can also shred smaller sheets of paper. In order to activate the automatic start sensor, the paper should be placed in the centre of the entry throat. The paper will then be shredded in the normal fashion.

Can I shred larger paper than the throat size of my machine? - This is normally absolutely fine for paper waste although to go through the cutting head the sheets will need to fold several times – remember that this will greatly reduce how many sheets you can shred in one pass.

How are Shredders powered? - Most Shredders are Electric Powered by plugging into a normal 3 pin domestic socket. Some Specialist Shredders may require a special 3-phase power supply. If this is necessary, it is stated in the product description for the machine and should be done by a qualified Electrician

Can I have my Shredder serviced if it goes wrong? - All machines can be serviced either during or after the warranty. Please make sure that you have proof of purchase when reporting a claim. Machines can also be placed under a Service/Maintenance Contract to prolong the life. Please call us on 0845 5555 007 for further information.



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The largest independent supplier of shredders in the UK

From us all at Ruffles we really hope that you have found the enclosed useful and please let us know if we can help further.



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Other Useful Ruffles Websites:

Don Ruffles Company Website	
Security Shredders	
Media Degaussers	
Office Supplies	
Furniture and Storage	
Security Safes	
Office Machines	
Mobile Shredding	
Office Supplies World	