



BRIQUETTING SYSTEMS



The SEM Advantage - Performance Guaranteed

In matters of national security, the US Military and Federal Government rely on Security Engineered Machinery every day. SEM has been designing, building and installing document destruction systems for over 40 years. In addition to virtually every government agency and military base, more than 350 central bank facilities in 50 countries rely on SEM. This includes large facilities like the US Federal Reserve and the The People's Bank of China, small facilities like the central banks of Tonga and Aruba, and every size in between. Comprehensive engineering, site planning, installation and maintenance services, ensure trouble-free performance, long service life and lowest possible cost of ownership.



Waste Reduction Solutions

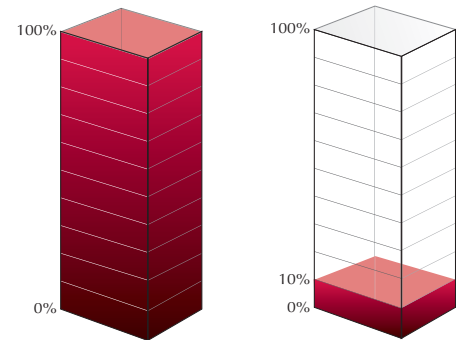
While shredding currency and sensitive documents eliminates security concerns, it doesn't solve disposal issues. That's why we've introduced a new line of Eco-Saver™ Briquetting Systems. From small batch systems to room-size, totally automated processes, SEM Briquettors reduce large volumes of loose waste into small, manageable briquettes.

Any SEM disintegrator (new or retrofit) can be paired with a briquetting system to provide the ultimate waste reduction solution.

Advantages of Briquetting

Without question the most obvious advantage of a briquetting system is the significant volume of waste reduction and the immediate savings in disposal cost. In the case of paper, it's not uncommon to see waste volume reduced by 90%. Other benefits include:

- Reduced transportation costs
- Improved housekeeping due to the elimination of dust and paper shreds
- Reduced danger of combustion versus loose waste - Can be an alternative to certain fire prevention measures
- Briquettes have secondary value as heating source - Sell your waste rather than pay for it to be removed
- Briquetted, disintegrated classified waste can be handled by paper mills and has true recycling value



Comparison of waste volume pre- and post-briquetting



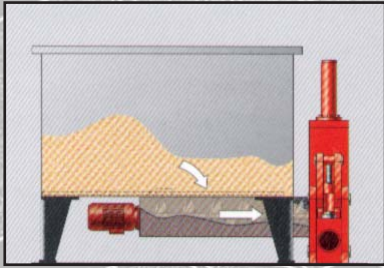
Components of a Typical Briquetting System

SEM Briquetting Systems include:

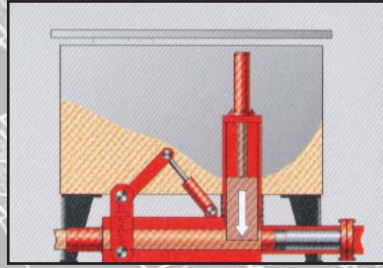
- Disintegrator for the reduction of paper from sheets to particles
- Material Evacuation System - air evacuation of particle from disintegrator to collection hopper
- Briquetting Press - includes a high pressure hydraulic ram to compact waste particle
- Material Transfer Tubes - direct compacted briquettes from briquettor to waste collection boxes
- Optional Sound Enclosure - reduces equipment noise levels to below 85 dB



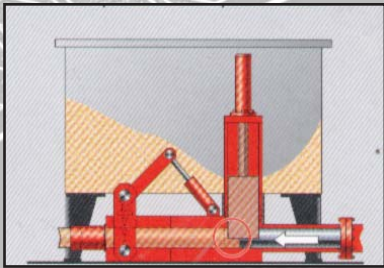
The Briquetting Process



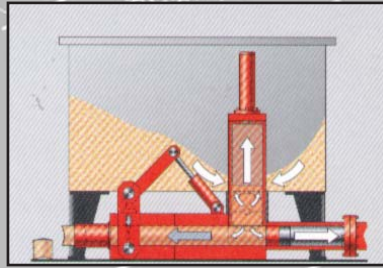
Material intake and spiral pre-compression



Pre-compression with push feeder



Briquette production



Briquette sizing and delivery



Closeup view of briquette exiting press

Pre-Engineered Systems

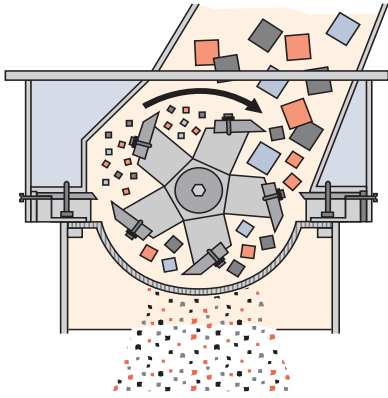
There are literally hundreds of disintegrator and briquettor combinations that can be created with SEM products. However, our experience proves that most applications can be accommodated by one of the three pre-engineered systems described below. If your application requires customization, our engineers will design a system specifically to suit your needs.



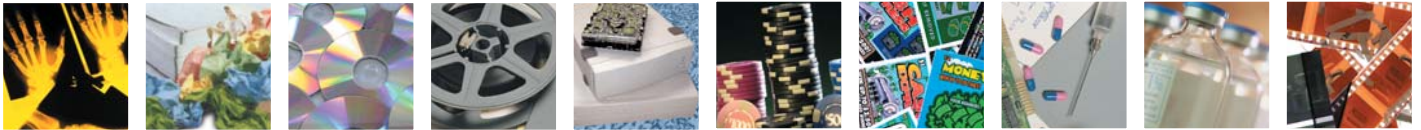
Model	Disintegrator	Briquettor	Disintegrator Thru-Put	Briquette Size	Briquettor Thru-Put	Briquettor Motor	Weight	Oil
22Green	22	614	800 lbs./hour	2.5"	400 - 600 lbs./hour	2 x 10HP	3,970 lbs.	2 x 43 Gal.
23Green	23	814	900 lbs./hour	3.2"	600 - 800 lbs./hour	2 x 15HP	5,515 lbs.	2 x 66 Gal.
1424Green	1424	614 x 2	1,200 lbs./hour	2.5"	800 - 1,200 lbs./hour	4 x 10HP	7,940 lbs.	4 x 43 Gal.

Disintegrators

SEM was the first company to bring a disintegrator to market. In fact, we coined the term 40 years ago. Here's how they work. Material is placed in the feed chute and it falls into the knife chamber. Five rotating knives pass two stationary bed knives to continuously cut material into smaller and smaller pieces. When the material is small enough to pass through a waste screen, it is evacuated for disposal.



Model	Capacity	Particle Size	Feed Opening	Destruction Chamber	HP	Air System	Weight
22/5	800-1,100 lbs./hour	3/32"-1"	12" x 20"	12" x 20" w/ 7 Blade Cutting System	30	Twin Bag Collection	2,470 lbs.
23/5	900-1,200 lbs./hour	3/32"-1"	12" x 24"	12" x 24" w/ 7 Blade Cutting System	30	Twin Bag Collection	2,670 lbs.
1424/5	1,200-1,600 lbs./hour	3/32"-1½"	14" x 24"	14" x 24" w/ 7 Blade Cutting System	40-150	Consult Factory	6,200 lbs.
1436/5	1,800-2,400 lbs./hour	3/32"-1½"	14" x 36"	14" x 36" w/ 7 Blade Cutting System	75-150	Consult Factory	8,500 lbs.



Eco-Saver™ Products

At SEM we're proud to do our part to protect the environment for future generations. We're committed to recycling, energy conservation and the use of non-toxic chemicals in our manufacturing processes. We are the first and only shredder company to be **ISO 14001** compliant. In addition to our in-house efforts, we're proud to provide equipment that will help you protect our environment as well.

In addition to the products featured in this catalog, we offer a number of other products that have earned our Eco-Saver™ Seal-of-Approval including paper shredders, magnetic media degaussers, and more. The Eco-Saver label is your guarantee that these products minimize negative environmental impacts as well as improve worker productivity and safety. Here's how:

- Reduced Energy Consumption
- Manual Operation - No Energy Consumption
- Waste Compression Systems for Reduced Disposal Levels
- All Natural Cutting Head Lubricants Derived from Renewable Resources

And if those aren't enough reasons to buy green, consider this. It's the law. Over the past several years, there have been a number of executive orders and legislative acts mandating the purchase of green products. In the coming months we look forward to bringing you more products that meet our Eco-Saver Standards, and we challenge our competitors to do the same.



SEM is a veteran owned small business.

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