Over many years of operation, the Moss medical waste retort autoclave system has proven to be the most reliable sterilizer design for the disposal of red bag infectious waste. In 1996, STERIS Corporation (formerly AMSCO) assigned Moss to be the STERIS/AMSCO Eagleguard retort autoclave exclusive national distributor. In 2004, STERIS decided not to continue manufacturing medical waste autoclaves. Since that time, Moss has been manufacturing these same retort autoclaves with the same design, operating control parameters and safety as was being supplied by STERIS but with larger stainless steel carts, an enhanced user friendly/remote monitoring PLC control system and cart lift table. Our autoclave designs are provided for hospitals, airports or commercial medical waste facilities. Medical waste system accessories include shredders (single, dual and four shaft designs), gas, oil, electric and solid fuel boiler systems, boiler accessories, cart tippers, cart dumpers and compactor containers.

The Moss approach to medical waste disposal is the most complete and acceptable method for processing of infectious waste materials. Human contact with red bag infectious waste is virtually eliminated. The operator simply loads red bags from the hospital floors or from commercial trucks onto our cart tipper with spill chute. This device dumps red bag into Moss custom designed stainless steel autoclave carts. Each cart is then pushed into the autoclave from a cart lift table or up a ramp for processing. Once processed, the carts are removed from the autoclave and are rolled directly to the compactor/container or shredder cart dumper.
George K. Moss Co., Inc. supplies retort medical waste autoclave systems to hospitals of approximately 75 beds and more or to commercial infectious waste disposal facilities. Our systems range in size from one to six carts that hold approximately 67.5 cu. ft. (300-350 lbs. or 136-158.75 kilograms/cart) mounded to the autoclave ceiling with red bag waste.

Moss has been providing proven medical waste disposal technology since 1982. We currently provide custom designed and sized high vacuum steam autoclaves that are provided with an internal track, external insulation with an aluminum exterior wrap, all required control valving/piping, loading ramp or lift table along with the following features and benefits: Various size units for different size hospitals or commercial facilities (1 thru 6 cart units constructed of stainless steel), Moss PLC control systems provide precise safe operation recording date, time, pressure and temperature. The autoclave system is modular and packaged for easy installation, which includes quick opening hydraulic door unit with locking ring, liquid ring vacuum pump designed for high vacuum operation of 22” Hg, temperature probe located in exit drain to ensure accurate temperature reading, unique condenser removes excess moisture for less weight at time of disposal and built for safety under ASME Boiler and Pressure Vessel Code, Section VIII, Division 1.

The Moss control panel is provided with a touch screen display located on the door panel and is designed to allow system personnel complete access to autoclave operating parameters. The display shows sterilizer status, time of day, cycle times, temperature and pressure readings and any warnings or alarms. The system also provides message readouts on the display screen and can communicate with a remote computer and send any alarm code to a pager, so that immediate attention can be given to the problem.

Shown above is the volume reduction of approximately 40—50 % after a pre and post vacuum cycle in a Moss autoclave system. Each autoclave is supplied with 1—6 high volume carts with a capacity of 300—375 lb. per stainless steel cart.

Moss autoclaves can be installed either inside or outside the hospital. Shown above is an outdoor installation of a 5’ x 13’ autoclave that is provided with pre & post vacuum capabilities and remote controls that is located indoors. Moss autoclaves are ASME Code Section I pressure vessels.
Shredding medical waste in preparation for landfill disposal is a critical part of medical waste processing. Medical waste requires shredding equipment specifically designed to provide an unrecognizable discharge in order to be acceptable in most landfills. Our custom designed Medical Waste Reduction Systems are designed to meet regulatory requirements. Our systems can be configured to meet numerous site-specific applications and has been approved to meet the most stringent size reduction ("unrecognizable") standards that we know of throughout the world.

All systems are designed for compatibility with the sterilization equipment. The Moss Sharps Shredder allows for the safe and efficient destruction of all sharps without the need for operator handling. (See unrecognizable sharps below).

Since the demise of incineration, autoclaving is now the widely accepted method for processing infectious waste materials. Add a medical waste shredder to the end of the process and you have a system that is universally acceptable by most any environmental agencies. An autoclave and shredder system is generally approved by all states and countries. Moss provides single, dual and four shaft shredder systems along with all required material handling equipment and controls.

George K. Moss Co., Inc. supplied and installed this large 2 stage shredder system shown above along with a 22.5 ft. long retort autoclave that processes approximately 1 mm lbs/yr. The system includes a cart tipper with spill chute (automatically loads red bag waste into autoclave carts hands free), dock level dumper for dumping general trash into a compactor/container along with dual conveyors for transporting shredded material to the compactor/container.
Moss looks at infectious waste disposal from a systems point of view, which requires a close look at the system's economics. We believe the best disposal system is not necessarily the most expensive one. This is why we focus on the total system, which involves looking at the personnel operating the system, as well as, the waste materials being disposed of. Our end objective is to provide you with the best value in quality waste disposal. George K. Moss Co., Inc. provides customer value and has the most cost effective system on the market relative to acquisition and cost of operation. Our project team planning assures our customers that their project meets their completion time schedule. We will plan your project from conception to completion, in budget, on time and designed and constructed to meet your expectations.

George K. Moss Co., Inc., in the steam business since 1958 and medical waste industry since 1982, specializes in the design, equipment supply and construction of industrial steam boiler and medical waste facilities. Moss is a full service company that designs, engineers and installs autoclave, shredding and material handling systems for the processing of infectious medical waste for hospitals or commercial medical waste facilities. Designing and constructing an infectious waste facility is a technical service requiring highly specialized skills. To do the job correctly, you need the right people, equipment and experience. Our staff is experienced in the steam and medical waste plant design to ensure your facility will operate as efficiently and maintenance free as possible. We also have a proud reputation of completing projects within the tightest budget and timeframe constraints.

Shown above is the installation of two Moss 5’ x 22.5’ retort autoclaves. Each autoclave holds 4 carts and can process up to 1,485 lbs./cycle. These autoclaves were installed in a large medical center in the southeastern U.S. Moss provided all equipment and services for the required installation including shredder, dumpers, cart washer and compactor/container.

At a rural hospital in Hawaii, Moss installed this pit mounted retort 2 cart autoclave system, including high wind design building with compactor/container (see left), which was designed to dump general trash and processed medical waste from ground level.