

- Safety is critical when it comes to autoclaves and manufacturing based on accepted international and local standards.
- Certified raw materials used according to pressure vessel manufacturing standards.
- Manufacturing based on 2014/68/EU or ASME or EAC standards.
- Manufacturing based on 2006/42/EC
   Machinery Safety Regulation.

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 Certified autoclaves by world well-known certification agencies such as Bureau Veritas, TUV, Bureau Veritas Inspection & Insurance Company. Akarmak, founded in 1990, manufactures autoclaves and pressure vessels for various industries including the Composite Materials, Glass Industry, Tire Retreading - Rubber Vulcanization, Building Materials, Medical Waste Sterilization.

Our autoclaves are manufactured in our state-of-the-art manufacturing facilities in the city of Eskisehir, with close proximity to major cities and ports. From the customer requirement acquisition stage to design, manufacturing, test, delivery and onsite commissioning, Akarmak is capable of providing turnkey an boutique solutions for every customer need.

The autoclaves are designed using advanced design tools and software meeting the highest safety and quality standards. We approach every project as unique and custom-made, and can handle customer specific requests. The autoclaves are manufactured with limited reliance on outside suppliers and are carried out by an experienced, highly trained and certified work force and technical staff.

Akarmak has the following certifications including those for autoclave and pressure vessel manufacturing:

- 2014/68/EU Pressure Equipment Directive
- 2009/105/EC Simple Pressure Vessels Directive
- ASME SEC VIII Div. 1
- EAC
- EN 3834-2
- EN 15085-2
- AD2000

Other certificates that may be required by different countries and jurisdictions. To certify our autoclaves, we work with internationally well-known certificate agencies such as Bureau Veritas, TUV, Bureau Veritas Inspection & Insurance Company.

Thank you for your interest in our company and our products. We look forward to realizing successful projects with you and enhance your value chain with high quality products.

Please do not hesitate to contact us, if you have any questions. You can also visit us at www.akarmak.com to get more information about our company and our products.

www.**akarmak**.com





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MEDICAL WASTE

www.**akarmak**.com

**Excellence in Autoclave Manufacturing** 

Superb After-Sales Service

Made in Europe





# MEDICAL WASTE

## STERILIZATION SYSTEMS

### AKARMAK MEDICAL WASTE STERILIZATION SYSTEM DATA SHEET

		Consumption/Cycle					
Code	Cycle Time (min)	Sterilization Capacity (kg/cycle)	Power Supply [kW] [1]	Feeding Unit Volume (It)	Autoclave Unit Volume (It)	Electric (kWh) [1]	Steam (kg)
AKR250L	30-35	20-30	12	250	450	2-3	15
AKR500L	30-35	50-70	20	500	600	3-5	25
AKR1000L	30-35	100-130	22	1000	600	5-7	35
AKR2500L	50-60	250-300	55	2500	1800	20-25	80
AKR500A	35-40	500-700	60		15000	12-15	400
AKR1000A	45-50	1000-1200	60		23000	15-20	600
AKR1500A	50-55	1500-1800	60	50 <b>-</b>	29000	22-30	800

\*Compressor and steam generator are excluded

- Technical Support & Maintenance by Certified Experts
- Up to %80 Volume Reduction
- Well Engineered and Designed Durable Shredder
- Bayonet Door: Safe and User Friendly
- Reference in 70+ Countries
- 30+ Years of Experience and Know-How
- Siemens Touch Panel







### TECHNICAL FEATURES

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DESCRIPTIONS	AKR250L	AKR500L	AKR1000L	AKR2500L		
Sterilization Capacities (kg/cycle)	20-30	50-70	100-300	250-300		
Process Method	Full Automatic, Pre-Shredded, Steam Sterilization					
Pressure Vessel and Shredder Hopper Materials	Stainless-steel AISI316L					
Approximate Total Weight	2300	3100	3300	10000		
Waste Feeding System	Automatic and manual options					
Total Design Power (Excluding Steam Generator) (kW)	12	20	22	55		
Dimensions (Width x Length x Height) (mm) Without Lifter	1300x1825x2300	1460x2670x2900	1570x2670x3400	7230x5600x6500		
Dimensions (Width x Length x Height) (mm) With Lifter	N.A	3670x2670x4550	3670x2670x5050	7230x5600x6500		
Shredder's Electric Motor Power	7,5kW	11kW	5,5kWx7,5kW	15kWx22kW		
Auto Reverse System for Shredder in Case Of Waste Jamming						
Sterilization Temperature: 135-140°C (Programmable)						
Sterilization Pressure: 3-4 bar (Programmable)						
Sterilization Level	8log10 (99,99999%)					
Inspection Report For Sterilization Level	As per International Standard (Robert Koch Institute & STAATT Level IV etc.)					
Waste Volume Reduction	Up to 80%					



shredder with reverse

rotation to avoid waste



The automatic sterlized waste discharge through archimedes





Dimensions (Inner Dimensions x Length)

Autoclave Trolley (mm)

**Autoclave Car Material** 

Shredder's Electric Motor Power

Autoclave Trolley Quantity Per Cycle

Waste Loading into Shredding Unit

Optimum Building Area Needs (mm)

Sterilization Temperature: 140-155°C

Sterilization Level

Waste Volume Reduction

Feeding Hopper Capacity For Shredding Unit (It)

Dimensions for Shredding Unit (Width x Length

Sterilization Pressure: 4-5 bar (Programmable)

Inspection Report For Sterilization Level

DESCRIPTIONS	AKR500A	AKR1000A	AKR1500A			
Sterilization Capacities (kg/h)	500-700	1000-1200	1500-1800			
Process Method	Full Automatic, Post-Shredded, Steam Sterilization					
Pressure Vessel and Shredder Hopper Materials	P295GH					
Approximate Total Weight	19500	21500	23000			
Autoclave Unit Volume (It)	15000	23000	29000			
Waste Feeding System Into Shredder's Hopper	Full Automatic Including Lifter, Covered With Transparent Fences. Container Feeding System					
Autoclave Door System	Full Automatic, Hydraulic Closing / Opening, Hydraulic Locking / Unlocking					
Total Design Power (Excluding Steam Generator and Compressor) (kW)	60kW	60kW	60kW			

02000x4000

1200x1200x1450

15kWx22kW

5000

6500x6200x6500

15000x15000x8000



TECHNICAL FEATURES



Manual loading with stainless steel trolleys into the autoclave. Automatic weighing in front of the autoclave. Automatic sterilization process.



02000x8500

1200x1200x1450

15kWx22kW

6500x6200x6500

20000x15000x8000

02000x6500

1200x1200x1450

Full Automatic Loading into Shredder

6500x6200x6500

6log10 (99,9999%)

As per International Standard (Robert Koch Institute & STAATT Level IV etc.)

Up to 80%



Full automatic loading into the shredder.





Efficient and durable shredder with reverse rotation to avoid waste





Sterilized and shredded waste is discharged automatically to truck or