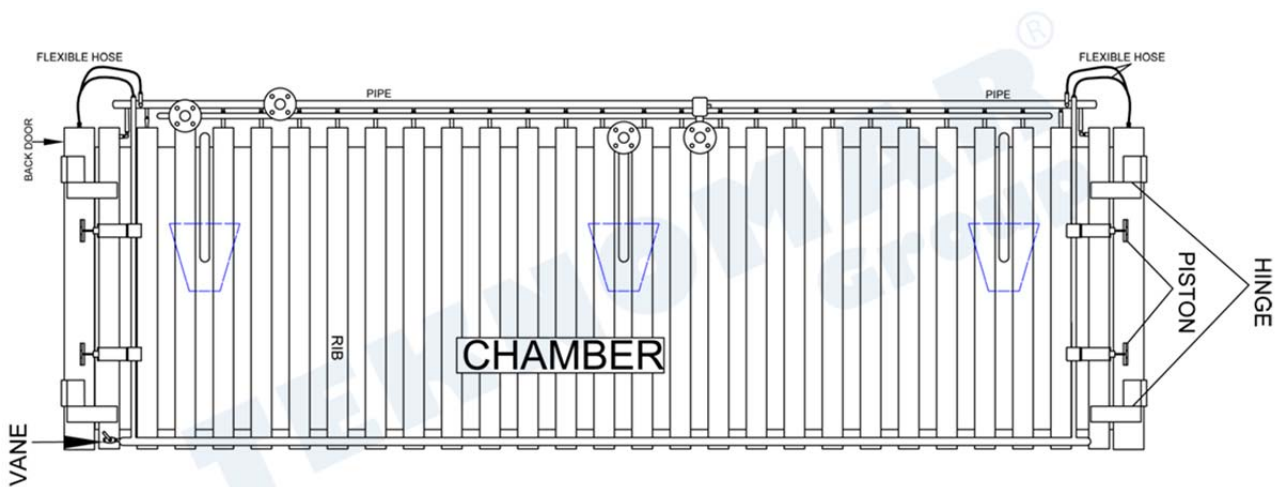
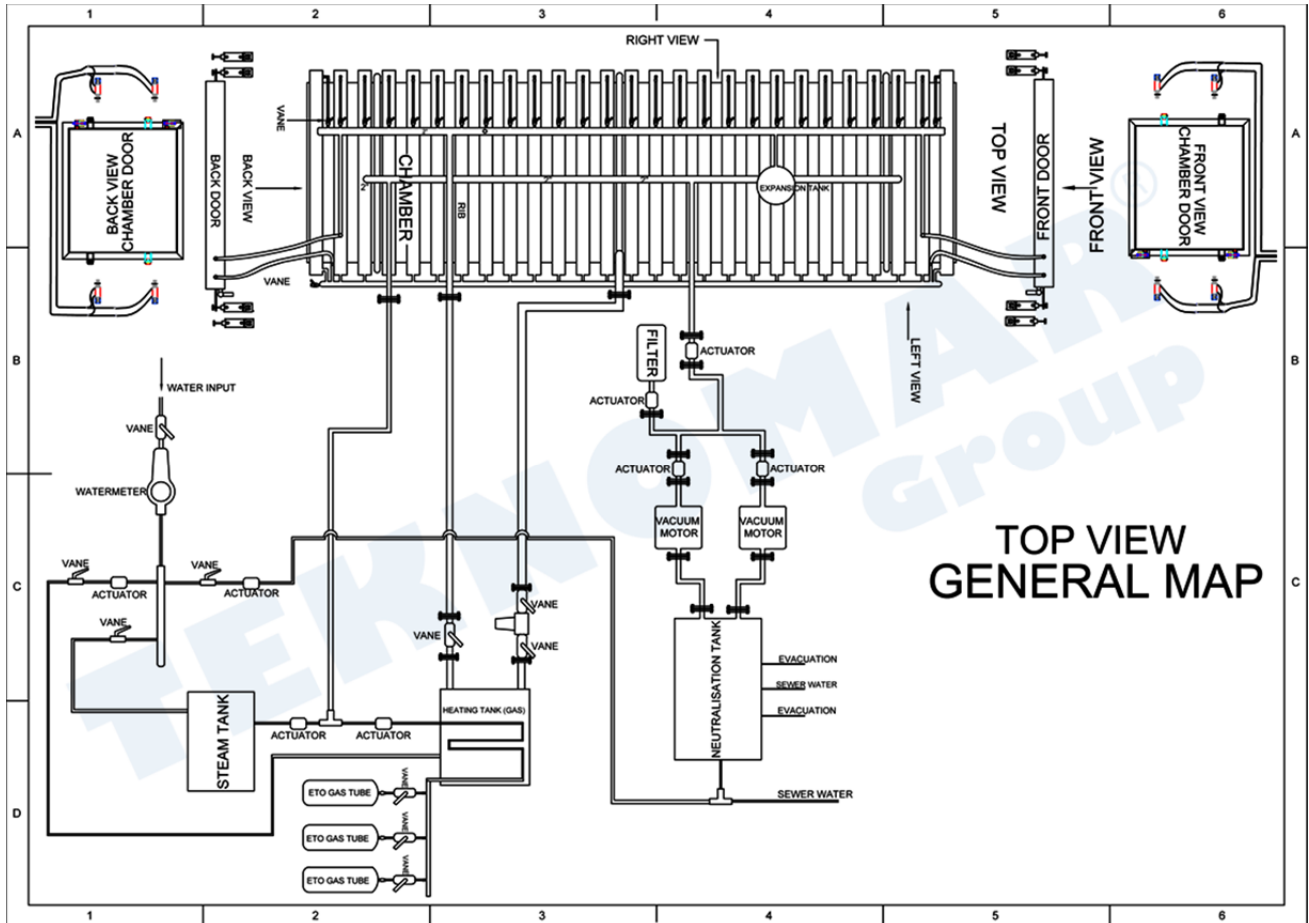


## Teknomar Brand Industrial Type ETO Sterilizer ETO-C 1445

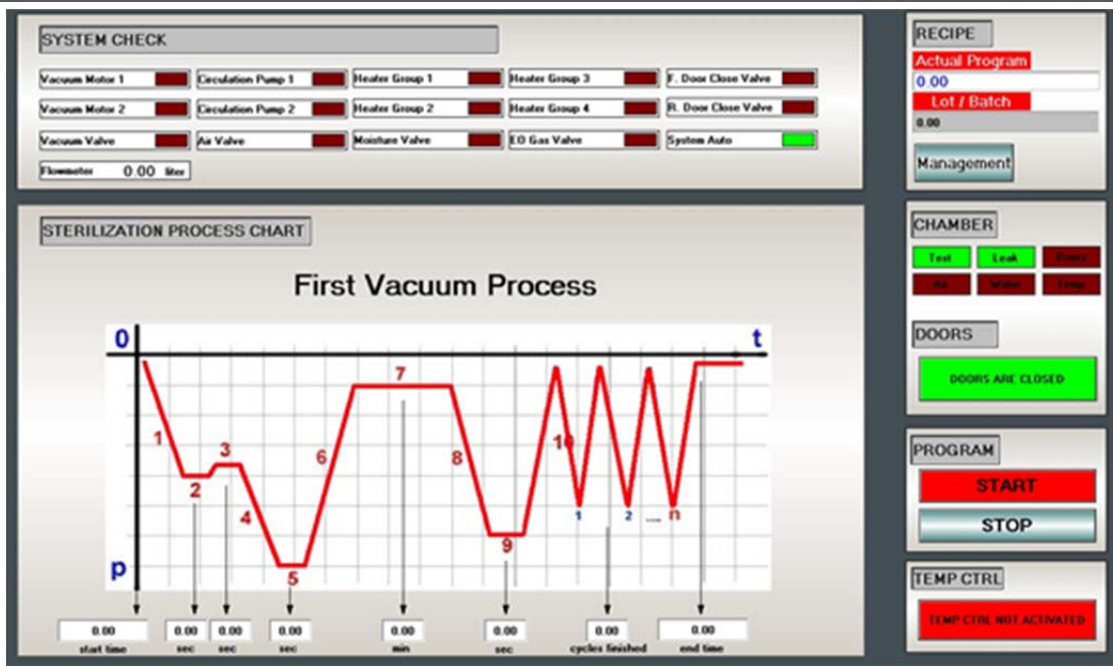
### Data Sheet



ETO Sterilizer ETO-C 1445			Chamber Interior Dimensions			Weight (kg)	Electricity (kW)
Volume (m <sup>3</sup> )	Pallet Number (Euro Pallet)	Door	Width (cm)	Dept. (cm)	Height (cm)		
1	-	Single	90	110	100	1450	21 kW
2	-	Single	120	120	140	1900	25 kW
5	-	Single	135	275	135	2800	50 kW
10	4	Single / Double	180	260	220	5800	60 kW
15	6	Single / Double	180	390	220	6600	70 kW
20	8	Single / Double	180	520	220	8500	70 kW
27	10	Double	220	520	220	10000	75 kW
34	12	Double	220	650	220	12000	80 kW
40	14	Double	220	760	240	14500	100 kW
51	18	Double	260	775	250	17000	120 kW
62	25	Double	270	980	235	21000	140 kW

<b>PRODUCT DESCRIPTION</b>	<b>Teknomar Brand Industrial_Type_ETO_Sterilizer_ETO-C-1445</b>
<b>TYPES OF PRODUCTS FOR STERILIZATION</b>	Medical disposable products, non-woven products, textile, gloves, PVC and PP - PE, Syringes, absorbable and non-absorbable sutures, catheters, laparoscopic surgical instruments, implants, sensitive flexible medical products, endoscopes, rigid and semi-rigid lumen shaped tools and etc...
<b>Device consists of separate parts</b>	Device, Electrical Board, Scale, Kiosk, Water Scrubber, Machine Park
<b>Interior Chamber All Material</b>	316L Stainless Steel
<b>External Outside Cover Material</b>	316L/304 Stainless Steel
<b>Welding</b>	316L Stainless Steel
<b>Piping</b>	316L/304 Stainless Steel, flexible pipes are made of plastic inside outer body reinforced
<b>Working Temperature</b>	37-55 C°
<b>Working Principle</b>	Negative Pressure (-1 / 0 Bar); Chamber design to working under negative pressure in compliance with European regulation prevailing for pressure vessel CE MARKED. Chamber vacuum tested in our workshops.
<b>Standard Sterilization Duration*</b>	About 6 hours per Cycle without loading/unloading depending on validation.

<b>Sterilization Program</b>	Unlimited Programming Capacity for different product sterilization on SCADA Software.
<b>EO Mixture</b>	Although depends on validation and local supply, System is available for each of the different ETO gas mixtures. The mixture can be; [%10 EO - %90 CO2], [%50 EO - %50 CO2], [%90 EO - %10 CO2], [%100 EO]
	Technical Note: During production, Customer undertakes to inform Manufacturer about the ETO Gas Mixture will be used in Customer Factory.
<b>Water Consumption</b>	Approximate Values subject to validation
<b>ETO Gas Consumption</b>	850gr/m3 for %100 ETO
<b>HARDWARE and SOFTWARE EQUIPMENT LIST</b>	
<b>PLC and IO Unit</b>	SIEMENS
<b>Panel Equipment</b>	SIEMENS/SCHNEIDER/ABB
<b>Connectors and Relays</b>	PHONEIX contact/ABB
<b>Vacuum Leakage Program</b>	Included
<b>Safety and Indicators</b>	Banner Engineering/SIEMENS
<b>Industrial PC</b>	ADVANTECH or Similar Touch Screen PC
<b>Thermal Isolation Panels</b>	Applied on all around the chamber, Heating Tank, Humidification Tank and relevant materials.
<b>SCADA System Software</b>	RELIANCE enables data collections, controlling and observing all sensor data: Heater, Vacuum, Humidification, EO Gas PPM, EO Gas KG, Water Consumption, Alerts, Password Levels for different users, Sterilization Reports and graphs, data acquisition of old dated sterilizations, Reports of Failures, E-mailing, Long Term Data Collection and Preservation.
<b>SCADA System Software</b>	<ul style="list-style-type: none"> <li>✓ Temperature Graph (Instantly and after sterilization)</li> <li>✓ Humidity Graph (Instantly and after sterilization)</li> <li>✓ Pressure Graph (Instantly and after sterilization)</li> <li>✓ Sensor data collection of Temperature, Humidity and pressure as data logger.</li> <li>✓ Save and Print option for collected data and generation of different file format.</li> <li>✓ Observing ETO temperature (C°)</li> <li>✓ Observing Humidity in Generator as bar</li> <li>✓ Observing Water Flow</li> <li>✓ Observing Heating Tank Temp</li> <li>✓ Observing Humidity Tank Temp</li> </ul>



Door Locking System

PNEUMATIC OR MANUEL



Example Figure of Pneumatic Door Closing

Number of Temperature Sensor (per m3)	PT100 around the chamber with several probes for homogenous measurement of chamber - Compliance with ISO 11135 - EN 1422
Number of Humidity Sensor (per m3)	Compliance with ISO 11135 - EN 1422
Number of Vacuum Sensor (per m3)	Compliance with ISO 11135 - EN 1422
Vacuum Pump	MonoBlock Vacuum Pump $10^{-1}$ Torr (Water Based)
Scale	Min 300 KG $\pm 20$ gr Industrial Type
EO Gas Regulator	Specialized ETO Gas Regulator

<b>Security Levels</b>	Every user has their own password depending on their authority level(The system has 4 security level).
<b>Heating System</b>	Water Circulation Homogeneous Electrical Heating System
<b>NEUTRALIZATION TECHNIQUE</b>	High Effective Water Scrubber Method through Teknomar Design Stainless Steel Neutralization Tank.
<b>SCRUBBER (OPTIONAL)</b>	0-10 PPM Acidic System
<b>HUMIDIFICATION TANK</b>	Teknomar Design Stainless Steel Humidification Tank – Steam Generator.
<b>DOOR SEALING</b>	Vacuum and EO Gas Durable Door Rubber.
<b>AIR INLET TO CHAMBER</b>	Taken Through HEPA FILTER
<b>MANUFACTURING STANDARD</b>	CE MARKED, ISO 9001:2015, ISO 13485:2012, EN 1422, EN ISO 11135
<b>FAT - SAT (TESTING)</b>	Installation Qualification - Operational Qualification Documentation with accordance of ISO 11135
<b>ENVIRONMENTAL ETO DETECTOR</b>	(OPTIONAL)
<b>INSTALLATION REQUIREMENTS</b>	Water, Air (Min 6 Bar), Drainage, Exhaust, Electric (3 Phase 380-400V 50/60Hz subject to change according to Countries)