

# PLASMAVAC

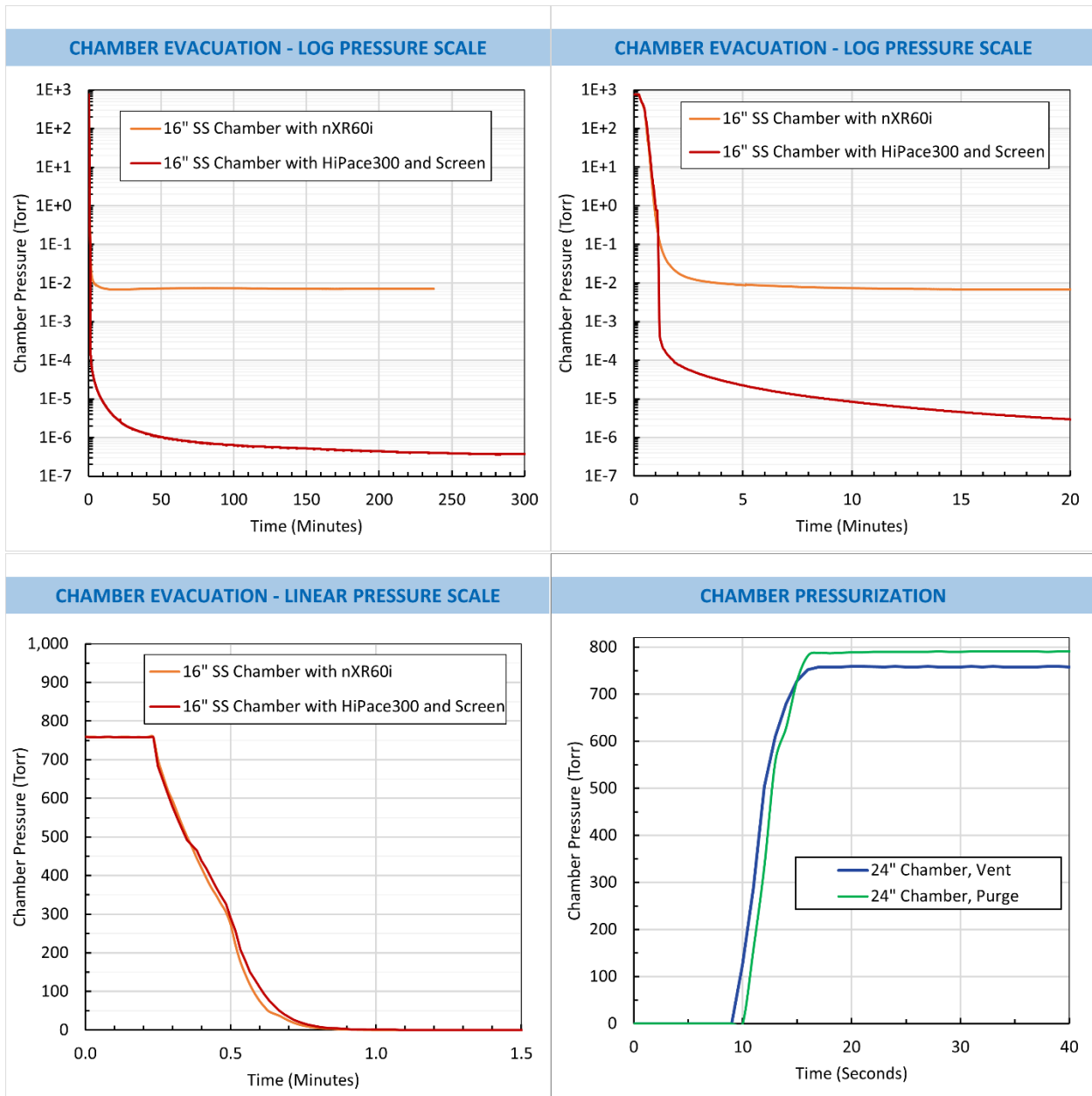


## ExploraVAC System Data Sheet

<b>Ser. Number</b>	--	Thermal Vacuum System
<b>Model</b>	P1013547	Exploravac standard
<b>MFG Date</b>	--	

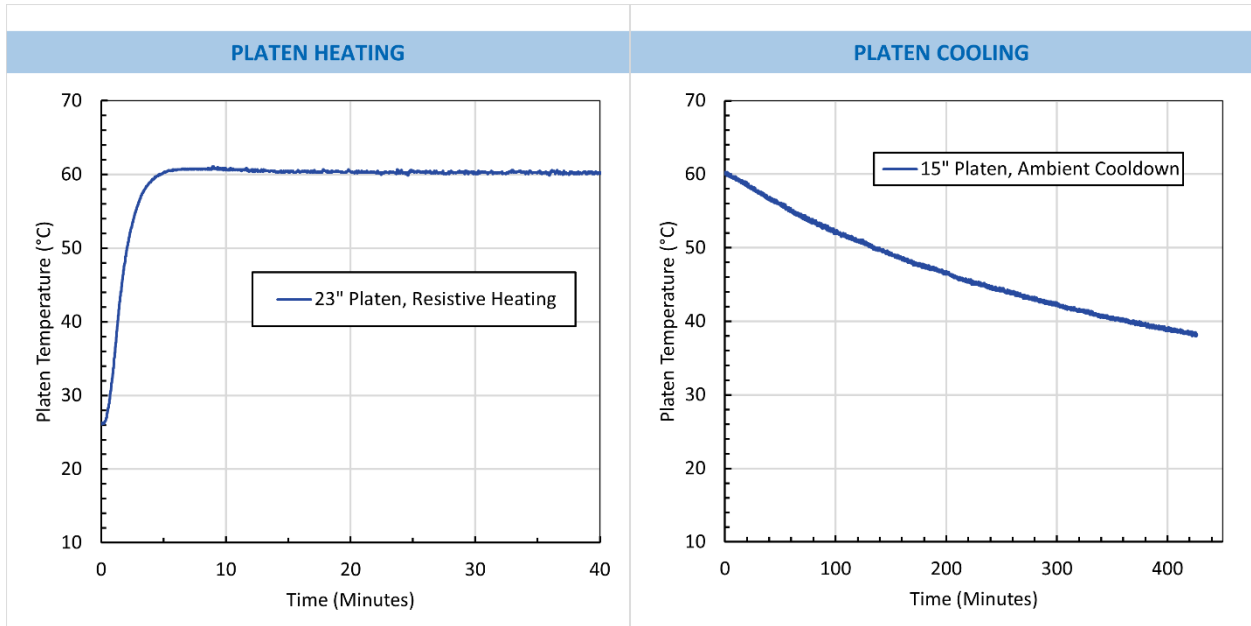
System Platform	ExploraVAC Plasma System	Comments/Notes
<b>Vacuum Chamber</b>		
Size	16 x 16 x 16 in (40.5 x 40.5 x 40.5 cm)	Internal dimensions
Material	304SS	Welded chamber
Volume	2.4 cu ft (68 L)	Internal volume
<b>Vacuum Pumping</b>		
Rough Pump	Edwards nXR60i	Dry Multi Roots pump
Roughing Speed	35.3 cfm (60.0 m <sup>3</sup> hr <sup>-1</sup> ) **	
Turbo Pump	Pfeiffer HiPace 300	
Turbo Speed	300 L/s **	
<b>Vacuum Gauges</b>		
Gauge Models	MPG400 Pirani and cold cathode	
Measurement Range	1x10 <sup>-8</sup> Torr to 750 Torr	
<b>Control Interface</b>	Button Panel + Evactron plasma control	Manual emergency stop switch
<b>System Pressure</b>		
Operating Pressure	5x10 <sup>-7</sup> Torr to 1 atmosphere	
Turbo Standby Control	20%-100% control range	
<b>Thermal Platen</b>		
Temperature Range	Ambient to 60°C	
Heating Power	2kW	
<b>System Package</b>		
System Weight	800lbs (363kg)	Approximate weight
System Size	33 x 36 x 70 in (84 x 91 x 178 cm)	
<b>Onboard Air Source</b>	150 psi regulated, 2 gallon capacity	For pneumatic valves
<b>Plasma unit</b>	Evactron E50 with ¼" gas feed,	0.5 µm pore size
<b>System Power</b>		
Input Voltage	208-240 VAC single phase	
Input Frequency	50-60 Hz	
Input Current	28Amps (at max load)	
Connection	15ft power cord with L6-30 plug	
<b>Operating Environment</b>		
Temperature	50 °F to 86 °F (10 °C to 30 °C)	Ambient room temperature
Humidity	5% - 80%	
<b>Connections</b>		
Chamber Vent	KF-16 (to atmosphere)	Vents to atmosphere
Chamber Gas Purge	½" Swagelok (to gas source)	250 psig max input
Pump Exhaust	KF-25	Connectable to facility exhaust

\*\*Peak capability shown. Refer to detailed option specifications for performance curve data.



Upper Left: Rough vacuum and high vacuum pump down curves of system in log scale.  
 Upper Right: Rough vacuum and high vacuum pump down curves of system in log scale  
 Lower Left: Rough vacuum and high vacuum pump down curves of system in linear scale  
 Lower Right: Chamber pressurization curve of system using vent to atmosphere and purge to regulated compressed air supply.

*Actual Test Data 5/23/2024,5/24/2024,5/28/2024*



Platen heat up curve of system in rough vacuum.

Ambient platen cooldown curve of in rough vacuum.

