

Carbon Smart Part Washer (SPW) Specification

VER 1.71
UPDATED 08.25.23

Washer Volume	1x build platform
Materials Supported	DPR 10 EPU 40/41/43 EPX 82/86FR FPU 50 MPU 100 PR 25 RPU 60/61/70/130 SIL 30 UMA 90
Materials Not Supported	CE 221 Third-party dental resins
Electrical Requirements	
Part Washer	1 standard NEMA 5-15R socket on a 10-A circuit breaker
Dimensions	
Part Washer	35 in. x 24 in. x 49 in.
Crate Clearance Area	70 in. x 160 in. x 60 in. (only required for removing hardware for crate)
Weight	
Part Washer	350 lb
Ventilation Requirements	1 x 4 in. diameter ducts with a minimum of 50 CFM (per part washer) with blast gate on each drop
Compressed Air Requirements	90–130 psi (air consumption at 90 psi is 2.6 CFM) Nozzle size of 1/4 in. industrial-shape hose coupling
Network Compatibility	Cat 5 Ethernet port with uninterrupted, outbound internet with access to Carbon servers via SSH over port 22 and 443
Regulatory Compliance	The Carbon Smart Part Washer and CBG Distiller are CE compliant.
Service, Support, and Training	Installation training Online access to user documentation Phone and email support On-site service for repair and maintenance
Distiller (if required)	Electrical Requirements: 1 standard NEMA 6-20R socket on a 20-A circuit breaker Ventilation Requirements: Additional 4 in. diameter duct with 100 CFM snorkel or fume hood (per distiller) with blast gate on each drop Weight: 200 lb

Solvent Comparison

	VF 1 A custom Vertrel™ blend	DPM 99% di(propylene glycol) methyl ether	DAA 99% diacetone alcohol
Carbon Approved Solvents <i>All other solvents could result in safety hazards, hardware failures, and unpredictable cleaning.</i>	New Name: VF 1 Part Number: MS-767-3D-13	CAS: 34590-94-8	CAS: 123-42-2
Cost Per Wash	~\$5.00 - \$20.00	~\$0.50 - \$2.00	~\$0.50 - \$2.00
Average Process Times	7 minutes wash	~30 minutes total 11-13 minutes wash + manual IPA post dunk + 5-15 min dry	~45 minutes total 5 min drain + 8 min wash + 30 min dry under snorkel
Solvent Sourcing Information (55 gal) *	Required US Source: Miller-Stephenson Email: casales@mschem.com Phone: 818-896-4714 / 800-771-8161 Required EU/UK Source: ECS GmbH Email: gukleinmann@gekace.com Phone: 818-896-4714 / 800-771-8161	Possible US/Canada Source: J R Hess www.jrhessco.com Possible US/Canada/EU/UK Source: Brenntag www.brenntagssouthwest.com/ Source: Novasol www.novasolchemicals.com/ Source: Univar Solutions	Possible US/Canada Source: J R Hess www.jrhessco.com Possible US/Canada/EU/UK Source: Brenntag www.brenntagssouthwest.com/ Source: Novasol www.novasolchemicals.com/ Source: Univar Solutions
Distiller Space Required	23 in. x 36 in. x 44 in.	N/A	N/A
Approximate Number of Washes Before Solvent Requires Action ***	~25 washes before distilling. Using custom distiller, can reclaim 85% of VF 1 for repeated use. On average, customers lose 3 gallons in 40 washes and a distillation.	~150 washes before disposal. Cannot be distilled. Dispose via your current liquid hazardous waste stream.	~200 washes before disposal. Cannot be distilled. Dispose via your current liquid hazardous waste stream.
Compatible Resins **	DPR 10 EPU 40/41 FPU 50 MPU 100 PR 25 RPU 60/61/70 SIL 30 UMA 90	DPR 10 (non-dental geometries) EPU 40/41 EPU 43 (DPM only) EPX 82/86FR (DPM only) FPU 50 MPU 100 PR 25 RPU 60/61/70 RPU 130 (DPM only) SIL 30 UMA 90	DPR 10

The Smart Part Washer is currently available for install in U.S., Canada, and E.U. (VF 1 is not available in Japan at this time.) Solvents can only be swapped by a certified Carbon Representative. Contact Carbon Support if you are interested in changing solvents.

* Washer holds 7.5 gallons.

** CE 221 is not compatible with the part washer in any solvent.

*** Variable based on part geometry.

Vertrel™ is a trademark of The Chemours Company.