

VACOM® Vacuum Classes

		Vacuum Class HV 1	Vacuum Class HV 2	Vacuum Class UHV 1	Vacuum Class UHV 2	Vacuum Class XHV 1	Vacuum Class XHV 2	
He leak rate	[mbar · l/s]	< 1E-09	< 1E-09	< 1E-10	< 1E-10	< 1E-10	< 1E-10	
In-Situ Bake-Out	Stainless Steel	without in-situ bake-out, outgassing rates after 10 h		24 h @ 200 °C			–	
	Aluminum			24 h @ 120 °C				
Outgassing rate	[mbar · l/(s · cm²)]	< 2E-09	< 5E-10	< 5E-12	< 1E-12	< 1E-13	< 2E-14	
Partial pressure $\sum C_x H_y$ (m/z > 45) / Total pressure		< 1%	< 1%	< 1%	< 0.1%	< 0.1%	< 0.1%	
Acceptance test certificate (outgassing rate + RGA)		optional						
Materials	Stainless Steel	1.4307 (304L)	X	X	X	–	–	–
		1.4404 (316L)	X	X	X	X	X	–
		1.4429-ESU (316LN-ESR)	X	X	X	X	X	–
	Aluminum	EN AW 5xxx	X	X	X	X	X	X
		EN AW 6xxx	X	X	X	X	X	X
Possible surface treatment	Stainless Steel	mechanical polishing, electropolishing, glass bead blasting					–	
	Aluminum	mechanical polishing						
low hydrogen annealing 1.4404 (316L), 1.4429-ESU (316LN-ESR)		–	–	–	optional	X	–	