

CAD Workstations Compared

		HP Z200 Workstation (one 3.47GHz Intel i5-670 dual core CPUs, NVIDIA Quadro FX 1800, 4GB RAM)		Lenovo D20 workstation (two 2.66GHz Intel Xeon X5550 quad core CPUs, NVIDIA Quadro FX 4800, 8GB RAM)		Dell Precision T3500 workstation (one 2.27GHz Intel Xeon E5520 quad core CPU, NVIDIA Quadro FX 3800, 4GB RAM)		Lenovo S20 workstation (one 2.27GHz Intel Xeon E5520 quad core CPU, NVIDIA Quadro FX 3800, 4GB RAM)		HP Z800 workstation (two 3.2GHz Intel Xeon X5580 quad core CPUs, NVIDIA Quadro FX 4800, 12GB RAM)		HP xw8600 workstation (two 3.4GHz Intel Xeon X5492 quad core CPUs, NVIDIA Quadro FX 4800, 4GB RAM)		Lenovo ThinkStation S10 workstation (2.66GHz Intel Core 2 Q6700 quad core CPU, NVIDIA Quadro FX 4600, 2GB RAM)
Price as tested		\$2,089		\$5,943		\$2,544		\$3,885		\$10,604		\$9,307		\$2,589
Date tested		8/7/10		1/11/10		7/30/09		7/29/09		4/24/09		12/22/08		6/30/08
Operating System		Windows XP	Windows Vista	Windows XP	Windows Vista	Windows XP	Windows Vista	Windows XP	Windows Vista	Windows XP 64	Windows Vista 64	Windows XP	Windows Vista	Windows XP
SPECviewperf	higher													
3dsmax-04		60.87	60.65	50.38	51.21	39.91	42.75	48.43	52.59	50.55	51.51	52.24	54.61	37.88
catia-02		68.13	66.87	61.79	62.01	51.85	53.33	60.40	60.61	62.10	61.66	63.17	62.48	48.25
ensight-03		53.85	53.06	55.26	53.51	47.26	47.84	51.74	55.33	53.99	53.62	54.44	50.82	43.33
maya-02		238.59	208.40	250.41	223.73	220.79	199.04	232.92	207.87	231.80	209.74	234.50	193.15	191.10
proe-04		68.03	65.74	64.83	63.66	55.67	55.54	61.56	64.49	63.59	61.48	52.73	57.15	48.86
SW-01		138.22	137.48	144.17	145.19	123.28	120.57	136.81	139.54	135.24	128.08	109.91	119.29	90.90
tcvis-01		35.60	34.81	40.55	39.51	28.71	28.07	29.17	38.76	28.93	28.29	29.84	27.58	24.46
ugnx-01		30.91	31.23	34.93	34.52	33.40	32.27	33.41	33.19	33.34	32.38	34.17	31.14	27.04
SPECcapc SolidWorks	lower													
Score	seconds	148.72	n/a	141.59	n/a	178.39	n/a	140.42¹	n/a	145.17 ¹	n/a	164.71	n/a	188.01
Graphics	seconds	56.83	n/a	41.48	n/a	62.99	n/a	47.33 ¹	n/a	41.31¹	n/a	54.18	n/a	60.13
CPU	seconds	32.81	n/a	33.00	n/a	36.68	n/a	31.01¹	n/a	32.68 ¹	n/a	44.36	n/a	41.48
I/O	seconds	63.10	n/a	67.73	n/a	83.35	n/a	65.86 ¹	n/a	71.94 ¹	n/a	69.96	n/a	90.19
SPECcapc SolidWorks	higher													
Score	ratio	5.27	n/a	6.28	n/a	4.66	n/a	5.91 ¹	n/a	6.38¹	n/a	4.84	n/a	4.56
Graphics	ratio	3.23	n/a	4.68	n/a	2.92	n/a	3.92 ¹	n/a	4.85¹	n/a	3.55	n/a	3.15
CPU	ratio	9.83	n/a	9.78	n/a	8.80	n/a	10.41¹	n/a	9.87 ¹	n/a	7.27	n/a	7.72
I/O	ratio	5.02	n/a	4.67	n/a	3.80	n/a	4.81 ¹	n/a	4.40 ¹	n/a	4.52	n/a	3.51
Autodesk Render Test	lower													
Time		137.4 ¹	135.2 ¹	64.00 ¹	63.60 ¹	118.2 ¹	125.0 ¹	99.0 ¹	117.6 ¹	59.00 ¹	52.00¹	64.40	67.60	153.20

Numbers in blue indicate best recorded results. Numbers in red indicate worst recorded results. Results are shown separately for portable and desktop workstations.