

Comparison of scan, design, and milling/processing times for 16 CAD/CAM systems



	BEGO Medifabricating from Bego USA	CeraSys from CeraSys America, Inc.	Cercon® Zirconia from Dentsply Prosthetics	DCS Precident System from Popp/DCS	es1 Laser Scanner from Etkon USA	Hint-ELs DentaCad distributed by Custom Milling Center and marketed by Darby Dental Lab Supply Co.	InVision™ DP Professional 3-D Printer from 3D Systems
Scan time							
metal-free copings	not yet available	8 min.	1 min.	7 min.	.5 min.	3 min.	
metal copings	3 min.			7 min.	.5 min.	3 min.	1 min.
metal-free bridges	not yet available	8 min. per unit (max. 8 units)	33 min. total for max. 47mm span	7 min. per unit (max. 14 units)	10 min. total for max. 16 units	6 min. total for max. 14 units	
metal bridges	not yet available			7 min. per unit (max. 14 units)	10 min. total for max. 16 units	6 min. total for max. 14 units	1 min. per unit (max. 16 units)
inlays/onlays				7 min.	.5 min.	3 min.	
veneers		8 min.		7 min.		3 min.	
implant abutments					.5 min.	3 min.	
full coverage crowns					1 min.	6 min.	
Design time for experienced technician							
metal-free copings	not yet available	1 min.	2 min.	2 min.	2 min.	1 min.	
metal copings	8 min.			2 min.	2 min.	1 min.	2 min.
metal-free bridges	not yet available	3-5 min. total for max. 8 units	N/A	3-4 min. per unit (max. 14 units)	12 min. total for max. 16 units	6 min. total for 3 units (max. 14 units)	
metal bridges	not yet available			3-4 min. per unit (max. 14 units)	12 min. total for max. 16 units	6 min. total for 3 units (max. 14 units)	2-3 min. per unit (max. 16 units)
inlays/onlays				3 min.	5 min.	2 min.	
veneers		1 min.		3 min.		2 min.	
implant abutments					2 min.	3 min.	
full coverage crowns					2 min.	1 min.	
Milling/processing time							
metal-free copings, anterior	centralized processing	10 min.	10 min.	2-3 hrs.	centralized milling	18-23 min.	
metal-free copings, posterior		10 min.	10 min.	2-3 hrs.		25-180 min.	
metal copings, anterior				30 min.		25 min.	4.5 to 5.5 hours for up to 100 waxups
metal copings, posterior				30 min.		30 min.	4.5 to 5.5 hours for up to 100 waxups
metal-free bridges		10 min. per unit (max. 8 units)	2 hr. 18 min. total for 47mm span	3 hr. per unit (max. 14 units)		69 min. total for 3 units (max. 14 units)	
metal bridges				30 min. per unit (max. 14 units)		75 min. total for 3 units (max. 14 units)	4.5 to 5.5 hours for up to 100 waxups
inlays/onlays				3 hr.		depends on material	
veneers		10 min.		3 hr.		35 min.	
implant abutments						15 min.	
full coverage crowns						40 min.	

KaVo Everest from KaVo	Lava® Crown and Bridge System from 3M ESPE	Neo Complete System from Cynovad, Inc.	Noritake Katana distributed by Custom Milling Center and marketed by Darby Dental Lab Supply Co.	Procera® from Nobel Biocare	Sirona inLab from Sirona Dental Systems	TurboDent System from U-Best Dental Technology	Wol-Ceram System from XPdent Corp.	Zenotec 4030 from Wieland Dental Systems		
3.5 min.	2.5 min.	.5 min.	3-4 min.	5-7 min.	2 min.	2.5 min.	5 min.	approx. .5-1 min.		
3.5 min.		.5 min.				2.5 min.	5 min.			
3.5 min. per abutment (max. 47mm span)	4 min. total for 3-4 units (max. 6 units)	.5 min. per unit (max. 6 units)	10 min. total for max. 6 units	3 min. per unit (max. 8 units)	2 min. total for max. 6 units	2.5 min. per unit (max. 14 units)		.5-1 min. per unit (max. 14 units)		
3.5 min. per abutment (max. 45mm span)		.5 min. per unit (max. 16 units)				2.5 min. per unit (max. 14 units)				
3.5 min.					2 min.	2.5 min.		.5-1 min.		
3.5 min.		.5 min.		7 min.	2 min.	2.5 min.	5 min.	.5-1 min.		
3.5 min.				4 min.		5 min.	10 min.			
3.5 min.		1.5 min.			2 min.	5 min.		approx. 1 min.		
50 seconds	2-3 min.	1 min.	4 min.	2 min.	2 min.	5 min.	3 min.	approx. 1 min.		
50 seconds		1 min.				5 min.	3 min.			
50 secs./coping (max. 47mm) 120 secs./pontic (max. 47mm)	4 min. total for up to 6 units	1 min. per unit (max. 6 units)	15 min. total for max. 6 units	2 min. per unit (max. 8 units)	5 min. total for max. 6 units	approx. 20 min. for max. 14 units		varies (depending on # of units & pontics)		
50 secs./coping (max. 45mm) 120 secs./pontic (max. 45mm)		1 min. per unit (max. 6 units)				approx. 20 min. for max. 14 units				
3.5 min.					2 min.	5 min.		approx. 2 min.		
3.5 min.		1 min.		2 min.	2 min.	5 min.	2 min.	approx. 1 min.		
3.5 min.				1 min.		20 min.	5 min.			
3.5 min.		3 min.			2 min.	5 min.		approx. 2 min.		
24 min.	15-20 min.	outsourced	8 min.		15 min.		7 min.	15 min.		
24 min.	approx. 21 min.	outsourced	10 min.	centralized milling	15 min.	centralized milling	7 min.	20 min.		
35 min.		outsourced or in-house rapid prototyping (3 min. per unit)						7 min.		
35 min.		outsourced or in-house rapid prototyping (3 min. per unit)						7 min.		
24 min. per unit (max. 47mm span) 35 min. per unit (max. 45mm span)	24-50 min. depending on # of units and ant. or post.	outsourced	42 min. total for max. 6 units				70 min. total for max. 6 units			varies (depending on # of units & pontics)
40-45 min.		outsourced or in-house rapid prototyping (3 min. per unit, depending on material)								
40-45 min.		in-house rapid prototyping (3 min. per unit)					12 min.		7 min.	20 min.
40-45 min.							12 min.		7 min.	15 min.
24-35 min.									15 min.	
45 min.		outsourced or in-house rapid prototyping (3 min. per unit)					15 min.			depends on material