

At-a-glance reference of components, indications and features for 16 CAD/CAM systems

	BEGO Medifabricating from Bego	CeraSys from CeraSys America, Inc.	Cercon® Zirconia from Dentsply Prosthetics-Ceramco	DCS Precident System from Popp/DCS	es1 Laser Scanner from Etkon USA Inc.	Hint-ELs DentaCad distributed by Custom Milling Center and marketed by Darby Dental Lab Supply Co.	InVision™ DP 3-D Printer from 3D Systems	KaVo Everest from KaVo	Lava™ Crown and Bridge System from 3MESPE	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 LLC	TurboDent System (TDS) from U-Best Dental Technology	Wol-Ceram System from XPdent Corp.	Zenotec 4030 from Wieland Dental Systems
System type																
Milling technology		■	■	■	■	■		■	■	■	■	■	■	■	■	■
Laser melting technology	■					■				■						
Electrolayering						■										
Automated waxer							■			■						
Components																
Scanner	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Milling unit		■	■	■		■		■	■	■	■		■			■
Combined scanner & milling unit		■	■						■	■			■		■	
Furnace		■	■			■		■	■	■	■					■
PC	■	■	■		■	■	■	■	■	■	■	■	■	■	■	■
Other			Cercon Clean (suction)			Hint-ELs rapidpro rapid prototyping unit		solid support table for milling engine		NEO Print for rapid prototyping						suction, Zirox ceramic system, resin & Zr-discs
Scanning/processing																
Complete in lab		■	■	■		■	■	■	■	■	■		■		■	■
Complete outsourcing		■				■			■		■			■		■
Remote (in-lab) scanning/centralized processing	■			■	■	■			■	■	■	■		■		■
Indications																
Metal-free copings	■	■	■	■	■	■		■	■	■	■	■	■	■	■	■
Metal copings	■			■	■	■	■	■	■	■	■	■	■	■	■	■
Metal-free bridges (maximum # of units)	4 units	8 units	47mm span	14 units	16 units	14 units		47mm span	6 units	6 units	57mm span	8 units	6 units (up to 40mm span)	14 units	3-4 units	14 units
Metal bridges (maximum # of units)	4 units			14 units	16 units	14 units	16 units	45mm span		16 units				14 units		
Inlays/onlays				■	■	■		■		■			■	■		■
Veneers		■		■	■	■		■		■		■	■	■	■	■
Implant abutments					■	■		■		■		■		■	■	
Full coverage crowns					■	■		■		■			■	■		■
Materials used																
Leucite-reinforced glass ceramic						■		■		■			■	■		
Ceramic, lithium disilicate						■		■		■			■			
Gold	■					■		■		■					■	
Titanium				■	■	■		■		■		■		■		
Nickel chrome						■		■		■		■		■		
Alumina				■		■		■		■		■		■		■ (green stage)
Glass-infiltrated zirconia				■	■	■		■		■		■		■	■	
Partially sintered zirconia (soft)		■	■			■		■	■	■		■		■		■
100% dense sintered zirconia (hard)	■			■		■		■		■		■		■		
Other	Co-Cr			castable plastic, fiber-reinforced glass	polyamide, non-precious metal	composite with acrylic	light-cured resin for waxups	C temp resin and C cast resin		Wax and resin, cobalt chrome	unsintered, yttria-zirconium (contains proprietary binder to stabilize for milling)			ceramic, feldspathic	silver palladium alloy	2 types of resins for temporaries and castings
Scanner type	five-axis photo	laser point	laser	laser/optical	laser	white stripe light with 3 cameras	3 axis, with 2 cameras and 1 laser	stripe light w/ 15 projection sequences, 3 angles, 5 positions, 20 light beams in two intensities	non-contact optical scanning w/ white light triangulation	proprietary chromatic coding optical sensor	laser	touch	laser or external optical	line laser	laser	3-shape, laser guided with 2 cameras
Scans																
Original die	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Waxup			■		■	■		■		■		■	■	■	■	■
Full-arch			■		■	■	■	■		■		■	■	■	■	■
Bite/opposing model	■				■	■	■	■	■	■	■	■	■	■	■	■
Adjacent teeth	■			■	■	■		■	■	■	■	■	■	■	■	■
Other				vacuum-formed stint of diagnostic model				attachments and bars	scans entire model, including adjacent teeth and bite					waxup abutment		any restorations, create your own library, ditto bars, attachments and telescopic crowns
Software design options																
Wax-knife	■		■		■	■	■	■	■	■	■		■	■		■
Buildup	■		■	■		■		■	■	■	■	■	■	■	■	■
Measurement grid	■		■	■	■	■		■	■	■	■		■	■		■
Automatic margin locator	■		■	■	■	■	■	■	■	■	■	■	■	■		■
Other		CAD software	digital cement gap, digital die spacer	adjust thickness of die spacer, coping and connectors	die spacer & cement gap adjustments, placing handles & metal collars	automatic full crown design	system is open (ie, can export tiles)	Optional automatic undercut elimination and manual margin definition; customizable bridge connector shapes	virtual cement gap, expansion gap, custom pontic library w/ free scaling	STL file output, static & dynamic occlusion, full contour morphologies, full waxup auto. proposal, virtual articulator	calculates space and provides auto connector and pontic placement			cut-back from digital waxup		nearly everything you can do in a waxup
Costs																
System	Not yet determined	\$49,500	\$39,900-\$59,800	\$175,000	\$26,900	\$412,500 - fully automated \$159,000 - semi-automated \$47,500 - scanner only	\$99,000	\$135,000	\$230,000	\$49,000-\$132,500	\$346,400 \$28,900 - scanner only	\$15,000 - Piccolo \$51,000 - Forte	\$33,995	\$19,500	\$58,000	\$145,000
Dongle fee (cost per unit)	Not yet determined	No	No	No	No	No	No	No	No	depends on service pack	No	No	average - \$7.30	No	\$5 per unit	No