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Which Trimble Grade Control System for which application?

The following outlines the ideal and typical applications for each of the Trimble Grade Control Systems. The information has been divided into conventional Grade Control Systems and 3D Grade Control Systems. Also included are the different system configurations.

Trimble Grade Control Systems Applications

GCS system:	GCS300	GCS400	GCS400	GCS500	GCS600	GCS600	GCS900
Machine	Dozer	Dozer	Dozer	Grader	Grader	Grader	See Table 2
Configuration	Single laser	Single laser with tilt	Dual laser	Cross slope only	Single laser with cross slope	Sonic tracer with cross slope	See Table 2
Roads & Highways - rough grading	X	X	X				X
Roads & Highways - fine grading				X	X	X	X
Large earthmoving projects - dams, reservoirs, land reclamation	X	X	X				X
Landfills and waste deposits	X	X	X				X
Airport construction - runways and tarmacs			X	X	X		X
Commercial site prep - complex design						X	X
Commercial site prep - pads, grading for large slabs, etc.	X	X	X	X	X		X
Residential site prep	X	X	X				X
Subdivisions - pads, local infrastructure	X	X	X	X	X	X	X
Underground utilities							X

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3D Trimble Grade Control Systems Applications GCS900

GCS system:	GCS900	GCS900	GCS900	GCS900	GCS900	GCS900
Machine	Dozer Grader	Dozer Grader	Dozer Grader	Grader	Excavator	Scraper
Configuration	Dual GPS	Dual GPS with VRS	Dual GPS with laser augmentation	ATS with cross slope	Dual GPS and solid-state sensors	Single GPS
Roads & Highways - rough grading	X	X			X	X
Roads & Highways - fine grading			X	X		
Large earthmoving projects - dams, reclamation, etc.	X	X			X	X
Landfills and waste deposits	X	X			X	
Airport construction - runways and tarmacs			X	X		
Commercial site prep - complex design	X	X	X			
Commercial site prep - pads, grading for large slabs, etc.	X		X		X	
Residential site prep	X	X	X			
Subdivisions - pads, local infrastructure	X		X	X	X	X
Underground utilities					X	

Trimble Grade Control System Configurations

System and what it replaces	Capability	Type of Reference	Key components
GCS300 – Single Control System Dozer or grader Replaces GCS21 and PA			
			CB420
	Single Laser	Rotating Laser,	LR400 or LR410
	Single Sonic	Stringline, Curb or Ground	ST300
	Blade Slope	Gravity	AS400
GCS400 – Single or Dual Control System Dozer or grader Replaces GCS21 and PA			
			CB420
	Single Laser	Rotating Laser	LR400 or LR410
	Dual Laser	Rotating Laser	2x LR400 or LR410
	Single Sonic	Stringline, Curb or Ground	ST300
	Dual Sonic	Stringline, Curb or Ground	2x ST300
	Blade Slope	Gravity	AS400
	Laser and Blade Slope	Rotating Laser and Gravity	LR400 or LR410 AS400
	Sonic and Blade Slope	Stringline, Curb or Ground and Gravity	ST300 AS400
GCS500 – Single Control System Grader or dozer Replaces GCS21, PA and BladePro			
			CB420
	Cross Slope	Gravity	2x AS400 RS400
	Single Laser	Rotating Laser	LR400 or LR410
	Single Sonic	Stringline, Curb or Ground	ST300

System and what it replaces	Capability	Type of Reference	Key components
GCS600 – Single or Dual Control System			
Grader or dozer Replaces GCS21, PA and BladePro			
	Cross Slope	Gravity	2x AS400 RS400
	Sonic and Cross Slope	Stringline, Curb or Ground and gravity	ST300 2 x AS400 RS400
	Laser and Cross Slope	Rotating Laser and Gravity	LR400 or LR410 2x AS400 RS400
	Dual Laser	Rotating Laser	2x LR400 or LR410
	Dual Sonic	Stringline, Curb or Ground	2x ST300
GCS900 – 3D Dual Control for Graders			
Replaces SiteVision GPS and BladePro 3D			
	Cross Slope	Gravity	2x AS400 RS400
	Sonic and Cross Slope	Stringline, Curb or Ground and gravity	ST300 2x AS400 RS400
	ATS and Cross Slope	ATS and Gravity	RMT Target 2x AS400 RS400
	GPS and Cross Slope	GPS and Gravity	MS980 2x AS400 RS400
	Dual GPS	GPS	2x MS980
	Laser Augmented Dual GPS	Rotating Laser and GPS	SR300-1 2x MS980

System and what it replaces	Capability	Type of Reference	Key components
GCS900 – 3D Dual Control for Dozers Replaces SiteVision GPS			
			SV170
	Dual GPS	GPS	2x MS980
	Laser Augmented Dual GPS	Rotating Laser and GPS	SR300-1 2x MS980
GCS900 – 3D Indicate System for Excavators Replaces SiteVision GPS			
			SV170
	Dual GPS for Excavator	GPS & Gravity	2x MS980, AS21, AS300x3
GCS900 – 3D Dual Control System for Scrapers Replaces SiteVision GPS			
			SV170
	GPS and Cross Slope	GPS and Gravity	MS980 and 2x AS400, RS400