

# As Seen at World of Concrete

## Bobcat

Bobcat introduced **K-Series skid-steer loaders** (S130 through S300) and **compact track loaders** (T140 through T300). New to the K-Series loaders is the SmartFAN cooling system, a hydraulically driven cooling fan that senses machine operating temperatures and then self-regulates to rotate only as fast as it needs to. Bobcat upgraded the drive chains size to 120 HSOC (high strength oval chain) from 100 HSOC on K-Series large-frame loaders. This upgrade makes the bowtie-style drive chains 38% stronger. By adding an extra 2 inches to the loaders' lift height, operators will be able to load and unload materials from trucks more easily. The K-Series large-frame loaders with vertical lift path include the S250, S300, T300 and A300. ([www.bobcat.com](http://www.bobcat.com))



## Caterpillar

The new Caterpillar **E-Series backhoe loaders**—the 416E, 420E and 430E—deliver high-performance hydraulics and enhanced operator comfort. The 420E and 430E are offered in integrated toolcarrier configurations for applications that benefit from parallel-lift loader linkage and the versatility of quick work tool changes. The 420E has 89 net horsepower (66 kW) and a backhoe digging depth of 14 ft 4 in (4.36 m) when equipped with a standard stick. The 430E has 97 net horsepower (72 kW) and a backhoe digging depth of 15 ft 5 in (4.7 m) when equipped with a standard stick. An extendible stick pushes the 420E digging depth to 17 ft 11 in (5.46 m) and the 430E digging depth to 19 ft 6 in (5.95 m). The 74-net-horsepower (55-kW) 416E offers the same digging depths as the 420E. The 416E also is available with an optional turbocharged engine that boosts net horsepower to 89 (66 kW).



The new flow-sharing hydraulic valves ensure proportional hydraulic flow to all implements and improve multi-function performance. The E-series also features a new cab design, enhanced drive train and travel performance, and onboard electronics. ([www.cat.com](http://www.cat.com))

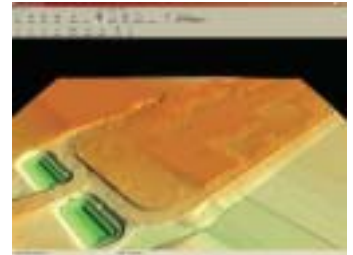
## Komatsu

The Komatsu America Corp. **PC600LC-8 hydraulic excavator** is an upgraded machine with increased speed and stabil-

ity, an improved Tier 3 compliant engine and enhanced serviceability. The PC600LC-8 has a flywheel horsepower of 386 HP and an operating weight between 126,320 and 132,280 pounds, depending on machine specification. Features of the new PC600LC-8 include: a Komatsu SAA6D140E-5 engine, which adopts a cooled EGR (Exhaust Gas Recirculating) system; a new hydraulically driven variable speed cooling fan for quieter operation and improved fuel economy; and an updated fuel filtration. The PC600LC-8's economy mode now features four level settings, allowing the operator to achieve required production at lowest possible fuel consumption. This hydraulic excavator is equipped with Komtrax, Komatsu's exclusive EMMS (Equipment Management Monitoring System) that monitors all critical excavator systems, alerting and guiding the operator should a problem occur. ([www.komatsuamerica.com](http://www.komatsuamerica.com))

## Quest Solutions

Quest Solutions' release of **Quest Earthwork 7.0**, the latest version of the company's cut-and-fill measuring software, contains improved 3D graphic capabilities. Now, instead of a grid of bright-colored lines, users see a much more realistic representation of the topography of their site. The existing features of Earthwork—rotate the site, zoom in on a specific spot and select areas—still work within the new 3D view. Earthwork 7.0 also offers tighter integration with data collectors. Using the new layout feature, estimators can create staking points using the mouse/digitizer or by selecting points from an existing line or area. Additionally, users can create offset stakes from the lines or areas, export from either the existing or proposed layer, and export finished grades or subgrades. The estimator can send the job information to a data collector that can be taken into the field and connected to either GPS or laser survey equipment. ([www.questsolutions.com](http://www.questsolutions.com))



## Topcon

Topcon's **CTS-3000 series total station** features onboard software that simplifies staking. An extended keyboard enables easy operation and data input. The system software can also be operated with a handheld data collector like Topcon's FC-100. Reflectorless measurement capabilities up to 250 m (820 ft.) and a prism type range of 3,000



m (9842 ft.) to a single standard size prism provide the range needed to cover most jobsites. CTS-3000 series instruments are built with rugged, weatherproof housings to protect internal components under typical job conditions and use. ([www.topconmc.com](http://www.topconmc.com))

### Trimble

The Trimble **SPS700 robotic total station** incorporates new robotic technology for increased speed and longer battery life and offers highly efficient layout capabilities. The total station also features direct reflex (DR) reflectorless distance measuring capability for one-person operation without a prism to measure inaccessible points and minimize manpower. With the Trimble SPS700 robotic total station with the Trimble LM80 Layout Manager, contractors receive these benefits: construction layout specific application programs perform all jobsite layout and measurement tasks for maximum flexibility and cost savings; easy-to-use system designed for contractors shortens learning curve; data storage and built-in checks eliminate mistakes; very fast one-person operation leads to a dramatic reduction in layout time and manpower costs; and rugged design withstands tough jobsite conditions and reduces repair costs. ([www.trimble.com](http://www.trimble.com))



### Vertigraph

Vertigraph Inc. announced new features for **SiteWorx Cut and Fill Takeoff Version 2.0 software**, an easy-to-use system for calculating cut and fill volumes and material quantities. New features include: a digitizer interface for calculating cut and fill volumes; automatic elevation checking to reduce errors; ability to identify and total subgrade volumes by material type; top soil stripping and respread volumes; 3D graphics of the existing and proposed site; plan view cut and fill reports; site balancing; export of results to Microsoft Word and Excel; ability to copy project boundaries as topsoil strip and respread areas; enhanced reporting options; and trenching. ([www.vertigraph.com](http://www.vertigraph.com))

### Volvo

**Volvo excavators** are tough, reliable, productive, and provide high performance and superior operator comfort for greater efficiency. All Volvo excavators feature the Volvo-exclusive Advanced Control System (ACS), which balances engine power with hydraulic pump output to provide maximum production with minimal fuel consumption. Their superb digging and lifting forces are the result of the high torque engine and its ability to drive a unique hydraulic system so that both high pressure and flow are achieved. The Volvo hydraulic quick-coupler system makes it possible to change attachments quickly and easily from inside the roomy, comfortable and quiet cab. ([www.volvo.com](http://www.volvo.com))




**GPS Surveying & GPS Machine Control**




**GCS 900**  
Call Us Today  
for a Demo!


**ALLEN Instruments & Supplies**  
Sales • Service • Rentals • Training

2940 E. La Palma Ave. #E      7114 E. Earl Drive  
Anaheim, CA 92806      Scottsdale, AZ 85251  
1-800-215-2737      1-800-272-0180

11305 Rancho Bernardo #120  
San Diego, CA 92127  
1-800-336-8860

**PRECISION LASER & INSTRUMENT, INC.**


**DATA PREPARATION SERVICES**



PRECISION LASER & INSTRUMENT, INC. CAN PROVIDE YOU WITH THE INFORMATION YOU NEED TO ACHIEVE THE BEST RESULTS IN THE FIELD OR OFFICE. WHETHER ITS DATA FOR MACHINE CONTROL, STAKEOUT, EARTHWORK VOLUMES, OR BASIC CAD INFORMATION, OUR DATA MANAGEMENT SERVICE CAN GIVE YOU THE INFORMATION YOU NEED TO GET YOUR JOB COMPLETED IN A TIMELY AND COST EFFECTIVE MANNER. THESE INCLUDE CONVERTING 2D DATA, EITHER FROM PAPER OR ELECTRONIC FILES, TO 3D FOR USE IN A VARIETY OF FIELD AND OFFICE APPLICATIONS.

PRECISION LASER AND INSTRUMENT, INC. SUPPORTS MACHINE CONTROL TECHNOLOGY SUITED FOR A BROAD RANGE OF EARTHMOVING, SITE GRADING, FINE GRADING AND RESURFACING PROJECTS.

- Survey Machine Possibilities, Ohio, & West Virginia
- Mobile Software Sales/Support of Terrestrial and Realtime



authorized dealer

RETTIGSBURG, PA AREA      774-266-1400  
COLUMBUS, OHIO AREA      614-714-0511  
CINCINNATI, OHIO AREA      513-714-0512

CONTACT: BERN BRADSHAW  
EMAIL: [KIM@LASERINST.COM](mailto:KIM@LASERINST.COM)

**Precision Laser & Instrument, Inc.**  
[WWW.LASERINST.COM](http://WWW.LASERINST.COM)