BREAKOUT



City Transfer, Inc.

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Momma is a coal miner.

Why are Zaxis Excavators so productive and durable? Heredity. Heading the Hitachi family are massive excavators that move tons of rocky overburden, even precious ore, 24 hours a day, day after day. Their reputation for productivity and uptime has made them the leader in the toughest excavation environment in the world. The



Extreme productivity runs in the family.

Learn more at www.hitachiconstruction.com.

HITACHI
ALWAYS | ORANGE

On the INSIDE

CONEXPO 2008



by Luke Gakstatter

ConExpo 2008 is right around the corner. There's always so much cool equipment to see and never enough time to take it all in.

If you're going, please carve out some time for us and come by the Hitachi booth. You're going to love what you see. We're rolling out two long-awaited new excavators as well as showcasing our ZXLink™ telematics machinemonitoring system.

On display, we'll have the 84-ton Zaxis 850LC-3 equipped with the Ultimate version of ZXLink. We'll introduce the new reduced-tail-swing Zaxis 135USLC-3. Incorporating the new Tier-3 emission standards and the larger CRES II cab, the unit has greater horsepower and faster travelling speed than its predecessor.

The new Zaxis 220W-3 Wheeled Excavator will also be introduced. It will be equipped with a wrist attachment. Greater stability ensures that this machine can move Jersey barriers without the need to extend outriggers. The machine can be customized with a variety of boom, blade, outrigger, and bucket options.

We'll also have the Zaxis 350LC-3 on display — a powerful and efficient performer for all kinds of tasks. And, of course, we'll have a goodie or two for you to take home as well.

We'll be in the North Hall, Booth N-1541. See you there!

habe Galestatta

Luke Gakstatter, Director, Hitachi Construction & Mining Products



Trickle-Down Effect

maller, utility-sized Hitachi excavators are cut from the same cloth as their larger relatives, which is why you can count on the same kind of productivity, smoothness, controllability, and reliability. There's a deep pool of design knowledge and manufacturing expertise behind each model — deep as in mining and quarry deep. Many of the innovations and designs used in our compact, construction, and production-sized excavators first appeared in Hitachi's giant mining-sized machines.

Heading our Hitachi family are the massive excavators that move tons of rocky overburden and ore, 24 hours a day, 365 days a year. Our mining excavators' reputation for productivity and uptime has made them the leaders in the toughest excavation environment in the world.

Some examples of features handed down from the larger machines to the smaller excavators include:

- Regenerative hydraulics for faster, stronger operation of the arm and more responsive control of the front attachments.
- MIC (Machine Information Center) has its origins in the Data Logging Unit (DLU) and Hitachi Monitoring System, which were developed on the large machines.
- Box-frame welds in the boom.
- Stronger undercarriage with enlarged box sections. The optional track undercover plate also came from mining and quarry machines.
- Increased structural strength from designs and manufacturing techniques first used on larger orange machines.
- Designs that balance productivity and reliability. Components are not stretched beyond their design, which helps prevent downtime and keeps daily operating costs low.

So, that's why we like to say heredity plays a big part in smaller Hitachi excavators. The same engineering skill you see in our colossal mining and quarry machines is handed down to every Zaxis Excavator. Call us about a demo on a 1.7- to 90-metric-ton machine today.

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12119C Digs Emerald City

eattle, Washington, is a city on the grow. Nicknamed the Emerald City for its majestic evergreen trees, it is the largest city in the Pacific Northwest, and home to many legendary Fortune 500 companies like Nordstrom, Starbucks®, and Amazon.com. Other nearby Fortune 500 giants include Microsoft®, Costco®, and Nintendo®. Seattle is also known for being business-friendly and is in the midst of a number of development projects.

Taking advantage of this boom is City Transfer, Inc. (CTI) — a very old, family-owned company that's been a lot of things in its over 100-year existence as a mass-excavation contractor.

"We recently bought eight Hitachi Zaxis 450LCs," says John "Kos" Kosloski, Jr., CTI's equipment manager.

"Ordinarily we would maybe buy three new ones one year, then two years later get a few more and rotate out the first batch, but work necessitated we get that many all at once."

The Zaxis orange beauties are hard at work throughout the Greater Puget Sound region. *Breakout* found two of them in the city of Kent, doing mass



John "Kos" Kosloski, Jr., CTI's equipment manager

excavation for the new Kent Events Center. Then, we found two more in downtown Seattle, at the bottom of a 72-foot pit, doing excavation for a 37-story building with a parking garage underneath.

CLEARING THE ZONE IN KENT

Once a 17.3-acre complex of baseball/softball/soccer fields, play equipment, portable restrooms, and jogging trails, the former Commons Playfield will soon to be home to the Kent Events Center and thousands of screaming Thunderbird hockey fans. The construction contract was won by M.A. Mortenson Company. CTI, pursuing its usual role as a subcontractor, is handling the site prep.



"We had to strip the entire site," says Andrew Castaneda, site foreman. "So one of our 450s is loading out all that material. The other is loading out, too, but it is doing soil remediation — moving out contaminated soil and replacing it with good soil. We have our load times down to a minute and a half, and we can move anywhere from 2,000 to 3,000 cubic yards of material a day with a 450. We run the two machines eight hours a day, all the way up to 12 to 16 hours a day if the contractor calls for that."



Andrew Castaneda, Site Foreman, CTI. When asked about the performance of the Zaxis 450LCs, Castaneda said, "I love these machines."

To haul all that material, CTI has its own fleet of trucks. Eighty to 100 of them are rolling on the street at any one time; 67 of them are brandspankin' new.

When asked about the performance of the 450s, Castaneda bubbles with enthusiasm. "I love these machines. I broke in this one here on a big job in Bellevue last year — the first 400 hours are mine. That one was my baby; I always took care of it. As site foreman, I make sure these guys take very good care of them, too.

"I've had the 450 digging side by side with another brand of the same size. The Hitachi was brand new; the other one had 200 hours. The 450 was definitely faster, had more power, and was more stable with a heaped bucket. The other brand didn't stick around too long after that."

BELLY OF THE BEAST IN SEATTLE

Hard at work nearly seven-stories down, two Hitachi ZX450LCs look mighty small, but what they are accomplishing is huge. They've been excavating steadily downward, and will ultimately move 86,000 cubic yards of earth.

"Right now those 450s are doing some trimming for the shoring, cleanup, and loading the conveyor," says Kevin Wicklund, site superintendent. "We've been here about three months,



"The 450s are great machines."

— Kevin Wicklund, Site Superintendent, CTI

and we'll be done in about two weeks. We have six to seven of these kinds of jobs a year. Our next one is at a hospital and will go about 80-feet deep. It's kind of a niche for us since we have the only conveyor system that will go that deep. The conveyor loads the material right onto our trucks...takes about two minutes to load one. It's a

pretty slick deal. We typically load out 3,200 cubic yards a day. When we're done, we don't have to disassemble the excavators. We'll just lift them out, in one piece, by crane."

WHY ORANGE?

"We have pretty much had every brand of machine in our fleet at one time or another," says Kosloski. "The performance of the 450 Hitachi units is great. With the increased weight and speed, especially in comparison to the machines six or seven years ago, we can set thousands of pounds, use a 72-inch digging bucket, and we're into mass production without any problems. The 450s are great machines."

Currently, CTI owns two Hitachi ZX450LC-3s, six ZX450LCs, a ZX-350LC-3, a ZX270LC-3, an EX750, and an EX800. "Kos" credits the switch to Hitachi to several things. "Hitachi is always up on the competition, the price is good, and we have great dealer support. When you are spending money on equipment, you want to make sure the dealer relationship is a strong one. I've been here about 20 years, and they've been with us in good times and bad. They've worked with us really well, and I'm happy."

City Transfer, Inc. is serviced by Papé Machinery, Tacoma, Washington.



Seven-stories down in the belly, Hitachi excavators are hard at work.





ongestion. It's a pain whether it's related to traffic, breathing, or the air space we travel. And right now, congestion rules the equipment rental market in the Toronto area, which apparently didn't get the memo about a construction slowdown. To stand out in this burgeoning construction market, Ontario Laser Rentals has positioned itself as being one of the most versatile and reliable players in the game. The versatility comes through a full line of more than 70 specialized attachments. The reliability is courtesy of a fleet of 30 excavators that is now more than two-thirds Hitachi — and growing.

HARD-ROCK SPECIALISTS

Started in 1974 as a supplier of laser equipment to the construction industry, Ontario Laser Rentals grew steadily, adding a second location in Ottawa and expanding its business to include trench boxes and other tools for sewer and water contractors. According to company manager Doug O'Malley, tapping that industry changed the firm's focus.



Ontario Laser Rentals' Hitachi Zaxis fleet ranges from the 80 up through the 450LC-3 and is equipped with a wide variety of attachments.

"We are located in Toronto, near the Niagara Escarpment, a massive shelf of limestone, dolostone, and shale," says O'Malley. "So we soon started renting hammers to help our customers deal with the rock that is present on almost any job. It just made sense for us to also rent a machine for those attachments. We purchased a trio of Hitachi excavators — a pair of EX400s and an EX300 — based on the excellent reputation they had. Their power and reliability proved to be just what we needed, and we were on our way."

GIVING THEM A LINE

Today, Ontario Laser Rentals' Hitachi Zaxis fleet ranges from a Zaxis 80 up to the new 450LC-3, and the company has become the go-to equipment source for most any application. What started as a selection of hammers and compactors now includes a full line of over 70 different accessories from Magnum Attachments, including shears, grapples, multiprocessors, specialized buckets, and more.

"While others in the area regularly rent machines with standard buckets, that's not the case for us. Customers turn to us for a specialized tool — and with the full line of attachments we offer, we can be relied on to meet almost any need. We also feel many of those same customers rent from us because they know our Hitachi machines will be up to the task and keep them on track. Hitachi has become an integral part of our business."

A dedicated rental house, O'Malley says they do occasionally sell a unit, but only when it makes sense from a customer's perspective.

"If a customer is involved in a longterm project and has been renting for a while, he might ask about an outright purchase. That just makes good business sense for them, and we will go ahead with the sale. But we are first and foremost a rental organization and prefer it that way."

HAVING A PRESENCE

Smaller by comparison to other Toronto-area rental houses, Ontario Laser Rentals has shown a knack for getting Hitachi units involved on several prominent projects. The company had several at work during Pearson International Airport's massive apron removal. They recently had an EX450 placing boulders for the showcase Brant Street Pier in nearby Burlington, and currently have several Hitachi excavators working a major hydro project in downtown Toronto.

"The pier job was challenging from so many different angles," says O'Malley. "It involved placing massive boulders to provide erosion control in an area prone to high winds and waves. The rocks averaged between four and eight tons, but often exceeded that, and had to be placed to provide the best fit. The contractor says the older EX450 was excellent throughout that phase of the project, providing both power for the lift and stability for the placement. We weren't surprised they gave the machine high grades; it happens all the time."

FORWARD THINKING

O'Malley adds that the rental experience is rounded out by the best support possible, courtesy of Ontario Laser Rentals' own service crew and backing from their local Hitachi dealer.

"Today the Hitachi units are flat-out the best machines we have in the fleet. And we really can't say enough about how the dealer has supported us over the years. We see continued growth on the horizon and, despite all the congestion in this market, feel we have all the pieces in place to make that happen."

Ontario Laser Rentals is serviced by the Mississauga branch of Wajax Industries.



At the Brant Street Pier, an area that is prone to high winds and waves, an EX450 placed massive boulders for erosion control. Rocks often exceeded eight tons, and had to be strategically placed for the best fit.



Ontario Laser Rentals' Hitachi line is well represented at the site of a massive 550-megawatt co-generation plant on Toronto's waterfront.

One Cool Customer

Excavators shiver their timbers in Anchorage



In the land of the midnight sun, you have to make hay when that sun shines. And making hay, or perhaps in this case tundra, is something Robert Haines has excelled at since the 1970s — first as a home builder and now as an excavation contractor. We visited with Haines on a balmy minus-eight-degree Anchorage morning.

ANCHORAGE, ALASKA, -8° F, 11:00 a.m., SUNRISE

The morning is chasing down the afternoon, yet our photographer is still "waiting for the light." Such is business in America's Final Frontier, a cold beauty with plenty of challenges for those who dig for a living. Robert Haines and Gordon Bartel, partners in B.C. Excavating, have met those challenges over the past three decades.

"I started as a home builder and began excavating as a sideline just to clear my own lots," Haines recalls. "Another home builder and I got the bright idea to expand full-time into excavating. Then the housing market went to hell in the '80s, so we just kept digging." Discovering excavating was less cyclical than building, he bought out his partner and has been at it ever since.

"The Hitachi can be delicate with fine work and a monster when it comes to ripping through the cycles in the dirt."

— Bob Haines, owner

"Do I have a preference in excavators? Well, I own a dozen Hitachi 'hoes — from a little 35 up to the new ZX450. That should tell you something. I've been running them for over 20 years, and I find them to be as trouble-free as you could possibly expect. In all these years I've had just

one problem with an engine, but Hitachi was on it — they took care of the problem and had us up and running in no time. So, even the one problem I've had with a Hitachi was, ultimately, a positive experience."

Bob has carved out a niche in the Anchorage market, and it's one with a green tint — service-station gas-tank removal and remediation. "Yeah, that keeps my crews busy, and I figure we have worked every street corner in town," he laughs. "Since those early days, we've expanded by working for general contractors and into light to medium civil construction."

When asked how Hitachi excavators have changed over the years, Bob recognizes the company's quest of balancing precision with pure brute force. "These excavators have become very sophisticated over the years, and that's fine when you're doing fine grading, but our guys generally run this iron full out — and they ought to. I want them and my machines giving it their all 10 to 12 hours a day. The Hitachi can be delicate with fine work and a monster when it comes to ripping through the cycles in the dirt." And with that we were off to see a few excavators be monstrously delicate.

KINNICK, ALASKA, GOOSE BAY ELEMENTARY, -1° F, MID-AFTERNOON

Jeff Hart has spent the past 12 years operating Cat, Komatsu, Hitachi,

and you name it. "Like Bob, I prefer the Hitachi," Hart says. "Even working in a deep frost line, these machines get the job done. Bob knows how to set up a machine to get the most out of it so he can bid on more kinds of projects — clearing, grubbing, remediation, and digging.



"I've been running these Hitachi excavators for the past 12 years, and they never let me down in any weather." — Jeff Hart, operator

"Our EX200LC-3 has great controls, and the newer excavator is even better. Hitachi controls are super-responsive, and they move a lot of material in a short time. That 400 over there is an old warhorse — I was loading 100 trucks a day in that excavator at the start of this project."

Seeing the elementary school was in Jeff's, Bob's, and Hitachi's good hands, we decide to shiver off into the Alaskan sunset...if there is a sunset.

B.C. Excavating is serviced by Construction Machinery Industrial, LLC.



16 steps to moving your big excavator to the jobsite on time

oving heavy, big-boy excavators can mean a rude introduction to the world of permits, specialized trailers, bridge heights and weights, curfew hours, weather restrictions, and increased liabilities. Plus those flags on your tractor and trailer are like waving a red cape in front of a bull — everyone knows no self-respecting DOT or law-enforcement official can resist at least a cursory walk-around inspection of a "wide load."

But don't back off! In order to help you safely and legally navigate the highways and byways, we've compiled 16 steps and some sound advice from industry experts and heavy-equipment haul-truck drivers. Remember, hauling your own equipment can speed deliveries and save you money.

SELECTING THE TRAILER

In order to select the correct trailer, you need to answer some questions:
How big will your largest load be?
How much does it weigh? What about transport width and length? Remember the transport width for an excavator is different than the operating width.
Large excavators usually have a retractable undercarriage that narrows the machine width.

Once you've answered these questions, you must choose the correct mode of transportation: a three-axle tractor with a drop axle, a two- or three-axle jeep, a three-axle trailer, and maybe a stinger axle on the trailer. The gross combined weight of your heaviest load determines the option. The most popular type of trailer is the

detachable gooseneck. Most drivers prefer a wooden deck to a metal one because the tracks don't slide as much and the planks are great for lining up the tracks during loading.

STEP BY STEP

1 Expect inspections. Make sure you have the basics covered: Truck and trailer inspections, driver time log, and a clear knowledge of your route and its restrictions.





2 Get your permits and know curfew hours, weather, and weight and height restrictions. Regulations vary by state and even by city and county, so check your DOT's website for specifics and scout the route yourself. Some areas issue an annual permit that requires additional filings for machine- and trip-specific permits if you exceed the equipment specifications in your original filings.

"If you are hauling, you are supposed to know the law," says veteran hauler Aaron Lightfoot of ROMCO Equipment in Dallas. "If you're stopped, you cannot plead ignorance. Tickets go on your record and make your company look bad. Don't think you can haul a big machine without a permit, because you can't."



Marty Ragsdale, haul-truck driver for OCT Equipment, Tulsa, Oklahoma, disconnects his tractor from the trailer.

3 Position your trailer in a level, easy-to-work-in area, with plenty of vertical clearance. Disconnect the tractor from the trailer. Make sure your trailer surface is clean.

4 Before cleaning, drive the excavator up to the front of the trailer. Find an experienced operator, if necessary.

5 Rotate the cab, boom, and arm so they are over the side or perpendicular to either track. Push downward until





the track rises off the ground. Rotate the track to shake off mud and dirt. Repeat on the other track. Clean the undercarriage and tracks with a shovel and a broom to remove all "unsecured cargo" — as the DOT likes to call anything that can fly or bounce off.

Don't take any shortcuts on this step. Debris that comes off the excavator or trailer while in transit can, at the minimum, get you pulled over and fined, and at the worst, cause a serious accident.



6 Drive the excavator onto the trailer, being careful to keep it centered. Go slow and steady. It is critical that the rollers are on the edge of the trailer on both sides. Position the bucket and arm so they are tucked in as low and as tight as possible, then put them over the rear wheels so the counterweight faces the truck. This is easier on gooseneck trailers because the excavator is loaded from the front. Many trailers have a cutout over the rear axles to allow the boom to set down lower. Take the hydraulic load off the system, kill the engine, remove the key, and lock the cab on the way out.

"Large excavators require careful positioning on the trailer since part of the tracks may protrude out from the side of the trailer bed," advises Matthew Hendry, Product Consultant, Hydraulic Excavators, Hitachi Construction and Mining Products.

Don't move attachments or extra buckets with the excavator. Adding items like attachments makes it a multiple-piece shipment. They add much more weight and are probably illegal for the type permit you have, so transport those separately. Excavators over 100,000 pounds require removing the counterweight, the bucket, and/or the stick components — these should be transported as separate loads.



7 Before you chain down the excavator, hitch the trailer to the truck so you're securing the load for travel. Now, secure all four points of the tracks — left and right front, left and right rear — to the trailer. Prevent the chain from breaking or slipping by hooking it onto the middle of a track section instead of to a crack between the sections.

Lever binders are approved, but ratcheting binders are preferred. Check your chains, hooks, and binders for wear; replace any damaged parts. That goes for the attachment points on the trailer, too. Make sure all the chain/binder tie-downs are rated for one-half the weight of the unit being hauled. A binder at one rating paired with a chain at a lower rating (or vice versa) will count at the lower rating.

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3 Fasten the cab and use one chain over the boom near the bucket or across the inside of the arm and attach to the frame rails or chain eyelets on the side of the trailer. Avoid the cylinders and hoses. When hauling a new machine, or one with a nice paint job, protect the body with something like an old mud flap to pad the chain.

9 Secure the front and the back of the excavator with four chains that crisscross. Manufacturers have attachment points on the undercarriage, two in the front and two in the back. Tighten them down on opposite sides of the trailer.





10 Place flags on the tracks if they stick out three inches or more. Use a full flag on each track on the back of the excavator, closest to the tractor, so they go around the corner of the track. Use a half flag on each track that's toward the rear of the trailer so they flutter in the wind.



11 Now that you have the excavator in position and secured, double-check for mud and loose dirt, and if necessary, sweep again.



12 Fold in the cab mirrors. Tape over the excavator exhaust pipe to prevent it from being clogged with foreign objects during transport.



13 Unfurl your wide-load banners at the front of the tractor and the rear of the trailer. Unfurl your front bumper flags.



14 Measure the height of the load and make sure the route will accommodate that height. Do one last walk-around.

After you've pulled away from the site or yard, stop a few blocks down the road and double-check your rigging. Check your mirrors often. If you

are going a long distance, pull over after a few miles and check the rigging again. Also keep in mind that few people on the road realize how wide you may need to turn or how long it takes you to stop.



16 Finally, don't rush things. Most accidents happen because the driver was in a hurry. You don't want to be the guy who lost an excavator off a trailer because he was only going a mile down the road, so he put it on the trailer sideways without any chains or flags. And you sure don't want to be the guy who hit a bridge because he didn't bother to measure the height of the load.

"A lot of hauling is common sense," says Lightfoot. "Take your time and don't get in a hurry. If you do something illegal, it hurts everyone. You always need to be thinking of what can go wrong."

"Hauling large excavators requires an experienced driver and pre-planning," adds Hendry. "Do it by the numbers, and the haul will likely go well. Cut corners, and you invite disaster."



Aaron Lightfoot, haul-truck driver, ROMCO Equipment, Dallas, Texas



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