

Focus on Cycle Times Pushes Mass Excavation Success for Rafat

By John Bauer, brand marketing manager, CASE Construction Equipment

[Rafat General Contracting](#) (Bolton, Ontario, Canada) has been in business since 1988. The company has grown since then to more than 400 employees and 200 pieces of equipment that handle everything from excavation and demolition to site remediation and property management.

One of the latest projects for Rafat is the excavation of 3,500 cubic meters (4,577 cubic yards) of dirt, as well as removing another 1,000 cubic meters (1,308 cubic yards) down to the foundation for the construction of a new retirement facility in the greater Toronto area.

To tackle the project, Tony Salim, supervisor and operator at Rafat, positioned two [CASE CX470C](#) hydraulic [excavators](#) in a bench-loading configuration with a simple quarter-turn (where possible) to fill a consistent stream of trucks coming into the jobsite.

For Salim, the focus in such a mass excavation operation is on optimizing cycle times and minimizing downtime. The CX470C tandem achieved these goals through the ability to maintain strong power through the dig, cycle quickly and smoothly, and the extended runtimes (greater fuel efficiency) offered by the combination of the machine's engine and hydraulics.

Power, Speed and Efficiency

"This machine – with the size of the bucket, size of the machine, and the power – it's really quick and just what we need to get the job done," Salim says. "The CASE actually has more power and digging force when loading the bucket. It's [noticeably] faster than other machines."

The CX470C's Intelligent Hydraulic System maximizes speed and efficiency by blending four integrated hydraulic control systems through lift/dump and dig/curl movements, which makes the CX470C able to move more dirt per gallon and load more trucks per shift.

"We do at least 100 loads a day... so you need the speed and you need the size of the bucket, and with the CX470C, we have both," Salim says. "I noticed that the CASE is better when it comes to digging force and filling up your bucket. [The sheer power of this machine] is really good because this is actually very hard ground, and with this CX470C, we have no issue."

With that power and speed also comes a precise responsiveness – made possible by the machine's intelligent hydraulics – that helps Rafat's operators be very specific with their actions.

“You have to dig and [swing around] and everything has to be precise [without] touching the truck and all that,” says Salim. “The CX470C is doing really good at that.”

Over time, the CX470C has also proven to be fuel-efficient. This allows for extended runtimes, which is important as the company tries to stay ahead of strict schedules.

“I can go a day-and-a-half without filling this machine; a day-and-a-half of a full 10 hours work,” he says. “With other machines, you have to fill up at the end of the day, every day.”

Comfort and Maintenance Made Easy

On this particular project, Salim says he spends 10 hours a day in the excavator. For an operator who is spending that much time at the controls, comfort is key.

“When you sit nine hours or 10 hours in a machine, you need to be comfortable. This cab here is really good, really spacious and really comfortable.”

The CX470C offers excellent cab space with a ROPS/FOPS-certified cab with features such as auto climate management, a highly adjustable seat, floor-to-ceiling glass on all sides, a full-color 7-inch HD monitor, and low operating noise.

Another factor that Salim found helpful is its optimal engine and filtration placement. With wide-open panels for easy access to service points, ground level access to grouped lubrication points and quick-change filters, daily maintenance checks are easy.

“As far as opening the hood or checking anything inside,” he says, “everything is there and everything is open. It’s really easy to maintain.”

With the help of their local dealer, [Strongco](#), Salim is even more confident that he has the right equipment and partners in place to optimize uptime, speed and productivity in its mass excavation applications.

“They're always there for us. If a machine has a problem, they're always there. If we make a phone call, they're right on it. I only have good things to say about Strongco.

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