EC210D
SUCCESS IN
INDONESIA

New Sulawesi runway
Stabilizing Java river
Sumatra plant groundwork
Dealing with flooding in Sumatra
Infrastructure work in Yogyakarta
Road to Sumatra hydro power plant
EC210D
THE POWER TO PERFORM

With world-class productivity, durability and efficiency, the EC210D is a product of Volvo’s global technology and engineering leadership.

Read the stories on how different parts of the Indonesian society are being built, stabilized, developed and supported by this powerful and versatile heavy-duty machine.
Before 2017, Morowali Regency in Central Sulawesi, Indonesia, was only accessible via land or sea. That all changed in March, when the first airport was completed. Now, to accommodate larger aircrafts at the airport, a fleet of Volvo Construction Equipment (Volvo CE) excavators are helping to expand the single runway.

“We are working under a tight five-month deadline to complete the runway extension, so we need durable machines with high efficiency – that’s why we selected the EC210D excavator,” said Ahmad Hakim Abdul Rauf, director and owner of PT Putra Morowali Sejahtera. “The Volvo excavators consume less fuel and provide superior performance. Plus, the aftermarket support from our dealer gives us the peace of mind we need.”

Four EC210D crawler excavators are helping to expand the runway from 1.3 km to 1.8 km to accommodate larger capacity planes and in anticipation of greater flight demands in the future.

Designed to increase productivity and reduce fuel consumption, the robust crawler excavator features a maximum bucket capacity of 1.22 m³, a maximum slew speed of 12.3 r/min and a maximum slew torque of 76.7 kNm. The EC210D is equipped with a four-cylinder Volvo D5E engine. PT Putra Morowali Sejahtera purchased the EC210D excavators from PT Intraco Penta Prima Servis (IPPS), Volvo CE’s distribution partner for the Sulawesi region.

In addition to helping improve air-access in Morowali, seven EC210D heavy-duty excavators are working as utility machines at a smelter plant. Three EC210B, the predecessor to the EC210D, are helping to produce an average of 7,500 tons of stones daily at a river quarry. On both the smelter plant and the river quarry, the excavators work a minimum of 10 hours in challenging and demanding conditions.

The EC210D can be equipped with either a top or side mounted Volvo hydraulic breaker built to break even most demanding materials, delivering consistent power and high breaking force. The Volvo-designed hydraulic breaker/shear piping and quick coupler piping option provide optimum flow to the hydraulic attachments. State-of-the-art auxiliary lines allow the correct flow and pressure for special attachments.

“At both the smelter plant and the river quarry, machines work with abrasive material, which quickly reduces bucket teeth and affects the undercarriage. But with the EC210D excavators we’ve experienced fewer breakdowns – they truly are higher performers,” Ahmad Hakim Abdul Rauf said.
Volvo EC210D helps stabilize Java river damaged by Mount Merapi volcano

In 2010, one of Indonesia’s most dangerous volcanos – Mount Merapi in Central Java – violently erupted over the course of two months, engulfing nearby areas in ash, mud and debris.

Described as one of the largest volcanic eruptions in the region since the 1870s, the volcano dumped mass amounts of cold lava that flooded and damaged rivers including the nearby Pabelan River in Muntilan, Magelang. Now close to a decade later, a local mining quarry company is using a EC210D crawler excavator from Volvo Construction Equipment to mine for rocks and to help stabilize the river.

“We purchased a Volvo EC210D because it is fuel efficient and the engine power is strong enough to deal with the challenges of working with very large stone material and rapidly changing weather,” said H.N. Year, owner of CV Sumber Jaya Sakti, a mining quarry company based in Magelang, Central Java.

On site since September 2017, the versatile EC210D is helping move between 280 m$^3$ to 300 m$^3$ of sand and rocks per day at the Pabelan River project. The crawler excavator joins a fleet of excavators and wheel loaders, and is expected to remain on site for one year working an average of 22-hours per day, as part of the two-year river stabilization project.

“Volvo machines are high performers that are durable, reliable and provide strong power in this tough and challenging environment,” Year said. “We selected the EC210D for its four-cylinder engine and the D-series cab, but the crawler excavator’s high torsion with low RPM is also making it a hit on the job site.”

Designed to increase productivity and reduce fuel consumption, the robust crawler excavator features a maximum slew speed of 12.3 r/min, maximum slew torque of 76.7 kNm, maximum bucket capacity of 1.22 m$^3$, and maximum operating weight of 22,800 kg.

Equipped with a Volvo D5E engine, the four cylinder, vertical, electronic-controlled high pressure fuel injectors, helps the EC210D provides superior performance.

“We invested in the EC210D because of the machine’s strength, durability and tough engines compared to other brands,” Year said.

CV Sumber Jaya Sakti purchased the EC210D from PT Indotruck Utama, a Jakarta-based Volvo CE dealer since 2011. Established in 1988, PT Indotruck Utama is a subsidiary of Indomobil Group, one of the largest automotive distributor and manufacturer in Indonesia.
A Volvo EC210D is leading ground preparation on construction of a new industrial facility in Muara Tembesi in the Indonesian province of Jambi, Sumatra. The unit belongs to PT Kurnia Batang Hari Berjaya, which is both the owner of the new palm oil plant under development and the lead contractor in construction work.

Elbert Gunawan, operations manager at PT Kurnia Batang Hari Berjaya, said the powerful performance of the EC210D put the company’s mind at ease.

“With this kind of land clearance project there’s always the risk of damage to the excavator’s undercarriage, but with the heavy-duty EC210D we don’t need to worry because it’s such a tough unit,” he said. “Also with its low fuel consumption it’s helping minimise costs. And we like the fact that our local dealer is standing by to support us, with an excellent facility nearby stocked with parts and well-trained service personnel.”

**Strong support locally**

PT Kurnia Batang Hari Berjaya purchased the machine from Indotruck Utama, which has been working as a Volvo CE dealer since 2011. The company stocks of a wide range of Volvo CE products, including articulated haulers, excavators, pavers, pipe layers, compactors and wheel loaders. Founded in 1988, Indotruck Utama, specializes in heavy-duty equipment and is also Volvo Trucks dealer. It has a facility close to the job site in Kota Baru.

For fast cycle times and optimum fuel consumption, the Volvo EC210D is equipped with intelligent work modes, including the new G4 work mode. Operators can choose the best mode to suit the task at hand, selecting from – I (Idle), F (Fine), G (General), H (Heavy) and P (Power max) mode.

Operators benefit from smoother, easier movement when traveling and lifting simultaneously as well as better grading quality from the harmonized boom and arm movement. For a productive work shift, the cab offers enhanced all-around visibility, an adjustable seat and ergonomic controls.

Work on site in Muara Tembesi began in September of last year and construction of the new palm oil facility is expected to complete towards the end of this year.
In North Sumatra, Indonesia, it rains more often than it doesn’t. The city of Medan regularly records 2.2 metres of annual precipitation, and so the locals often joke that there is no such thing as a ‘dry season’.

In such a weather-challenged environment, local aggregates producer PT. Bangun Mitra Abadi needs machines that can handle the rain and the flooding with minimal downtime. In fact, this is doubly important given it often digs for stones in local rivers.

Surya Ichsan, owner of PT. Bangun Mitra Abadi, said maintaining a regular supply of aggregates is essential to keeping the development of local infrastructure on track.

“We produce aggregates that are used to construct buildings in Medan, and roads in Barus and Stabat – all vital infrastructure for the area’s development,” he said. “So it’s important for us to select strong equipment, like the Volvo EC210D excavator, to ensure smooth operations.”

On site since April 2017, the EC210D excavator works eight hours daily to support the impressive output of PT. Bangun Mitra Abadi. Each day the company produces some 600 tons of base course, as well as splitting 350 tons of stones and loading an impressive 1,200 tons of materials.

“We really appreciate the contribution of the EC210D to our overall productivity,” Ichsan said. “The machine’s superior performance, helps us deliver material to clients on time while using only 12 to 18 liters of fuel per hour.”

Designed to increase productivity and reduce fuel consumption, the robust EC210D features a maximum slew speed of 12.3 r/min and maximum slew torque of 76.7 kNm. Up to 1.22 m³ of bucket capacity is available while overall maximum operating weight is 22,800 kg. Equipped with a Volvo D5 Engine, the EC210D provides superior performance. And in addition to its impressive technical specifications, the design of the EC210D focuses on delivering the best possible working environment for the operator.

“Our operators appreciate the EC210D’s comfortable seats, air conditioning and radio inside the cab,” Ichsan continued. “While these might seem like small details, they actually help boost morale and productivity, and our operators look forward to working in the machine.”

Indonesian contractor PT. Bangun Mitra Abadi says the Volvo excavator’s superior performance helps keep operations going through even the most challenging weather conditions.
Yogyakarta is the cultural center of Indonesia. The government is hoping to boost tourism in the city and to support this has kicked off an ambitious infrastructure development program that includes a new airport, the New Yogyakarta International Airport. With many large projects underway, demand for aggregates is high. One building materials supplier that is playing an important role in keeping up with demand is CV WiroSobo Sejahtera, which operates a quarry at Gendol River and a separate crushing plant nearby.

Leading excavation at the Gendol River site is a Volvo EC210D, which is working up to 14 hours a day, shifting 150 m³ – 300 m³ of material. It removes sand and rocks, and loads them into trucks for transfer to the crushing plant. Periodically, these sand and rock supplies are replenished, as materials that erupt from nearby Merapi volcano are washed into the Gendol River valley. While these inflows of material are a welcome gift, it can also make working conditions unstable with the ground prone to movement or inflows of water.

Suroto, the company owner at CV WiroSobo Sejahtera, explains how working conditions can change. “Somedays the EC210D is working in a dry riverbed and others it might be working in water or on ground that has shifted," he said. “We need a machine that has the power to cope with the changing terrain and that is tough enough to work among so much hard rock and sand. With the Volvo EC210D we have a machine that we know is safe and fuel efficient - we don’t have to worry about how it will cope.”

The 20-ton rated Volvo EC210D comes with a powerful Tier 3 Volvo engine that works together with the machine’s proven hydraulics to provide high torque at low rpm. This design gives the machine a perfect balance of performance and fuel efficiency.

Built with durable components, the EC210D is designed to secure lasting machine value and an excellent return on investment. It can be fitted with a selection of buckets and breakers that work in harmony with the machine to ensure optimal performance and profitability in any application. With a sturdy design and built-in durability, all buckets are equipped with Volvo teeth to handle even the toughest of applications.

The EC210D belonging to CV WiroSobo Sejahtera was purchased through local Volvo CE dealer PT IndoTruck Utama.
The largest hydropower power plant in Sumatra, Indonesia is currently under construction with a Volvo EC210D playing a key role in the construction of the access road to the new facility. The excavator belongs to equipment rental company Tapanuli Adya Citra which is leasing it to main contractor Sinohydro Corporation on a five-year rental deal. The EC210D excavator is the second Volvo unit for Tapanuli Adya Citra, with the company also adding an SD110B compactor to its fleet in recent years.

Landi Sinaga, owner of Tapanuli Adya Citra, said both he and his operators appreciate the design and performance of the EC210D.

“The EC210D is a strong and reliable machine, while its low fuel consumption also helps save costs,” he said. “It’s popular with the operators too, because the cab has a great air conditioning system and a very comfortable seat. We have a great relationship with our local Volvo dealer PT Indotruck Utama, so it was easy to do business with them.”

For a productive work shift, the EC210D excavator is equipped with a spacious and safe cab for the operator, offering enhanced all-around visibility, an adjustable seat and ergonomic controls. The improved interior also features a new I-ECU monitor that displays a range of information for efficient operation.

The HB21 can be either top- or side-mounted and is capable of breaking even the most demanding of materials, delivering consistent power and high breaking force. State-of-the-art auxiliary lines on the EC210D facilitate the correct flow and pressure of hydraulic oil to the attachment.

In addition to the HB21, Volvo CE offers a comprehensive range of other attachments for use with the EC210D. A selection of buckets and breakers are available, all of which work in harmony with the base machine to ensure optimal performance and profitability. With a sturdy design and built-in durability, all compatible buckets are equipped with Volvo teeth to handle the toughest applications.

Once complete the PLTA Batang Toru power plant will have a capacity of 510 MW and supply energy to the majority of North Sumatra. It is scheduled to open in 2022.