

# Creepy-Crawly Sub

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## An unusual underwater robot explores the bottom of the sea

A crab the size of a car has been spotted off the coast of South Korea! But the supersized shellfish isn't a sea monster. It's a crab-like robot called the Crabster CR200.

Engineers in South Korea designed the **submersible** to withstand strong ocean currents. The robot's unusual design allows it to go where other underwater vehicles can't.

### A Better Bot

Existing submersibles struggle to explore the ocean in rough water. Strong currents make it hard for them to stay still and scan underwater objects. "We needed a new robot for this harsh environment," says Bong-Huan Jun, one of the Crabster's creators.

Jun's team planned out what features their robot needed. It had to move across uneven ground and hold up to powerful currents. After looking at past research, the engineers decided to model their craft on crabs. These animals use eight legs to stay stable as they crawl along the seafloor.

The team created a design for their robot. They decided six legs would be enough to steady it. Then they built a **prototype**. This small-scale model allowed them to test the computer programs that would control the Crabster's legs.

Finally, the team built the full-sized Crabster to test in the ocean. They wanted to see how well it walked on the seafloor and make sure its cameras and other devices worked.

### Ocean Explorer

This past April, the Crabster went on its first mission. It helped with search and rescue after a ferry sank in choppy waters west of South Korea.

The Crabster worked well, but the team is still improving the design. The bot walks very slowly, so they're upgrading it so it can go faster. They even hope to add a swimming function so the Crabster can paddle through the water too.

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