

Omni Jaw 5™



TOOLING AND INSTRUMENTATION



The Omni Jaw 5™ is a high-powered hydraulic tool that generates up to 5 tons of force on the cutting jaw. An electric trigger placed ergonomically on the handle actuates the device. The longer the momentary trigger is held open, the higher the force generated. This design allows the tool to use the minimum amount of power required to achieve the desired result. After the trigger is released, the system automatically resets and the cutting jaw returns to the open position. When used as a bolt cutter, the Omni Jaw 5—which was originally designed for the U.S. Department of Energy as a portable asbestos cyanide-dipped bolt cutter—cuts and traps the bolt head to eliminate environmental and safety hazards.

Features

- 4140 steel alloy machined body and cutting jaw
- S7 high-impact tool with steel machined cutting blades
- Stainless steel jaw guards and handle frame
- ¼" Lexan transparent shield
- Ultra alloy steel bolts

Benefits

- Strong — generates up to 5 tons of force
- Ergonomic electric trigger — improves ease of use
- Safe — traps trimmings to eliminate environmental and safety hazards
- Portable — weighs 18 lb, including section of hydraulic hose and fittings
- Fast — shears bolts in seconds
- Versatile — with an interchangeable jaw, can be used as a bolt cutter, punch or shear
- Precise — leaves surface undamaged

Applications

- Asbestos removal
- Equipment dismantlement
- Building demolition
- Ship deconstruction
- Construction

Patents & Awards

- U.S. Patent Nos. 7,673,392 and 7,971,359
- Technology Ventures Corporation – featured technology, 2012

Inventor

Lee Bzorgi

Technology Readiness Level (1–9)



Technology has been proven to work in its final form and under expected conditions.

Partnering Opportunities

Y-12 is seeking an industry partner to fully commercialize this technology.

**If you would like more information, please contact the
Office of Technology Commercialization and Partnerships:**

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