

Omni Jaw 5™ Powered Protrusion Cutter

Y-12 invites interested companies to license its patented Powered Protrusion Cutter (PPC), originally designed for the Department of Energy as a portable asbestos cyanide-dipped bolt cutter. The PPC cuts and traps the bolt head to eliminate environmental and safety hazards.



The PPC 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 it. The longer the momentary trigger is held open, the higher the force generated. This allows the tool to use the minimum amount of power required to cut. After the trigger is released, the system automatically resets, and the cutting jaw returns to the open position.

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, the PPC 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 AND AWARDS

The Y-12 National Security Complex has patent protection for this technology – U.S. Patent No. 7,673,392.

INVENTOR

Lee Bzorgi, Director of the National Security Technology Center, is a senior technical advisor to Y-12's Science, Technology and Partnerships organization. He manages the design, fabrication and testing of new products for law enforcement, the Department of Energy, the Department of Defense, Homeland Security, and Y-12 Security.

TECHNOLOGY READINESS LEVEL (1-9)

8 – 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 about this technology, please contact:

Gina Davis

Director, Marketing and Commercialization

davisgk@y12.doe.gov

(865) 576-0181 office

(865) 963-5646 cell

www.SecretCityIP.com