

# **SOLUTION MINING RESEARCH INSTITUTE**

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**10 years of EZ cutter experience,  
a proven contribution to salt cavern development**

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FLODIM, Manosque, France

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**Abstract**

Cutting pipes remains a challenge of major concern for storage cavern operators and salt producers. Changing the position of leaching strings when developing salt caverns or re-accessing underground caverns with bent casing, often requires heavy and delicate operations that are both time-consuming and costly.

The first solution mining dedicated casing cutter enables clean and perfectly controlled cuts without explosives, chemicals or other expensive workover alternatives. By simplifying transportation, logistics and safety issues, it can be deployed on any standard wireline unit. The only significant requirement is conductive fluid in the well, such as brine or sea water.

This versatile and lightweight logging tool, capable of cutting both inner and outer casings, has proven highly effective in many configurations over the past decade.

Smartly combined with the other tools of the “Flodim Cavity suite”, cavern intervention programs can be made faster, lighter and cheaper.

The “EZ cutter” has been successfully operated since 2014 in 14 countries worldwide, cutting more than 400 casings in many distinctive configurations.

As the demand for massive underground storage is expected to grow fast and as brine & potash extraction remains on an upward trend, the electrochemical cutting technology should become a game changer with unique advantages to optimize any leaching intervention program.

This paper presents the operational feedback of 10 years of casing cuts, including case studies and innovations that have enhanced the tool’s capabilities to better serve the underground cavern industry. It also highlights the ongoing development prospects, introducing the future XS Cutter and XL Cutter that will increase the intervention capabilities and reduce effective cutting times.

**Key words:** salt caverns, casing cut, cavern development, sonar, well casing, well logging