

 geographe™

**SPECIALISED  
TOOLING**



# INDUSTRIAL NUT SPLITTER

To suit Caterpillar Haul Trucks

2024 - Revision 1

[geographe.com.au](http://geographe.com.au)

**DESIGNED  
TO DELIVER.**

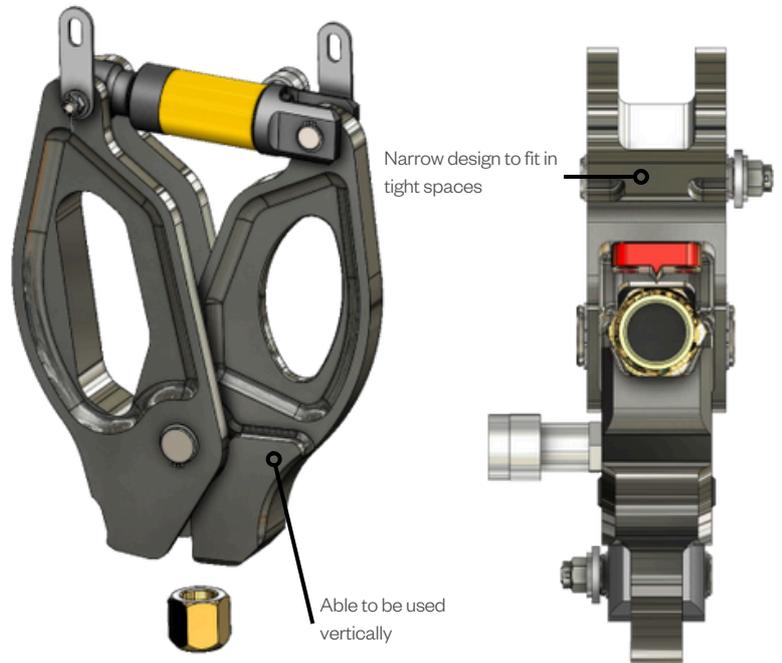
# Eliminating inefficient extraction of seized and corroded wheel nuts

## Creating a Lighter Effective Solution to Difficult Extraction

Approached by Western Australian salt producer and global exporter, Dampier Salt in 2010, Geographe was asked to solve the challenge of replacing seized and corroded wheel nuts on its Caterpillar fleet impacted by running continuously in saltwater conditions. Dampier Salt was facing frequent downtime due to premature wear and failure of critical components. These failures were causing significant production delays and increased maintenance costs.

On top of providing a solution to the efficient removal of seized wheel nuts, Dampier Salt requested the following design specifications to be included:

- Tool should operate in a vertical position
- Tool should be narrow enough to fit into the truck wheel hub
- Tool could not weigh more than 23kg for mine site safety reasons



Geographe Industrial Nut Splitter

## The Geographe Solution

The result was the Geographe Industrial Nut Splitter - an easy to use, lightweight hydraulic splitting tool allowing the wheel nuts to be quickly cut off a machine without damaging the wheel studs. With the industrial nut splitter being the first commercial piece of tooling created for customer use, Geographe's Specialised Tooling team was founded.



Safer work environment for maintenance teams by reducing hot works to removed corroded wheel nuts



Increase fleet uptime with efficient extraction



Decreases deviation from safe work procedures from eliminating hot works



The Geographe Industrial Nut Splitter ensures optimal removal of seized wheel nuts, bringing the removal time from 36 hours down to an average of 4 – 6 hours

## Customer Outcomes

By leveraging advanced engineering techniques and maintaining a strong focus on customer collaboration, Geographe delivered a solution to Dampier Salt that not only solved the immediate problem of inefficient extraction practices of seized wheel nuts but also provided long-term benefits such as faster extractions with the Geographe Industrial Nut Splitter.





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## **ENHANCED PERFORMANCE**

With over 1,000 Enhanced Performance (EP™) components now catalogued to suit OEM brands such as Caterpillar, Komatsu, Hitachi, and Liebherr, Geographe creates and manufactures products to outperform any wear parts in the market.



Extend the  
Operational Life  
of parts



Correct known  
deficiencies in  
OEM parts



Adapt existing  
designs for specific  
conditions



Cut maintenance  
costs and increase  
uptime

## How we add value to your operation

At Geographe, our products are designed to deliver beyond expectations. We provide engineered solutions to achieve higher equipment utilisation and performance rates.

We collaborate with our customers to solve mine site challenges, helping to significantly reduce maintenance time, improve safety, and decrease up-front and whole-of-life operating costs.

Through innovative thinking and a pioneering approach, our dedicated team of skilled engineers, metallurgists, analysts, and developers design and engineer high-performance parts to support optimal performance and minimal interruptions to operating equipment in mine sites around the world.



All manufacturers names, numbers, symbols and descriptions are used for reference purposes only.

It is not implied that any part listed is the product of the OEM.

Geographe is a registered trademark of Geographe Enterprises Pty Ltd.

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