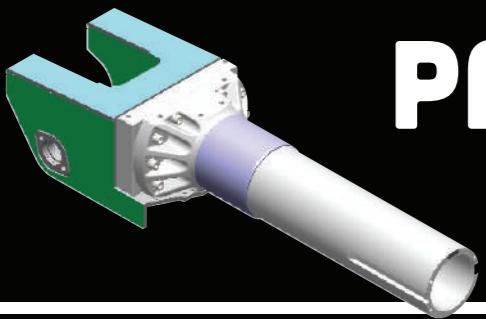




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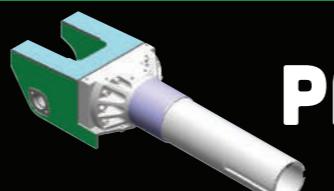
MINING
PRODUCTS PTY LTD

TRACK ADJUSTER CANNON

Improved Aftermarket, redesigned Track Adjuster Cannon to suit D10 & D11 CAT Dozers



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ON THE RIGHT TRACK

**New Track Adjuster Cannon saves
your company time and money!**

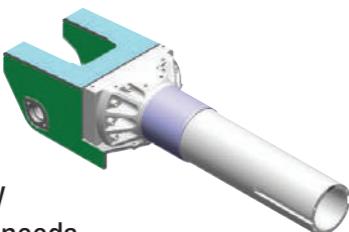
**New Aftermarket Product to suit
Caterpillar D10 and D11 Dozers.**

Strong and Durable

Made in Australia, with top quality materials, by highly skilled tradesman, to exacting Australian Standards.

Modular Design

It has two main pieces instead of one.



This means that you only change the part that needs changing. You can reduce downtime by 80% when the Track Adjuster Cannon is replaced.

Competitively Priced

Made in Australia.

No need to ship in expensive parts from overseas.

Lower overall cost-of-ownership contributes to a better bottom line for your business!



The Problem

With ever-growing cost pressures on mining operations, equipment operators are looking for ways to reduce break downs and minimise maintenance downtime.

Companies expect maximum availability from the equipment in their mining fleet, and dozers are often on the front line of such operations. When equipment breaks down on-site, it can have a significant impact on revenue.

When the equipment is the Track Adjuster Cannon, it can take up to five days to strip the dozer, remove the broken components and repair them.

In addition to the repair time, sourcing replacement parts has proved challenging of late. It could continue to be challenging in these uncertain times. Getting replacement parts from overseas incurs costs in lost operational time and additional freight charges.



The Investigation

Our parent company, Metal Testing Pty. Ltd., is leading the way in testing metal structures for fatigue cracking. With more than 15 years experience, we are a NATA-accredited non-destructive testing company.

Mohan Narayan, the proprietor of Metal Testing Pty. Ltd. noticed a trend in the way the track tensioners from dozers were failing. "Because we were testing so many dozer track tensioners from clients across Australia we saw a pattern in the way the stress fatigue cracks were developing," Mohan said.

Drawing on his years of experience with metal structures, he investigated the trend further. Having identified the weakness in the failed tensioners, Mohan became determined to provide a solution that would serve his clients better and give them real value.

After 18 months of research and development, KAM Mining Products brought its first Track Adjuster Cannon to the market. Modular by design, made of two main parts instead of one, it has several key features to reduce stress in the components and give the assembly the qualities that equipment owners are looking for: strength, reliability and reduced downtime during maintenance.



The Solution

Our innovative design allows for safe, easy access to the parts. The Track Adjuster Cannon itself is split into two pieces and is held together as an assembly with ten bolts, making it easy to service.

If the cannon assembly wears on one end (in the keyways), it can be rotated 180° and used again, effectively doubling its life. Instead of days, it can be switched out in a matter of hours, to allow the equipment to be operational again much sooner. This process could lead to an 80% reduction in repair or maintenance time for the Track Adjuster Cannon.

As well, the Track Adjuster Cannon from KAM Mining Products is manufactured here in Australia, eliminating the extra time and the cost of international shipping.

Safety by Design

Failure of a cannon shaft presents as additional problem. The uncontrolled release of energy from the spring assembly poses a significant safety risk to maintenance personnel.

The team at Metal Testing Pty. Ltd. had to address these fatal risks during the design process. Mohan said, "We believe safety is paramount when it comes to design, manufacturing, operations and maintenance. We have designed the spring assembly to be sealed inside the cannon shaft to provide a physical barrier between personnel and the stored energy sources."

The company used finite element analysis, a computer-based method for solving engineering problems, to fine-tune their design. The analysis confirmed that the design was markedly superior under stress to equivalent components on the market today.

The result is a safe, reliable and more durable tensioning system than the other products that are currently available for D10 and D11 dozers.

