# **VBL** Valley Blades

# CASE STUDY

# Gold Mine

CAT 16M MOTOR GRADER #1108

TARGET: 1500 - 2000 HOURS

**RESULT: 1,948 HOURS** 

**PRODUCT: GRADER LINK** 

**USA** 

START

END

AUG/21

**FEB/22** 

# **INSTALLATION:** AUG 25/21

A CAT 16M motorgrader was selected for the trial of VBL Grader-Link cutting edge system. Thorough moldboard clean up was conducted for proper fit of the new cutting edge. 12-inch segments were installed, key bolts added and all bolts were torqued to factory specifications. Machine went right to work after installation.

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INSTALLATION TIME 1 HOUR Hour Meter 68516

# INSPECTIONS

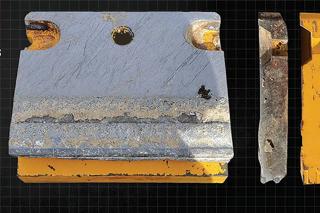
SEPT 2/21 No signs of damage. No breakages.

#### HOURS OF USE 171

## FEB 24/22

After completion of the 184-day trial, carbide inserts are still intact. Considering 1,948 hours of operation, wear was extremely minimal and consistent across the mouldboard averaging ½-inch of material use. Right and left end segments experienced approximately 1-inch of wear. Minor chips occurred but did not impact overall product performance.

The Grader-Link system proved to be the best cutting edge ever used by the gold mine.



HOUR METER 70464 1,948 HRS 184 DAYS

FOR TRIALS AND INFORMATION CONTACT GRADE CONTROL 02 43851041 www.gradecontrol.com.au



OCT 13/21

Minimal and consistent wear

HOURS OF USE 692

across mouldboard. Wear: 1/8"

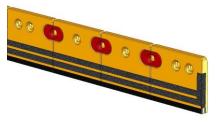


#### Introduction:

A longer lasting, safer, grader blade designed specifically for 16, 18 and 24 ft mouldboard graders is now available.

#### Safety:

Borrowing the 12" sectional design from VBL's innovative CARBIT-Link system the individual part weight can be limited to 46lb / 20kg. This makes it possible for one person to safely move and install the segments. Compare this to traditional blades weighing between 205lb / 93kg (1-<sup>1</sup>/<sub>2</sub>"X10"X48") - 1500lb /680kg (3"X16"X96") requiring lifting equipment and putting maintenance personnel at risk.





#### Triple carbide:

The wear surface on the bottom edge is fortified with 2 rows of high wearing tungsten carbide (1" tall). These inserts are protected by a 2" pass of tungsten carbide embedding (TCM).

## Base Blade:

A heat treated alloy steel forging provides superior strength and hardness to further protect the carbide. The recessed mating features and bolt holes are hot forged to their final shape. This technique orients the grain structure in these areas resulting in 30% more strength.





## End protection:

Additional tungsten carbide embedding is added to the ends of system to prevent premature wear in these areas. As these areas are typically the first to wear out, increasing their wear life can prolong the life of the entire system.

## Other benefits:

The sections lock together using the patent pending link plates ensuring proper alignment and a secure connection. The sections can also be removed individually to be replaced if prematurely worn in one place on the mouldboard. The sections can also be moved around on the mouldboard periodically if they are wearing unevenly.





# **GRADE CONTROL** 02 43851041 gradecontrol.com.au