

# 8 WAYS TO MAXIMIZE RELIABILITY OF YOUR HYDRAULIC MINING SHOVEL



## PERFORM DAILY MACHINE WALK-AROUND

Proactively identify and resolve potential or evolving issues before they cause a major machine downtime. Perform daily checks and walk-around as described in the operating manual.

## MATCH & MATERIAL

To achieve highest reliability, durability and also productivity, it is very important to select the appropriate bucket for the given application. The bucket should be suitable for the density, abrasiveness and fragmentation of the material. Do not use the corner tooth of the bucket for ripping as it transmits high torsional forces.

## OPERATE ON LEVEL & EVEN GROUND

Maintain proper floor conditions and request auxiliary machines if required. Operating on uneven surfaces applies localized, high loads to the undercarriage reducing component and structural life.

## AVOID CONTACTS

Avoid cylinder end stroke contacts, contacts between the bucket and stick, and contacting undercarriage with the bucket. These contacts induce high loads reducing component and structural life.

## AVOID HIGH ENERGY MATERIAL CONTACTS

Lowering or swing the bucket at high speeds into material causes high loads which will reduce component and structural life.

## TAKE NOTICE OF BCS ALERTS

The Board Control System provides comprehensive service information and machine operating data. Do not ignore visual and/or audible alarms. These early warnings can help prevent major failures.

## PROPER CLAM OPERATION FOR FS MACHINES

Ensure the clam is completely closed before contacting material. Curl the bucket out/back after dumping, in order to close the clam against gravity. This operating technique will provide a smooth clam closure and help avoid banging the clam against the back wall.

## FOLLOW PROPER DOUBLE BENCHING PRACTICES FOR BH MACHINES

Ensure upper bench material is easy to penetrate and only requiring minimal effort to loosen. Double Benching inappropriate material will reduce component and structural life. Appropriate material can be verified by checking if the bucket can move through upper bench material by lowering the boom with the float function only.

**MORE INFORMATION:** Operational Practices (Media Number EM027975)

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