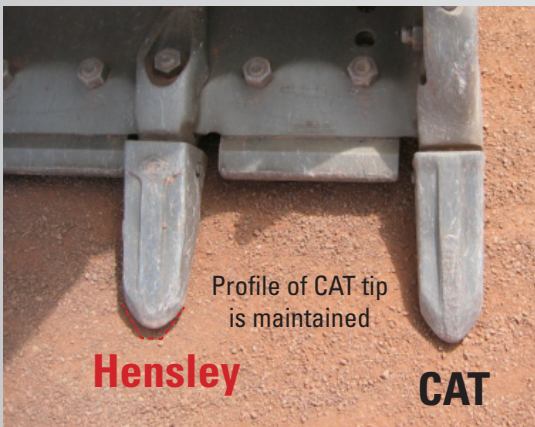


CAT / Hensley Tooth Comparison

The following images show a study comparing the performance and wear of CAT J-400 PenTip with ARM vs. Hensley J-400 HD PenTip with TC Impregnation in a Quarry Aggregate Application. The tips were installed on the same machine and put to work. Images were taken along the way to document and compare pocket and profile wear. By 265 hours, the Hensley teeth showed significant wear, needing to be replaced. The CAT tips maintained the pocket and a sharper profile for the duration of the study to 590 hours.

NEW

New tips were installed on a CAT 980 Wheel Loader.

**Hensley CAT****CAT Hensley****50 HRS**

Profile of CAT tip is maintained

Hensley CAT**CAT**

CAT ARM maintains the penetration profile of tip

**Hensley**

TC Impregnation washing out, tip profile rounding

**112 HRS****Hensley**

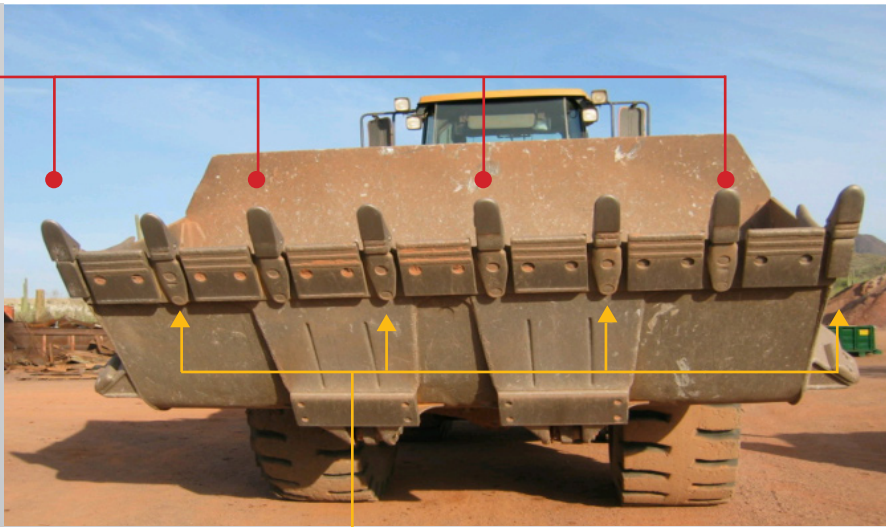
Loss of penetration profile, TC Impregnation washed out, and pocket profile is visibly wearing

CAT

Pocket and penetration profile are maintained as well as longer ARM life



265 HRS



CAT

Hensley

Hensley need to be replaced due to pocket wear.

CAT usable life remaining due to ARM protection on the Pocket and longer wear life with DH-3 steel.

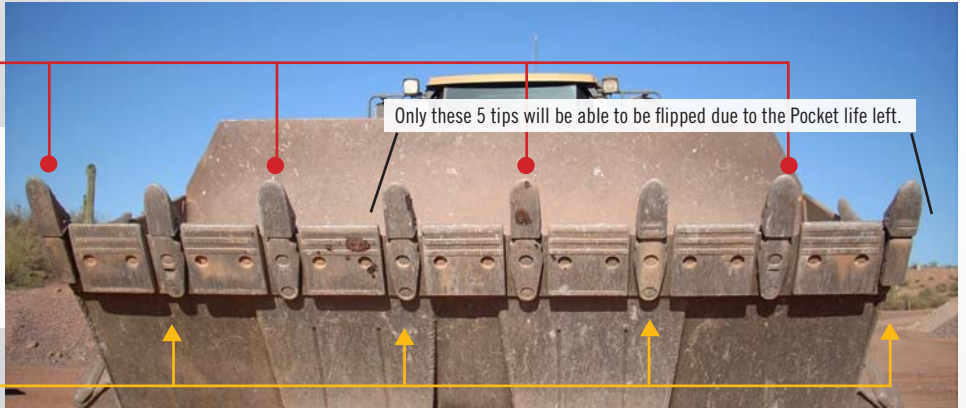
Hensley Tip doesn't have enough pocket material to keep running – needs to be replaced

CAT Tip pocket is maintained and thick enough to keep running

501 HRS

Hensley

All Bucket tips Wearing from Left to Right but the Hensley end tip has been replaced. The CAT tip next to it is on its first Life



CAT

ARM remains along with sharper profile



Hensley Tip

CAT Tip



Here the CAT tips have clearly displayed better wear life. The Hensley Tip in the middle has lost the pocket requiring replacement.

590 HRS



CAT



Hensley

CAT

Hensley



At 590 hours the tips were removed. The CAT tip has maintained profile better than Hensley tip. ARM remains on CAT tip, protecting the pocket from wearing out.