TIP SELECTION GUIDE

Bucket tips come in many shapes and sizes to meet all applications. The chart below will help to determine weather your bucket impact and abrasion conditions. Knowing these will help to guide in the best tip for the job.

Every tip is designed as a unique balance of:

1 STRENGTH

The resistance to breakage from impacts

2 PENETRATION

The ability to cut through material - “sharpness”

3 WEAR LIFE

The weight of wear material available and material properties—”hardness”

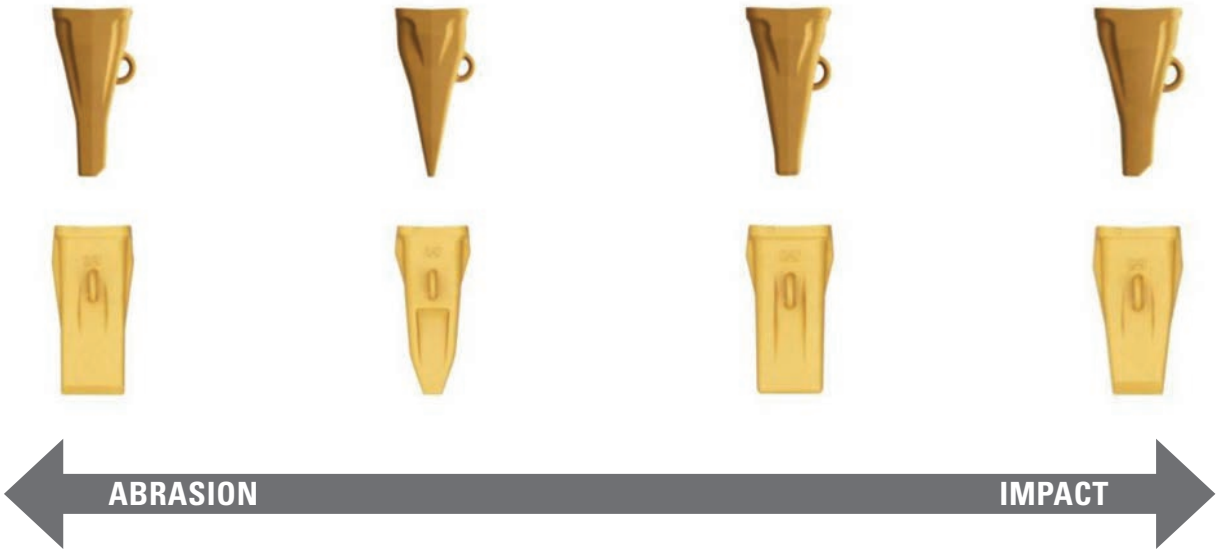
Here we see common Caterpillar tip shapes that align with principles above

ABRASION TIPS
Are longer and have more wear material to prioritize **wear life**

PENETRATION TIPS
Have a small contact surface and tapered body prioritizing **penetration**

GENERAL PURPOSE TIPS
Balances **strength, penetration and wear life**

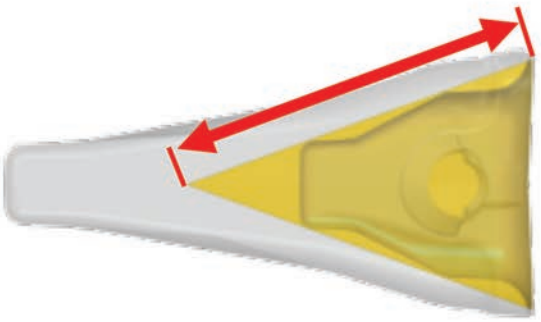
IMPACT TIPS
Have a shorter overall length and stronger tip pocket to prioritize **strength**



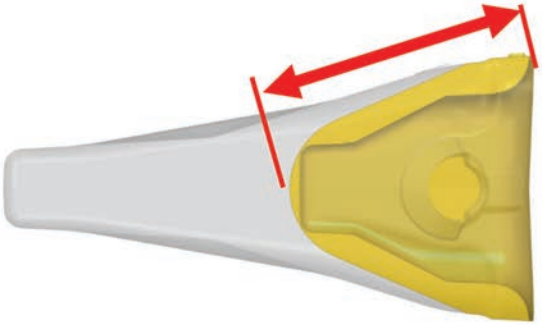
When selecting the proper tip shape it is critical to understand the application and environment of your site. The table below provides a general guide to determine levels of abrasion and impact.

		LOW	MODERATE	HIGH	EXTREME
ABRASION	Average Tip Wear Life	≥ 8 weeks 1,000 hrs +	3-8 weeks 400-1,000 hrs	1-3 weeks 100-400 hrs	≤ 1 week 100 hrs or less
IMPACT	Material Size	 0-6" | 0-152mm	 6-18" | 152-457mm	 18-36"+ | 457-914mm+	 36"+ | 914mm+

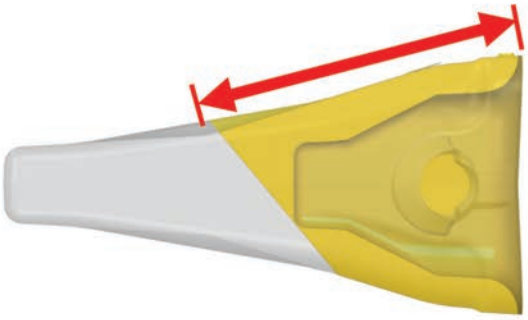
Overserving the wear profile of your current tips allows insight to the proper tip selection. Tip wear profile is a result of machine operation and material conditions. The following profiles can used as a guide to select the optimum tip shape. These shapes also help to understand tip length varies at wear out.



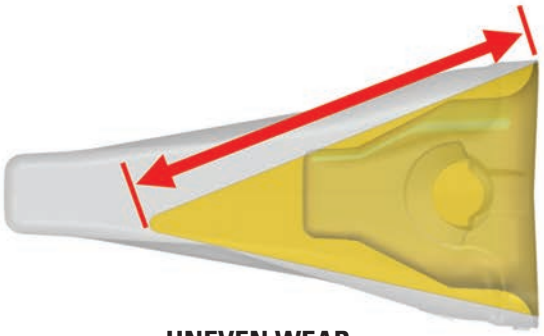
NORMAL ABRASIVE



HIGH IMPACT ROCK



WALL SCRATCHING



UNEVEN WEAR