



H&L Mesabi proudly serves Minnesota, Wisconsin & Upper Michigan as the premier custom wear specialist in construction, governmental and mining applications

## H&L Mesabi Milling and Reclamation Guide



H&L Mesabi is a proud representative of Kennametal® and their premium, American-made, tungsten carbide milling and reclamation tools.

**Choosing the Conical  
Troubleshooting**

**[HLMESABI.COM](http://HLMESABI.COM)**

# Choosing the Conical

## Machine

**Low HP:** <100HP, <1 meter drum

**Medium HP:** 100-300HP, 1-2 meters drum

**High HP:** >300HP, >2 meters drum

## Surface

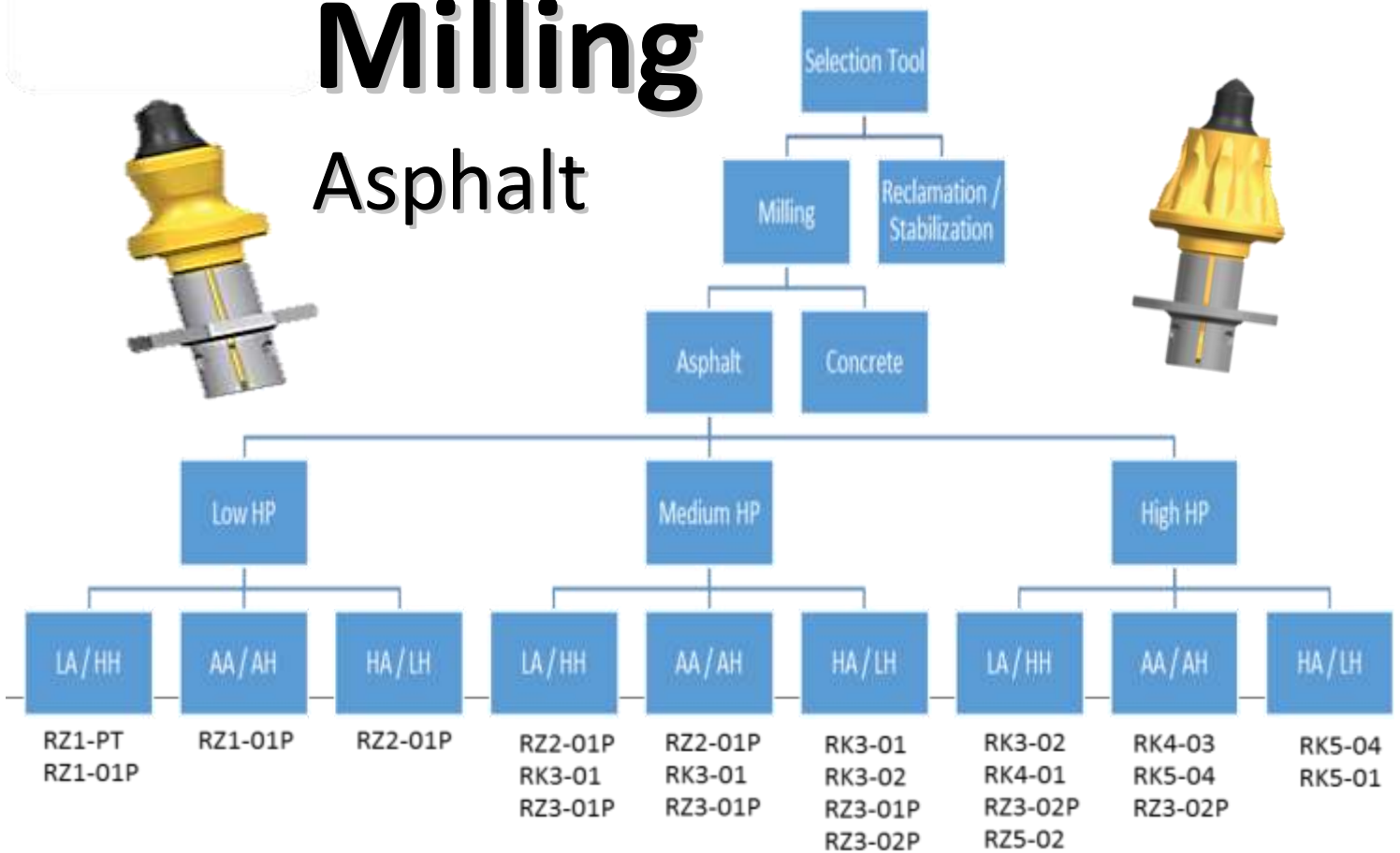
**LA/HA:** low abrasion high hardness

**AA/AH:** ave abrasion ave hardness

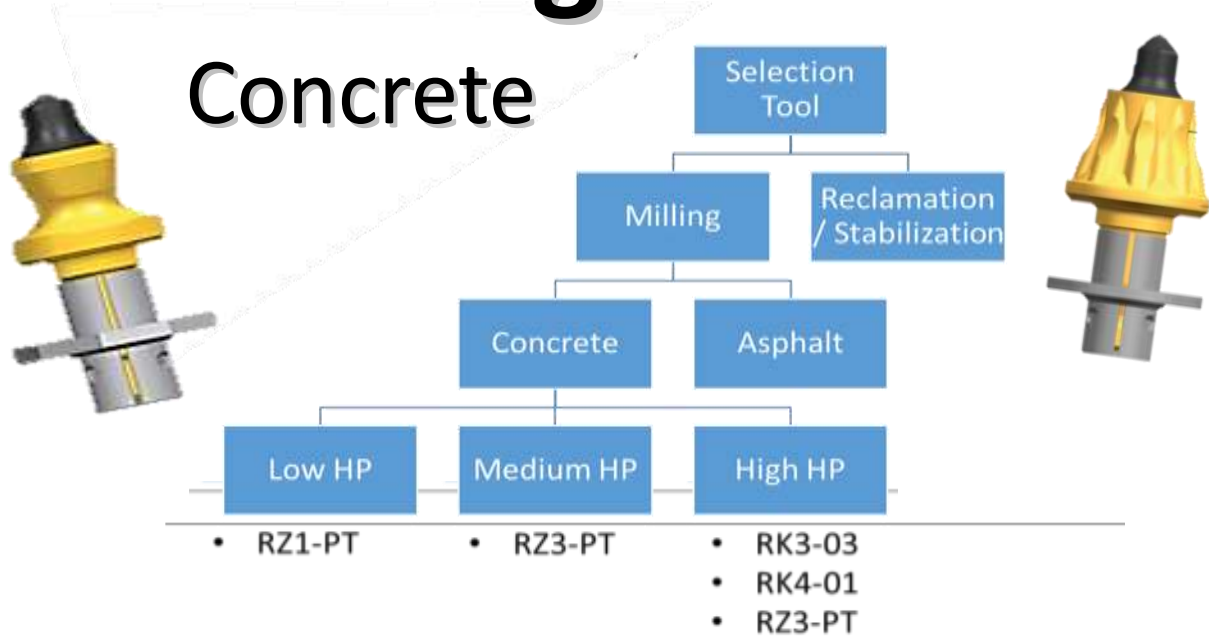
**HA/LH:** high abrasion low hardness



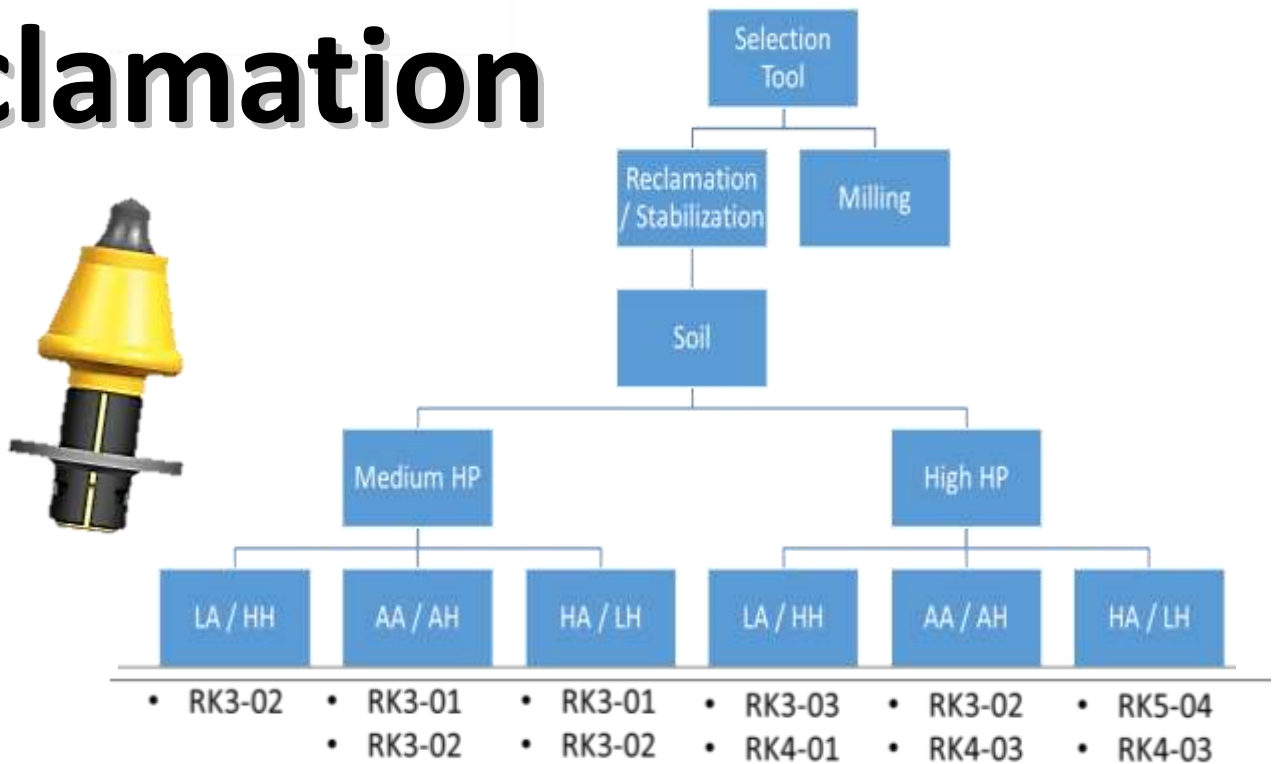
# Milling Asphalt







# Milling Concrete



# Reclamation Soil



# Troubleshooting

Problem	Possible Cause	Solution
 Poor Rotation	Worn toolholders	Replace worn holders
	Excess material build-up on tool	Increase water flow to drum
	Holders not properly aligned	Remove incorrect holders and correct positioning
	Excessive machine speed	Slow down machine
	Cutting too deep	Decrease cutting depth (make 2 or more passes)
 Excessive Steel Body Wear	Caused by highly abrasive material	Consider using a tip design with bigger start diameter
	High rotation speed	Reduce rotation speed (if possible)
		Consider using a heavier body tool
	Worn belts are not removing the material	Check and replace worn belt
 Extreme Carbide Tip Wear	Hard material (aggregate)	Consider using a larger carbide tip tool
	Heat build-up on tool	Increase coolant (water) to the drum
	High rotation speed	Reduce rotation speed (if possible)
	Cutting too deep	Decrease cutting depth (make 2 or more passes)
 Tip Fractures	Extremely hard material (aggregate)	Consider using a larger carbide tip tool
	Heat build-up on tool	Increase coolant (water) to the drum
	Poor rotation	Check for worn holders, excess material build-up on tool, etc.
		Consider doing a "warm-up" cut when starting
	Excessive machine speed	Slow down machine
	Using hard objects for tool installation	Use air hammer installation tool, rubber mallet or copper hammer