

# 9 STEPS TO GOOD HAUL ROADS:

Make your haul roads your greatest asset – instead of your greatest liability – by following these nine steps.



## 1. DESIGN THEM RIGHT

- Crowned straight sections
- Superelevated curves
- Safety berms
- Drainage ditches

## 2. ENSURE PROPER GRADE

- Ideal grade: between 8% & 10 %
- Rolling resistance: 2% or less

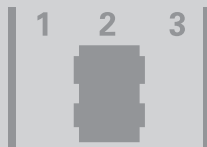


## 3. WATCH BENCH AND DUMP AREAS

- Smooth floor
- Clear debris
- Enable full acceleration
- Ensure trucks can enter at high speed & reverse to dump

## 4. PAY ATTENTION TO ROAD WIDTH

- 3X width of widest truck
- Tires clear of berms and ditches



## 5. USE PROPER ROAD BED MATERIALS

- Soft & wet surfaces increase rolling resistance:
- Slows production
  - Wears tires

## 6. KEEP THEM CLEAN

Free from:

- Rocks
- Debris
- Puddles
- Potholes
- Ruts
- Gullies
- Spillage

## 7. KEEP THEM WATERED

- Too much dust impacts safety & speed
- Too much water is hard on tires & slows trucks



## 8. EDUCATE OPERATORS

- Motor grader operators: follow proper road maintenance techniques
- Truck operators: watch loads, speeds, tire pressures and debris

## 9. MAKE THE INVESTMENT

- Just as important as moving material
- Impacts production



### THE BENEFITS

- Increase cycle times
- Improve safety
- Boost productivity
- Reduce maintenance
- Lower fuel costs
- Reduce tire damage

