

ORE TRAIN DUMPER OPERATIONS



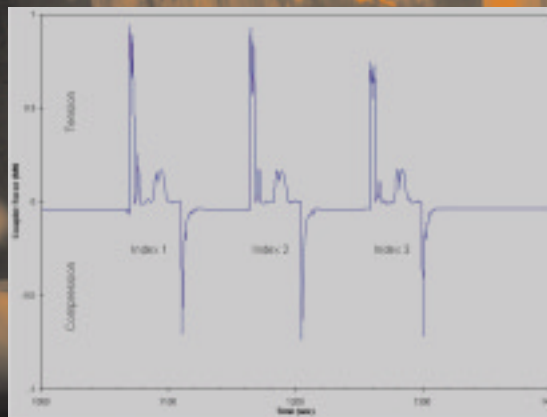
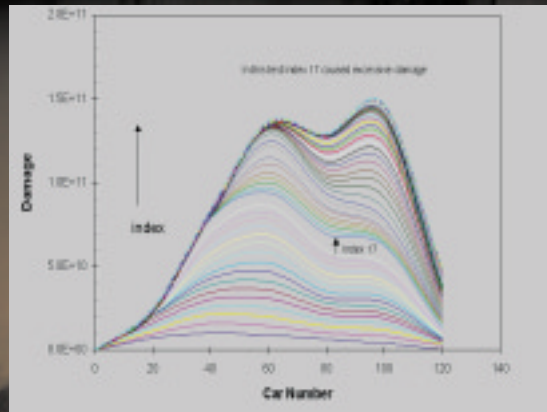
Current iron ore train average length: 4 locomotives plus 220 wagons (approx. 2300m).

Rotary 'dumpers' unload up to three ore cars at once.

Trains of up to 230 ore cars are indexed through the dumper automatically by a positioning arm which fits between ore cars.

High longitudinal coupler forces (up to 2MN) have been measured as the positioning arm moves the train.

By modifying positioning arm speed profile and drag braking, coupler damage and energy required to drive the positioner arm can both be minimised.



BENEFITS

- Reduced coupler failures
- Reduced ore car body stresses
- Increased coupler life
- Lower operating cost