Motornostix® crane monitoring service enables you to:

**Manage and improve**
- Crane availability
- Crane reliability

**Detect breakdowns at an early stage**
- Motor and gearbox failure
- Motor and shaft misalignment
- Geartooth wear and failure
- Loose couplings and mountings
- Bearing failure

**Measure crane performance**
- Hoist motor run-time

**Motornostix® crane monitoring service provides:**
- Online data logging with state-of-the-art Motornostix® condition monitoring system
- Measurement of vibration, temperature, motor current, stray flux and rotational speed
- Monitoring by Motornostix® which includes:
  - Identification and investigation of trend and spectral anomalies
  - Establishing base-line operating norms
  - Managing alerts and communicating to plant
  - Assisting in the identification and localising of impending problems
- Delivery of scheduled crane performance reports
**Typical fault conditions investigated by Motornostix®**

**Electrical conditions**
- Phase imbalance

**Mechanical conditions**
- Lubrication overheating
- Changes to motor loading conditions
- Bearing damage and faults
- Severe misalignment
- Mechanical looseness
- Imbalance
- Brake temperature

**Example datasets used by Motornostix® in analysis**

- Bearing surface damage
- Rotor imbalance
- Gear tooth wear
- Gear shaft misalignment
- Excessive loading
- Temperature trends
- Time domain correlation

**Performance Reporting by Motornostix®**

Performance reporting includes:
- Hoist motor run-time

**Typical reports**
- Daily run-time reports (hourly totals)
- Weekly run-time reports (daily totals)
A typical Motornostix® crane service monitors

- One hoist motor and gearbox
- One aux hoist and gearbox
- One cross-travel motor and gearbox
- Two long-travel motors and gearboxes
- Hoist motor performance

Additional measurement points can be customised for each site

Payback

The expected payback is achieved in:
- Reduction of crane-related production down-time
- Reduction of crane maintenance costs