

Risk Assessment

Methodology

- **Integrated approach**
 - Review past inspection reports, history of failures, repairs/modifications to the structure and operations
 - Detailed inspection of the structure (dragline)
- **Understanding the structural behaviour, root causes of failures and other possible failure modes**
 - Stress measurements and FE modelling
 - Identify low Fatigue category details and highly stressed members/areas
- **Assess current structural integrity and determine risk profile utilising a modified FMECA process**

Outcomes

- Identify detects/areas requiring immediate attention
- Identify actions required in the medium and long term to manage structural integrity and risk of failures cost effectively
- Conducted risk assessments of over 50 draglines
- Comprehensive Data Base of Failure History, FE modelling and analysis of over 65 draglines covering all types of draglines (BE1350, BE1370, BE1570, BE2570, BE2570WS, Marion 8050, Marion 8200, Marion 8750 and P&H9020)