GENERAL FACTSHEET

Asset mothballing

In the present economic climate, companies may be faced with a decision to mothball an asset.

When assets are mothballed it is normally done with a view to restarting operations at some point in the future. In this case it is vital to ensure that they will restart again with the minimal of issues and cost, so it is important that degradation of equipment is minimised.

Decisions about how the operation is shut down are important these should be made while the asset is operational. Several areas need to be considered when devising a strategy to maintain confidence to restart safely and economically.

- Resource needs to preserve and maintain preservation
- Understanding the likely timescale for re-start
- Determining the degree of preservation required for re-start or the sale of equipment
- Balancing the costs of preserving equipment vs the cost of remediating on re-start
- Identifying deterioration mechanisms that will affect the integrity of equipment during longer term periods of shutdown
- Understanding the practical steps that can be taken to avoid or reduce the effects of deterioration
- Identifying ongoing maintenance or preventive actions

- Understanding the steps required to re-establish the asset after the period of idleness
- The consequences of the plans changing e.g. a quicker start up, an extended mothballing period or a decision for full closure and demolition

What we offer
ABB have significant experience in supporting assets through a mothballing and restarting process. We can carry out a mothballing study to help define the most appropriate preparation and on-going preservation actions.

The starting point is to understand the desired outcomes of the mothballing programme, so we would want to establish;

- The envisaged duration of mothballing and the degree of certainty on the timescale
- How quickly operations would need to be re-established
- The scope of the mothballing - is it a full asset, particular systems or selected items only
- The study could cover a whole asset, (including all equipment, infrastructure and utilities) or a particular set of key items
Depending on the goals of the study we would then look to determine all or some of the following:

- The deterioration mechanisms that would impact equipment
- The preservation actions that could remove or reduce deterioration - both during decommissioning and the period of mothballing
- The probable impact of deterioration on the start up performance of the equipment
- The required re-commissioning actions
- The optimum balance of preservation actions versus increased risk or cost at start up
- The options and costs for environmental permits
- Appropriate security policies
- Previously recognised concerns that need to be included
- Possible interactions of the idle asset with the other production facilities, e.g. the support systems and utilities

The output of the study is a set of recommendations on how best to shutdown and preserve the assets, so as to achieve the defined objectives, including definitions of:

- The actions to be taken during decommissioning - including record keeping
- Written schemes of preservation for each part of asset
- The steps to re-commissioning activities / timescales
- Recommendations on how to maintain remaining live assets, identify any issues to remaining operation
- Recommended structural integrity and security considerations

When carrying out the study we would tailor the approach to meet specific programme objectives and needs. We would consider the physical plant, systems, and work practices. The work would involve interviews with key personnel and studying maintenance and inspection records.

Benefits
- Confidence that all potential risks and issues are identified and planned for
- Increased likelihood of successful start up
- Cost effective and risk based approach to preserving critical assets
- A step by step set of guides to preserving the equipment
- Preservation of the value of the asset

Why ABB?
ABB have conducted many multi-functional studies in many parts of the world and specialises in the oil, gas, petrochemical and life science sectors of process industry. We have a deep knowledge of global standards and environmental legislation, built up through our involvement in professional institutions.

Our experienced consultants have an in-depth understanding of ageing plant and equipment, most of our engineers and consultants have an operational background and use their experience to make pragmatic technical judgements. This approach ensures cost effective solutions that can be practically implemented.