



A phoenix rises from the ashes

When fire forced the closure of the Australian Briquette Production Facility at Morwell in Victoria's Latrobe Valley, the future for the plant and its workforce looked bleak.

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Prior to the fire production costs were high and the plant was losing millions of dollars. The estimated rebuilding cost was between \$5 – 10 million. With these handicaps it seemed the only option was to close the facility permanently.

After submitting a low-cost tender that proposed a workplace revolution at the plant, Mecrus won the rebuilding contract. Within five weeks the Mecrus team had the plant back in production at a total refurbishment spend of just \$2 million dollars.

The Mecrus team had no previous briquette production experience. Instead they drew on their expertise in progressive asset management practices and a history of retraining and re-energising management and workforces.

Changing practices, challenging beliefs

Recommencing production was only the beginning. The Australian Briquette Production Facility had been operating at Morwell for more than 50 years. In that time updates to equipment, procedures and infrastructure had been both random and infrequent. Some practices and equipment dated back almost a hundred years.

To ensure the rebuilding of the briquette plant delivered successful operating outcomes, the Mecrus team began by challenging the norms of the previous operation. Knowing that process improvement is as much about changing attitudes as it is about the mechanics, the team began methodically questioning established work practices and long-held beliefs.

By conducting a 'value chain analysis' on inputs and outputs Mecrus was able to demonstrate that some practices could be refined or removed without any impact on production output. The analysis challenged the effectiveness of an ingrained, rigid workforce culture.

Onsite, the Mecrus philosophy was: "if it is a safe, legal and an efficient use of resources, then do it". The Mecrus approach not only changed the employee culture but that of suppliers and customers as well, creating a totally new work environment.

In the new workplace all staff were given clear roles and responsibilities, coupled with appropriate levels of authority and accountability. They were included in the integration of site communication systems that resulted in immediate and valuable two way feedback between management and

the shop floor. Mecrus initiated recognition of performance and an equal stakeholder return for all employees. This was achieved by the introduction of flexible work procedures and arrangements. In fact, by refining roles to include additional responsibility for both operation and maintenance of the plant, employees were able to control and influence their own destiny. Operationally, this removed the issue of demarcation and was supported by 'a single union' agreement.

Making a job into a career

This approach offered all employees a clear career path. Opportunities for advancement are now based on experience, skills attained and a demonstrated positive attitude to work. By placing a value on employees' previous experience and incorporating lessons learned elsewhere Mecrus was able to encourage the introduction of new processes and ideas and a capacity to question the norm and challenge routine. By blending new and established employees there was a new impetus to make changes quickly, which challenged the thinking of the experienced employees.

Improving consistency, quality and time

The overall improvements were generated by improving the productivity of people by 100%. The same net production was achieved with fewer than 50% of the work force. This doubled the productivity of Operations and Maintenance (O&M) related inputs. By reducing costs by 42% O&M was halved. Utilities remained even. Raw coal was reduced by 20% and coal supply was reduced by 66%.

Mecrus raised the profile of performance feedback by simplifying test procedures. Operators now test their own outcomes. This eliminates all of the traditionally accepted bottlenecks and unnecessary hold points.

Process improvement

The entire briquette manufacturing process was reduced, with each step being evaluated to ascertain where value could be added. By doing this, 25% of the original process was bypassed. For example, the cooling house was removed and the raw coal feed bunkering system was simplified. This step was followed by significant plant modifications that removed a further 15% of the process, including the removal of the old launders. In all, the total manufacturing process was fine-tuned to overcome myriad, minor plant issues.

Industrial harmony

During this complex and challenging process, Mecrus received full union support. The company achieved all of its outcomes without any industrial conflict while working in a heavily industrialised environment.



Comparison between pre and post operations indicators in \$/tonne as follows:

| Cost per tonne (\$) | Labour O&M | Utilities Power, Water & Steam | Raw Materials Coal | Coal Handling | Total |
|---------------------|------------|--------------------------------|--------------------|---------------|-------|
| Pre | 60 | 6 | 20 | 9 | 95 |
| Post | 30 | 6 | 16 | 3 | 55 |