

Director and Principal Designer - Helmut Mayer B.E. (Aerospace Hons 1) B.Sc. (Psychology)

UNSW RPEQ 6516



Key Experiences

Helmut is one of the company's Principal Designers and has been with HMIDE since 1986.

He has been responsible for the design, calculation and detailing of ship loaders, unloaders, container and other cranes, bucket wheel and blade reclaimers, stackers and spreaders.

He has been involved in the supervision of manufacture, the erection of equipment and the inspection and modification of existing machines.

An important component of Helmut's work has involved the inspection of existing machines to provide advise on a broad range of issues such as structural integrity, accidental damage and its repair, possibility of upgrading, maintenance inspections and development of maintenance strategies.

He has also been acting as the commercial manager of the company and has been responsible for the smooth running of the engineering and administrative processes, as well as environmental analysis and strategic development. With his broad range of skills, and a strong vision, Helmut guides the company as its Executive director.

Areas of Particular Expertise

- Concept design for yard machines and ship loaders.
- Design audits for older machines for compliance with the new code AS4324.1-1995.
- Structural and mechanical re calculation of existing machines for upgrades.
- Analysis for the repair of accidental damage or general wear and tear.
- Development of Specification documentation.
- Commissioning
- Design audits of new machines.
- Safety and maintenance, with repair recommendations.
- Assessment and Management of Design Risk.

Professional Experience

1990 - Present

Selection of Projects

- Tanner Coal Facility Ship loaders design, 1992 - 4000 tph and 2004 - 6000tph to cater for cape sized vessels.
- Hammersley Iron Bucket Wheel Relcaimer - structural integrity check and evaluation of machine operation to improve machine throughput
- Cannington Ship loader 1997 - 12000 tph, to cater for 10,000 to 45,000 DWT vessels, mineral sand and gravel
- Bengalla Portal Reclaimer, 1998 - ship loader structural and Mechanical audit
- Kalgoorlie ship loader, 1998 - structural audit
- Queensland Cement Limit - structural review of ship loader
- Walsh Point Stacker, Bucket Wheel Relciamer, ship loader - development of maintenance and auditing strategy for the proposed facility
- Ladle Cranes for Port Kembla Copper, 1998 - two overhead travelling cranes used for lifting molten metal
- 3.5T Jibbing, slewing and travelling Building Maintenance Unit Design. 1999
- Onslow Salt, 2000 - track mounted bucket elevator reclaimer design.
- Engineering Input for Cape Lambert Stacker Dismantling and Weip Ship loader dismantling, 2001.