



GETTING THE MOST OUT OF MANUFACTURING P

A lifetime of experience has given Walter Ebeling, managing director of PMSA, a CMA member, unmatched insight into factors that turn mediocre businesses in the industry into successful ones.

All too often Ebeling's experience has shown that companies in the industry fail or stagnate at the point where they are no longer competitive, or where their equipment cannot keep up with demand or are unproductive due to breakages, downtime or inefficient operation. Either way, these companies usually fail to realise that change is required and may continue living on the breadline for years before ultimately succumbing.

For this reason, he has become passionate about helping manufacturers recognise these crossroads and adapt their business practices in order to be competitive and flourish. By concentrating on the optimisation of processes,

upgrades of key components of machines and investment in appropriate technologies, many of these businesses are able to turn the corner and embark on a new growth path.

Production boost

"In many instances, businesses that own good-quality equipment and are willing to change with the times are able to



(Above): PA MSA RE1400 high-performance brick-making plant (Van Dyk Stene, Western Cape).

upgrade existing plants with technology that allows them to reduce cement content of their products, while maintaining strengths. New processes also allow them to cure faster and have products ready to deliver in as little as 48 hours after manufacturing.

"Because of superior processes, they're able to produce more rapidly, with faster curing of concrete and by optimising the complete manufacturing process, the product consistency is more uniform. As a result, the mix designs can be optimised as there is no need to add extra cement to make provision for high product strength variation. This also means that products can be moved to the sales stock yard sooner, which clears the way for increased production," says Eberling.

"And it doesn't cost an arm and a leg to implement upgrades that can completely transform an old plant into a modern production line. If the machines are quality ones from any of the rec-



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ognised manufacturers in Europe, the USA, SA or similar quality-orientated companies, then we can do a lot to optimise them.”

Big benefits

He explains that through relatively simple modifications, such as the installation of proportional hydraulic valves, appropriate sensors and modern SCADA control systems, machines can make faster and more precise movements that can shave several seconds off each cycle. This alone can improve production by thousands of units per day. In addition, time is saved on maintenance and repairs due to the smoother operation of the equipment.

In terms of productivity, there are many other parts that can also improve the quality and quantity produced. An example of PMSA's ongoing product development is the new UltraVibe long-life sealed vibrators, with high vibration force and no maintenance, reduced servicing

(Far left): PMSA's fully automated packer-head for high-productivity plants.

(Left): A PMSA VB4X high-performance brick-making plant (Dukathole Brickworks, Eastern Cape).

and downtime. These vibrators can be supplied in either a two-vibrator stop/start configuration or in a four-motor continuously running configuration with fully adjustable speed and force of the vibration for the manufacture of any kind of concrete product, from a thin paver to a solid kerb and everything in between.

“These and similar changes to production lines will boost production and quality significantly. They will also right the wrongs of the past where extra cement, demoulding agents, additives and longer curing times may have been implemented to make up for shortfalls in the production process. By optimising and modernising equipment, all this can be eliminated and the cost per unit can be driven down significantly, quality will increase, curing times will be reduced and your products will be competitive,” says Eberling.

Profitable path

He adds that even 20- or 30-year-old machines which are still in good condition can be upgraded to a high standard and produce consistent quality. “If they're of inferior quality, haven't been well looked after or simply aren't worth upgrading, we can supply customers with brand-new PMSA machines, where required.

“We also fully understand that not all companies are in a position to buy one of our fully automated VB4X or RE1400 plants, but that doesn't mean they shouldn't be in a position to compete with the best producers in terms of consistency and quality. Whether we supply any of our brick, block, kerbstone or roof tile manufacturing machines or optimise and upgrade customers' existing plants, they can be assured of our dedication to helping them produce the best possible products in a cost-effective and efficient manner,” he says.


“As many as 90% of these businesses are able to turn the corner and embark on a new growth path.”

In addition to hardware for the machines, retrofitted control systems are also available to suit customers' needs. Where possible, web interfaces even make it viable for managers to monitor and control progress from remote locations. PMSA's technical staff also have the ability to dial into the operation to fault-find or tweak a SCADA system.

Exemplary track record

Considering that PMSA has been manufacturing world-beating concrete manufacturing equipment right here in SA for more than 40 years, there is little need to look elsewhere when upgrading a plant.

The company's long-term approach of assisting manufacturers with upgrades on most brands of machines can save them a small fortune in replacement costs, while dramatically improving profitability. Furthermore, by elevating the importance of serving the industry above merely making sales of new machines, the company is demonstrating its long-term approach of growing with its customers' businesses.

“In time, most companies come to value the quality and consistent output of our machines, which last for decades and keep delivering when others can't. Also, to have local support at hand at any time is invaluable, rather than relying on overseas experts to remotely try to set up machines or fly to SA at great expense,” says Eberling. 



(Above): PMSA owners Walter and Robert Eberling.