The costs of Maintenance / Downtime.

Downtime. A Noun defined as 'An interval during which a machine is not productive, as during repair, malfunction, maintenance'.

For any company, Downtime might also be defined as 'erosion of profit margin.' Industry analysts estimates that downtime costs factories at least 5 percent of their productive capacity, with many losing as much as 20 percent of their productivity.

But what does that mean? If you visualise money not product coming out of the end of a product line, each individual product represents some contribution to profit. True, it may be only pennies but it adds up.

As an example, if a food packaging line is running a product contributing 7 pence each at 350 parts per minute, every minute it is stopped will cost £24.50. Ten minutes per day results in a loss of £61,250 per year in lost profit. Ten minutes per day also results in the loss of more than 40 hours of production or 1 week over the course of a year.

A recent study by Oracle Corporation estimates that equipment downtime can cost large businesses an average of £68,761 per hour. Oracle shows that for a large company, reclaiming just one percent of downtime can be worth as much as £5,059,753 per year. Oracle estimates that even an average sized company has the opportunity to be close to £687,616 per year, both significant opportunities when every pound of profit is vital.

Unplanned downtime is estimated to cost $50 billion annually. Equipment failure is the cause of 42 percent of this unplanned downtime. These are all big numbers, but what are the implications of this downtime?

E support@gillsc.com
T +44 (0)1590 613900

- The cost of idle labour, plus the potential cost of overtime hours to make up for lost output.
- Repair costs, replacement costs or expenses for specialists to repair the machinery.
- Higher production costs from bottlenecks, plus products in other stages in the manufacturing process can be slowed down or potentially halted.
- Scrap expenses from wasted material due to breakdown. Costs could be even more significant if the machine produced inaccurate products over a period of time.
- Costs of temporary fixes until a permanent solution is found and implemented-possibly requiring another period of shutdown.
- Parts and delivery costs.
- Late delivery charges for delayed product shipments.
- The cost of the company's' reputation. This may not be so easy to measure in straight financial figures, but the cost will become quantifiable if the downtime results in the loss of an order or customer.

There is one other consequence of downtime – employee safety. All manufacturers take care to provide a safe working environment, but one study found that up to 30 percent of all manufacturing deaths occur during maintenance activity. A reduction in downtime and maintenance interventions could also contribute to improved shop floor safety.