

# Motor Management – The Way Forward?

**Gary Downes, Managing Director of Solutions in I.T. Ltd. looks at how motor management can help customers, when integrated with preventative maintenance and the expertise of an AEMT repair facility, plus a modern computer system.**

Having attended many AEMT meetings over the last 10 years, it is a well-accepted fact that AEMT members consider the electro-mechanical repair and service industry to be a largely “reactive” one. If your customers have breakdowns or other repair problems, then you have lots of work to do, and conversely, if your customers have few problems, then your business is quiet. The ‘peaks’ and ‘troughs’ of your business are therefore expected, and you generally hope that you have more peaks and fewer troughs in order to make money and survive, and indeed most of you have done so successfully for many, many years!

Well, while this undoubtedly is a fact of your business, there is more that can be done to ensure that your level of business stays high and that your customer is kept both happy and loyal. Motor Management can certainly be part of this, as it encourages preventative maintenance as opposed to fixing failed machines – put simply, you maintain machines so that they don’t breakdown as

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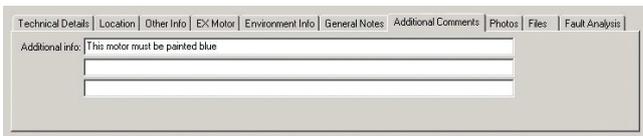
often! If peaks and troughs are an accepted part of business, then “prevention is better than cure” is even more widely understood - whether it is having an inoculation before travelling abroad, improving your quality systems so that less mistakes are made that need correction, training your staff so that they do a better job first time, or maintaining a machine before it breaks down – it’s why we all have our cars serviced after all? So, prevention is a fairly easy concept to understand and to sell to your customer. How can we bring this prevention concept into the world of electro-mechanical repair and what are the benefits in doing so?

Motor Management is about exactly that, managing your customers’ motors for them. You log each motor in full detail storing the technical details of the machine, the location, the application specifics [ATEX, DSEAR, Ex application, etc.], environmental

information, and of course a photo [or many photo’s] as a “picture says a thousand words” is another accepted truism. Once you have the information logged in detail, you need somewhere to store the information where it is easily retrieved when you need it – some kind of database system is ideal – one that allows you to store, retrieve and enquire on it in a fast and flexible way.

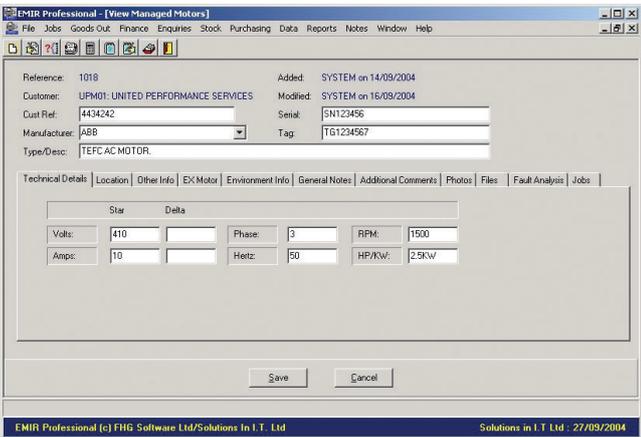
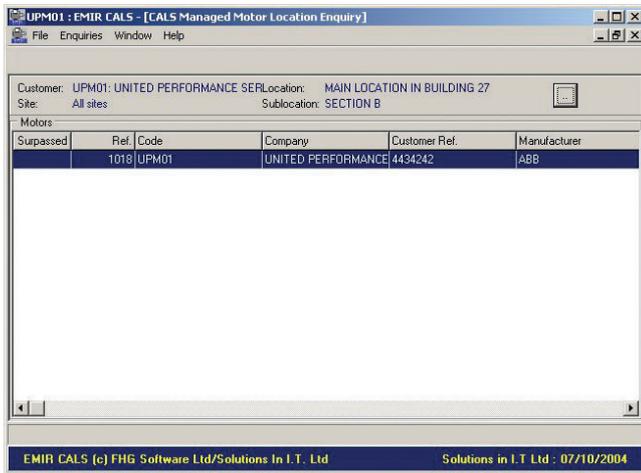


Having logged the information, you then need to schedule maintenance visits with the customer to ensure that the motor/machine will continue to run smoothly. Remember, we are trying to avoid downtime for the customer by preventing failure. This is where your expertise comes in handy, as you can tell the customer how often visits should be made, how often components need replacing [e.g. bearings], what tests you will use to see that all is running well [thermal imaging, balancing, etc] and basically how you will promise the customer to minimise down-time and lost production, inconvenience and, of course, the unexpected costs of an emergency repair/replacement.



Of course it is very unlikely, if not impossible, to eliminate motor/machine breakdown completely, so another vital part of motor management is ensuring that the customer has sufficient spare motors/machines to cope with an unexpected breakdown. Again, your experience will help the customer to identify where they are ‘exposed’ in terms of available motor cover, and you can obviously supply spare motors to ensure their needs are covered. Also, you will be able to show, through your expertise, how one spare could possibly be used to cover several different motor applications by adapting it [adding a

brake, changing mounting, re-configuring, etc.] and this will again show the customer how valuable your expertise is in minimising their costs and keeping their production/business running.

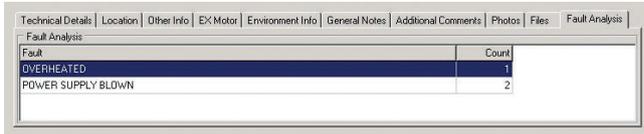


So, we now have a detailed log of motors, we have regular preventative maintenance visits planned, and we have ensured that spare motors [and other machines] are available where possible so that if we do have a motor failure then a 'quick' swap can be done to minimise downtime, and don't forget you can then still supply another spare or fix the broken one as part of the motor management process.

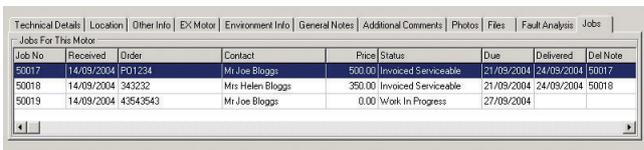
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vital that a trick isn't missed here when it comes to providing vital additional information to customers. In particular, you should be analysing the faults recorded against a particular motor [track each motor uniquely of course!] and analysing whether the faults are recurring in nature, or are common across a location, or if there are any other trends that point to faults that need to be fixed outside of the motor/machine itself.



From the customer's point of view, their main concerns of downtime and unexpected or unplanned costly repairs are now reduced, their motors are now managed by experts who are planning activity and providing good information to improve the situation even further, and all of this prevention creates a "nice warm feeling" for the customer, and with it an ongoing and fruitful business relationship. The only down-side for the customer is that they may lose sight of the full details behind the motor management scheme as you will hold the information on your own site and in your own system, and if they want this information, they have to wait for you to provide it – it isn't instantly available to them.



This is where a fully integrated system, as provided within EMIR, comes into its own. EMIR will not only provide a motor management database to keep track of motors, allow you to schedule maintenance jobs against each motor, track faults, provide details of how many Spares there are for Active motors [and record details when one motor surpasses another], but will also allow, via the EMIR CALS system, the customer to access the information for themselves across the Internet [you will need a Windows server to handle this side of things though]. While the thought of the customer accessing this information directly may cause some concern for you, we have ensured that no sensitive 'price' information is available and that customers' can only see their own motor information, so you have nothing to worry about!

So it's a real "Win-Win" situation for all concerned. You get regular guaranteed work, and virtual sole supply into the customer [you own the data, and knowledge is power after all!] and the customer gets to reduce downtime and the costs and inconvenience associated with it. No wonder Motor Management [and any other machine management for that matter] is growing so fast!

**Solutions-in-IT website is on [www.solutionsinit.com](http://www.solutionsinit.com)**