



Do the parts talk?

- ◆ Having worked for a number of years in a large group of Companies and having had an exposure to different kinds of machines, the Group Director Manufacturing came to the conclusion that parts in a machine also talk. While they are in the warehouse, they are rather quiet. Their appearance and physical properties only can tell us a little bit about them. Whether they are fit for the job, whether they can handle the rigors of continuous operations inside the machine and whether they can stand the heat (friction etc) can only be at best left to conjecture and speculation.
- ◆ **Parts in the machine**
 - ◆ Once the parts are put in the machine following a breakdown or an act of preventive maintenance, they come into their own. They start talking. Their true color becomes exposed. Whether they are genuine or otherwise becomes evident through their own conduct or their interaction with the other parts in the same machine. Yes, the parts start talking!
 - ◆ If they are genuine, they adjust themselves well with the rest of the machine and the machine finds comfort in their company and reaches optimum performance. On the contrary, if they are of No 2 origin, they start misbehaving. They start hurting others and hurting themselves too in the process. The overall outcome is that the whole machine starts to suffer. The performance of the machine drops down and the machine starts falling sick at regular intervals and ultimately refuses to work.
 - ◆ The non-genuine parts not only fail themselves but result in consequential failure of other parts too, sometimes vital and much more expensive ones. The result is premature failure of the machine and more importantly stoppage of the whole production line, wasted hours of the work force, uncalled for delays in supplying customer orders, lost orders, lost customers and lost business. Therefore, what started as an apparently harmless exercise of saving a little money in the procurement of parts turns out into a tragedy.
- ◆ **Even genuine parts change their voice over time**
 - ◆ Just as a good salesperson listens to the voice of the customer, a good engineer or a technician always tries to listen to the voice of the parts. Parts continually talk. When they are healthy, fit and in good company and clean ambience, they sound cheery and chirpy. As they work (run), they need cleaning, lubrication, health examination etc. Lack of attention starts to show on the voice of parts. They start to squeak, screech, whine and weep. A good engineer listens to these changes in the voice. He does not let these changes happen in the first place but in case the signs show up he takes immediate corrective actions until their voice becomes normal again.
- ◆ **Listen to their voice in a generator**
 - ◆ In case of a generator, an engineer must keep talking to the parts. He should listen to their voice. He may notice unusual vibrations, an abnormal sound, a change in color of the engine exhaust, increased lube oil consumption, higher fuel consumption, low oil pressures, high oil and coolant temperatures, traces of metal in the lube oil, excessive blow by etc. These are all symptoms and ways parts express themselves.
 - ◆ The golden rule is to replace old parts with genuine parts only, provide machine regular cleaning and lubrication, change filters regularly, ensure handling by authorized professionals only and continually listen to the voice of the parts just as doctor listens to his patient and looks for changes. The parts will outlast and outlive your expectations. They will do even better than the manufacturer recommendations.
 - ◆ Listen to the voice of the parts and change them only if they warrant a change. There is no need for premature changes. This is called condition-based maintenance. Be assured your generator will last 20,000 hours or more before a major surgery (overhaul), and will then again be ready to go for a similar length of time.