

Take advantage of controlled bolting techniques

For all operations, controlled bolting is highly important. It ensures that the tightening and loosening of bolts are done in a controlled manner. If you rush through this process, then you could risk complications further down the line. If you correctly use a controlled bolting technique, then it can help you meet tighter deadlines and also has a number of benefits and advantages.

Together, with [hydraulic torque wrench](#) specialists, HTL Group, we cover the advantages of controlled bolting techniques:

Reduces time

Because controlled bolting has an automated set-up, there's no heavy loading and manual effort required. This means that fatigue won't set in, which in turn would lower productivity levels. Not only is the manual labour a lot more strenuous on workers, it's also a lot more time consuming for a human to do this task.

Safety

Let's not forget the safety benefits. The controlled bolting equipment in this scenario can take away any unsafe actions of manual uncontrolled tightening. This is because the equipment requires highly-skilled and trained operators who follow specific procedures.

Consistency

When dealing with joints which have gaskets, consistency is crucial. This is because an even and consistent compression is required so there's no damage and so that the gasket can work effectively.

Human error is one of most common cause of error in engineering. This in itself would mean the task could take a lot longer. But, controlled bolting eliminates this risk. With this bolting technique, you can feel assured that you will be correctly operating every time. This is possible thanks to skilled operators using calibrated and tested equipment and follow specific procedures.

Accurate calculations can also be provided by controlled bolting, which can help give the operator the required tool setting so that usability is easier.

It's essential to bare in mind before you undergo any tightening procedures, that give the equipment a full inspection. It's also imperative to check the lubrication of any nuts and bolts and to make sure they're flush against the flange. Be sure to check for uneven bolt tensioning as this can result in bolts being overloaded or too loose, a gasket leakage, and less than 100% tensioning.

Even though controlled bolting is more consistent, time-effective and safe, you must ensure that you're correctly trained in the method used.

Sources

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