

Friction coefficient determination

In the tightening laboratory of Atlas Copco Tools



Atlas Copco

Find the right manufacturer for your tightening joints

Normally, only 10 percent of the torque applied to a joint is used for the clamping force. The remaining 90 percent flows into friction.

Depending on friction factors, the preload force can be undesirably high or low. To be able to set the optimum torque, it is therefore essential to know the friction factors of your screws. The friction coefficient determination gives you information about the friction factors of your screws and enables you to optimize your tightening quality.

In our tightening laboratory, we not only measure the preload force at analysis torque and determine the **total friction coefficient** of the bolted joint. Thanks to special measuring technology, we are also able to determine the **friction coefficient in the head or nut support** as well as the **thread friction coefficient**. This procedure enables a particularly precise analysis of the friction factors and provides information about the quality of your bolted joint.

There are two different options for the friction coefficient determination in our tightening laboratory:

1. The analysis takes place under standardized conditions in accordance with **DIN EN ISO 16047**. This procedure is particularly suitable for evaluating suppliers with regard to their quality, for example.
2. Components from your production are used.

When using the second option, you can, among other things, apply the results obtained directly to your production.