

CMC Driver for Open Protocol Torque Tools

The CMC Driver for Open Protocol Torque Tools provides LabVIEW programming and simulation support for torque tools that can communicate over Open Protocol. It is part of the CMC Driver Framework Torque Tools product family and includes a license to the CMC Open Protocol API.



Automate Your Assembly Process

Simulate When Hardware is not Available

Customize Your Torque Applications

Swap Tools Whenever Necessary

No Changes To Code for New Tools

FUNCTIONALITY

- ✓ Torque Tool Simulation
- ✓ Functional Example
- ✓ Communication Start/Stop
- ✓ Communication Keep-Alive
- ✓ Enable/Disable Tool
- ✓ Subscribe to Tightening Results
- ✓ Subscribe to Linking Group Info
- ✓ IO Device Status
- ✓ Application Selection
- ✓ Multi-Spindle Results
- ✓ Error Reporting
- ✓ Many Related Functions

SUPPORTED HARDWARE

Any Torque Tool that supports Open Protocol: Atlas Copco Industrial Technique AB 9836441501 1.4 rev6.

TESTED HARDWARE

- ✓ Cleco mPro mPro400GC
- ✓ Cleco mPro mPro400GC(D)
- ✓ Desoutter CVI3 Vision
- ✓ Atlas Copco Power Focus 6000



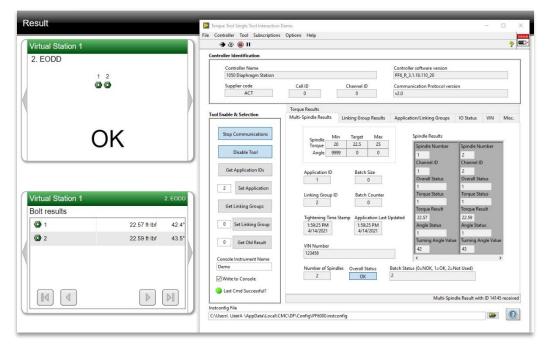


Figure 1. CMC Torque Tools Shipping Example Side-by-Side with Atlas Copco Virtual Station Results.

Full-Featured Example

Use the included full-featured, open source example to get up and running fast. Create your instrument configuration and immediately begin subscribing to torque results. View the code to get immediate insight into how to implement the same functionality in your own programs.

Torque Tools Simulation

The CMC Driver for Open Protocol Torque Tools includes a generic torque tool simulator that can be used to test and verify code without hardware connected. This enables you to develop while waiting for hardware to become available.

- Generates randomized torque results within your parameters
- Multi-spindle and standard torque results
- · Application selection and retrieval
- Enable/disable tool
- Subscribe/unsubscribe to torque results
- Set/get linking groups
- Error condition reporting (i.e. attempting to select an Application that does not exist, etc.)
- View raw simulated communication strings



SUPPORTED MIDs

MID Name	MID#	Rev
Communication Start	0001	1
Communication Start	0002	1,2,3
Acknowledge		
Communication Stop	0003	1
Command Error	0004	1
Command Accepted	0005	1
·		
Application Number	0010	1
Upload Request		
Application Numbers	0011	1
Upload Reply		
Application "Selected"	0014	1
Subscribe		
Application Selected	0015	1
Application Selected	0016	1
Acknowledge		
Application "Selected"	0017	1
Unsubscribe		
Select Application	0018	1
Linking Group Numbers	0030	1
Upload Request		
Linking Group Numbers	0031	1,2
Upload Reply		
Linking Group Data	0032	1
Upload Request		
Linking Group Data	0033	1,2,3
Upload Reply		
Linking Group	0034	1
Info/Selected Subscribe		
Linking Group/Selected	0035	1
Info		
Linking Group	0036	1
Info/Selected		
Acknowledge		
Linking Group	0037	1
Info/Selected		
Unsubscribe		
Select Linking Group	0038	1,2
Linking Group Restart	0039	1,2

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