

Most Data Center Projects have Thousands of QAQC Documents Required for Electrical & Mechanical

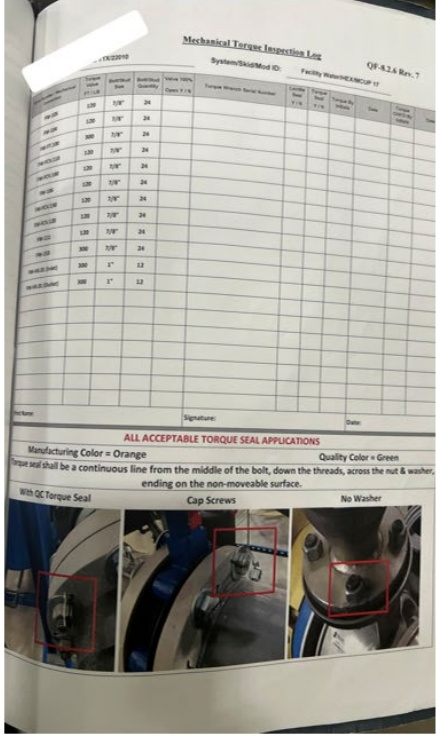
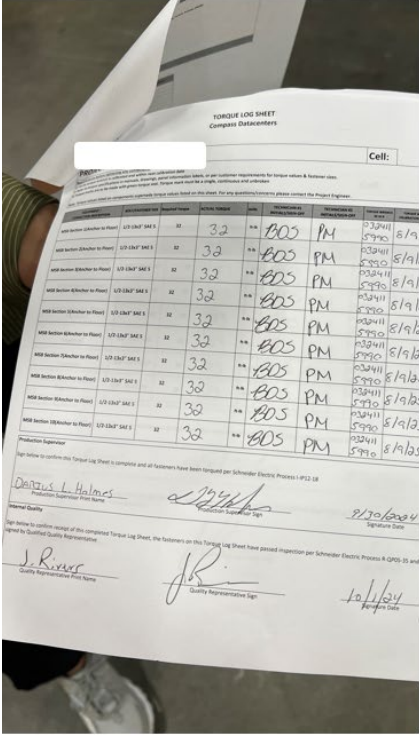


- Site Acceptance Reports (Receipt)
- Cable Test (Meg Report)
- Electrical Torque Reports (Torque Log)
- Mechanical Torque Reports (Torque Log)

Offsite & Onsite Construction



QAQC Documentation Must Be Standardized & Accurate, First Time / Every Time



Current Industry QAQC Standard – People, Paper, Poor Visibility

- Integrator Production & QAQC
- EC & MC Foreman QC & QA Team
- GC MEP Manager & Oversight
- Owner Rep
- 3rd Party Inspectors



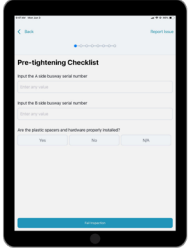
Cumulus Enables Faster Time to Productivity



Project SOP/MOP adherence is ensured, and immediate quality feedback is provided to the worker.

QA/QC Documentation is Automatically Created as Work is Completed

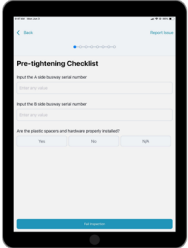
Checklist Questions



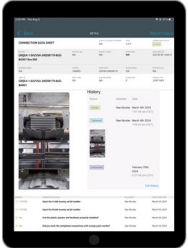
Work Activities



QA/QC Checks



Final Documentation



Example of Cumulus Automated Torque Report



CONNECTION DATA SHEET

CLIENT DOCUMENT NUMBER
N/A

PAGE
1 of 2

CONNECTION STATUS
QcPass

RECORD 2ERC-RSB-05 Rev 000	PROJECT NO. N/A	PROJECT NAME N/A	WORK PACK N/A	DATE CREATED 2025-03-06 21:06:42
--------------------------------------	--------------------	---------------------	-------------------------	-------------------------------------

DRAWING NAME N/A	SYSTEM 2ERC	SUBSYSTEM RSB	WORK ORDER N/A	TEST PACK NO. N/A
---------------------	----------------	------------------	-------------------	----------------------

JOINT ID 2ERC-RSB-05	PIPE CLASS N/A	FLANGE RATING N/A	FLANGE SIZE 1/2"	FLANGE TYPE RSB
--------------------------------	-------------------	----------------------	---------------------	--------------------

FLANGE MATERIAL N/A	BOLT MATERIAL Grade 5	NUMBER OF BOLTS 2	BOLT STUD SIZE 1/2"	BOLT LENGTH 2 "	NUT MATERIAL Grade 5
------------------------	--------------------------	----------------------	------------------------	--------------------	-------------------------

GASKET TYPE N/A	LUBRICANT N/A
--------------------	------------------

TIGHTENING METHOD	TOOL DESCRIPTION	SERIAL NUMBER	CALIBRATION DUE DATE
<input checked="" type="checkbox"/> MANUAL	Micro 135 N-m	0524102911	February 26th 2026
<input type="checkbox"/> HYDRAULIC			
<input type="checkbox"/> TENSIONING			

REQUIRED TORQUE VALUE 50.0 lbf-ft	PHASE A RANGE 50.2–51.2 lbf-ft	PHASE B RANGE 51.4–53.3 lbf-ft	PHASE C RANGE 50.6–52.8 lbf-ft	PHASE N RANGE 51.1–51.6 lbf-ft
	PHASE G RANGE 23.4–24.0 lbf-ft			

ANSWER	VERIFICATION CHECKS	FULL NAME	DATE COMPLETED
✔ Yes	Is the correct lug and termination hardware being used?	Manuel Mendoza	March 06, 2025
✔ Yes	Are washers and bellville oriented in the correct direction?	Manuel Mendoza	March 06, 2025
✔ No	Is there any damage to the equipment or missing material?	Manuel Mendoza	March 06, 2025
✔ Yes	Is the termination area all clean?	Manuel Mendoza	March 06, 2025
✔ Yes	Has torque seal been applied?	Manuel Mendoza	March 06, 2025
✔ Yes	Has labels been put in place?	Manuel Mendoza	March 06, 2025
✔ Yes	Is the torque seal properly applied?	jesse young young	March 06, 2025
✔ Yes	Is the proper hardware used?	jesse young young	March 06, 2025

WORKER Manuel Mendoza	COMMENTS N/A	DATE APPROVED March 6th 2025
QC ENGINEER jesse young young	COMMENTS N/A	DATE APPROVED March 6th 2025
QA ENGINEER (Optional) N/A	COMMENTS N/A	DATE APPROVED N/A



COMMENT
2025-03-06 21:06



COMMENT
2025-03-06 21:06

Business Value of Using Cumulus



- **Reduce Human Error / Arc Flash Events**
- **Improve Transparency & Speed of Delivery**
- **De-risk the Project Schedule**
- **Standardize & Automate QA/QC Processes and Reporting Across All Trade Partners**
- **Improve Worker Productivity with Automated Task Guidance**
- **Get Detailed Progress Data in Real-Time**

Risk Compression: Projects move from hundreds of unresolved ambiguities to a handful of clearly defined items.



Risk Becomes Visible

Speed of Delivery Realized

Less Surprises in Commissioning

Less People Required Onsite



Why this Matters... In Cumulus Customer's Words



“Cumulus improves the time to productivity of my new craft in the field.”

“We lose days chasing torque logs at turnover—this makes that go away.”

“Cumulus removes the human error... removes the pencil whipping.”

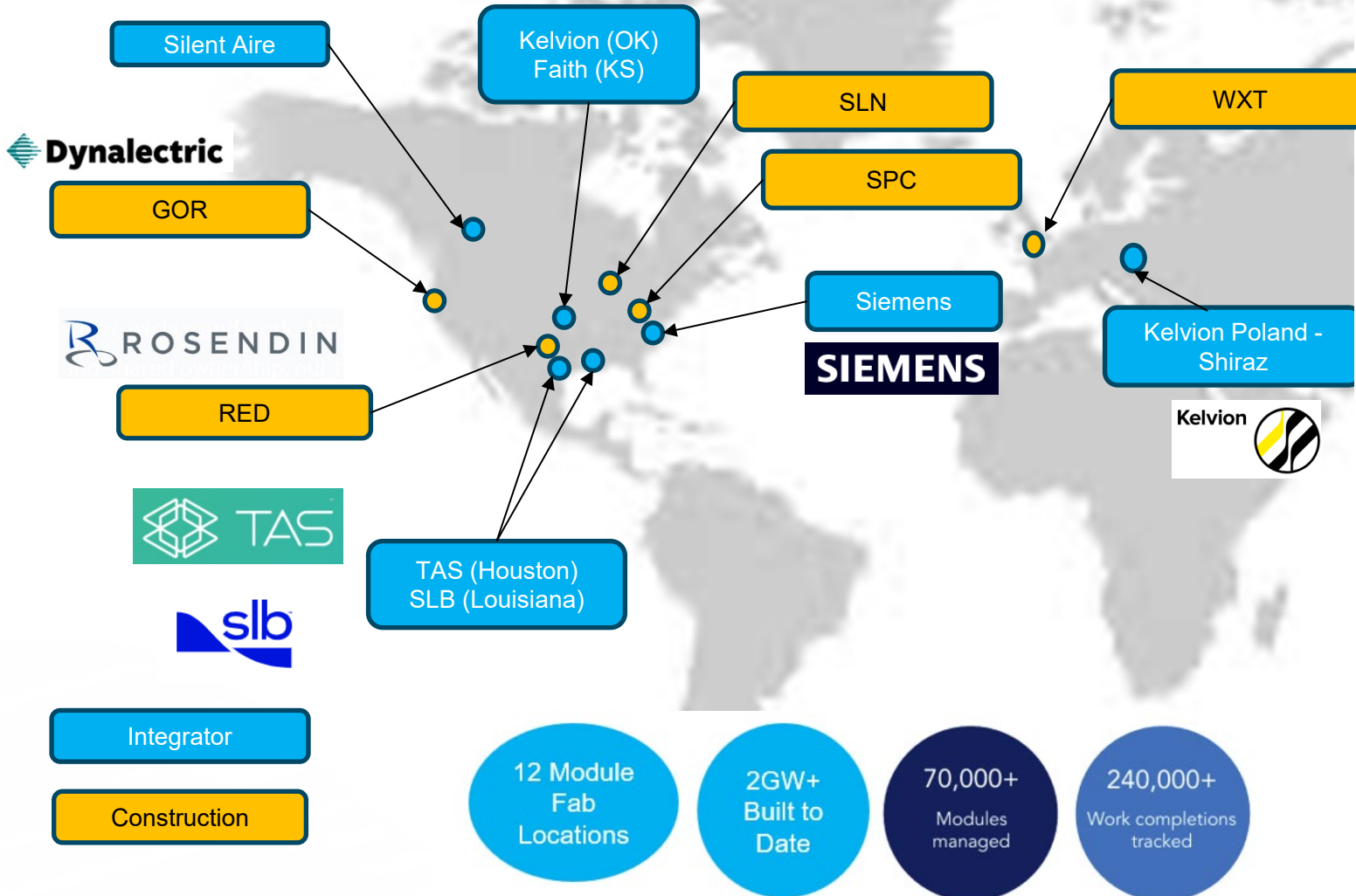
“Cumulus improves my life. I’m no longer sitting in the office after hours, filling out forms and paperwork. I can go to my kid’s soccer games now.”

“Cumulus helps me forecast the exact number of field crews and resources I need to hit my critical dates and keeps the client happy.”

“Our company prides itself on quality and safety. Cumulus makes us safer and faster.”



Hyperscaler Case Study



- Zero Arc Flash Incidents**
 No reported arc-flash events during commissioning and startup over the past 4 years since the Cumulus System has been in use.
- Significant Quality Improvements**
 - 90% reduction in reported torque-related issues.
 - 80% reduction in torque-related rework.
- Full Accountability**
 100% traceability of torque verifications
- Standardized Adoption**
 Mandated use across all module fabrication facilities with planned rollout across all global construction sites.
- Rapid User Growth**
 1,000+ active users today, expected to double in the next 12–18 months.

Cumulus Digital Systems

The new standard for Automated QAQC & Production & Progress Tracking



Contractors Using Cumulus



U.S. ENGINEERING



Integrators Using Cumulus



Cumulus Doesn't Make the Tools... We are Your BLE Tool Experts...



Cumulus Hardware Compatibility Guide

Contents

- INTRODUCTION 4
- MANUAL TORQUING 5
- DIGITAL PRESSURE GAUGES 8
- HYDRAULIC WRENCHES / PUMPS 9
- ELECTRIC TORQUE TOOLS 10
- ELECTRICAL TESTING 14
- DEVICE OVERVIEW 16
- RECOMMENDED ANDROID DEVICES 17
- RECOMMENDED IOS DEVICES 21
- TORQUE MULTIPLIERS 22
- DATA CENTER RECOMMENDED TOOLS 23

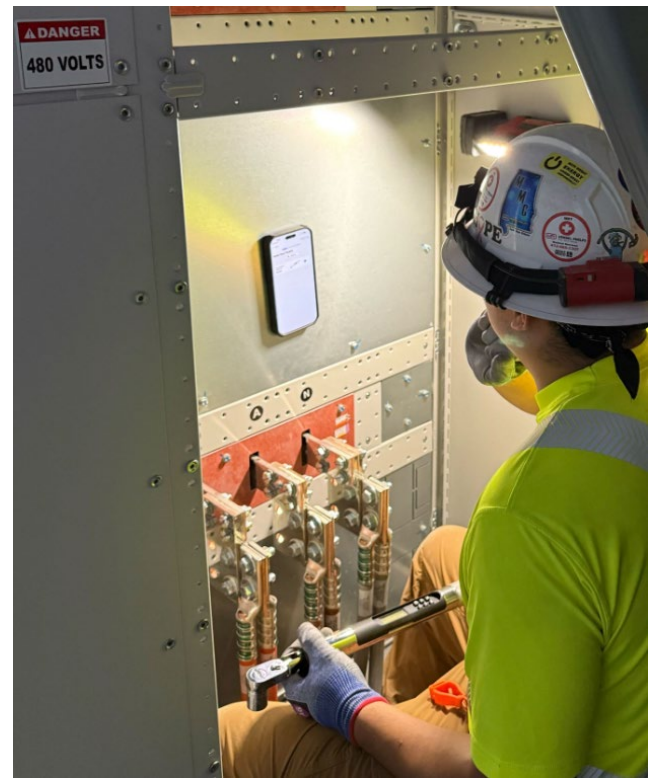


Bluetooth

CTECHW2M1200S

5 kV, 10 kV and 15 kV Insulation Resistance Testers

Bluetooth



Bluetooth

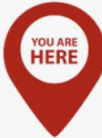
CTECHWMS80F

360° Torque Indicator Lights

Approaching Target Target Achieved Over Torque

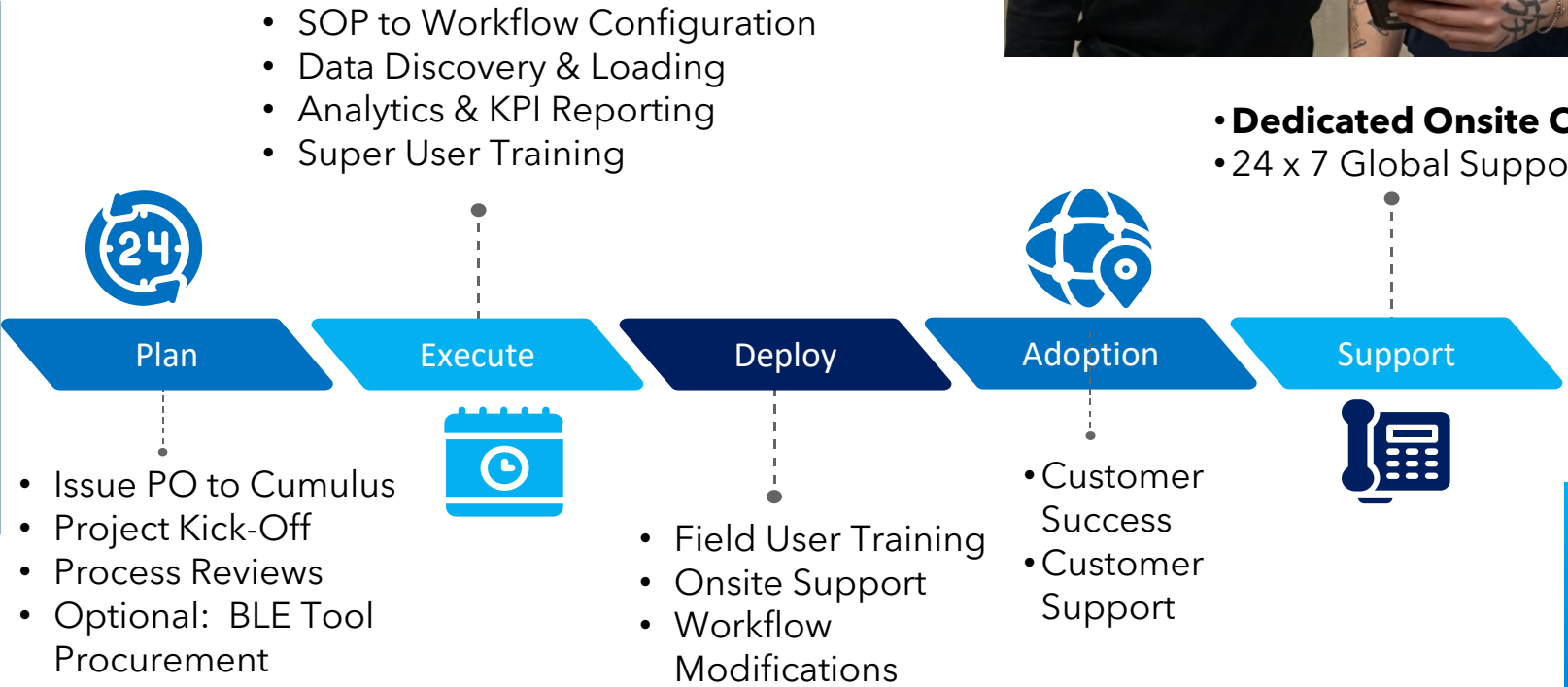
Cumulus Turnkey Implementation

The Cumulus Customer Success Team handles everything (data management, training, etc)



- Scope & Schedule
- Implementation Plan
- Estimated Cost
- Business Case

Prepare



Delivering Value to All Stakeholders in Data Center Construction



Hyperscaler/Developer

- Real-time Supply Chain Performance Leading Indicators
- Standardized & Digital QA/QC Documentation
- Construction Progress Visibility



General Contractors

- Stop Chasing Torque Logs
- Real-time Visibility into Torque & Testing Progress
- Never Lose QA/QC Paperwork



MEP Contractors

- Eliminate Manual Data Entry
- Save Foreman & QA Manhours
- 100% CYA for Work Completed



QA/QC Commissioning

- Actionable QA/QC Data vs Manual Review of Paperwork
- QA/QC Paperwork is Never Lost
- Accelerate Commissioning & Testing

Links for More Information:

[Short Compilation of Customer Testimonial Videos](#)

[Data Center Construction – Real-Time Progress Tracking & Forecasting](#)

[Improving Speed to Market With the Highest Quality in Data Center Construction](#)

<https://cumulusquality.com/data-center/>

