

	CS ASSEMBLY LEVELS MATRIX	DCN #SI-QG-TER-006A REVISION LEVEL 1.0 DATE OF REVISION 19/09/17 PAGE 1 OF 1
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Below lists all Custom Solutions assembly levels and their descriptions:

LEVEL TYPE – NAME	DEFINITION	EXAMPLES
Level 0 – Kit / Configuration	A combination of components to achieve a saleable end part number that may or may not involve assembly certifications but does not involve swaging or connecting fittings together.	Simple Collection of Parts, Swapping Handles on Valves and Swapping Ferrules.
Level I – Basic Assembly	A basic combination of components (Swagelok or low-energy non-Swagelok products) that can be described with a basic sketch or short paragraph.	Hoses with Quick Connectors, Regulators With Gauges and Actuators on Valves.
Level II – Simple System	A set of components that require a Product & Instrumental Drawing (P&ID) or drawing to define orientation or layout	Assemblies with Direction-Specific Flow Paths and High Energy Non-Swagelok Products.
Level III – Complex System	In addition to Level II requirements, Level III Systems can be defined as systems that include any or all of the following: Close tolerances, typically defined as less than +/- .050", Specific quality requirements called out in customer purchase order, Leak testing other than standard Snoop bubble test, Functional testing, Electrical, pneumatic, or hydraulic components (excludes ABVAs)	Large Panels, Complex Assemblies, Single system >USD 50K and Third-party Services.
Level IV – Tech Centre Fabricated	Assembly for Level IV systems is not performed locally; all Level IV systems are quoted through the factory CS group via Flowan.	Assemblies outside of our scope and expertise.

Below summarizes the essential documents needed for the respective assembly levels:

LEVEL	GENERIC QUOTE (SCALA)	USE SCALA LONG DESCRIPTION	P&ID/VISIO SKETCH	SOLIDWORKS DRAWING	ASSEMBLY QUOTATION DOCUMENT (AQD)	OFF-LINE EXCEL COSTING	TARIFF CODE
0	✓	✓					TBC
1	✓	✓					TBC
2	✓		✓		✓	✓	TBC
3	✓			✓	✓	✓	TBC
4	✓		✓	✓	✓	✓	TBC