

Test #	User Requirement	User Inputs	System Validation (Error Checks)	Test	Expected Behavior	Verified	Verified By	Verified On	Test Data (for convenience)
1	Create a New QC Plan FROM SCRATCH in DRAFT mode	Part Number, Revision	Ensure Part Number and Revision Combination are Unique	1. Try to create a Plan with a duplicate Part Number and Revision. 2. Create a Plan with a unique Part Number and Revision. Plan should be created in DRAFT mode	1. Plan should not be created if duplicate part number and revision 2. A Blank Quality Control Plan is created. Results in a blank QC Plan in DRAFT mode. Human action and review is required to create and release the plan.	PASS	Nick Kelly	6/30/2023	
2	Add Spec of type Nom +/- Tol	Char: diameter (or any other characteristic of size) Char Type: Nom +/- Tol Nom = 1.500 + Tol = 0.010 - Tol = 0.010 Data Type = Num	The Nom field should be non-null	1. Verify spec is displayed correctly on Plan and Inspection screens. 2. Check the number of decimal places for Nom, +Tol, and -Tol 3. In an Inspection: -- Verify 1.489 is out of spec -- Verify 1.490 is in spec -- Verify 1.510 is in spec -- Verify 1.511 is out of spec	QC Plan: Diameter 1.500 +/- 0.010 Inspection Summary Table: Diameter 1.500 +/- 0.010 Data Entry Screens: Diameter 1.500 +/- 0.010 Pass/Fail is calculated correctly (see Tests)	PASS	Nick Kelly	6/30/2023	1.489 1.490 1.510 1.511
3	Add Spec of type Nom +/- Tol	Char: diameter (or any other characteristic of size) Char Type: Nom +/- Tol Nom = 1.500 + Tol (Upper) = 0.050 + Tol (Lower) = 0.010 Data Type = Num	The Nom field should be non-null The upper tolerance should be greater than the lower tolerance	1. Verify spec is displayed correctly on Plan and Inspection screens. 2. Check the number of decimal places for Nom, Upper Tol, and Lower Tol 3. In an Inspection: -- Verify 1.509 is out of spec -- Verify 1.510 is in spec -- Verify 1.550 is in spec -- Verify 1.551 is out of spec	QC Plan: Diameter 1.500 +0.050 -0.010 Inspection Summary Table: Diameter 1.500 +0.050 -0.010 Data Entry Screens: Diameter 1.500 +0.050 -0.010 Pass/Fail is calculated correctly (see Tests)	PASS	Nick Kelly	6/30/2023	1.509 1.510 1.550 1.551
4	Add Spec of type Nom -/- Tol	Char: diameter (or any other characteristic of size) Char Type: Nom -/- Tol Nom = 1.500 - Tol (Upper) = 0.002 - Tol (Lower) = 0.007 Data Type = Num	The Nom field should be non-null The lower tolerance should be greater than the upper tolerance Tolerance fields should be non negative	1. Verify spec is displayed correctly on Plan and Inspection screens. 2. Check the number of decimal places for Nom, Upper Tol, and Lower Tol 3. In an Inspection: -- Verify 1.492 is out of spec -- Verify 1.493 is in spec -- Verify 1.498 is in spec -- Verify 1.499 is out of spec	QC Plan: Diameter 1.500 - 0.002 - 0.007 Inspection Summary Table: Diameter 1.500 - 0.002 - 0.007 Data Entry Screens: Diameter 1.500 - 0.002 - 0.007 Pass/Fail is calculated correctly (see Tests)	PASS	Nick Kelly	6/30/2023	1.492 1.493 1.498 1.499
5	Add Spec of type Basic (i.e. Nominal only)	Char: diameter (or any other characteristic of size) Char Type: Basic Nom = 1.500 Data Type = Num	The Nom field should be non-null	1. Verify spec is displayed correctly on Plan and Inspection screens. 2. Check the number of decimal places for for Nom 3. In an Inspection: -- Any value entered should be indeterminate	QC Plan: Diameter 1.500 Inspection Summary Table: Diameter 1.500 Data Entry Screens: Diameter 1.500 Pass/Fail is calculated correctly (see Tests)	PASS	Nick Kelly	6/30/2023	1.55
6	Add Spec type of Reference	Char: diameter (or any other characteristic of size) Char Type: Reference Nom = 1.500 Data Type = Num	The Nom field should be non-null	1. Verify spec is displayed correctly on Plan and Inspection screens. 2. Check the number of decimal places for for Nom 3. In an Inspection: -- Any value entered should be indeterminate	QC Plan: Diameter 1.500 Inspection Summary Table: Diameter 1.500 Data Entry Screens: Diameter 1.500 Pass/Fail is calculated correctly (see Tests)	PASS	Nick Kelly	6/30/2023	1.52
7	Add Spec of type Min - Max	Char: diameter (or any other characteristic of size) Char Type: Min - Max Nom = [leave empty] Min = 1.0 Max = 2.0 Data Type = Num	At least one of the three specification fields should be non-null	1. Verify spec is displayed correctly on Plan and Inspection screens. 2. In an Inspection: -- Verify 0.99 is out of spec -- Verify 1.0 is in spec -- Verify 2.0 is in spec -- Verify 2.1 is out of spec	QC Plan: Diameter 1.0 - 2.0 Inspection Summary Table: Diameter 1.0 - 2.0 Data Entry Screens: Diameter 1.0 - 2.0 Pass/Fail is calculated correctly (see Tests)	PASS	Nick Kelly	6/30/2023	0.99 1.0 2.0 2.1
8	Add Spec of type Min Only	Char: diameter (or any other characteristic of size) Char Type: Min - Max Nom = [leave empty] Min = 1.0 Max = [leave empty] Data Type = Num	At least one of the three specification fields should be non-null	1. Verify spec is displayed correctly on Plan and Inspection screens. 2. In an Inspection: -- Verify 0.99 is out of spec -- Verify 1.0 is in spec -- Verify 2.1 is in spec	QC Plan: Diameter 1.0 MIN Inspection Summary Table: Diameter 1.0 MIN Data Entry Screens: Diameter 1.0 MIN Pass/Fail is calculated correctly (see Tests)	PASS	Nick Kelly	6/30/2023	0.99 1.0 2.1
9	Add Spec of type Max Only	Char: diameter (or any other characteristic of size) Char Type: Min - Max Nom = [leave empty] Min = [leave empty] Max = 2.0 Data Type = Num	At least one of the three specification fields should be non-null	1. Verify spec is displayed correctly on Plan and Inspection screens. 2. In an Inspection: -- Verify 2.1 is out of spec -- Verify 2.0 is in spec -- Verify 0.9 is in spec	QC Plan: Diameter 2.0 MAX Inspection Summary Table: Diameter 2.0 MAX Data Entry Screens: Diameter 2.0 MAX Pass/Fail is calculated correctly (see Tests)	PASS	Nick Kelly	6/30/2023	2.1 2.0 0.9
10	Add Spec of type GD&T Spec without MMC e.g. position 0.005	Char: position Char Type: GD&T Nom = (assumed to be 0) Tol (Upper) = 0.005 Tol (Lower) = [leave empty] Bonus = RFS Data Type = Num	Both + Tol and -Tol cannot be null	1. Verify spec is displayed correctly on Plan and Inspection screens. 2. In an Inspection: -- Verify .0051 is out of spec -- Verify .0049 is in spec	QC Plan: Position 0.005 Inspection Summary Table: Position 0.005 Data Entry Screens: Position 0.005 Pass/Fail is calculated correctly (see Tests)	PASS	Nick Kelly	6/30/2023	0.0051 0.0049
11	Add Spec of type GD&T Spec with MMC e.g. position 0.005 (MMC)	Char: position Char Type: GD&T Nom = (assumed to be 0) Tol (Upper) = 0.005 Tol (Lower) = [leave empty] Bonus = MMC Data Type = Num	Both + Tol and -Tol cannot be null	1. Verify spec is displayed correctly on Plan and Inspection screens. 2. In an Inspection: -- Verify .0051 is out of spec -- Verify .0049 is in spec 3. Enter a Bonus Tolerance of .0001 -- Verify .0051 should now be in-spec	QC Plan: Position 0.005 (MMC) Inspection Summary Table: Position 0.005 (MMC) Data Entry Screens: Position 0.005 (MMC) Pass/Fail is calculated correctly (see Tests)	PASS	Nick Kelly	6/30/2023	0.0051, .0001 bonus 0.0049

12	Add Spec of type GD&T Spec special case: Surface Profile Outside Material e.g. profile of surface 0.005	Char: surface profile Char Type: GD&T Nom = (assumed to be 0) Tol (Upper) = 0.005 Tol (Lower) = [leave empty] Bonus = RFS Data Type = Num	Both + Tol and -Tol cannot be null	1. Verify spec is displayed correctly on Plan and Inspection screens. 2. In an Inspection: -- Verify .0051 is out of spec -- Verify .0049 is in spec	QC Plan: Surface Profile (or Profile of Surface) 0.005 Inspection Summary Table: Surface Profile (or Profile of Surface) 0.005 Data Entry Screens: Surface Profile (or Profile of Surface) 0.005 Pass/Fail is calculated correctly (see Tests)	PASS	Nick Kelly	6/30/2023	0.0051 0.0049
13	Add Spec of type GD&T Spec special case: Surface Profile Inside Material e.g. profile of surface -0.005	Char: surface profile Char Type: GD&T Nom = (assumed to be 0) Tol (Upper) = [leave empty] Tol (Lower) = 0.005 Bonus = RFS Data Type = Num	Both + Tol and -Tol cannot be null	1. Verify spec is displayed correctly on Plan and Inspection screens. 2. In an inspection: -- Verify -.0051 is out of spec -- Verify -.0049 is in spec	QC Plan: Surface Profile (or Profile of Surface) - 0.005 Inspection Summary Table: Surface Profile (or Profile of Surface) - 0.005 Data Entry Screens: Surface Profile (or Profile of Surface) - 0.005 Pass/Fail is calculated correctly (see Tests)	PASS	Nick Kelly	6/30/2023	-0.01
14	Add Spec of type GD&T Spec special case: Surface Profile Bilateral e.g. profile of surface -0.0025, +0.0025	Char: surface profile Char Type: GD&T Nom = (assumed to be 0) Tol (Upper) = 0.0025 Tol (Lower) = 0.0025 Bonus = RFS Data Type = Num	Both + Tol and -Tol cannot be null	1. Verify spec is displayed correctly on Plan and Inspection screens. 2. In an Inspection: -- Verify -.0026 is out of spec -- Verify -.0025 is in spec -- Verify 0.0025 is in spec -- Verify 0.0026 is out of spec	QC Plan: Surface Profile -0.0025 + 0.0025 Inspection Summary Table: Surface Profile -0.0025 + 0.0025 Data Entry Screens: Surface Profile -0.0025 + 0.0025 Pass/Fail is calculated correctly (see Tests)	PASS	Nick Kelly	6/30/2023	-0.0026 0.0025 0.0026
15	Add Spec of type Note	Char: Any text (alpha-numeric and special characters) Data Type = P/F	Characteristic cannot be empty	1. Verify spec is displayed correctly on Plan and Inspection screens. 2. In an Inspection: -- Enter P or Pass for Pass -- Enter F or Fail for Fail -- Pass or Fail should be reflected correctly	QC Plan: Text is shown exactly as entered Inspection Summary Table: Text is shown exactly as entered Data Entry Screens: Text is shown exactly as entered Pass/Fail is calculated correctly (see Tests)	PASS	Nick Kelly	6/30/2023	P Pass f Fail
16	Inch Defaults: Create a spec with a Nominal that is whole number i.e. X (no decimal places)	Char: diameter (or any other characteristic of size) Nominal = 10 + Tol = [leave empty] -- Tol = [leave empty] Data Type = Num Set default tolerance for X: 0.10	The Nom field should be non-null	1. Verify spec is assembled and displayed correctly on Plan and Inspection screens. 2. Check the number of decimal places for Nom, +Tol, and -Tol 3. In an inspection: -- Verify 9.99 is out of spec -- Verify 9.99 is in spec -- Verify 10.10 is in spec -- Verify 10.11 is out of spec	QC Plan: Diameter 10 +0.10 -0.10 Inspection Summary Table: Diameter 10 +0.10 -0.10 Data Entry Screens: Diameter 10 +0.10 -0.10 Pass/Fail is calculated correctly (see Tests)	PASS	Nick Kelly	6/30/2023	9.99 9.90 10.10 10.11
17	Inch Defaults: Create Spec with a Nominal with whole numbers i.e. XX	Char: diameter (or any other characteristic of size) Nominal = 10.1 + Tol = [leave empty] -- Tol = [leave empty] Data Type = Num Set default tolerance for XX: 0.05	The Nom field should be non-null	1. Verify spec is assembled and displayed correctly on Plan and Inspection screens. 2. Check the number of decimal places for Nom, +Tol, and -Tol 3. In an Inspection: -- Verify 10.049 is out of spec -- Verify 10.050 is in spec -- Verify 10.150 is in spec -- Verify 10.151 is out of spec	QC Plan: Diameter 10.1 +0.05 -0.05 Inspection Summary Table: Diameter 10.1 +0.05 -0.05 Data Entry Screens: Diameter 10.1 +0.05 -0.05 Pass/Fail is calculated correctly (see Tests)	PASS	Nick Kelly	6/30/2023	10.049 10.050 10.150 10.151
18	Inch Defaults: Nominal with whole numbers only (i.e.XXX)	Char: diameter (or any other characteristic of size) Nominal = 10.10 + Tol = [leave empty] -- Tol = [leave empty] Data Type = Num Set default tolerance for XXX: 0.01	The Nom field should be non-null	1. Verify spec is assembled and displayed correctly on Plan and Inspection screens. 2. Check the number of decimal places for Nom, +Tol, and -Tol 3. In an inspection: -- Verify 10.089 is out of spec -- Verify 10.090 is in spec -- Verify 10.110 is in spec -- Verify 10.111 is out of spec	QC Plan: Diameter 10.10 +0.01 -0.01 Inspection Summary Table: Diameter 10.10 +0.01 -0.01 Data Entry Screens: Diameter 10.10 +0.01 -0.01 Pass/Fail is calculated correctly (see Tests)	PASS	Nick Kelly	6/30/2023	10.089 10.090 10.110 10.111
19	Inch Defaults: Nominal with whole numbers only (i.e.XXXX)	Char: diameter (or any other characteristic of size) Nominal = 10.100 + Tol = [leave empty] -- Tol = [leave empty] Data Type = Num Set default tolerance for XXXX: 0.005	The Nom field should be non-null	1. Verify spec is assembled and displayed correctly on Plan and Inspection screens. 2. Check the number of decimal places for Nom, +Tol, and -Tol 3. In an Inspection: -- Verify 10.094 is out of spec -- Verify 10.095 is in spec -- Verify 10.105 is in spec -- Verify 10.106 is out of spec	QC Plan: Diameter 10.100 +0.005 -0.005 Inspection Summary Table: Diameter 10.100 +0.005 -0.005 Data Entry Screens: Diameter 10.100 +0.005 -0.005 Pass/Fail is calculated correctly (see Tests)	PASS	Nick Kelly	6/30/2023	10.094 10.095 10.105 10.106
20	Inch Defaults: Nominal with whole numbers only (i.e.XXXXX)	Char: diameter (or any other characteristic of size) Nominal = 10.1000 + Tol = [leave empty] -- Tol = [leave empty] Data Type = Num Set default tolerance for XXXXX: 0.0015	The Nom field should be non-null	1. Verify spec is assembled and displayed correctly on Plan and Inspection screens. 2. Check the number of decimal places for Nom, +Tol, and -Tol 3. In an Inspection: -- Verify 10.0984 is out of spec -- Verify 10.0985 is in spec -- Verify 10.1015 is in spec -- Verify 10.1016 is out of spec	QC Plan: Diameter 10.1000 +0.0015 -0.0015 Inspection Summary Table: Diameter 10.1000 +0.0015 -0.0015 Data Entry Screens: Diameter 10.1000 +0.0015 -0.0015 Pass/Fail is calculated correctly (see Tests)	PASS	Nick Kelly	6/30/2023	10.0984 10.0985 10.1015 10.1016
21	Inch Defaults: Angle	Char: Angle Nominal = 45 + Tol = [leave empty] -- Tol = [leave empty] Data Type = Num Set default tolerance for Angle: 0.5	The Nom field should be non-null	1. Verify spec is assembled and displayed correctly on Plan and Inspection screens. 2. Check the number of decimal places for Nom, +Tol, and -Tol 3. In an inspection: -- Verify 44.49 is out of spec -- Verify 44.50 is in spec -- Verify 45.50 is in spec -- Verify 45.51 is out of spec	QC Plan: Diameter 45 +0.5 -0.5 Inspection Summary Table: Diameter 45 +0.5 -0.5 Data Entry Screens: Diameter 45 +0.5 -0.5 Pass/Fail is calculated correctly (see Tests)	PASS	Nick Kelly	6/30/2023	44.49 44.50 45.50 45.51
22	ISO fine mm defaults for Linear, Diameter:Nominal value less than 0.5 mm	Char = Diameter or Linear Dimension Nominal = 0.49 + Tol = [leave empty] -- Tol = [leave empty] Data Type = Num	The Nom field should be non-null	1. Default Tolerances should not be applied 2. In an Inspection: -- Pass/Fail cannot be determined for 0.50	QC Plan: Diameter 0.49 + null - null Inspection Summary Table: Diameter 0.49 + null - null Data Entry Screens: Diameter 0.49 + null - null Pass/Fail cannot be determined (f)	PASS	Nick Kelly	6/30/2023	0.5

23	ISO fine mm defaults for Linear, Diameter:Nominal value = 0.5 mm	Char = Diameter or Linear Dimension Nominal = 0.5 + Tol = [leave empty] -- Tol = [leave empty] Data Type = Num	The Nom field should be non-null	1. Verify spec is assembled and displayed correctly on Plan and Inspection screens. 2. Check the number of decimal places for Nom, +Tol, and -Tol 3. In an Inspection: -- Verify .44 is out of spec -- Verify .45 is in spec -- Verify .55 is in spec -- Verify .56 is out of spec	QC Plan: Diameter .5 +.05 -.05 Inspection Summary Table: Diameter .5 +.05 -.05 Data Entry Screens: Diameter .5 +.05 -.05 Pass/Fail is calculated correctly (see Tests)	PASS	Nick Kelly	6/30/2023	0.44 0.45 0.55 0.56
24	ISO fine mm defaults for Linear, Diameter:Nominal value = 3 mm	Char = Diameter or Linear Dimension Nominal = 3 + Tol = [leave empty] -- Tol = [leave empty] Data Type = Num	The Nom field should be non-null	1. Verify spec is assembled and displayed correctly on Plan and Inspection screens. 2. Check the number of decimal places for Nom, +Tol, and -Tol 3. In an Inspection: -- Verify 2.94 is out of spec -- Verify 2.95 is in spec -- Verify 3.05 is in spec -- Verify 3.06 is out of spec	QC Plan: Diameter 3 +.05 -.05 Inspection Summary Table: Diameter 3 +.05 -.05 Data Entry Screens: Diameter 3 +.05 -.05 Pass/Fail is calculated correctly (see Tests)	PASS	Nick Kelly	6/30/2023	2.94 2.95 3.05 3.06
25	ISO fine mm defaults for Linear, Diameter:Nominal value = 3.1mm	Char = Diameter or Linear Dimension Nominal = 3.1 + Tol = [leave empty] -- Tol = [leave empty] Data Type = Num	The Nom field should be non-null	1. Verify spec is assembled and displayed correctly on Plan and Inspection screens. 2. Check the number of decimal places for Nom, +Tol, and -Tol 3. In an Inspection: -- Verify 3.04 is out of spec -- Verify 3.05 is in spec -- Verify 3.15 is in spec -- Verify 3.16 is out of spec	QC Plan: Diameter 3.1 +.05 -.05 Inspection Summary Table: Diameter 3.1 +.05 -.05 Data Entry Screens: Diameter 3.1 +.05 -.05 Pass/Fail is calculated correctly (see Tests)	PASS	Nick Kelly	6/30/2023	3.04 3.05 3.15 3.16
26	ISO fine mm defaults for Linear, Diameter:Nominal value = 6.0 mm	Char = Diameter or Linear Dimension Nominal = 6 + Tol = [leave empty] -- Tol = [leave empty] Data Type = Num	The Nom field should be non-null	1. Verify spec is assembled and displayed correctly on Plan and Inspection screens. 2. Check the number of decimal places for Nom, +Tol, and -Tol 3. In an Inspection: -- Verify 5.94 is out of spec -- Verify 5.95 is in spec -- Verify 6.05 is in spec -- Verify 6.06 is out of spec	QC Plan: Diameter 6 +.05 -.05 Inspection Summary Table: Diameter 6 +.05 -.05 Data Entry Screens: Diameter 6 +.05 -.05 Pass/Fail is calculated correctly (see Tests)	PASS	Nick Kelly	6/30/2023	5.94 5.95 6.05 6.06
27	ISO fine mm defaults for Linear, Diameter:Nominal value = 6.1 mm	Char = Diameter or Linear Dimension Nominal = 6.1 + Tol = [leave empty] -- Tol = [leave empty] Data Type = Num	The Nom field should be non-null	1. Verify spec is assembled and displayed correctly on Plan and Inspection screens. 2. Check the number of decimal places for Nom, +Tol, and -Tol 3. In an Inspection: -- Verify 5.9 is out of spec -- Verify 6.0 is in spec -- Verify 6.2 is in spec -- Verify 6.3 is out of spec	QC Plan: Diameter 6.1 +0.1 -0.1 Inspection Summary Table: Diameter 6.1 +0.1 -0.1 Data Entry Screens: Diameter 6.1 +0.1 -0.1 Pass/Fail is calculated correctly (see Tests)	PASS	Nick Kelly	6/30/2023	5.9 6.0 6.2 6.3
28	ISO fine mm defaults for Linear, Diameter: Nominal value = 30.0 mm	Char = Diameter or Linear Dimension Nominal = 30 + Tol = [leave empty] -- Tol = [leave empty] Data Type = Num	The Nom field should be non-null	1. Verify spec is assembled and displayed correctly on Plan and Inspection screens. 2. Check the number of decimal places for Nom, +Tol, and -Tol 3. In an Inspection: -- Verify 29.8 is out of spec -- Verify 29.9 is in spec -- Verify 30.1 is in spec -- Verify 30.2 is out of spec	QC Plan: Diameter 30 +0.1 -0.1 Inspection Summary Table: Diameter 30 +0.1 -0.1 Data Entry Screens: Diameter 30 +0.1 -0.1 Pass/Fail is calculated correctly (see Tests)	PASS	Nick Kelly	6/30/2023	29.8 29.9 30.1 30.2
29	ISO fine mm defaults for Linear, Diameter: Nominal value = 30.1 mm	Char = Diameter or Linear Dimension Nominal = 30.1 + Tol = [leave empty] -- Tol = [leave empty] Data Type = Num	The Nom field should be non-null	1. Verify spec is assembled and displayed correctly on Plan and Inspection screens. 2. Check the number of decimal places for Nom, +Tol, and -Tol 3. In an Inspection: -- Verify 29.94 is out of spec -- Verify 29.95 is in spec -- Verify 30.25 is in spec -- Verify 30.26 is out of spec	QC Plan: Diameter 30.1 +.15 -.15 Inspection Summary Table: Diameter 30.1 +.15 -.15 Data Entry Screens: Diameter 30.1 +.15 -.15 Pass/Fail is calculated correctly (see Tests)	PASS	Nick Kelly	6/30/2023	29.94 29.95 30.25 30.26
30	ISO fine mm defaults for Linear, Diameter: Nominal value = 120.0 mm	Char = Diameter or Linear Dimension Nominal = 120 + Tol = [leave empty] -- Tol = [leave empty] Data Type = Num	The Nom field should be non-null	1. Verify spec is assembled and displayed correctly on Plan and Inspection screens. 2. Check the number of decimal places for Nom, +Tol, and -Tol 3. In an Inspection: -- Verify 119.84 is out of spec -- Verify 119.85 is in spec -- Verify 120.15 is in spec -- Verify 120.16 is out of spec	QC Plan: Diameter 120 +.15 -.15 Inspection Summary Table: Diameter 120 +.015 -.015 Data Entry Screens: Diameter 120 +.015 -.015 Pass/Fail is calculated correctly (see Tests)	PASS	Nick Kelly	6/30/2023	119.84 119.85 120.15 120.16
31	ISO fine mm defaults for Linear, Diameter: Nominal value = 120.1 mm	Char = Diameter or Linear Dimension Nominal = 120.1 + Tol = [leave empty] -- Tol = [leave empty] Data Type = Num	The Nom field should be non-null	1. Verify spec is assembled and displayed correctly on Plan and Inspection screens. 2. Check the number of decimal places for Nom, +Tol, and -Tol 3. In an Inspection: -- Verify 119.89 is out of spec -- Verify 119.90 is in spec -- Verify 120.30 is in spec -- Verify 120.31 is out of spec	QC Plan: Diameter 120.1 +0.2 -0.2 Inspection Summary Table: Diameter 120.1 +0.2 -0.2 Data Entry Screens: Diameter 120.1 +0.2 -0.2 Pass/Fail is calculated correctly (see Tests)	PASS	Nick Kelly	6/30/2023	119.89 119.90 120.30 120.31
32	ISO fine mm defaults for Linear, Diameter: Nominal value = 400.0 mm	Char = Diameter or Linear Dimension Nominal = 400 + Tol = [leave empty] -- Tol = [leave empty] Data Type = Num	The Nom field should be non-null	1. Verify spec is assembled and displayed correctly on Plan and Inspection screens. 2. Check the number of decimal places for Nom, +Tol, and -Tol 3. In an Inspection: -- Verify 399.7 is out of spec -- Verify 399.8 is in spec -- Verify 400.2 is in spec -- Verify 400.3 is out of spec	QC Plan: Diameter 400 +0.2 -0.2 Inspection Summary Table: Diameter 400 +0.2 -0.2 Data Entry Screens: Diameter 400 +0.2 -0.2 Pass/Fail is calculated correctly (see Tests)	PASS	Nick Kelly	6/30/2023	399.7 399.8 400.2 400.3
33	ISO fine mm defaults for Linear, Diameter: Nominal value = 400.1 mm	Char = Diameter or Linear Dimension Nominal = 400.1 + Tol = [leave empty] -- Tol = [leave empty] Data Type = Num	The Nom field should be non-null	1. Verify spec is assembled and displayed correctly on Plan and Inspection screens. 2. Check the number of decimal places for Nom, +Tol, and -Tol 3. In an Inspection: -- Verify 399.7 is out of spec -- Verify 399.8 is in spec -- Verify 400.4 is in spec -- Verify 400.41 is out of spec	QC Plan: Diameter 400.1 +0.3 -0.3 Inspection Summary Table: Diameter 400 +0.3 -0.3 Data Entry Screens: Diameter 400 +0.3 -0.3 Pass/Fail is calculated correctly (see Tests)	PASS	Nick Kelly	6/30/2023	399.7 399.8 400.4 400.41

34	ISO fine mm defaults for Linear, Diameter: Nominal value = 1000.0 mm	Char = Diameter or Linear Dimension Nominal = 1000 + Tol = [leave empty] -- Tol = [leave empty] Data Type = Num	The Nom field should be non-null	1. Verify spec is assembled and displayed correctly on Plan and Inspection screens. 2. Check the number of decimal places for Nom, +Tol, and -Tol 3. In an Inspection: -- Verify 999.6 is out of spec -- Verify 999.7 is in spec -- Verify 1000.3 is in spec -- Verify 1000.4 is out of spec	QC Plan: Diameter 1000 +0.3 -0.3 Inspection Summary Table: Diameter 1000 +0.3 -0.3 Data Entry Screens: Diameter 1000 +0.3 -0.3 Pass/Fail is calculated correctly (see Tests)	PASS	Nick Kelly	6/30/2023	999.6 999.7 1000.3 1000.4
35	ISO fine mm defaults for Linear, Diameter: Nominal value = 1000.1 mm	Char = Diameter or Linear Dimension Nominal = 1000.1 + Tol = [leave empty] -- Tol = [leave empty] Data Type = Num	The Nom field should be non-null	1. Verify spec is assembled and displayed correctly on Plan and Inspection screens. 2. Check the number of decimal places for Nom, +Tol, and -Tol 3. In an Inspection: -- Verify 999.5 is out of spec -- Verify 999.6 is in spec -- Verify 1000.6 is in spec -- Verify 1000.7 is out of spec	QC Plan: Diameter 1000.1 +0.5 -0.5 Inspection Summary Table: Diameter 1000.1 +0.5 -0.5 Data Entry Screens: Diameter 1000.1 +0.5 -0.5 Pass/Fail is calculated correctly (see Tests)	PASS	Nick Kelly	6/30/2023	999.5 999.6 1000.6 1000.7
36	ISO fine mm defaults for Linear, Diameter: Nominal value = 2000.0 mm	Char = Diameter or Linear Dimension Nominal = 2000 + Tol = [leave empty] -- Tol = [leave empty] Data Type = Num	The Nom field should be non-null	1. Verify spec is assembled and displayed correctly on Plan and Inspection screens. 2. Check the number of decimal places for Nom, +Tol, and -Tol 3. In an Inspection: -- Verify 1999.4 is out of spec -- Verify 1999.5 is in spec -- Verify 2000.5 is in spec -- Verify 2000.6 is out of spec	QC Plan: Diameter 2000 +0.5 -0.5 Inspection Summary Table: Diameter 2000 +0.5 -0.5 Data Entry Screens: Diameter 2000 +0.5 -0.5 Pass/Fail is calculated correctly (see Tests)	PASS	Nick Kelly	6/30/2023	1999.4 1999.5 2000.5 2000.6
37	ISO fine mm defaults for Linear, Diameter: Nominal value = 2000.1 mm	Char = Diameter or Linear Dimension Nominal = 2000.1 + Tol = [leave empty] -- Tol = [leave empty] Data Type = Num	The Nom field should be non-null	Default Tolerances should not be applied	QC Plan: Diameter 2000.1 + null - null Inspection Summary Table: Diameter 2000.1 + null - null Data Entry Screens: Diameter 2000.1 + null - null	PASS	Nick Kelly	6/30/2023	2000.1
38	ISO fine mm defaults for Linear, Diameter: Nominal value = 4000.0 mm	Char = Diameter or Linear Dimension Nominal = 4000 + Tol = [leave empty] -- Tol = [leave empty] Data Type = Num	The Nom field should be non-null	Default Tolerances should not be applied	QC Plan: Diameter 4000 + null - null Inspection Summary Table: Diameter 0.49 + null - null Data Entry Screens: Diameter 0.49 + null - null	PASS	Nick Kelly	6/30/2023	4000
39	ISO fine mm defaults for Linear, Diameter: Nominal value = 4000.1 mm	Char = Diameter or Linear Dimension Nominal = 4000.1 + Tol = [leave empty] -- Tol = [leave empty] Data Type = Num	The Nom field should be non-null	Default Tolerances should not be applied	QC Plan: Diameter 4000.1 + null - null Inspection Summary Table: Diameter 4000.1 + null - null Data Entry Screens: Diameter 4000.1 + null - null	PASS	Nick Kelly	6/30/2023	4000.1
40	ISO fine mm defaults for Radius: Nominal value less than 0.5 mm	Char = RADIUS Nominal = 0.49 + Tol = [leave empty] -- Tol = [leave empty] Data Type = Num	The Nom field should be non-null	Default Tolerances should not be applied	QC Plan: Radius 0.49 + null - null Inspection Summary Table: Radius 0.49 + null - null Data Entry Screens: Radius 0.49 + null - null	PASS	Nick Kelly	6/30/2023	0.5
41	ISO fine mm defaults for Radius: Nominal value = 0.5 mm	Char = RADIUS Nominal = 0.5 + Tol = [leave empty] -- Tol = [leave empty] Data Type = Num	The Nom field should be non-null	1. Verify spec is assembled and displayed correctly on Plan and Inspection screens. 2. Check the number of decimal places for Nom, +Tol, and -Tol 3. In an Inspection: -- Verify 0.29 is out of spec -- Verify 0.30 is in spec -- Verify 0.70 is in spec -- Verify 0.71 is out of spec	QC Plan: Radius 0.5 +0.2 -0.2 Inspection Summary Table: Radius 0.5 +0.2 -0.2 Data Entry Screens: Radius 0.5 +0.2 -0.2 Pass/Fail is calculated correctly (see Tests)	PASS	Nick Kelly	6/30/2023	0.29 0.3 0.7 0.71
42	ISO fine mm defaults for Radius: Nominal value = 3 mm	Char = RADIUS Nominal = 3 + Tol = [leave empty] -- Tol = [leave empty] Data Type = Num	The Nom field should be non-null	1. Verify spec is assembled and displayed correctly on Plan and Inspection screens. 2. Check the number of decimal places for Nom, +Tol, and -Tol 3. In an Inspection: -- Verify 2.79 is out of spec -- Verify 2.80 is in spec -- Verify 3.20 is in spec -- Verify 3.21 is out of spec	QC Plan: Radius 3 +0.2 -0.2 Inspection Summary Table: Radius 3 +0.2 -0.2 Data Entry Screens: Radius 3 +0.2 -0.2 Pass/Fail is calculated correctly (see Tests)	PASS	Nick Kelly	6/30/2023	2.79 2.8 3.2 3.21
43	ISO fine mm defaults for Radius: Nominal value = 3.1mm	Char = RADIUS Nominal = 3.1 + Tol = [leave empty] -- Tol = [leave empty] Data Type = Num	The Nom field should be non-null	1. Verify spec is assembled and displayed correctly on Plan and Inspection screens. 2. Check the number of decimal places for Nom, +Tol, and -Tol 3. In an Inspection: -- Verify 2.59 is out of spec -- Verify 2.60 is in spec -- Verify 3.60 is in spec -- Verify 3.61 is out of spec	QC Plan: Radius 3.1 +.5 -.5 Inspection Summary Table: Radius 3.1 +.5 -.5 Data Entry Screens: Radius 3.1 +.5 -.5 Pass/Fail is calculated correctly (see Tests)	PASS	Nick Kelly	6/30/2023	2.59 2.6 3.6 3.61
44	ISO fine mm defaults for Radius: Nominal value = 6.0 mm	Char = RADIUS Nominal = 6 + Tol = [leave empty] -- Tol = [leave empty] Data Type = Num	The Nom field should be non-null	1. Verify spec is assembled and displayed correctly on Plan and Inspection screens. 2. Check the number of decimal places for Nom, +Tol, and -Tol 3. In an Inspection: -- Verify 5.49 is out of spec -- Verify 5.50 is in spec -- Verify 6.50 is in spec -- Verify 6.51 is out of spec	QC Plan: Radius 6 +.5 -.5 Inspection Summary Table: Radius 6 +.5 -.5 Data Entry Screens: Radius 6 +.5 -.5 Pass/Fail is calculated correctly (see Tests)	PASS	Nick Kelly	6/30/2023	5.49 5.5 6.5 6.51

45	ISO fine mm defaults for Radius: Nominal value = 6.1 mm	Char = RADIUS Nominal = 6.1 + Tol = [leave empty] -- Tol = [leave empty] Data Type = Num	The Nom field should be non-null	1. Verify spec is assembled and displayed correctly on Plan and Inspection screens. 2. Check the number of decimal places for Nom, +Tol, and -Tol 3. In an Inspection: -- Verify 5.09 is out of spec -- Verify 5.1 is in spec -- Verify 7.1 is in spec -- Verify 7.11 is out of spec	QC Plan: Radius 6.1 +1 -1 Inspection Summary Table: Radius 6.1 +1 -1 Data Entry Screens: Radius 6.1 +1 -1 Pass/Fail is calculated correctly (see Tests)	PASS	Nick Kelly	6/30/2023	5.09 5.1 7.1 7.11
46	ISO fine mm defaults for Angle: Nominal value less than 1 deg	Char = ANGLE Nominal = 0.99 + Tol = [leave empty] -- Tol = [leave empty] Data Type = Num	The Nom field should be non-null	Default Tolerances should not be applied	QC Plan: Angle 0.99 + null - null Inspection Summary Table: Angle 0.99 + null - null Data Entry Screens: Angle 0.99 + null - null	PASS	Nick Kelly	6/30/2023	0.99
47	ISO fine mm defaults for Angle: Nominal value = 1.0 deg	Char = ANGLE Nominal = 1.0 + Tol = [leave empty] -- Tol = [leave empty] Data Type = Num	The Nom field should be non-null	1. Verify spec is assembled and displayed correctly on Plan and Inspection screens. 2. Check the number of decimal places for Nom, +Tol, and -Tol 3. In an Inspection: -- Verify 0.0 is in spec -- Verify 1.0 is in spec -- Verify 2.01 is out of spec	QC Plan: Angle 1.0 + 1.0 - 1.0 Inspection Summary Table: Angle 1.0 + 1.0 - 1.0 Data Entry Screens: Radius 1.0 + 1.0 - 1.0 Pass/Fail is calculated correctly (see Tests)	PASS	Nick Kelly	6/30/2023	0 1.0 2.1
48	ISO fine mm defaults for Angle: Nominal value = 1.1 deg	Char = ANGLE Nominal = 1.1 + Tol = [leave empty] -- Tol = [leave empty] Data Type = Num	The Nom field should be non-null	1. Verify spec is assembled and displayed correctly on Plan and Inspection screens. 2. Check the number of decimal places for Nom, +Tol, and -Tol 3. In an Inspection: -- Verify 0.09 is out of spec -- Verify 0.1 is in spec -- Verify 2.1 is in spec -- Verify 2.11 is out of spec		PASS	Nick Kelly	6/30/2023	0.09 0.1 2.1 2.11
49	ISO fine mm defaults for Angle: Nominal value = 10.0 deg	Char = ANGLE Nominal = 10.0 + Tol = [leave empty] -- Tol = [leave empty] Data Type = Num	The Nom field should be non-null	1. Verify spec is assembled and displayed correctly on Plan and Inspection screens. 2. Check the number of decimal places for Nom, +Tol, and -Tol 3. In an Inspection: -- Verify 9.99 is out of spec -- Verify 9.0 is in spec -- Verify 11.0 is in spec -- Verify 11.1 is out of spec		PASS	Nick Kelly	6/30/2023	8.99 9.0 11 11.1
50	ISO fine mm defaults for Angle: Nominal value = 10.1 deg	Char = ANGLE Nominal = 10.1 + Tol = [leave empty] -- Tol = [leave empty] Data Type = Num	The Nom field should be non-null	1. Verify spec is assembled and displayed correctly on Plan and Inspection screens. 2. Check the number of decimal places for Nom, +Tol, and -Tol 3. In an Inspection: -- Verify 9.99 is out of spec -- Verify 9.6 is in spec -- Verify 10.6 is in spec -- Verify 10.61 is out of spec		PASS	Nick Kelly	6/30/2023	9.59 9.6 10.6 10.61
51	ISO fine mm defaults for Angle: Nominal value = 50.0 deg	Char = ANGLE Nominal = 50.0 + Tol = [leave empty] -- Tol = [leave empty] Data Type = Num	The Nom field should be non-null	1. Verify spec is assembled and displayed correctly on Plan and Inspection screens. 2. Check the number of decimal places for Nom, +Tol, and -Tol 3. In an Inspection: -- Verify 49.49 is out of spec -- Verify 49.5 is in spec -- Verify 50.5 is in spec -- Verify 50.51 is out of spec		PASS	Nick Kelly	7/6/2023	49.49 49.5 50.5 50.51
52	ISO fine mm defaults for Angle: Nominal value = 50.1 deg	Char = ANGLE Nominal = 50.1 + Tol = [leave empty] -- Tol = [leave empty] Data Type = Num	The Nom field should be non-null	1. Verify spec is assembled and displayed correctly on Plan and Inspection screens. 2. Check the number of decimal places for Nom, +Tol, and -Tol 3. In an Inspection: -- Verify 49.76 is out of spec -- Verify 49.77 is in spec -- Verify 50.43 is in spec -- Verify 50.44 is out of spec		PASS	Nick Kelly	7/6/2023	49.76 49.77 50.43 50.44
53	ISO fine mm defaults for Angle: Nominal value = 120.0 deg	Char = ANGLE Nominal = 120.0 + Tol = [leave empty] -- Tol = [leave empty] Data Type = Num	The Nom field should be non-null	1. Verify spec is assembled and displayed correctly on Plan and Inspection screens. 2. Check the number of decimal places for Nom, +Tol, and -Tol 3. In an Inspection: -- Verify 119.66 is out of spec -- Verify 119.70 is in spec -- Verify 120.33 is in spec -- Verify 120.34 is out of spec		PASS	Nick Kelly	7/6/2023	119.66 119.67 120.33 120.34
54	ISO fine mm defaults for Angle: Nominal value = 120.1 deg	Char = ANGLE Nominal = 120.1 + Tol = [leave empty] -- Tol = [leave empty] Data Type = Num	The Nom field should be non-null	1. Verify spec is assembled and displayed correctly on Plan and Inspection screens. 2. Check the number of decimal places for Nom, +Tol, and -Tol 3. In an Inspection: -- Verify 119.93 is out of spec -- Verify 119.94 is in spec -- Verify 120.26 is in spec -- Verify 120.27 is out of spec		PASS	Nick Kelly	7/6/2023	119.93 119.94 120.26 120.27
55	ISO fine mm defaults for Angle: Nominal value = 400.0 deg	Char = ANGLE Nominal = 400.0 + Tol = [leave empty] -- Tol = [leave empty] Data Type = Num	The Nom field should be non-null	1. Verify spec is assembled and displayed correctly on Plan and Inspection screens. 2. Check the number of decimal places for Nom, +Tol, and -Tol 3. In an Inspection: -- Verify 400.17 is out of spec -- Verify 400.16 is in spec -- Verify 399.84 is in spec -- Verify 399.83 is out of spec		PASS	Nick Kelly	7/6/2023	400.17 400.16 399.84 399.83

56	ISO fine mm defaults for Angle- Nominal value = 400.1 deg	Char = ANGLE Nominal = 400.1 + Tol = [leave empty] -- Tol = [leave empty] Data Type = Num	The Nom field should be non-null	Default Tolerances should not be applied		PASS	Nick Kelly	7/6/2023	400.1
189	Test Specs with custom tolerances	Setup table of Custom Tolerances under defaults		Add specs without Tolerances	Defaults should be imported correctly	PASS	Nick Kelly	7/6/2023	
200	Display Feature-Level Work Instructions to Inspector	Add feature-level work instructions to the plan.		Verify work instructions on an inspection.	Work Instructions should be correctly displayed on Part View, Spec View, and Matrix (Spreadsheet view)	PASS	Nick Kelly	7/6/2023	

Test #	User Requirement	User Inputs	System Validation (Error Checks)	Test	Expected Behavior	Verified	Verified By	Verified On	Test Data (for convenience)
57	Create a new QC Plan FROM PDF DRAWING in DRAFT mode	Part Number, Revision	Ensure Part Number and Revision Combination are Unique	1. Try to create a Plan with a duplicate Part Number and Revision. 2. Create a Plan with a unique Part Number and Revision. Plan should be created in DRAFT mode	1. Plan should not be created if duplicate part number and revision 2. A Blank Quality Control Plan is created. Results in a blank QC Plan in DRAFT mode. Human action and review is required to create and release the plan.	PASS	Nick Kelly	7/6/2023	
58	Add Balloon of type Nom +/- Tol	Char: diameter (or any other characteristic of size) Char Type: Nom +/- Tol Nom = 1.500 + Tol = 0.010 -- Tol = 0.010 Data Type = Num	The Nom field should be non-null	1. Verify spec is displayed correctly on Plan and Inspection screens. 2. Check the number of decimal places for Nom, +Tol, and -Tol 3. In an Inspection: -- Verify 1.489 is out of spec -- Verify 1.490 is in spec -- Verify 1.510 is in spec -- Verify 1.511 is out of spec	QC Plan: Diameter 1.500 +/- 0.010 Inspection Summary Table: Diameter 1.500 +/- 0.010 Data Entry Screens: Diameter 1.500 +/- 0.010 Pass/Fail is calculated correctly (see Tests)	PASS	Nick Kelly	7/6/2023	1.489 1.490 1.510 1.511
59	Add Balloon of type Nom +/- Tol	Char: diameter (or any other characteristic of size) Char Type: Nom +/- Tol Nom = 1.500 + Tol (Upper) = 0.050 + Tol (Lower) = 0.010 Data Type = Num	The Nom field should be non-null The upper tolerance should be greater than the lower tolerance	1. Verify spec is displayed correctly on Plan and Inspection screens. 2. Check the number of decimal places for Nom, Upper Tol, and Lower Tol 3. In an Inspection: -- Verify 1.509 is out of spec -- Verify 1.510 is in spec -- Verify 1.550 is in spec -- Verify 1.551 is out of spec	QC Plan: Diameter 1.500 +0.050 -0.010 Inspection Summary Table: Diameter 1.500 +0.050 -0.010 Data Entry Screens: Diameter 1.500 +0.050 -0.010 Pass/Fail is calculated correctly (see Tests)	PASS	Nick Kelly	7/6/2023	1.509 1.550 1.551
60	Add Balloon of type Nom -/- Tol	Char: diameter (or any other characteristic of size) Char Type: Nom -/- Tol Nom = 1.500 -- Tol (Upper) = 0.002 -- Tol (Lower) = 0.007 Data Type = Num	The Nom field should be non-null The upper tolerance should be greater than the lower tolerance Tolerance fields should be non negative	1. Verify spec is displayed correctly on Plan and Inspection screens. 2. Check the number of decimal places for Nom, Upper Tol, and Lower Tol 3. In an Inspection: -- Verify 1.492 is out of spec -- Verify 1.493 is in spec -- Verify 1.498 is in spec -- Verify 1.499 is out of spec	QC Plan: Diameter 1.500 - 0.002 - 0.007 Inspection Summary Table: Diameter 1.500 - 0.002 - 0.007 Data Entry Screens: Diameter 1.500 - 0.002 - 0.007 Pass/Fail is calculated correctly (see Tests)	PASS	Nick Kelly	7/6/2023	1.492 1.493 1.498 1.499
61	Add Spec of type Reference	Char: diameter (or any other characteristic of size) Char Type: Reference Nom = 1.500 Data Type = Num	The Nom field should be non-null	1. Verify spec is displayed correctly on Plan and Inspection screens. 2. Check the number of decimal places for for Nom 3. In an Inspection: -- Any value entered should be indeterminate	QC Plan: Diameter 1.500 Inspection Summary Table: Diameter 1.500 Data Entry Screens: Diameter 1.500 Pass/Fail is calculated correctly (see Tests)	PASS	Nick Kelly	7/6/2023	1.52
62	Add Balloon of type Basic (i.e. Nominal only)	Char: diameter (or any other characteristic of size) Char Type: Basic Nom = 1.500 Data Type = Num	The Nom field should be non-null	1. Verify spec is displayed correctly on Plan and Inspection screens. 2. Check the number of decimal places for for Nom 3. In an Inspection: -- Any value entered is accepted without a Pass/Fail determination	QC Plan: Diameter 1.500 Inspection Summary Table: Diameter 1.500 Data Entry Screens: Diameter 1.500 Pass/Fail is calculated correctly (see Tests)	PASS	Nick Kelly	7/6/2023	1.5009999999999999
63	Add Balloon of type Min - Max	Char: diameter (or any other characteristic of size) Char Type: Min - Max Nom = [leave empty] Min = 1.0 Max = 2.0 Data Type = Num	At least one of the three specification fields should be non-null	1. Verify spec is displayed correctly on Plan and Inspection screens. 2. In an Inspection: -- Verify 0.99 is out of spec -- Verify 1.0 is in spec -- Verify 2.0 is in spec -- Verify 2.1 is out of spec	QC Plan: Diameter 1.0 - 2.0 Inspection Summary Table: Diameter 1.0 - 2.0 Data Entry Screens: Diameter 1.0 - 2.0 Pass/Fail is calculated correctly (see Tests)	PASS	Nick Kelly	7/6/2023	0.99 1.0 2.0 2.1
64	Add Balloon of type Min Only	Char: diameter (or any other characteristic of size) Char Type: Min - Max Nom = [leave empty] Min = 1.0 Max = [leave empty] Data Type = Num	At least one of the three specification fields should be non-null	1. Verify spec is displayed correctly on Plan and Inspection screens. 2. In an Inspection: -- Verify 0.99 is out of spec -- Verify 1.0 is in spec -- Verify 2.1 is in spec	QC Plan: Diameter 1.0 MIN Inspection Summary Table: Diameter 1.0 MIN Data Entry Screens: Diameter 1.0 MIN Pass/Fail is calculated correctly (see Tests)	PASS	Nick Kelly	7/6/2023	0.99 1.0 2.1
65	Add Balloon of type Max Only	Char: diameter (or any other characteristic of size) Char Type: Min - Max Nom = [leave empty] Min = [leave empty] Max = 2.0 Data Type = Num	At least one of the three specification fields should be non-null	1. Verify spec is displayed correctly on Plan and Inspection screens. 2. In an Inspection: -- Verify 2.1 is out of spec -- Verify 2.0 is in spec -- Verify 0.9 is in spec	QC Plan: Diameter 2.0 MAX Inspection Summary Table: Diameter 2.0 MAX Data Entry Screens: Diameter 2.0 MAX Pass/Fail is calculated correctly (see Tests)	PASS	Nick Kelly	7/6/2023	2.1 2.0 0.9
66	Add Balloon of type GD&T Spec without MMC e.g. position 0.005	Char: position Char Type: GD&T Nom = (assumed to be 0) Tol (Upper) = 0.005 Tol (Lower) = [leave empty] Bonus = RFS Data Type = Num	Both + Tol and -Tol cannot be null	1. Verify spec is displayed correctly on Plan and Inspection screens. 2. In an Inspection: -- Verify .0051 is out of spec -- Verify .0049 is in spec	QC Plan: Position 0.005 Inspection Summary Table: Position 0.005 Data Entry Screens: Position 0.005 Pass/Fail is calculated correctly (see Tests)	PASS	Nick Kelly	7/6/2023	0.0051 0.0049
67	Add Balloon of type GD&T Spec with MMC e.g. position 0.005 (MMC)	Char: position Char Type: GD&T Nom = (assumed to be 0) Tol (Upper) = 0.005 Tol (Lower) = [leave empty] Bonus = MMC Data Type = Num	Both + Tol and -Tol cannot be null	1. Verify spec is displayed correctly on Plan and Inspection screens. 2. In an Inspection: -- Verify .0051 is out of spec 3. Enter a Bonus Tolerance of .0001 -- Verify .0051 should now be in-spec	QC Plan: Position 0.005 (MMC) Inspection Summary Table: Position 0.005 (MMC) Data Entry Screens: Position 0.005 (MMC) Pass/Fail is calculated correctly (see Tests)	PASS	Nick Kelly	7/6/2023	0.0051 0.0049
68	Add Balloon of type GD&T Spec special case: Surface Profile Outside Material e.g. profile of surface 0.005	Char: surface profile Char Type: GD&T Nom = (assumed to be 0) Tol (Upper) = 0.005 Tol (Lower) = [leave empty] Bonus = RFS Data Type = Num	Both + Tol and -Tol cannot be null	1. Verify spec is displayed correctly on Plan and Inspection screens. 2. In an Inspection: -- Verify .0051 is out of spec -- Verify .0049 is in spec	QC Plan: Surface Profile (or Profile of Surface) 0.005 Inspection Summary Table: Surface Profile (or Profile of Surface) 0.005 Data Entry Screens: Surface Profile (or Profile of Surface) 0.005 Pass/Fail is calculated correctly (see Tests)	PASS	Nick Kelly	7/6/2023	0.0051 0.0049
69	Add Balloon of type GD&T Spec special case: Surface Profile Inside Material e.g. profile of surface -0.005	Char: surface profile Char Type: GD&T Nom = (assumed to be 0) Tol (Upper) = [leave empty] Tol (Lower) = -0.005 Bonus = RFS Data Type = Num	Both + Tol and -Tol cannot be null	1. Verify spec is displayed correctly on Plan and Inspection screens. 2. In an Inspection: -- Verify -.0051 is out of spec -- Verify -.0049 is in spec	QC Plan: Surface Profile (or Profile of Surface) - 0.005 Inspection Summary Table: Surface Profile (or Profile of Surface) - 0.005 Data Entry Screens: Surface Profile (or Profile of Surface) - 0.005 Pass/Fail is calculated correctly (see Tests)	PASS	Nick Kelly	7/6/2023	-0.01
70	Add Balloon of type GD&T Spec special case: Surface Profile Bilateral e.g. profile of surface -0.0025, +0.0025	Char: surface profile Char Type: GD&T Nom = (assumed to be 0) Tol (Upper) = -0.0025 Tol (Lower) = -0.0025 Bonus = RFS Data Type = Num	Both + Tol and -Tol cannot be null	1. Verify spec is displayed correctly on Plan and Inspection screens. 2. In an Inspection: -- Verify -.0026 is out of spec -- Verify -.0025 is in spec -- Verify 0.0025 is in spec -- Verify 0.0026 is out of spec	QC Plan: Surface Profile - 0.0025 + 0.0025 Inspection Summary Table: Surface Profile - 0.0025 + 0.0025 Data Entry Screens: Surface Profile - 0.0025 + 0.0025 Pass/Fail is calculated correctly (see Tests)	PASS	Nick Kelly	7/6/2023	-0.0026 -0.0025 0.0025 0.0026

71	Add Balloon of type Note	Char: Any text (alpha-numeric and special characters) Data Type = P/F	Characteristic cannot be empty	1. Verify spec is displayed correctly on Plan and Inspection screens. 2. In an Inspection: -- Enter P or Pass for Pass -- Enter F or Fail for Fail -- Pass or Fail should be reflected correctly	QC Plan: Text is shown exactly as entered Inspection Summary Table: Text is shown exactly as entered Data Entry Screens: Text is shown exactly as entered Pass/Fail is calculated correctly (see Tests)	PASS	Nick Kelly	7/6/2023	P Pass f Fail
190	Test Specs with custom tolerances	Setup table of Custom Tolerances under defaults	Add specs without Tolerances	Defaults should be imported correctly		PASS	Nick Kelly	7/6/2023	
196	Add Ops Sheets	Open the Drawing tab on a plan. Click on "Sheets" to add one or more drawings (Typically Ops Sheets). Add balloons on the Ops Sheets. Release Plan. Create an Inspection.	Verify that all balloons from Ops Sheets are correctly included in the Plan and in the Inspection.	All balloons from Ops Sheets should be correctly included in Plan and Inspection.		PASS	Nick Kelly	7/6/2023	
199	Create a Tabulated Family Plan where the Child Parts have revisions independent of the Family Plan	Configuration: Activate Independent TOS revisions. On the Part Masters Tile: Create a Tabulated (Family) Part Master. Load Tabulated Child Part Masters (TOS Entries) with independent revisions Navigate to Plans. Create a New QC Plan by selecting Family Part Number and Revision.	Family Part Number and Revision (P123, E) Add child part masters and revisions under the TOS tab (P101 D, P202 A, P303 B).	Table of Sizes tab should appear on the Plan with the child Part Masters and Revisions. Inspection should reflect the Child Part Master and Revision (not the parent Revision)		PASS	Nick Kelly	7/6/2023	
202	Alpha-numeric ballooning	Create balloons with Alpha- numeric numbering. E.g. #3, #3A, #3B				PASS	Nick Kelly	7/6/2023	

Test #	User Requirement	User Inputs	System Validation (Error Checks)	Test	Expected Behavior	Verified	Verified By	Verified On	Reviewed	Reviewed By	Reviewed On	Test Data (for convenience)
72	New Plan from "New Revision"	Existing Part Number & Revision, New Part Number (prefilled), New Revision	Ensure Part Number and Revision Combination are Unique	1. Create a New Plan for "New Revision". Plan should be created in DRAFT mode	1. a. A Quality Control Plan is created that matches exactly the Plan associated with the Existing Part Number and Revision. 1. b. Balloons and Specs are copied from the Drawing associated with the Existing Part Number and Revision	PASS	Nick Kelly	7/7/2023	PENDING			
73	Create a New Plan from "New Revision" for a Tabulated Plan	Existing Part Number & Revision, New Part Number (prefilled), New Revision.	Ensure Part Number and Revision Combination are Unique	1. Create a New Plan for "New Revision". Plan should be created in DRAFT mode	1.a. A Quality Control Plan is created that matches exactly the Plan associated with the Existing Part Number and Revision. 1.b. Balloons are copied from the Drawing associated with the Existing Part Number and Revision 1.c. An empty table of sizes is created	PASS	Nick Kelly	7/7/2023	PENDING			
74	Create a New Plan from "New Revision" for a Composite Plan	Existing Part Number & Revision, New Part Number (prefilled), New Revision	Ensure Part Number and Revision Combination are Unique	1. Load Bill of Material (pre-requisite) for New Part Number/Rev. 2. Create a New Plan for "New Revision". Plan should be created in DRAFT mode	1. a. A Quality Control Plan is created that matches exactly the Plan associated with the Existing Part Number and Revision. 1. b. Balloons and Specs are copied from the Drawing associated with the Existing Part Number and Revision 1.c. Properties -> Composite Plan is set to yes 1.d. Sub-Plans are listed on the Sub-Plan tab	PASS	Nick Kelly	7/7/2023	PENDING			

Test #	User Requirement	User Inputs	System Validation (Error Checks)	Test	Expected Behavior	Verified	Verified By	Verified On	Test Data (for convenience)
75	Create a New QC Plan from XLSX in DRAFT mode	Part Number, Revision	Ensure Part Number and Revision Combination are Unique. Ensure file type is XLSX.	1. Create a Plan with a unique Part Number and Revision. Plan should be created in DRAFT mode	1. A Quality Control Plan is created that matches the excel file being imported	PASS	Nick Kelly	7/7/2023	

Test #	User Requirement	User Inputs	System Validation (Error Checks)	Test	Expected Behavior	Verified	Verified By	Verified On	Test Data (for convenience)
76	Create a New QC Plan: CLONE a Plan	Part Number, Revision	Ensure Part Number and Revision Combination are Unique	1. Try to create a Plan with a duplicate Part Number and Revision. 2. Create a Plan with a unique Part Number and Revision	1. A plan cannot be created. 2. A Quality Control Plan is created that matches the Plan associated with the Existing Part Number and Revision. Plan should be created in DRAFT mode	PASS	Nick Kelly	7/6/2023	
77	Create a New QC Plan by "Clone" for a Tabulated Plan	Part Number, Revision	Ensure Part Number and Revision Combination are Unique	1. Try to create a Plan with a duplicate Part Number and Revision. 2. Create a Plan with a unique Part Number and Revision. Plan should be created in DRAFT mode	1.a. A Quality Control Plan is created that matches exactly the Plan associated with the Existing Part Number and Revision. 1.b. Balloons are copied from the Drawing associated with the Existing Part Number and Revision 1.c. An empty table of sizes is created 2. A plan cannot be created.	PASS	Nick Kelly	7/6/2023	
78	Create a New QC Plan by "Clone" for a Composite Plan	Existing Part Number & Revision, New Part Number (prefilled), New Revision	Ensure Part Number and Revision Combination are Unique	1. Load Bill of Material (pre-requisite) for New Part Number/Rev. 2. Create a New Plan for "New Revision". Plan should be created in DRAFT mode	1. a. A Quality Control Plan is created that matches exactly the Plan associated with the Existing Part Number and Revision. 1. b. Balloons and Specs are copied from the Drawing associated with the Existing Part Number and Revision 1.c. Properties -> Composite Plan is set to yes 1.d. Sub-Plans are listed on the Sub-Plan tab	PASS	Nick Kelly	7/6/2023	

Test #	User Requirement	User Inputs	System Validation (Error Checks)	Test	Expected Behavior	Verified	Verified By	Verified On	Test Data (for convenience)
79	Create a Tabulated Plan where each Child Part Master has the same Revision as the Family Part Master	On the Part Masters Title: Create a Tabulated (Family) Part Master. Load Tabulated Child Part Masters (TOS Entries) Navigate to Plans. Create a New QC Plan by selecting Part Number and Revision. Set Plan Defaults: XXX = 0.01 XXXX = 0.005		Part Number and Revision (P123, A) Add child part masters under the TOS tab (P101, P202, P303)	Table of Sizes tab should appear on the Plan with the child Part Masters	PASS	Nick Kelly	7/6/2023	
80	Add a Non-Tabulated Spec of Data Type = Num	Char Type = Nom +/- Tabulated = No Char = linear dimension Nom = 3.00 +Tol = [blank] -Tol = [blank] Data Type = Num		Add spec to plan	1. Should show up as a non-tabulated spec in QC Plan: linear dim 3.00 +0.005 -0.005.	PASS	Nick Kelly	7/6/2023	
81	Add a Tabulated "Nom +/-" Spec of Data Type = Num with tolerance defaults set at the PLAN level	Char Type = Nom +/- Tabulated = Yes Char = Diameter D1 Nom = [blank] +Tol = [blank] -Tol = [blank] Data Type = Num Plan Default Tol = 0.005		Add spec to plan. Add at least one variant and a nominal with three places after the decimal (e.g. P101, 1.500)	1. Should show up as a tabulated spec in QC Plan: Diameter D1 TAB +0.005 -0.005, Data Type: T:NUM 2. Diameter D1 should show up as a column on Table of Sizes	PASS	Nick Kelly	7/6/2023	
82	Add a Tabulated "Nom +/-" Spec of Data Type = Num with tolerance defaults set at the SPEC level	Char Type = Nom +/- Tabulated = Yes Char = Diameter D2 Nom = [blank] +Tol = 0.002 -Tol = 0.002 Data Type = Num		Add spec to plan	1. Should show up as a tabulated spec in QC Plan: Diameter D2 TAB +0.002 -0.002, Data Type: T:NUM 2. Diameter D2 should show up as a column on Table of Sizes	PASS	Nick Kelly	7/6/2023	
83	Add a Tabulated "Nom +/-" Spec of Data Type = Num with tolerance defaults set at the SPEC level					PASS	Nick Kelly	7/6/2023	
84	Add a Tabulated "Nom -/" Spec of Data Type = Num with tolerance defaults set at the SPEC level					PASS	Nick Kelly	7/6/2023	
85	Add a Tabulated "Min/Max" Spec of Data Type = Num with tolerance defaults set at the SPEC level					PASS	Nick Kelly	7/6/2023	
86	Add a Tabulated "Min Only" Spec of Data Type = Num with tolerance defaults set at the SPEC level					PASS	Nick Kelly	7/6/2023	
87	Add a Tabulated "Max Only" Spec of Data Type = Num with tolerance defaults set at the SPEC level					PASS	Nick Kelly	7/6/2023	
88	Add a Tabulated BASIC Spec of Data Type = Num with tolerances set in the Table of Sizes	Char Type = BASIC Tabulated = Yes Char = Diameter D3 Nom = [blank] Data Type = Num		Add spec to plan	1. Should show up as a tabulated spec in QC Plan: Diameter D3 BASICTAB, Data Type: T:NUM 2. Diameter D3 should show up as a column on Table of Sizes	PASS	Nick Kelly	7/6/2023	

89 Add a Tabulated "Note" Spec of Data Type = P/F

Char Type = Note
Tabulated = Yes
Char = Color
Data Type= P/F

Add spec to plan

1. Should show up as a tabulated spec in QC Plan: Color, Data Type: T:P/F
2. Color should show up as a column on Table of Sizes

PASS Nick Kelly 7/6/2023

90 Add a Tabulated "Note" Spec of Data Type = P/F THAT APPLIES TO ONLY CERTAIN VARIANTS

Char Type = Note
Tabulated = Yes
Char = Coating Yes/No
Data Type= P/F

Add spec to plan

1. Should show up as a tabulated spec in QC Plan: Coating Yes/No, Data Type: T:P/F
2. Coating Yes/No? should show up as a column on Table of Sizes

PASS Nick Kelly 7/6/2023

91 Load Table of Sizes

Add data to Table of Sizes for Group Number P123 Rev A with Variant Part Numbers: P101, P202, P303:
Use Test Data for Table of Sizes

Create Inspection for P202
Create Inspection for P303

Inspection for part P202 should include:
1. linear dimension 3.00 +0.005 -0.005 (from the non-tabulated spec)
2. D1 1.650 +0.005 -0.005
3. D2 2.100 +.002 - .002
4. D3 2.000 BASIC
5. Color= Red
6. Coating= Yes

Inspection for part P303 should include:
1. linear dimension 3.00 +0.005 -0.005 (from the non-tabulated spec)

PASS Nick Kelly 7/6/2023

PN, D1, D2, D3, Color, Coating
P101, 1.500, 2.000, 1.000, White, No
P202, 1.650, 2.100, 2.000, Red, Yes
P303, 1.750 + .001 -.001, 2.500 +.001 -.001, 3.000, Blue,

Test #	User Requirement	User Inputs	System Validation (Error Checks)	Test	Expected Behavior	Verified	Verified By	Verified On	Test Data (for convenience)
92	Create a Composite Plan	1. Part Number and Revision of the Assembly to create a Plan; 2. Bill of Material 3. Properties - Set Composite Plan		1. Verify that the Sub-Plans tab appears on the Plan, 2. Verify that all first-level Components are listed 3. Verify that any first-level Components with Plans are shown as Active	1. The Sub-Plans tab should appear. 2. All First-Level Components should be listed. 3. And Components with Plans should be listed as Active and should display the most recent released Version.	PASS	Nick Kelly	7/6/2023	
93	Create an Inspection	Part Number and Revision of the Assembly; Inspection Identifier 1		1. Verify that each Active Sub-Plan plus the Parent-Level Assembly Plan are converted into inspections 2. Verify that user can navigate between these inspections via the header 3. Verify that Percentage In-Spec is calculated across all inspections within the Composite Inspection i.e. each inspection is treated as independent. 4. There should be only one Manage tab - at the parent assembly inspection level	1. All Active Sub-Plans should be converted into inspections 2. User should be able to navigate between inspections 3. Percentage In-Spec should be calculated correctly 4. Only one Manage tab should be available at the parent assembly inspection level	PASS	Nick Kelly	7/6/2023	

Test #	User Requirement	User Inputs	System Validation (Error Checks)	Test	Expected Behavior	Verified	Verified By	Verified On	Test Data (for convenience)
94	User receives a drawing in metric (mm) from a customer, but must convert the drawing to inches for measurement on the shop floor, and then must convert the inch measurements back to mm to report to the customer	Create a plan with two parameters: 1. A parameter with Unit = mm (2.54 +/- .254 mm) 2. A parameter with Unit = inch (1.500 +/- .005 inch)		On the Properties Tab, set Unit Conversion: mm to inch. In an Inspection created from this plan: 1. Parameter 2.54 +/- .254 mm must be converted to 0.10000 ± 0.009999* inch 2. Parameter 1.500 +/- .005 inch must not be converted	In an Inspection created from this Plan: 1. Any dimensions with units mm must be converted to inches. 2. Any dimensions with units inch must not be converted .089 should be out of spec .090 should be in spec .110 should be in spec .111 should be out of spec	PASS	Nick Kelly	7/7/2023	
95	User receives a drawing in inch from a customer, but must convert the drawing to mm (metric) for measurement on the shop floor, and then must convert the mm measurements back to inch to report to the customer	Create a plan with two parameters: 1. A parameter with Unit = inch (1.500 +/- .005 inch) 2. A parameter with Unit = mm (2.50 +/- .02 mm)		On the Properties Tab, set Unit Conversion: inch to mm. In an Inspection created from this plan: 1. Parameter 1.500 +/- .005 inch must be converted to 38.100 ± 0.126* mm 2. Parameter 2.50 +/- .02 mm must not be converted	In an Inspection created from this Plan: 1. Any dimensions with units inch must be converted to mm. 2. Any dimensions with units mm must not be converted 37.9729 should be out of spec 37.9730 should be in spec 38.2270 should be in spec 38.2271 should be out of spec	PASS	Nick Kelly	7/7/2023	

Test #	User Requirement	User Inputs	System Validation (Error Checks)	Test	Expected Behavior	Verified	Verified By	Verified On	Test Data (for convenience)
96	Assign specs to different Inspection Types (i.e. create sub-groups)	<p>Create Inspection Types:</p> <ol style="list-style-type: none"> 1. Setup 2. In Process 3. Final <p>(Note: Inspection Type names will be different for each organization)</p>		<p>Create a QC Plan. Assign specs:</p> <ol style="list-style-type: none"> 1. To only one Inspection Type each (S, IP, F) 2. To two Inspection Types each (S+IP, S+F, IP+F) 3. To all three Inspection Types (S+IP+F) 	When an inspection is created, only the assigned specs should show up.	PASS	Nick Kelly	7/7/2023	
97	Assign inspection method and sampling rules by Inspection Type	<p>For a spec assigned to all three inspection types, set inspection method and sampling to:</p> <ol style="list-style-type: none"> 1. Setup: Caliper, 3 2. In Process: Caliper, 1 in 10 3. Final: CMM, C=0 1.0 or ORKG C=0 1.0 		<p>Create Inspections of type:</p> <ol style="list-style-type: none"> 1. Setup 2. In Process 3. Final 	<ol style="list-style-type: none"> 1. The correct inspection method and sampling rule should show up for each spec based on Inspection Type. 	PASS	Nick Kelly	7/7/2023	
98	Create a First Article Inspection (Special Built-In Inspection type)	<p>Create a Plan</p> <ol style="list-style-type: none"> 1. Add specs of type Standard, Deviation, and Manufacturing 		<p>Create a First Article</p> <ol style="list-style-type: none"> 1.a. Set FAI to "Exclude Manufacturing", then create an FAI 1.b. Set FAI to "Include All", then create an FAI 	<ol style="list-style-type: none"> 1.a. FAI should exclude MFG specs 1.b. FAI should include STD, DVN, and MFG specs 	PASS	Nick Kelly	7/7/2023	

Test #	User Requirement	User Inputs	System Validation (Error Checks)	Test	Expected Behavior	Verified	Verified By	Verified On	Test Data (for convenience)
99	Create a new Manufacturing Inspection from a Released Plan	[Assuming a Released Plan exists] Select Plan: Part Number + Rev 1. Enter Inspection Identifier 1 (required) 2. Enter Inspection Identifier 2 (optional) 3. Enter Lot Size 4. Select Switching 5. Select Inspection Type	System checks for duplicated Inspection Identifier 1	Create New Inspection	New Inspection is Created with the correct Meta Data. All Meta Data is logged in History.	PASS	Nick Kelly	7/7/2023	
100	Create a new Mfg FAI from a Released Plan	[Assuming a Released Plan exists] 1. Select Plan: Part Number + Rev 2. Enter Inspection Identifier 1 (required) 3. Enter Inspection Identifier 2 (optional) 4. Select FAI Type 5. Select Number of Parts		Create New FAI	New FAI is Created with the correct Meta Data. All Meta Data is logged in History.	PASS	Nick Kelly	7/7/2023	
101	Create a new Receiving Inspection from a Released Plan	[Assuming a Released Plan exists] 1. Select Plan: Part Number + Rev 2. Enter Inspection Identifier 1 (required) 3. Enter Inspection Identifier 2 (optional) 4. Enter Lot Size 5. Select Switching 6. Select Inspection Type After the inspection is created: 1. Set Supplier Name	For a Receiving Inspection, Suppliers can be selected from: 1. A list of suppliers defined on a Plan 2. The complete list of suppliers if suppliers were not listed on the Plan	Create New Inspection	New Inspection is Created with the correct Meta Data. All Meta Data is logged in History. [BUG] Supplier Name not logged in History	PASS	Nick Kelly	7/7/2023	
102	Create a new Receiving FAI from a Released Plan	[Assuming a Released Plan exists] 1. Select Plan: Part Number + Rev 2. Enter Inspection Identifier 1 (required) 3. Enter Inspection Identifier 2 (optional) 4. Select FAI Type 5. Select Number of Parts After the inspection is created: 1. Set Supplier Name	For a Receiving Inspection, Suppliers can be selected from: 1. A list of suppliers defined on a Plan 2. The complete list of suppliers if suppliers were not listed on the Plan	Create New FAI	New FAI is Created with the correct Meta Data. All Meta Data is logged in History. [BUG] Supplier Name not logged in History	PASS	Nick Kelly	7/7/2023	
103	Create an FAI from any row marked as "First Piece" in an Inspection	[Assuming a Released Plan exists, AND an Inspection has been created AND measurements entered] 1. In the "Measurements" (spreadsheet) view, select a row that needs to be reported as First Articles (this process can be repeated for up to 10 rows) 2. Click on mark R/C and mark selected row as First Piece 3. From the Inspection Summary page, click on "New FAI" to generate an FAI and transfer data from inspection to FAI		Click on New FAI	New FAI is Created with the correct Meta Data. All Meta Data is logged in History. Measurement data is copied from existing inspection to FAI.	PASS	Nick Kelly	7/7/2023	
104	Accept data as entered	Enter numeric data in an Inspection (up to a total of 8 places after the decimal)		Enter numeric data. Close Inspection. Then reopen the Inspection. Verify that the data has not changed.	Factory should save data as entered without any rounding.	PASS	Nick Kelly	7/7/2023	
105	Accept Attachments	Attach one or more files to an inspection		Attach files. Close Inspection. Then reopen the Inspection. Verify that attached files are listed correctly, and can be downloaded to desktop / opened in browser.	Attachments should be listed. Attachments can be downloaded / opened. Attachments should be logged in History	PASS	Nick Kelly	7/7/2023	
184	User wants to sort by Inspection Method on the FAI measurement entry screen (both Standard and AS9102)	User creates an FAI and then sorts by Inspection Method.		Sort by Inspection Method. Unsort by clicking on Balloon Number.	Data should be captured against the correct feature. Work Instructions and Drawing Zones should be displayed for the correct feature.	PASS	Nick Kelly	7/7/2023	
185	User wants to sort by Inspection Method on Part View page	User creates a regular Inspection, then navigates to the Part view, and then sorts by Inspection Method.		Sort by Inspection Method. Unsort by clicking on Balloon Number.	Data should be captured against the correct feature. Work Instructions and Drawing Zones should be displayed for the correct feature.	PASS	Nick Kelly	7/7/2023	

193 Upload work orders to create inspections.

Load an excel file that has Standard Parts and Tabulated Parts (ToS Entries)

Create and release a plan with Three Inspection Types. Load excel file with list of Work Orders and Lot Sizes. Inspections should be created for any Parts that have associated Released Plans. For each part, the system should create all required inspection types.

PASS

Nick Kelly

7/7/2023

Test #	User Requirement	User Inputs	System Validation (Error Checks)	Test	Expected Behavior	Verified	Verified By	Verified On	Test Data (for convenience)
106	Move Plan from DRAFT to RELEASE	On Manage slideout, change status from DRAFT to RELEASE		On Manage slideout, change status from DRAFT to RELEASE. Enter signature	System should ask user for Signature before change plan status from DRAFT to RELEASE. Password must be valid.	PASS	Nick Kelly	7/7/2023	
107	Each Inspector signs for his/her own work.	User enters some or all required measurement data		Enter new data and verify whether Signature Box appears in header for the user that entered data	System recognizes that new data has been entered (since last signing if applicable) and offers user the header prompt to sign.	PASS	Nick Kelly	7/7/2023	
108	An (any) Inspector Accepts or Rejects an Inspection or FAI	Click on Accept or Reject on the Manage tab	Check for missing attachments (if attachments were set to required on Properties)	1. Set Accept 2. Set Reject 3. Return to Pending	1. Inspector is asked to sign document by entering his/her password. 2. Inspection status changes to Accepted, Rejected or Pending depending on selection. Also displayed on List of Inspections page. 3. Changes are logged in Inspection History 4. User Name, Date and Time are displayed on the Manage tab after signing.	PASS	Nick Kelly	7/7/2023	
109	A separate user or a manager Reviews an Inspection or FAI	Click on the Reviewed button on the Manage tab	Check for missing attachments	1. Set Reviewed 2. Return to Pending	1. Reviewer is asked to sign document by entering his/her password. 2. Review status changes to Reviewed (check mark) on List of Inspections page 3. Changes are logged in Inspection History 4. Reviewer Name, Date and Time are displayed on the Manage tab after signing.	PASS	Nick Kelly	7/7/2023	
110	Entering or changing (or deleting) gage ID requires signature from Inspector	Enter a Gage ID in an Inspection Change a Gage ID in an Inspection Delete a Gage ID in an Inspection	Is the gage valid? Is it in Cal?	Enter / change /delete a gage ID	Gage ID should be captured in history. Initial entry or change or delete should require an e-signature	PASS	Nick Kelly	7/7/2023	
111	1. Manual CMM upload should require signature.	User selects a Part or selects the Serial Number column. Then the user clicks on CMM Upload, and uploads a file.		Upload data from a CMM file	Once data is loaded, an option to sign must appear in the header.	PASS	Nick Kelly	7/7/2023	
112	2. CMM auto-upload should not require signature.	Run CMM Auto-Upload. Any data added via CMM auto-upload should not trigger an electronic signature requirement in the header.				PASS	Nick Kelly	7/7/2023	
113	A signature is required to Accept or Reject	User changes Inspection Status from Pending to Accept or Reject		Change Inspection Status from Pending to Accept or Reject		PASS	Nick Kelly	7/7/2023	
114	An Initial signature is required from every user (non read-only users)	User logs into Ifactory, and is presented with a message and option to Accept (and continue) or Reject (and leave). User should not be able to bypass initial signature by requesting "reset password" link		User logs into Ifactory (with and without SSO)	System displays an initial signing message	PASS	Nick Kelly	7/7/2023	
115	Excel upload of data should require an e-signature	User uploads data from an excel file		User uploads data from an excel file	Signature Box should appear in the header for the user that uploaded the data.	PASS	Nick Kelly	7/7/2023	
116	All Inspections are displayed on the List of Inspection page with correct Pending / Accepted / Rejected and Pending / Reviewed Status. Verify that filters for Location (new proposed column), and Status work correctly.	Create 5 inspections. Set status of at least one inspection to Accepted. Set status of at least one inspection to Rejected. Change Reviewer status from Pending to Reviewed.		Change Inspection Status.	All 5 inspections should initially show Accept/Reject status as Pending. All 5 inspections should show Reviewed status as Pending. The updated status should be correctly reflected in the List of Inspections.	PASS	Nick Kelly	7/7/2023	
117	Verify that % In-Spec is correctly calculated	Create a Plan and Inspection with two features. Record 9 measurements that pass, and one that fails for each measurement.		Verify that Ifactory shows the correct % of parts in-spec		PASS	Nick Kelly	7/7/2023	
198	Admin needs to be able to sign off inspections for employees who have not returned to work to finish an inspection.	Admin user opens the "manage" tab in an inspection and signs off on on work still pending signatures.			After the admin signs, completed signature is visible to all users, and inspection is locked and cannot be edited.	PASS	Nick Kelly	7/7/2023	

Test #	User Requirement	User Inputs	System Validation (Error Checks)	Test	Expected Behavior	Verified	Verified By	Verified On	Test Data (for convenience)
118	Import data for ONE part from CMM file(s) MANUALLY	Output CMM file(s) from desired CMM Type (e.g. Zeiss/Calypto, PCDMIS, etc). Select part (row) in Spreadsheet view, then upload CMM file(s)		Select a part, and upload 1. One file per part 2. Multiple files per part	1. Data is written to the correct spec 2. Multiple Places parsed correctly 3. Features of size parsed correctly (e.g. diameter, linear dimension etc) 4. GD&T features parsed correctly 5. Bonus parsed correctly	PASS	Nick Kelly	7/7/2023	
119	Import data for MULTIPLE parts from CMM files MANUALLY	Output multiple CMM file from desired CMM Type (e.g. Zeiss/Calypto, PCDMIS, etc). Select part (row) in Spreadsheet view, then upload CMM file(s)		Select the Serial Number (Row Identifier) column, and upload: 1. CMM files for multiple parts; ONE file per part 2. CMM files for multiple parts; MULTIPLE files per part	1. Data is writtten to the correct row in the Inspection. Where two or more files are uploaded per part, make sure that the data is uploaded to the correct serial number 2. Data is written to the correct spec 3. Multiple Places parsed correctly 4. Features of size parsed correctly (e.g. diameter, linear dimension etc) 5. GD&T features parsed correctly 6. Bonus parsed correctly	PASS	Nick Kelly	7/7/2023	
120	Import data from CMM files AUTOMATICALLY	Output a CMM file from desired CMM Type (e.g. Zeiss/Calypto, PCDMIS, etc) to the upload/in folder.			1. File is moved from "in" to "out". 2. Data is sent to the correct Inspection (Plan, Inspection Identifier, Inspection Type) 3. Data is written to the correct row in the Inspection 4. Data is written to the correct spec 5. Multiple Places parsed correctly 6. Features of size parsed correctly (e.g. diameter, linear dimension etc) 7. GD&T features parsed correctly 8. Bonus parsed correctly	PASS	Nick Kelly	7/7/2023	

Test #	User Requirement	User Inputs	System Validation (Error Checks)	Test	Expected Behavior	Verified	Verified By	Verified On	Test Data (for convenience)
121	Identify incomplete and complete inspections	Create an inspection		<ol style="list-style-type: none"> 1. Enter Lot Size. 2. Enter measurement data for multiple parts and features. 3. On the Inspection Summary page, filter the Progress bar to identify Complete and Incomplete features. 	User should be able to filter the Progress bar to identify Incomplete and Complete features.	PASS	Nick Kelly	7/7/2023	
122	Calculate Percentage Parts In-Spec	Create an inspection		Enter measurement data	<ol style="list-style-type: none"> 1. User should be able to see the Parts In Spec % from the List of Inspections page. 	PASS	Nick Kelly	7/7/2023	

Test #	User Requirement	User Inputs	System Validation (Error Checks)	Test	Expected Behavior	Verified	Verified By	Verified On	Test Data (for convenience)
123	Add a new Gage Manually (i.e. one-at-a-time)	1. Set-up List of Values for Gage type, Make, Model etc. 2. Set-up List of Values for Storage Locations and Usage Locations 3. Add a Single Gage		Add a single Gage	A new gage is created without a Calibration status	PASS	Nick Kelly	7/7/2023	
124	Add multiple Gages via Upload	1. Set-up List of Values for Gage type, Make, Model etc. 2. Set-up List of Values for Storage Locations and Usage Locations 3. Upload a List of Gages (including Standard, Master, Reference gages, fixtures)	Column headers must match Ifactory's standard column names	Upload a List of Gages	1. Gages should be imported correctly 2. Calibration due-dates should be set correctly 3. Standard, Master, Reference Only gages should be classified correctly	PASS	Nick Kelly	7/7/2023	
125	Calibrate a Variable / Numeric Gage In-House	Setup an In-House Calibration: Nominal = 0.250 *. Tol = 0.0001 *. Tol = 0.0001	1. The default "After Calibration" setting should be 'Out of Calibration' unless cal data is entered, and complete (i.e. values for actuals are entered for all rows). 2. Master gage should be highlighted in red if it is invalid	1. Enter Measurements for Condition Before and Condition After (if required) Actual Before = 0.2502 Actual After = 0.2499	1. Condition Before should be out-of-cal 2. Condition After should be in-cal 3. New calibration due-date should be set correctly 4. Calibration status should be set correctly	PASS	Nick Kelly	7/7/2023	
126	Update calibration record for a Gage after calibration at vendor	1. Create a New In-house Calibration		1. Set calibration status After to In-Calibration (default) 2. Optionally upload a calibration cert from a vendor	1. Calibration Date and Calibration Due-Date should be set correctly. 2. Calibration status should be set correctly	PASS	Nick Kelly	7/7/2023	
127	Log Gage IDs on the Gage Tab in Inspections to ensure Gages are in calibrations and are traceable	1. Log gage ID for a single gage (standard, reference only, fixture, master) 2. Log gage IDs for compound gages 3. Log gage IDs for multiple gages	System verifies gage calibration as of the date the Gage ID is recorded.	Calibration date and status should match data under the Gage tab.	1. If Gage is in-calibration, system shows green-check-mark 2. If Gage is out-of-calibration, system shows red circle 3. If Gage ID is not recognized, system shows a "?" 4. If Gage ID corresponds to a Reference Only gage, system shows red circle 5. If Gage ID corresponds to a Fixture, system shows grey circle (no calibration required)	PASS	Nick Kelly	7/7/2023	
128	Perform a Gage Recall	Enter the suspect gage ID in the search box on the List of Inspections page. Alternatively, see all the Gage Transactions under Gage			System returns a List of Inspections that used that Gage ID	PASS	Nick Kelly	7/7/2023	
129	Find a list of calibrations that used a specific Master Gage	Enter the suspect master gage ID in the search box on the List of Gages page			System returns a List of Gages that used that Master Gage ID for calibrations (as well as the Master Gage listing itself)	PASS	Nick Kelly	7/7/2023	
130	Anytime calibration record changes state between "before" and "after", the user MUST select action taken and add a note.		Out-of-Cal until passing calibration data is entered. All rows with a check must be filled completely before Out-of-Cal status changes.			PASS	Nick Kelly	7/7/2023	
177	Verify Reference Gage Functionality	User adds a gage and sets it to Reference Gage.			The calibration tab should be disabled, gage should show special calibration status of 'Reference Only'.	PASS	Nick Kelly	7/7/2023	
178	Cloning a Gage should copy over Calibration Template	User creates a new Gage ID in the system by cloning from an existing gage.			System should copy over the calibration template from the first calibration.	PASS	Nick Kelly	7/7/2023	
179	Recalibration should inherit template from previous calibration	User calibrates a gage for a second time (or any time after the first calibration)		Calibrate a Gage for the first time. Calibrate the gage for a second time.	System should copy over the calibration template from the first calibration.	PASS	Nick Kelly	7/7/2023	
180	Calibrate an Attribute / Pass/Fail Gage In-House	Setup an In-House Calibration: Nominal = 0.250 *. Tol = 0.0001 *. Tol = 0.0001	1. The default "After Calibration" setting should be 'Out of Calibration' unless cal data is entered, and complete (i.e. values for actuals are entered for all rows). 3. Master gage should be highlighted in red if it is invalid	1. Enter Measurements for Condition Before and Condition After (if required) Actual Before = FALSE Actual After = TRUE	1. Condition Before should be out-of-cal 2. Condition After should be in-cal 3. New calibration due-date should be set correctly 4. Calibration status should be set correctly	PASS	Nick Kelly	7/7/2023	
182	Prevent updates to historical calibration records	User attempts to modify a historical calibration record.	Don't allow updates to previous calibration records - only the current (most recent) record can be updated.	Open an older calibration record (not the most recent calibration record) for a gage. Attempt to modify the data entered in the calibration record.	Fields should be read-only. System should not allow modification of historical calibration record.	PASS	Nick Kelly	7/7/2023	
188	Print Gage Label with Last Cal and Cal Due Date.	Click on Print Label			Label data should match calibration record in system.	PASS	Nick Kelly	7/7/2023	
204	Import a List of Gages	Upload a spreadsheet of Gages.		Verify last Cal Date and Cal Due Date	Gage Calibration Dates must be imported in the User's Time Zone.	PASS	Nick Kelly	7/7/2023	

Test #	User Requirement	User Inputs	System Validation (Error Checks)	Test	Expected Behavior	Verified	Verified By	Verified On	Test Data (for convenience)
131	Settings: Set Company-wide Time Zone and/or User Time Zone. Ensure all Time Stamps display data in local Time Zone. (Note: Time stamps are always saved in UTC)	Set Time Zone under Settings		Enter measurement data	Verify that data date and time stamp is accurate	PASS	Nick Kelly	7/10/2023	
132	Verify measurement data is saved / stored correctly	Enter measurement data		Restart server	Data should be saved to database and not lost after restart.	PASS	Nick Kelly	7/10/2023	
133	Test two users entering data in the same inspection (but different measurements / features / parts)	<ol style="list-style-type: none"> Both users enter data for the same inspection lot but for different sections of the inspection One user over-writes the other intentionally or accidentally 				PASS	Nick Kelly	7/10/2023	
134	Test Plan Change History	<p>Take an existing QC Plan, and make the following changes:</p> <ol style="list-style-type: none"> Add a spec Change an Inspection Method Change a Sampling Rule Change Inspection Type Assignments Add or change a Default tolerance Delete a Spec 		Verify that all changes are recorded in Plan history	All changes to QC Plan should be recorded	PASS	Nick Kelly	7/10/2023	
135	Test Measurement Audit	<p>User enters data in multiple specs. Then overwrites some measurements.</p> <p>User enters Serial Number (Row Identifier), and/or Group Identifier information.</p>		<ol style="list-style-type: none"> Verify that initial, overwritten and deleted measurements are recorded in Measurement audit. Verify that initial, overwritten and deleted row and group identifiers are recorded in Measurement audit. 		PASS	Nick Kelly	7/10/2023	
136	Test Object Delete History Log	"Admin" user attempts to delete an Object (Plan, Inspection etc.)	Only "Admin" can delete an object.	Verify that object is deleted from List, and added to Delete History	Object is deleted and added to delete history	PASS	Nick Kelly	7/10/2023	
137	Ensure that all Excel Output Reports have a Unique Identifier that matches the Object (e.g. inspection) the report was created from.	Search for an Inspection record by entering the Unique ID.		On the List of Inspections page, enter the Inspection Unique ID .	<ol style="list-style-type: none"> System should return the Inspection that matches that Unique ID Note: For Composite Inspections, user can only search by Parent Inspection Unique ID. 	PASS	Nick Kelly	7/10/2023	
138	Test Inspection History Tab	<p>For changes to Inspection Record (other than measurements):</p> <ol style="list-style-type: none"> Record page IDs in Inspection History Record Inspection Identifier 1 and 2 in Inspection history Record Comments: Part Level, Feature Level, Measurement Level in History Lot Size and Switching Rules Record Comments from the Manage tab in History 				PASS	Nick Kelly	7/10/2023	
139	Balloon renumbering (from either Add Spec or Add Balloon) must be captured in Plan History	<p>User balloons some features, then deletes a feature from:</p> <ol style="list-style-type: none"> The table The drawing <p>Then the user clicks on Renumber.</p>		<p>User balloons 10 features, then deletes a feature from:</p> <ol style="list-style-type: none"> The table The drawing <p>Then the user clicks on Renumber.</p>	The old and new balloon numbers should be logged in History	PASS	Nick Kelly	7/10/2023	

140	User History should record all changes to users	As Admin: 1. Change a User's First Name, Last Name, Email Address, Role. 2. Change a User's password		All changes to User record are displayed in History accessed by clicking on the "three-dots" menu at the end of each row.	PASS	Nick Kelly	7/10/2023	
		Note: Ifactory provides a number of controls for user authentication. These include: 1. Minimum password length and complexity (enforced by Ifactory) 2. Limit number of unsuccessful logins (company setting) 3. Prevent password reuse for 3 generations (enforced by Ifactory) 4. Auto-log-out after period of inactivity (company settings) 5. Password reset intervals (company settings)			PASS	Nick Kelly	7/10/2023	
141								
142	Passwords should meet minimum length and complexity requirements (these requirements are defined by Ifactory)	Create or change a password.	An error message should displayed if password entered is fewer than 8 characyers or if minimum complexity is not met .	1. Create a password with fewer than 8 characters. 2. Create a password that does not meet minimum requirements as displayed on screen	An error message is displayed.	PASS	Nick Kelly	7/10/2023
181	Gage Calibration History	Add Actual before, Actual After to history - need to map record back to cal data (record function and nominal as labels - changed to recording row number instead, as function may not be entered, and function/nominal could change) Add Notes to History Add deletion of calibration records to history			Gage History should record the following from every calibration: 1. Actual Before 2. Actual After 3. Notes 4. Deletion of Calibration records	PASS	Nick Kelly	7/10/2023
205	Gage Transaction History	Add "Gage History" tab to Gage detail page - lists all transactions for gage (issue and return) - same as going to gage transactions and searching on gage id, but easier. Rename of "Gage calibration" tile to "Gages" makes presence of this less confusing.				PASS	Nick Kelly	7/10/2023
206	JSON Data Back-up should match system data					PASS	Nick Kelly	7/10/2023

Test #	User Requirement	User Inputs	System Validation (Error Checks)	Test	Expected Behavior	Verified	Verified By	Verified On	Test Data (for convenience)
169	Add a Part Master manually					PASS	Nick Kelly	7/10/2023	
170	Add a Part Master from an Import					PASS	Nick Kelly	7/10/2023	
171	Create a BoM manually					PASS	Nick Kelly	7/10/2023	
172	Add a BoM from an import					PASS	Nick Kelly	7/10/2023	

Test #	User Requirement	User Inputs	System Validation (Error Checks)	Test	Expected Behavior	Verified	Verified By	Verified On	Test Data (for convenience)
143	Change or correct a default tolerance	Change default tolerance for .XXX from .015 to .0015	N/A	Release Plan. Up-version button should appear on the Inspection page indicating that Ifactory has detected that the Version of the Inspection does not match with the Version of the Plan. In the Inspection, click on Up-Version.	1. The inspection should be up-versioned to match the latest Plan (The Version shown on the Inspection should match with the Version on the Plan) 2. The corrected tolerance should be shown in the Inspection 3. Pass/Fail should be recalculated if data was previously entered	PASS	Nick Kelly	7/10/2023	
144	Add a specification	Add a Spec		Release Plan. Up-version button should appear on the Inspection page indicating that Ifactory has detected that the Version of the Inspection does not match with the Version of the Plan. In the Inspection, click on Up-Version.	1. The inspection should be up-versioned to match the latest Plan (The Version shown on the Inspection should match with the Version on the Plan) 2. The spec that was added should be shown in the Inspection	PASS	Nick Kelly	7/10/2023	
145	Delete a specification	Delete a spec		Release Plan. Up-version button should appear on the Inspection page indicating that Ifactory has detected that the Version of the Inspection does not match with the Version of the Plan. In the Inspection, click on Up-Version.	1. The inspection should be up-versioned to match the latest Plan (The Version shown on the Inspection should match with the Version on the Plan) 2. The spec that was deleted should no longer be shown in the Inspection	PASS	Nick Kelly	7/10/2023	
146	Change an Inspection Method	Change an Inspection Method		Release Plan. Up-version button should appear on the Inspection page indicating that Ifactory has detected that the Version of the Inspection does not match with the Version of the Plan. In the Inspection, click on Up-Version.	1. The inspection should be up-versioned to match the latest Plan (The Version shown on the Inspection should match with the Version on the Plan) 2. The inspection method that was updated should be displayed correctly.	PASS	Nick Kelly	7/10/2023	
147	Change a Sampling Rule	Change a Sampling Rule		Release Plan. Up-version button should appear on the Inspection page indicating that Ifactory has detected that the Version of the Inspection does not match with the Version of the Plan. In the Inspection, click on Up-Version.	1. The inspection should be up-versioned to match the latest Plan (The Version shown on the Inspection should match with the Version on the Plan) 2. The sampling rule that was updated should be displayed correctly. Sample size should be recalculated (if possible)	PASS	Nick Kelly	7/10/2023	
148	Remove a feature from an Inspection Type	Remove a feature from an inspection Type		Release Plan. Up-version button should appear on the Inspection page indicating that Ifactory has detected that the Version of the Inspection does not match with the Version of the Plan. In the Inspection, click on Up-Version.	1. The inspection should be up-versioned to match the latest Plan (The Version shown on the Inspection should match with the Version on the Plan) 2. The features that were removed from the Inspection Type should no longer be included in the inspection.	PASS	Nick Kelly	7/10/2023	
149	Add a feature to an Inspection Type	1. Create an Inspection of any Inspection type 2. Return to the Plan, create a new draft version, and assign one or more features to the above Inspection Type		Release Plan. Up-version button should appear on the Inspection page indicating that Ifactory has detected that the Version of the Inspection does not match with the Version of the Plan. In the Inspection, click on Up-Version.	1. The inspection should be up-versioned to match the latest Plan (The Version shown on the Inspection should match with the Version on the Plan) 2. The features that were assigned to the Inspection Type should now be included in the inspection.	PASS	Nick Kelly	7/10/2023	
186	Only Editors or Admins can Up-Version (Users cannot up-version)	Editor creates a Plan and associated inspection. Editor creates and releases a new plan version.		A "User" attempts to up-version the plan.	"User" is not permitted to Up-Version the Plan.	PASS	Nick Kelly	7/10/2023	

Test #	User Requirement	User Inputs	System Validation (Error Checks)	Test	Expected Behavior	Verified	Verified By	Verified On	Test Data (for convenience)
150	Set sampling rule to 100%	Define sampling rule in the plan		Enter a lot size of 365	Sample size should be 365	PASS	Nick Kelly	7/10/2023	
151	Set sampling rule to 1 in 5	Define sampling rule in the plan		Enter a lot size of 365	Sample size should be $365/5 = 73$. Inspection data entry screens should have every 5th row in white starting with the first row	PASS	Nick Kelly	7/10/2023	
152	Set sampling rule to a fixed quantity (e.g. 13)	Define sampling rule in the plan		Enter a lot size of 365	Sample size should be 13	PASS	Nick Kelly	7/10/2023	
153	Set sampling rule C=0 1.0	Define sampling rule in the plan		Enter a lot size of 365	Lot size = 500; Sample Size = 29	PASS	Nick Kelly	7/10/2023	
154	Set sampling rule to ORIG C=0 1.0 (i.e. old revision)	Define sampling rule in the plan using the "Original C=0" plan		Enter a lot size of 150	Lot size = 150; Sample Size = 13	PASS	Nick Kelly	7/10/2023	
155	Set sampling to C=0 1.0 (i.e. new revision)	Define sampling rule in the plan using the "C=0" plan		Enter a lot size of 150	Lot size = 150; Sample Size = 19	PASS	Nick Kelly	7/10/2023	

Test #	User Requirement	User Inputs	System Validation (Error Checks)	Test	Expected Behavior	Verified	Verified By	Verified On	Test Data (for convenience)
156	Read-Only User	<ol style="list-style-type: none"> User attempts to Add / Edit Plans User attempts to create an Inspection or NCR (or CAPA, SCAR) User attempts to change Settings User attempts to change List of Values User attempts to Add/Edit Users and Roles User attempts to run Analytics. User attempts to Delete Objects. 		Set Role to Read-Only	<ol style="list-style-type: none"> Cannot create or modify Plans or Inspections (or NCRs or other objects) Cannot enter inspection data Can view Plans and inspections and other Objects. Can Filter Tables On-Screen. Can run Analytics and set Date Ranges Can run Reports and Download data Cannot change Company Settings. Can change personal user settings (Time Zone, Language etc.) Cannot change List of Values Cannot create or modify Plans. Can enter inspection data Can create or modify Inspections and NCRs. Can run Analytics and set Date Ranges Can run Reports and Download data Cannot change Company Settings Cannot change List of Values Cannot delete objects Cannot edit Users 	PASS	Nick Kelly	7/10/2023	
157	User (Factory-floor data-entry)	<ol style="list-style-type: none"> User attempts to Add / Edit Plans User attempts to create an Inspection or NCR (or CAPA, SCAR) User attempts to change Settings User attempts to change List of Values User attempts to Add/Edit Users and Roles User attempts to run Analytics. User attempts to Delete Objects. 		Set Role to User	<ol style="list-style-type: none"> Can create or modify Plans or Inspections (or NCRs or other objects) Can enter inspection data Can view Plans and Inspections. Can Filter Tables On-Screen. Can run Analytics and set Date Ranges Can run Reports and Download data Can change Company Settings Cannot change List of Values Cannot delete objects Cannot edit Users 	PASS	Nick Kelly	7/10/2023	
158	Editor	<ol style="list-style-type: none"> User attempts to Add / Edit Plans User attempts to create an Inspection or NCR (or CAPA, SCAR) User attempts to change Settings User attempts to change List of Values User attempts to Add/Edit Users and Roles User attempts to run Analytics. User attempts to Delete Objects. 		Set Role to Editor	<ol style="list-style-type: none"> Can create or modify Plans or Inspections (or NCRs or other objects) Can enter inspection data Can view Plans and Inspections. Can Filter Tables On-Screen. Can run Analytics and set Date Ranges Can run Reports and Download data Can change Company Settings Can change List of Values Cannot delete objects Cannot edit Users 	PASS	Nick Kelly	7/10/2023	
159	Admin	<ol style="list-style-type: none"> User attempts to Add / Edit Plans User attempts to create an Inspection or NCR (or CAPA, SCAR) User attempts to change Settings User attempts to change List of Values User attempts to Add/Edit Users and Roles User attempts to run Analytics. User attempts to Delete Objects. 		Set Role to Admin	<ol style="list-style-type: none"> Can create or modify Plans or Inspections (or NCRs or other objects) Can enter inspection data Can view Plans and Inspections. Can Filter Tables On-Screen. Can run Analytics and set Date Ranges Can run Reports and Download data Can change Company Settings Can change List of Values Can delete objects Can edit Users 	PASS	Nick Kelly	7/10/2023	
160	1factory Support (Super Admin)	<ol style="list-style-type: none"> Log impersonation event and make visible to customer Prevent data editing by 1factory team on Production server SuperAdmin cannot enter a signature 		Cannot be tested by customer. Must be tested by 1factory in presence of customer	<ol style="list-style-type: none"> 1factory support team members cannot create or edit plans and inspections. Can change account settings and add/edit users 	PASS	Nick Kelly	7/10/2023	
173	Admin needs to add a New user to an account that has SSO enabled	On boarding page should prompt user to enter password if SSO AND Esignatures enabled.	Should include explanatory text on both pages that password is used for signing only (not for login)	<p>Add a New User in the Identity Provider (e.g. Okta, Azure AD, Cisco Duo etc.). [This test will need to be run by the end customer]</p> <p>Add New User with the same user email in 1factory.</p>	User receives an email to complete the sign-up process. Clicking on the link takes user to a page where he/she sets up their signing password.	PASS	Nick Kelly	7/10/2023	
174	Admin needs to reset the password for an account that has SSO enabled	Admin should be able to reset forgotten password, via 'resend password' button on User slide-out		Admin navigates to the Users menu, selects a User, and clicks on Resend Password Link.	User receives an email with a link to reset password.	PASS	Nick Kelly	7/10/2023	
175	User resets his/her own password for an account that has SSO enabled	User should be able to reset forgotten password, via 'Forgot password' on login page.		Click on "forgot password"	User receives an email with a link to reset password.	PASS	Nick Kelly	7/10/2023	
176	User changes her/her own password for an account that has SSO enabled	User should be able to change password, via change password page		Click on "Change Password"	User enters current password and new password to change password.	PASS	Nick Kelly	7/10/2023	

Test #	User Requirement	User Inputs	System Validation (Error Checks)	Test	Expected Behavior	Verified	Verified By	Verified On	Test Data (for convenience)
161	Output an Inspection Summary Report	Setting: Precision: Data as entered. Rounding: No rounding 1. Enter measurement data in an inspection 2. Use Mark Row/Column to add Part-level and Feature-level comments 3. Use Manage-tab to add Inspection-level comments 4. Filter Inspection Summary Table by Inspection Method or Spec Type		1. Verify inspection headers 2. Verify measurement data 3. Verify Feature-level comments (Part-level will not show up) 4. Repeat test by Filtering by Inspection Method or Spec Type and then running the report	1. Inspection headers must match exactly 2. Min and Max of measurement data should be calculated correctly Note: -- Min and Max of features with multiple places e.g. 3x is calculated across all the places -- Min and Max values are shown with a fixed number of decimal places (4) 3. Feature-level and inspection level comments show up on the report 4. Inspector names should show up on the report (shows all inspectors that entered data)	PASS	Nick Kelly	7/10/2023	
162	Output a Specifications as Columns Reports	Setting: Precision: Data as entered. Rounding: No rounding 1. Enter measurement data in an inspection 2. Use Mark Row/Column to add Part-level and Feature-level comments 3. Use Manage-tab to add Inspection-level comments 4. Optionally Filter Inspection Summary Table by Inspection Method or Spec Type		1. Verify inspection headers 2. Verify measurement data 3. Verify Feature-level comments (Part-level will not show up) 4. Repeat test by Filtering by Inspection Method or Spec Type and then running the report	1. All measurement data must match what was entered in the system 2. All measurement data must match what was entered in the system 3. Feature-level and inspection level comments show up on the report 4. Inspector names should show up on the report (shows all inspectors that entered data) 5. Status Accepted / Rejected should show up on report 6. Report should be filtered to match list of features on the inspection	PASS	Nick Kelly	7/10/2023	
163	Output a Specifications as Rows Reports	Setting: Precision: Data as entered. Rounding: No rounding 1. Enter measurement data in an inspection 2. Use Mark Row/Column to add Part-level and Feature-level comments 3. Use Manage-tab to add Inspection-level comments 4. Optionally Filter Inspection Summary Table by Inspection Method or Spec Type		1. Verify inspection headers 2. Verify measurement data 3. Verify Feature-level comments (Part-level will not show up) 4. Repeat test by Filtering by Inspection Method or Spec Type and then running the report	1. Inspection headers must match exactly 2. All measurement data must match what was entered in the system 3. Feature-level and inspection level comments show up on the report 4. Inspector names should show up on the report (shows all inspectors that entered data) 5. Status Accepted / Rejected should show up on report 6. Report should be filtered to match list of features on the inspection	PASS	Nick Kelly	7/10/2023	
164	From a First Article Inspection, output a FAI report	Setting: Precision: Data as entered. Rounding: No rounding Change Settings for Reports output (gage/calibration) from No to Yes FAI Type: AS9102 or Standard 1. AS9102 - Form 1,2,3 Standard output		Run	Inspection reports must include the Gage ID and Calibration Due Date	PASS	Nick Kelly	7/10/2023	
165	Output gage ID and calibration to reports	Settings: Precision: Data as entered. Rounding: No rounding Change Settings for Reports output (gage/calibration) from No to Yes		Run	Inspection reports must include the Gage ID and Calibration Due Date	PASS	Nick Kelly	7/10/2023	
166	Output a Specifications as Columns Report for a Composite Inspection	Open an inspection created from a "Composite" Plan that has inspection data and gages recorded in it.		In the inspection, click on Reports tab. Then click on Specifications as Columns.		PASS	Nick Kelly	7/10/2023	
167	Output a Data Entry Form for an inspector to fill off-line	Open an inspection that does not have any data in it. In the inspection, click on Reports tab. Then click on Data Entry Form.		Clicking on Data Entry Form should output a report that can be printed for data entry	Content of Data Entry Form should match data entry screens in IFactory	PASS	Nick Kelly	7/10/2023	
168	Output a human-readable QC Plan form	Open a Plan. On the Manage tab, click on QC Plan Summary			QC Plan Summary in excel must match QC Plan in the system.	PASS	Nick Kelly	7/10/2023	

Test #	User Requirement	User Inputs	System Validation (Error Checks)	Test	Expected Behavior	Verified	Verified By	Verified On	Test Data (for convenience)
194	Spec Library	Create and release a Spec Library with one or more specs. Import Spec Library into a Plan. Release Plan. Create an Inspection.		Verify that all Spec Library features are correctly imported into Plan and associated Inspection.	All Spec Library features should be correctly displayed in the Inspection.	PASS	Nick Kelly	7/10/2023	
195	Spec Library	Up Version the Spec. Library. Reimport the Spec Library into the Plan. Release the Plan.		Verify that all updated Spec Library features are correctly imported into Plan and associated Inspection.	All Spec Library features should be correctly displayed in the Inspection.	PASS	Nick Kelly	7/10/2023	

Test #	User Requirement	User Inputs	System Validation (Error Checks)	Test	Expected Behavior	Verified	Verified By	Verified On	Test Data (for convenience)
183	Bug: Gage Calibration for fourth place decimal (rounding issue) is incorrect	Setup an In-House Calibration: Nominal = 0.0250 * Tol = 0.0001 ^ Tol = 0.0001	1. Enter Measurements for Condition Before and Condition After (if required) Actual Before = 0.02489 Actual After = 0.02490 or 0.02491		1. Condition Before should be out-of-cal 2. Condition After should be in-cal 3. New calibration due-date should be set correctly 4. Calibration status should be set correctly	PASS	Nick Kelly	7/10/2023	
187	Bug: When FAI is Up-Versioned, the data in the Remarks column (#14) gets erased	User creates and releases a Plan. User creates an FAI and adds Remarks.		User modifies the Plan and releases the new Version. User Up-Version FAI. When the FAI is up-versioned, the Remarks are not erased.		PASS	Nick Kelly	7/10/2023	
191	BUG: Auto upload timestamp does not reflect the time zone settings	Set Time Zone under Settings.		Start auto-upload	Auto-Upload attempt should reflect time in User's Time Zone.	PASS	Nick Kelly	7/10/2023	
192	BUG: When an Inspection is moved from Reviewed back to Pending, we are not updating the Status on the List of Inspections page.	Set an Inspection to Approved (or rejected), and then to Reviewed. Save Inspection.		Move Inspection from Reviewed to Pending.	New status should be recorded in History and must be reflected on the List of Inspections page.	PASS	Nick Kelly	7/10/2023	
197	BUG: When clicking save to Release a New Version and adding Release Notes at the same time - the release notes will not save. (They only save if you type the release notes first then hit save, go back to manage and then release the plan and hit save.)	User creates a new version of a Plan, adds Release Notes, and clicks Save.		Verify Plan Status and Release Notes.	Plan status changes to Released, and Release Notes are saved.	PASS	Nick Kelly	7/10/2023	
201	BUG: Run-chart for GD&T features with Bonus is misleading, since a measurement may be shown outside of ULS/LSL in red as though it failed, but it actually "passed" after adding to bonus tolerance.				Measurements that are out-of-spec without bonus but in-spec with bonus are displayed in a yellow square.	PASS	Nick Kelly	7/10/2023	
203	Unable to save more than 12 rows of in house calibration data.	Load calibration data with more than 12 rows		Verify that calibration record with more than 12 rows is saved correctly.		PASS	Nick Kelly	7/10/2023	