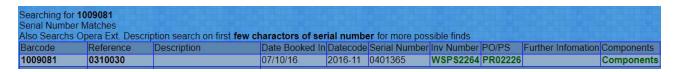
## **Product Outputs / Quality Control**

Similar problems of remote desktop view to the on-site reviews is Product Outputs / Quality Control. Quality Control is done via barcode, each component and subsequent product is tracked and QA via barcode tracking.

for example:1511824-201709-M5

Using Tom Thumb Serial number 0401365

Search in the system:



This shows the unit was built using Production PR02226 Clicking PR02226:

Stock Refere	nce Description	C	ty Supplie	r Supplier	Ref Last Ord	er gty Date Purcha	sed Barcoo	les Opera S	tk Unit Co	st Total
330190	Universal Clamp	1	000090	32 A4916	100	15/09/16	100	115.00	7.23	72.3
330191	Clamp Spacer	1	000090	32 A4917	150	04/03/15	48	63.00	4	40
330193	Pressure gauge: 63mm dial	-5 to +60 cmWG 1	000090	97 74656	100	26/07/17	5	20.00	52.5	525
330201	Main Body Block	1	000090	32 0330201	100	15/09/16	142	157.00	36.68	366.8
330206	Blocking Bolt and Nut	1	000090	32 0330206	100	15/09/16	201	216.00	4.48	44.8
330208	Inlet 10mm	1	000090	32 0330208	100	15/09/16	224	235.00	2.98	29.8
330209	Outlet 15 mm	11	000090	32 0330209	100	15/09/16	262	277.00	2.97	29.7
330210	Precision Valve	1	0 000091	17 9901-40	100	04/03/15	99	135.00	34.99	349.9
330211	Adjustable Valve	1	0 000091	17 9901-18	100	04/03/15	85	99.00	43.51	435.1
330296	Blanking Bolt	1	0 000091	23 367-6098	150	04/03/15	10	29.00	0.51	5.1
330212	Gauge Seal	1	0							
330213	O Ring Thick	1								
330214	O Ring Thin	6	0							
330216	Screws For Clamp	4	0							
390006	Tom Thumb Instruction Man	ual 1	0							
390010	Adjustable Valve Label	1	0							
390015	Tom Thumb label	1								
390016	Address label for Tom Thum									
390018	Label: CAUTION Must be us									
0390030	Serial number label TT480	1	0							
									189.85	1898
	and the second								N	
	erial numbers									
	ence Barcode   Serialnumber Desc									
310030	1009080 0401364	IN147662	09/11/							
310030	1009081 0401365	WSPS2264		17 66141						
310030	1009082 0401366	IN148755	11/01/							
310030	1009083 0401367	IN148755	11/01/							
310030	1009084 0401368	IN148755	11/01/							
310030	1009085 0401369	IN148755	11/01/							
310030	1009086 0401370	WSPS2277	03/02/							
	400000000000000000000000000000000000000	WSPS2277	03/02/	17						
0310030	1009087 0401371									
0310030 0310030 0310030	1009087 0401371 1009088 0401372 1009089 0401373	IN148755 IN148755	11/01/	17						

This shows all the individual components used to build the unit. (This unit was 1 of a batch of 10) It also shows the end invoices the units went out on.

Clicking a component part e.g. 0330201:

Stock Reference	Description	Barcode	Serialnumber	Date Booked in	Date Issued out	Booked out by	Production/POR Numbe
0330201	Main Body Blo	ock 958169	Tracking9	13/04/2016	10/10/2016	Philip Crossley	POR10628
0330201	Main Body Blo	ock958241	Tracking81	13/04/2016	10/10/2016	Philip Crossley	POR10628
0330201	Main Body Blo	ock 958242	Tracking82	13/04/2016	10/10/2016	Philip Crossley	POR10628
0330201	Main Body Blo	ock 958243	Tracking83	13/04/2016	10/10/2016	Philip Crossley	POR10628
0330201	Main Body Blo	ock958244	Tracking84	13/04/2016	10/10/2016	Philip Crossley	POR10628
0330201	Main Body Blo	ock 958245	Tracking85	13/04/2016	10/10/2016	Philip Crossley	POR10628
0330201	Main Body Blo	ock 958246	Tracking86	13/04/2016	10/10/2016	Philip Crossley	POR10628
0330201	Main Body Blo	ock 958247	Tracking87	13/04/2016	10/10/2016	Philip Crossley	POR10628
0330201	Main Body Blo	ock 958248	Tracking88	13/04/2016	10/10/2016	Philip Crossley	POR10628
0330201	Main Body Blo	ock958249	Tracking89	13/04/2016	10/10/2016	Philip Crossley	POR10628

This shows when a component was booked into the system, barcodes / tracking codes, purchase orders and who used the component.

Also from the production PR02226 screen, which is the complete production run for 10 units, the end destination of the units (Invoice out number) and any final Serial numbers are listed.

Clicking an invoice number e.g. IN148755 Brings up the digital view of the invoice:



Clicking the PDF icon brings up a copy of the invoice sent to the customer See Doc IN148755.

Clicking the part number, expands the part number into a list of individual barcodes / serial numbers that went with the invoice.

antity	Part Number	Description	Unit Price (exVat / Del)	Total
6	0310030	Tom Thumb TT480	£545.00	£3,270.00
	Opera Notes:	Includes: Variable blow off valve. Fixed blow off valve, (predefined level). Patient circuit (si		
	Intrastat Tracking			
	Serial Number	0401366 Date Code 2016-11	Barcode: 1009082	Linked to Invoice by: Catherine Spence
	Includes:	0120140 - (Tracking881819_48)		
	Includes:	3210011 - NeoPEEP 1.0m (Tracking24)		
	Includes;	3210071 - (Tracking971817_86)		
	Serial Number	0401367 Date Code 2016-11	Barcode: 1009083	Linked to Invoice by: Catherine Spence
	Includes:	0120140 - (Tracking881819_45)		
	Includes:	3210011 - NeoPEEP 1.0m (Tracking28)		
	Includes:	3210071 - (Tracking971817_85)		
	Serial Number	0401368 Date Code 2016-11	Barcode: 1009084	Linked to Invoice by: Catherine Spence
	Includes:	0120140 - (Tracking881819_6)		
	Includes:	3210011 - NeoPEEP 1.0m (Tracking29)		
	Includes: Serial Number	3210071 - (Tracking971817_84) 0401369 Date Code 2016-11	Barcode: 1009085	Linked to Invalor by Catherine Course
	Includes:		Barcode, 1009085	Linked to Invoice by: Catherine Spence
	Includes:	0120140 - (Tracking881819_9) 3210011 - NeoPEEP 1.0m (Tracking3)		
	Includes:	3210011 - Neureer 1.0/11 (Hackings) 3210071 - (Tracking971817_83)		
	Serial Number	0401372 Date Code 2016-11	Barcode: 1009088	Linked to Invoice by: Catherine Spence
	Includes:	0120140 - (Tracking881819_5)	Darcoue, 1009066	Linked to hivoice by. Camerine openice
	Includes:	3210011 - NeoPEEP 1.0m (Tracking51)		
	Includes:	3210071 - (Tracking896198-8)		
	Serial Number	0401373 Date Code 2016-11	Barcode: 1009089	Linked to Invoice by: Catherine Spence
	Includes:	0120140 - (Tracking881819 47)		Canada a macada a managa a man
	Includes:	3210011 - NeoPEEP 1.0m (Tracking53)		
	Includes:	3210071 - (Tracking896198 79)		
	Link to QA Here			

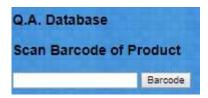
Clicking Link to QA from here, will retrieve the QA (design outputs) of the units.

Stock Reference	Barcode	Serial Number	Adjustable Value @ 10lpm 42.1 +/- 1 mbar	Adjustable Value @ 10lpm Minimum is Max of 8cmH20	Built By	Calibrated Manometer ID	Calibration Date	Customer Requested Maximum Limit	Customers Asset Number (service only)	Gauge cannot be removed without Tools PASS	Gauge is Straight PASS	Labels are attached CE Label	Labels are attached Serial No. Label	Labels are attached Tom Thumb Label	Pass	Precision Value @ 10lpm Maximum 44.1 mbar +/- 1	Pressure Gauge @ 10 lpm Pressure 30cmH20 +/- 1 (28.4 - 30.4 mbar)	Serial Number	Snoop Test No Leaks Pass
'0310030	1009082	0401366	41.5	Yes	Philip Crossley	102075	1483574400			Yes	Yes	Yes	Yes	Yes	Yes	44.3	29.9	0401366	Yes
'0310030	1009083	0401367	42.1	Yes	Philip Crossley	102075	1483574400			Yes	Yes	Yes	Yes	Yes	Yes	44.8	29.4	0401367	Yes
'0310030	1009084	0401368	41.5	Yes	Philip Crossley	102075	1483574400			Yes	Yes	Yes	Yes	Yes	Yes	44.6	29.6	0401368	Yes
'0310030	1009085	0401369	42.0	Yes	Philip Crossley	102075	1483574400			Yes	Yes	Yes	Yes	Yes	Yes	44.7	30.3	0401369	Yes
'0310030	1009088	0401372	42.8	Yes	Philip Crossley	102075	1483574400			Yes	Yes	Yes	Yes	Yes	Yes	44.4	29.6	0401372	Yes
'0310030	1009089	0401373	41.1	Yes	Philip Crossley	102075	1483574400			Yes	Yes	Yes	Yes	Yes	Yes	43.7	29.7	0401373	Yes

Note this is simply one route to QA records. The system is not designed in a straight line, all data in the system is linked and can be found from other parts of the system when required. For example you start with a component find when it got booked in, what shelf it was stored on, if used in production, what the part it went into, QA of the end products, invoice to the customer and returns information if applicable.

## **QA a Single Product:**

Starts with a Single Input Box

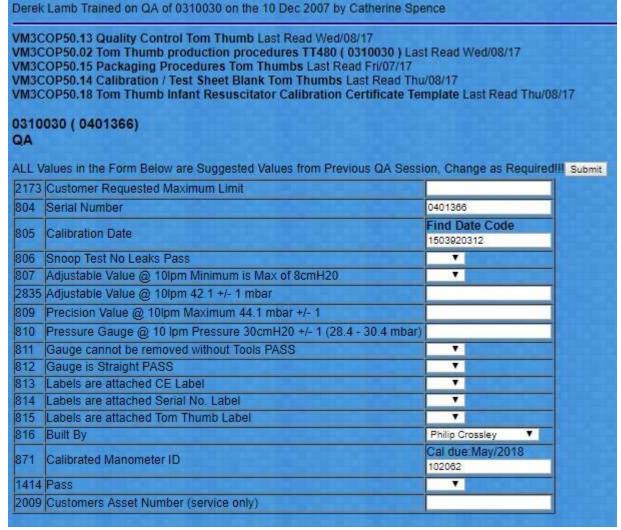


Scanning a barcode, the system will first check if the user has been trained to QA this item:

An untrained QA employee will see:

```
VM3COP50.13 Quality Control Tom Thumb Last Read Wed/08/17
VM3COP50.02 Tom Thumb production procedures TT480 ( 0310030 ) Last Read Wed/08/17
VM3COP50.15 Packaging Procedures Tom Thumbs Last Read Fri/07/17
VM3COP50.14 Calibration / Test Sheet Blank Tom Thumbs Last Read Thu/08/17
VM3COP50.18 Tom Thumb Infant Resuscitator Calibration Certificate Template Last Read Thu/08/17
```

A Trained Employee will see:



Also of note – the QA cannot proceed if any of the QMS documents associated with the product have not been read by the user. This includes if a document has had any sort of update. Regardless of time read, the QMS procedure is immediately available to the user for review by clicking the link.

## **QA Controls on Shipping to customers**

Behind each and every product code in the system there is an option screen as part of it.

	U.A.
View Active QA Form	Digital QA Form
Atmosphere Readings	Add to QA LOG
All Units QA'ed ▼	QA Type (ALL will Block Orders Shipping until item is QA'ed)

Setting a product code to All Units QA'ed, will prevent any of the stock from leaving the building, unless the product has passed QA.

Demonstrating the system as a series of flat PDF documents, as part of a product technical file is no longer straight forward e.g. the PMS reports on products, works in much the same way as demonstrated above on the Product Design and Quality Control. From customer complaints, product feedback, customer returns, shipping delays, supplier reviews etc.

All the information to carry out the review, is on hand at the time of the review. The end report such as ID17690 is proof the surveillance has been carried out so it can be logged in the technical file

Regards

Derek Lamb 28 August 2017