

<b>Title:</b> Tube Auditor Re-launch	
<b>Document No:</b> NOC-2007	
<b>Revision:</b> 1.0	March 2020

Dear Customer,  
Dear Collaborator,

We are pleased to inform you that **Brooks Life Sciences is re-launching Tube Auditor** - a fast, accurate and non-invasive device used to measure volume in microtubes.

The Tube Auditor has been on the market for a long time and, due to an increased demand in the past year, we have decided to:

- simplify the quoting and ordering process;
- release new product configurations and;
- expand the instrument's labware compatibility.

These changes will decrease lead times.

This document describes and summarizes all modifications that will impact this product model. All modifications summarized in this NOC will be effective as of **March 19<sup>th</sup> 2020**.



## 1. What is the Tube Auditor?

**Tube Auditor** is a fast, accurate and non-invasive device used to measure volume in microtubes. It can also be used to detect precipitate, and therefore to help understand sample quality, and it works with capped tubes ensuring that sample quality is not compromised.

**Tube Auditor** is compatible with **96-SBS or 48-SBS** format racks. Moreover, it can be used as a stand-alone unit or integrated into an automated system. If integrated into an automated system, then an OPC license is required to enable remote control of the instrument.

By default, **Tube Auditor is equipped with a 1D Barcode Reader used to identify the evaluated SBS-rack**. The 1D Barcode Reader can be used to read the code placed on the SBS-rack in different positions (short-side or long-side). If desired, **a 2D Barcode can also be installed** and used for fast identification of racked 2D-coded sample tubes.

To help understand sample quality, a **"Precipitate Detection"** option can be activated (**"Pro" version of the system**).



*The Tube Auditor comes with a PC equipped with proprietary software. Once set up, the unit is simple to use and the software intuitive.*

## 2. Affected Products

### 2.1 Obsolescence of parts

All instruments with the Part Numbers listed below will be made **obsolete** as of **March 19<sup>th</sup>, 2020**. The Part Numbers are being made obsolete as they are duplicate part numbers and unnecessary as part of our product portfolio.

PART NUMBER	DESCRIPTION
LS-0315-0206	Assy, std,pro,2d,no opc license, tube auditor 48
LS-0316-0009	Tube auditor, UK Biobank
LS-0316-0028	Tube auditor pro with 2d reader
LS-0316-0033	Tube auditor, Monsanto
LS-0316-0201	Assy,std,w/o pro,no 2d,no opc license,tube auditor
LS-0316-0204	Assy,std,w/o pro,w/ 2d,w/ opc license,tube auditor
LS-0316-0205	Assy,std,w/ pro,no 2d,no opc license,tube auditor
LS-0316-0206	Assy,std,w/ pro,w/ 2d,no opc license,tube auditor
LS-0316-0207	Assy,std,w/ pro,no 2d,w/ opc license,tube auditor
LS-0316-0208	Assy,std,w/ pro,w/ 2d,w/ opc license,tube auditor

### 2.2 New releases: Tube Auditor Configurations

Tube Auditor is now available in 48-SBS or in 96-SBS formats, depending on the selected type of labware.

The different Tube Auditor models compatible with 96-SBS racks are listed below:

PART NUMBER	DESCRIPTION (96-FORMAT)
96-0001	Tube Auditor 96 Standard
96-0002	Tube Auditor 96 with 2D Reader
96-0003	Tube Auditor 96 with OPC License
96-0004	Tube Auditor 96 with 2D Reader and OPC License

- 96-0001:** Tube Auditor compatible with 96-SBS racks; standard configuration. It includes 1D Barcode Reader (to identify the evaluated SBS-rack), PC and TA software used to assess volumes by default.
- 96-0002:** Tube Auditor compatible with 96-SBS racks; equipped with 2D reader. It includes all items mentioned on 96-0001 plus a 2D Barcode reader for fast identification of racked 2D-coded sample tubes.
- 96-0003:** Tube Auditor compatible with 96-SBS racks; standard configuration for integration. It includes 1D Barcode Reader (to identify the evaluated SBS rack), PC and TA software used to assess volumes by default. The device is also supplied with an OPC license (Open Platform Communications) for industrial telecommunication and system integration.
- 96-0004:** Tube Auditor compatible with 96-SBS racks; premium configuration. It includes 1D Barcode Reader (to identify the evaluated SBS-rack), PC and TA software used to assess volumes by default. Moreover, the system is supplied with a 2D Barcode reader (for sample tubes) and with an OPC license for system integration.

The different Tube Auditor models compatible with 48-SBS racks are listed below:

PART NUMBER	DESCRIPTION (48-FORMAT)
98-0001	Tube Auditor 48 Standard
98-0002	Tube Auditor 48 with 2D reader
98-0003	Tube Auditor 48 with OPC License
98-0004	Tube Auditor 48 with 2D reader and OPC License

- 98-0001:** Tube Auditor compatible with 48-SBS racks; standard configuration. It includes 1D Barcode Reader (to identify the evaluated SBS-rack), PC and TA software used to assess volumes by default.
- 98-0002:** Tube Auditor compatible with 48-SBS racks; equipped with 2D reader. It includes all items mentioned on 98-0001 plus a 2D Barcode reader for fast identification of racked 2D-coded sample tubes.
- 98-0003:** Tube Auditor compatible with 48-SBS racks; standard configuration for integration. It includes 1D Barcode Reader (to identify the evaluated SBS-rack), PC and TA software used to assess volumes by default. The device is also supplied with an OPC license (Open Platform Communications) for industrial telecommunication and system integration.
- 98-0004:** Tube Auditor compatible with 48-SBS racks; premium configuration. It includes 1D Barcode Reader (to identify the evaluated SBS-rack), PC and TA software used to assess volumes by default. Moreover, the system is supplied with a 2D Barcode reader (for sample tubes) and with an OPC license for system integration.

The different software options are available with the codes below:

PART NUMBER	DESCRIPTION (PRO-VERSION)
97-0001	SW License to activate the Pro version (precipitate detection) (available for all configurations)

- 97-0001:** Software License for Tube Auditor Pro version. Compatible with all Tube Auditor configurations listed above (96 and 48 format). Pro license supports precipitate detection and provides a facility to save and recall audited tube images.

### 2.3 Replacement Products

As of March 19<sup>th</sup>, 2020, Brooks Life Sciences will no longer supply the products listed below. The Part Numbers are being made obsolete as they are duplicate part numbers and unnecessary as part of our product portfolio.

Please refer to “Replaced by” column to know what to offer instead.

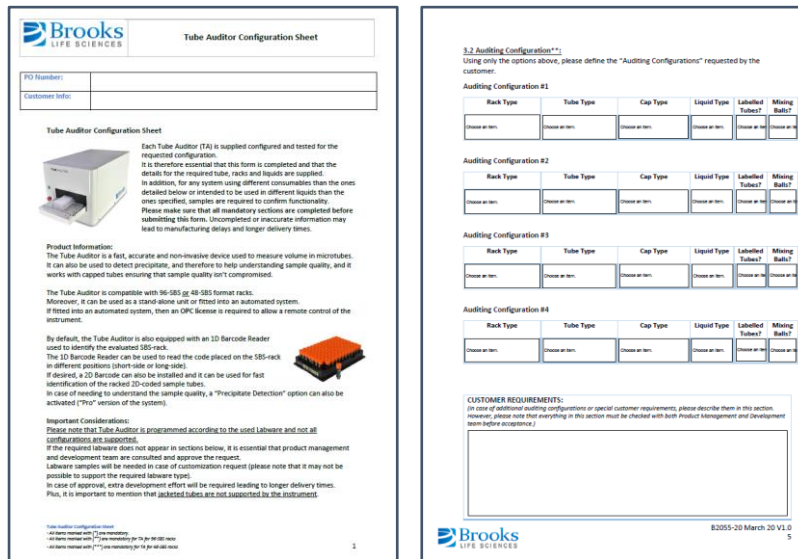
OBS. PART #	DESCRIPTION	REPLACED BY:
LS-0315-0206	Assy, std, pro, 2d, no opc license, tube auditor 48	98-0002 + 97-0001
LS-0316-0009	Tube auditor, UK biobank	No replacement
LS-0316-0028	Tube auditor pro with 2d reader	96-0002 + 97-0001
LS-0316-0033	Tube auditor, Monsanto	No replacement
LS-0316-0201	Assy, std, w/o pro, no 2d, no opc license, tube auditor	96-0001
LS-0316-0204	Assy, std, w/o pro, w/ 2d, w/ opc license, tube auditor	96-0004
LS-0316-0205	Assy, std, w/ pro, no 2d, no opc license, tube auditor	96-0001 + 97-0001
LS-0316-0206	Assy, std, w/ pro, w/ 2d, no opc license, tube auditor	96-0002 + 97-0001
LS-0316-0207	Assy, std, w/ pro, no 2d, w/ opc license, tube auditor	96-0003 + 97-0001
LS-0316-0208	Assy, std, w/ pro, w/ 2d, w/ opc license, tube auditor	96-0004 + 97-0001



## 4. How to request Tube Auditor Customization

Each Tube Auditor (TA) is supplied configured and tested for the requested configuration. It is therefore essential that a "Tube Auditor Configuration Sheet" is completed and that the details for the required tube, racks and liquids are supplied. In addition, for any system using different consumables than the ones detailed on the form or, intended to be used with different liquids to those specified, samples are required to confirm functionality.

Please make sure that all mandatory sections are completed before submitting the form. Uncompleted or inaccurate information may lead to manufacturing delays and longer delivery times.



**Tube Auditor Configuration Sheet**

Each Tube Auditor (TA) is supplied configured and tested for the requested configuration. It is therefore essential that this form is completed and that the details for the required tube, racks and liquids are supplied. In addition, for any system using different consumables than the ones detailed below or intended to be used in different liquids than the ones specified, samples are required to confirm functionality. Please make sure that all mandatory sections are completed before submitting this form. Uncompleted or inaccurate information may lead to manufacturing delays and longer delivery times.

**Product Information:**  
The Tube Auditor is a fast, accurate and non-invasive device used to measure volume in microtubes. It can also be used to detect precipitate, and therefore to help understanding sample quality, and it works with capped tubes ensuring that sample quality isn't compromised.  
The Tube Auditor is compatible with 96-SBS-gt 48-SBS format racks. Moreover, it can be used as a standalone unit, or fitted into an automated system. If fitted into an automated system, then an OPC license is required to allow a remote control of the instrument.  
By default, the Tube Auditor is also equipped with an ID Barcode Reader used to identify the evaluated SBS-rack. The ID Barcode Reader can be used to read the code placed on the SBS-rack in different positions (front-side or long-side). If desired, a 2D Barcode can also be installed and it can be used for fast identification of the racked 2D-coded sample tubes. In case of needing to understand the sample quality, a "Precipitate Detection" option can also be activated ("Pro" version of the system).

**Important Considerations:**  
Please note that Tube Auditor is programmed according to the used Labware and not all configurations are supported. If the required labware does not appear in sections below, it is essential that product management and development teams are consulted and approve the request. Labware samples will be needed in case of customization request (please note that it may not be possible to support the required labware type). In case of approval, extra development effort will be required leading to longer delivery times. Plus, it is important to mention that jacketed tubes are not supported by the instrument.

**3.2 Auditing Configuration\*\*:**  
Using only the options above, please define the "Auditing Configurations" requested by the customer.

**Auditing Configuration #1**

Rack Type	Tube Type	Cap Type	Liquid Type	Labelled Tubes?	Mixing Balls?
Choose an item...	Choose an item...	Choose an item...	Choose an item...	Choose an item...	Choose an item...

**Auditing Configuration #2**

Rack Type	Tube Type	Cap Type	Liquid Type	Labelled Tubes?	Mixing Balls?
Choose an item...	Choose an item...	Choose an item...	Choose an item...	Choose an item...	Choose an item...

**Auditing Configuration #3**

Rack Type	Tube Type	Cap Type	Liquid Type	Labelled Tubes?	Mixing Balls?
Choose an item...	Choose an item...	Choose an item...	Choose an item...	Choose an item...	Choose an item...

**Auditing Configuration #4**

Rack Type	Tube Type	Cap Type	Liquid Type	Labelled Tubes?	Mixing Balls?
Choose an item...	Choose an item...	Choose an item...	Choose an item...	Choose an item...	Choose an item...

**CUSTOMER REQUIREMENTS:**  
In case of additional auditing configurations or special customer requirements, please describe them in this section. However, please note that everything in this section must be checked with both Product Management and Development teams before acceptance.

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Tube Auditor Configuration Sheet

### Important Considerations:

Please note that Tube Auditor is programmed according to the specified Labware and not all configurations are supported.

If the required labware does not appear on the form, it is essential that both the Product Management and Development teams are consulted and approve your request.

Labware samples will be needed for customization requests (please note that it may not be possible to support the required labware type).

Upon approval, extra development effort will be required leading to longer delivery times.

**Note: it is important to mention that jacketed tubes are not supported by the instrument.**

## 5. Reason for Change

To better fulfill the demands of our target customers and to stay in line with market expectations and needs, Brooks Life Sciences has decided to re-organize its strategy to sell Tube Auditor. BLS has invested in the expansion of Tube Auditor portfolio to better meet the needs of each Sample Management entity.

## 6. Date of Change

All changes listed in this document will take effect as of **March 19<sup>th</sup> 2020**.

Moreover, there will be no interruption of support from Brooks Life Sciences for any Tube Auditor customers. Obsolescence of part numbers does not mean the end of support or lack of spare parts supply.

If necessary, please contact your local Brooks Life Sciences representative for further information and support on this subject.

## 7. Product Availability

For POs and Lead Time questions, please contact:

- [blss.europe.orders@brooks.com](mailto:blss.europe.orders@brooks.com) (Europe)
- [BLSS.NA.Orders@brooks.com](mailto:BLSS.NA.Orders@brooks.com) (NA)

If you require further information please feel free to contact your local account manager, distributor or member of the support team on [blss.sales@brooks.com](mailto:blss.sales@brooks.com) .

*Thank you.*