

The Services and Support team at Thermo Fisher Scientific knows Applied Biosystems™, Invitrogen™, and Ion Torrent™ instruments better than anyone because the professionals at Thermo Fisher design and manufacture them. With our instrument qualification services, you can be confident that your instruments are installed, operating, and performing according to the manufacturer's specifications. Our manufacturer-trained and certified field service engineers will conduct comprehensive tests, including software and hardware compatibility, component verification, and site requirements, to verify performance and provide reliable, audit-style documentation to support regulatory requirements.

• System performance verification

## mendations for maintaining a qualified system

Recommendations for maintaining a qualified system		
Description	Checkpoints	Services included
IQ/OQ/IPV (RUO) or IQ/OQ/PQ (IVD)*		
Complete qualification service	When are qualification services recommended?	Comprehensive, audit-style documentation for:
Verifies and documents:	At installation	Installation verification
<ul> <li>That all instrument components and accessories match the order invoice and shipping manifest</li> </ul>	<ul> <li>After a move requiring re-installation</li> </ul>	<ul> <li>Order and system verification</li> </ul>
		<ul> <li>Calibrated tools certification</li> </ul>
<ul> <li>That the customer's site meets the requirements for instrument installation</li> </ul>	<ul> <li>After major additions, changes, or hardware or software upgrades that require capturing the instrument configuration during re-installation</li> </ul>	<ul> <li>Component verification</li> </ul>
		Customer training verification
<ul> <li>The configuration of all components of the instrument system, including software and computer</li> </ul>		<ul> <li>Documentation verification</li> </ul>
		Hardware operation verification
<ul> <li>That upon installation, the instrument system is able to meet all performance specifications; comprehensive sub-system testing is included in the verification</li> </ul>		Maintenance verification
		Software verification
		<ul> <li>System performance verification</li> </ul>
<ul> <li>Establishes the initial accuracy and performance of the instrument</li> </ul>		
OQ/IPV (RUO) or OQ/PQ (IVD)*		
Post-installation qualification service	When are qualification services recommended?	Comprehensive, audit-style documentation for:
Verifies and documents:	After planned maintenance	<ul> <li>Calibrated tools certification</li> </ul>
<ul> <li>The configuration of all components of the instrument system, including software and computer</li> </ul>	<ul> <li>After a critical repair</li> </ul>	<ul> <li>Component verification</li> </ul>
	<ul> <li>After minor additions, changes, or hardware or software upgrades</li> <li>According to SOP or site quality requirements</li> </ul>	<ul> <li>Customer training verification</li> </ul>
<ul> <li>The operational performance of all relevant sub-systems using comprehensive testing</li> </ul>		<ul> <li>Documentation verification</li> </ul>
		Hardware operation verification
<ul> <li>That the instrument system is able to meet all performance specifications after critical service or planned maintenance events</li> </ul>	Before a previously installed system will be used in a regulated test	Maintenance verification
		Software verification

environment for the first time



of the instrument

• Helps ensure the continued accuracy and precision

<sup>\*</sup> IQ: Installation qualification; OQ: Operational qualification; IPV: Instrument performance verification; PQ: Performance qualification; RUO: Research Use Only; IVD: In Vitro Diagnostic Use.