



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

March 30, 2011

Michael J. Tokich
Senior Vice President and Chief Financial Officer
STERIS Corporation
5960 Heisley Road,
Mentor, Ohio 44060-1834

Re: STERIS Corporation
Form 10-K for the year ended March 31, 2010
Filed May 28, 2010
Form 10-Q for the quarter ended December 31, 2010
File No. 1-14643

Dear Mr. Tokich:

We have reviewed your letter dated March 21, 2011 and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by amending your filing, by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your filing and the information you provide in response to these comments, we may have additional comments.

Form 10-Q for the quarter ended December 31, 2010

Item 2 - Management's Discussion and Analysis of Financial Condition and Results of Operations, page 23

Matters Affecting Comparability, page 25

1. We note your response to prior comment 4. We are unable to agree that your current presentation is appropriate and consistent with the guidance in Item 10(e) of Regulation S-K as further discussed in the Staff's Non-GAAP Financial Measures Compliance and Disclosure Interpretation 102.10. We believe your current presentation whereby you present a non-GAAP income statement and provide a discussion of the results of operations using only the non-GAAP income statement information attaches undue prominence to the non-GAAP financial measure. We note similar presentation in your

Forms 10-Q for the quarters ended June 30 and September 30, 2010. Please amend each of your June 30, September 30 and December 31, 2010 to remove the non-GAAP income statement presentation and instead separately disclose only those non-GAAP measures used by management that you wish to highlight for investors. Please note this comment also applies to your future Forms 8-K.

2. Notwithstanding the above, we note your proposed revised disclosures regarding the use of the non-GAAP financial measures. However, we note the proposed disclosure does not provide the disclosures required by Item 10(e) of Regulation S-K for each non-GAAP measure presented. Please further revise the disclosures.

Results of Operations, page 27

3. We note that your discussion of the results of operations is based on the non-GAAP financial information and that you do not provide a discussion of the GAAP results of operations as required by Item 303(b) of Regulation S-K. We note similar deviations from the requirements of Item 303(b) of Regulation S-K in your Forms 10-Q for the quarters ended June 30 and September 30, 2010. Please amend each of your June 30, September 30 and December 31, 2010 to include a discussion of your GAAP results of operations for the periods.

You may contact Eric Atallah, Staff Accountant at (202) 551-3663 or me at (202) 551-3643 if you have questions regarding comments on the financial statements and related matters. In this regard, do not hesitate to contact Martin James, Senior Assistant Chief Accountant at (202) 551-3643 with any questions.

Sincerely,

Kevin L. Vaughn
Accounting Branch Chief