



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

DIVISION OF
CORPORATION FINANCE

Mail Stop 3030

September 7, 2016

Sunny S. Sanyal
President and Chief Executive Officer
Varex Imaging Corporation
1678 S. Pioneer Road
Salt Lake City, Utah 84014

**Re: Varex Imaging Corporation
Registration Statement on Form 10-12B
Filed August 11, 2016
File No. 001-37860**

Dear Mr. Sanyal:

We have reviewed your filing 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 these comments within ten business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing your response and any amendment you may file in response to these comments, we may have additional comments.

Form 10

1. File a materially complete document as your next amendment, including all required exhibits. In particular, complete the missing information from the significant number of blanks.

Exhibit 99.1

Varex Imaging Corporation, page 8

2. Please revise the opening paragraphs of this section, where appropriate, to disclose Varex's earnings for the most recently completed fiscal year and the applicable stub period.

Information Statement Summary, page 8

3. In an appropriate location in your summary, please clarify how the amount of the cash consideration and the amount of the borrowing capacity under the credit facility will be determined.

Reasons for the Separation, page 14

4. Disclose why the Varian Medical board determined to complete the spin-off at this time if the conditions supporting the decision have existed previously.

Overview, page 58

5. In an appropriate location in your information statement, please disclose the new products that you are currently introducing to the market that are referred to in the first full paragraph on page 59.

Intellectual Property, page 70

6. Clarify if the patents and patent applications described in this section will be transferred to Varex and disclose the duration of the material patents that you will hold. Also, disclose how licenses could be terminated and the portion of your business affected by those licenses and the portion of your business represented by the royalty-bearing licenses that you will hold.

Environmental Matters, page 70

7. Clarify the percentage of the liabilities related to the CERCLA sites that you will be obligated to reimburse Varian. If known, please quantify your potential liability.

Agreements with Varian, page 102

8. File the supply/distribution agreements and the co-marketing/licensing agreement described in this section as exhibits to your registration statement.

Trading Between the Record Date and Distribution Date, page 114

9. Disclose what happens to “ex-distribution” and “when-issued” trades if you determine not to proceed with the distribution.

Material U.S. Federal Income Tax Consequences, page 116

10. Please revise your disclosure to indicate, if true, that you do not intend to seek a ruling as to the tax consequences of the spin-off because the IRS no longer provides such rulings for spin-off transactions.

Description of Material Indebtedness, page 120

11. Please file the credit agreement described in this section as an exhibit to your registration statement.

Report of Independent Registered Public Accounting Firm, page F-2

12. Please revise to provide an audit report stating that the audit was conducted in accordance with the standards of the Public Company Accounting Oversight Board (United States), and not the auditing standards of the PCAOB as currently indicated. Refer to AS 1.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

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Varex Imaging Corporation
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You may contact Dennis Hult at (202) 551-3618 or Kate Tillan, Assistant Chief Accountant, at (202) 551-3604 if you have questions regarding comments on the financial statements and related matters. Please contact Tim Buchmiller at (202) 551-3635 or Daniel Morris, Special Counsel, at (202) 551-3314 with any other questions.

Sincerely,

/s/ Daniel Morris for

Amanda Ravitz
Assistant Director
Office of Electronics and Machinery

cc: Ronald C. Chen, Esq.
Wachtell, Lipton, Rosen & Katz