



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549-3030

April 1, 2011

E.J. Elliott
Chief Executive Officer
Gencor Industries, Inc.
5201 North Orange Blossom Trail
Orlando, FL 32810

**Re: Gencor Industries, Inc.
Form 10-K for the Fiscal Year Ended September 30, 2010
Filed December 22, 2010
File No. 001-11703**

Dear Mr. Elliott:

We have reviewed your response letter dated March 18, 2011, and your subsequent filings 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 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, please tell us why in your response.

After reviewing the information you provide in response to these comments, we may have additional comments.

Form 10-K for the Fiscal Year Ended September 30, 2010

Business, page 2

1. We note your response to prior comment 4. In future filings, please provide, if material, disclosure in your "Business" and "Liquidity and Capital Resources" sections about your "Acquisition Fund" mentioned in your response, such as when you created the fund, the amount in the fund and the purpose of the fund. Also, expand the disclosure in the "Risk Factors" section of your Form 10-K to provide more specific disclosure of the risks related to the fund.

2. The staff of the Division of Investment Management has informed us that while it does not necessarily agree with all aspects of your analysis, it has no further questions regarding the company's investment company status at this time. The IM Staff notes particularly your representation that the value of "investment securities" as defined in Section 3(a)(1)(C)(2) of the Investment Company Act of 1940 owned by the company currently comprises approximately 35% of the value of the company's total assets (exclusive of Government securities and cash items) on an unconsolidated basis, as such terms are defined in the Investment Company Act.

With respect to your assertion that the company is experiencing high cash balances as a temporary result of market conditions, and that the company intends to acquire operating subsidiaries at a market-appropriate time, the IM Staff wishes to refer you to Rule 3a-2 under the Investment Company Act and the various staff guidance published thereunder; the IM Staff has long recognized that an operating company may find itself in such a position, but has limited the time period for which such a company may be relieved from compliance with Section 3(a).

Finally, the IM Staff appreciates your contention that compelling the company to register with the Commission as an investment company may be inconsistent with the purposes of the Investment Company Act in some respects. The IM Staff wishes to note that our inquiries with respect to these issues are not necessarily intended to result in registration, and are often motivated by our duty to ensure that investors in operating companies achieve investment returns sufficiently linked to the operating performance – as opposed to the investment performance – of such companies.

Consolidated Balance Sheets, page 25

3. Please refer to prior comment 5. We note that you have provided a roll-forward of the allowance for doubtful accounts between September 30, 2009 and September 30, 2010. We note that the only deductions listed are for bad-debt write-offs. Please confirm for us that you had no recoveries of accounts receivable balances subject to an allowance during the year-ended September 30, 2010. Alternatively, please provide us a roll-forward that includes detail of any recoveries.
4. Please refer to prior comment 6. We note your response to our comment that states, "the majority of the Company's sales require cash payments in advance of shipping." Please explain how you account for the significant cash payments when made in advance of shipping. We see that your customer deposits liability is only \$1.5 million. Please provide us a summary of the revenue generating activities which require cash payments in advance of shipping and quantify for us the amount of cash received prior to shipping and reconcile to your customer deposit liability.

Note 1 – Nature of Operations and Summary of Significant Accounting Policies, page 29

Fair Value Measurements, page 29

5. We see from your response to our prior comment 8 that fixed income valuations are based on estimates provided by Standard & Poor's for municipal bonds and Interactive Data Corporation for corporate bonds and that the use of such services is ordinary and customary where not all issues are frequently traded. Please tell us more about the nature of the estimates provided by these services and the activity in these markets, considering that all issues are not frequently traded. Please specifically tell us how you concluded that the estimates you receive represent fair value measurements that fall within Level 1 in the fair value hierarchy, which indicates quoted prices in active markets for identical assets are obtained. We refer you to FASB ASC 820-10-50-2.

Inventories, page 31

6. Please refer to prior comment 10. We note your response to our comment, but do not see how you addressed our concern. Please tell us how often you review your inventory for obsolescence. In addition, please tell the basis for determining the inventory's market value as part of your lower of cost or market test.

Impairments, page 31

7. Please refer to prior comment 11. Please revise future filings to include a policy note for testing intangible and long-lived assets for impairment consistent with and similar to your response to our comment. Please provide us with a copy of your proposed revised disclosure.

Item 10. Directors, Executive Officers and Corporate Governance, page 40

8. We note your response to the second sentence of prior comment 1. You must determine whether your report contains material deficiencies and the appropriate time to file the report.
9. Regarding your responses to prior comments 2 and 3:
 - It does not appear that you provided the table requested in the second sentence of both comments. Therefore, we reissue the comment to provide us with a table that supports your disclosure that the transactions had been reported.
 - Your response to the third sentence of both comments only addressed the examples we mentioned of appointments announced since February 17, 2009 through September 30, 2010 when no Form 3 or Form 4 was filed after February 17, 2009. However, your response did not refer to other appointments, such as the person(s)

E.J. Elliott
Gencor Industries, Inc.
April 1, 2011
Page 4

- who acted as chief financial officer after Messrs. Mundy and Adams resigned. We note the disclosure in your Form 8-Ks filed August 13, 2009 and on June 30, 2010.
- If your table does not support your disclosure that the transactions had been reported, tell us how you will provide disclosure to investors about the unreported transactions.
 - Messrs. Adams, Sharp and Mundy must determine the appropriate time to file their Form 3s. Please note that your directors and chief financial officers must file a Form 3 upon appointment even if that person does not beneficially own any of your securities. See General Instruction 1(c) to Form 3.

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.

You may contact Kevin Kuhar, Staff Accountant, at (202) 551-3662 or Julie Sherman, Accounting Reviewer, at (202) 551-3640 if you have questions regarding comments on the financial statements and related matters. Please contact Tom Jones at (202) 551-3602 or Tim Buchmiller at (202) 551-3635 if you have questions on other comments. In this regard, do not hesitate to contact me at (202) 551-3212 with any other questions.

Sincerely,

Jeffrey Jaramillo
Accounting Branch Chief