



DIVISION OF
CORPORATION FINANCE

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

October 1, 2010

E. J. Elliott
Chairman of the Board and
Chief Executive Officer
Gencor Industries, Inc.
5201 North Orange Blossom Trail
Orlando, Florida 32810

Re: Gencor Industries, Inc.
Form 10-K for the fiscal year ended September 30, 2009
Filed December 29, 2009
File No. 1-11703

Dear Mr. Elliott:

We have reviewed your letter dated September 30, 2010 and have the following comment. In our comment, we 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 comment applies 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 the comment, we may have additional comments.

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1. Please provide us with the disclosure that is not included in your currently filed Form 10-K for the fiscal year ended September 30, 2009. We will evaluate your response to our prior comment once we receive that information.

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

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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.

You may contact Tom Jones at (202) 551-3602 or Tim Buchmiller, reviewing attorney, at (202) 551-3635 if you have any questions.

Sincerely,

Russell Mancuso
Branch Chief