

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549-4631

December 17, 2013

<u>Via E-Mail</u>
Mr. Tony R. Thene
Chief Financial Officer
Carpenter Technology Corp.
P.O. Box 14662
Reading, PA 19610

Re: Carpenter Technology Corp.

Form 10-K for Fiscal Year Ended June 30, 2013

Filed August 23, 2013

Response Letter Dated November 15, 2013

File No. 1-5828

Dear Mr. Thene:

We have reviewed your response 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-K for Fiscal Year Ended June 30, 2013

Financial Statements

Note 10 – Pension and Other Postretirement Benefits, page 72

1. We note your response to prior comment number three. To facilitate our under-standing of your materiality and presentation conclusions, please provide us the following additional information:

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- Provide your analysis, prepared in accordance with SAB Topics 1:M & 1:N, that supports your materiality conclusion regarding the impact of your recent change in determining inventoriable costs.
- It is unclear whether you are bifurcating the components of net periodic pension costs (e.g. service cost, interest cost, etc.) between financial statement line items. Please quantify and provide us your analysis and basis for conclusions regarding the components of net periodic pension costs that you believe are subject to inventory capitalization and those that are not.
- We note you intend to continue to recognize pension and OPEB costs associated with former manufacturing employees in cost of sales. Please quantify those amounts for us for each period presented and explain why you believe they should be reflected in cost of sales but not subject to inventory capitalization.

You may contact Kevin Stertzel at (202) 551-3723 or Anne McConnell at (202) 551-3709 if you have questions regarding these comments and related matters. Please contact me at (202) 551-3768 with any other questions.

Sincerely,

/s/ W. John Cash

W. John Cash Branch Chief