Sun Hydraulics Corporation
1500 West University Parkway
Sarasota, FL 34243

November 14, 2013

VIA EDGAR

Securities and Exchange Commission
Division of Corporation Finance
100 F Street, NE
Washington, D.C. 20549
Attention: Terence O'Brien, Accounting Branch Chief

RE: **Sun Hydraulics Corporation**
Form 10-K
Filed March 12, 2013
File No. 0-21835

Dear Mr. O'Brien:

On behalf of Sun Hydraulics Corporation ("the Company"), I am writing in response to the comments set forth in your letter addressed to the undersigned dated October 21, 2013 (the "Comment Letter"). For the convenience of the Staff of the Division of Corporation Finance of the Securities and Exchange Commission (the "Staff"), each of the Staff's comments is repeated below, along with the Company's response to each comment set forth immediately following the comment.

Comment 1

Form 10-K for the year ended December 29, 2012

18. Segment Reporting, page 52

1. We have read your responses to comments 1 and 2 in our letter dated September 26, 2013. It remains unclear to us how the change from a "sales from" perspective to a "sales to" perspective would necessarily entail a decrease from four reportable segments to just one. In your response to comment 1, you have told us that your CODM "does not use the geographic region's operating results to make decisions about resource allocation to the region nor to assess the region's performance or that of the employees employed in the region." However, in your response to comment 2, it appears the CODM receives this information on a monthly basis and uses it for some purpose. Please tell us on what specific information the CODM relies to make such resource allocation decisions and performance assessments. Considering the CODM report provided in your response is only through April 2013, it would appear that your US and Germany reporting units may constitute your reportable segments, pursuant to ASC 280-10-50-12 and 50-14. Please advise. Also as previously requested, please provide us this CODM "flash report" for the fiscal years 2012 and 2011.

Response to Comment 1

The Company has reviewed this comment and the prior comments relating to segment reporting and the expansion of disclosure to provide additional information regarding its management of operations. As requested, we also have provided the staff with the CODM Flash Reports for fiscal years 2012 and 2011.

We appreciate the Staff's comments relating to the Company's change from four segments, representing Sun's separate legal entities, to one overall business segment, and have completed our review of the applicable accounting and Commission regulations and guidance. As set forth in ASC 280-10-50, an operating segment is a component of a public entity that has all of the following characteristics:

(i) it engages in business activities from which it may earn revenues and incur expenses (including revenues and expenses relating to transactions with other components of the same public entity);

(ii) its operating results are regularly reviewed by the public entity's chief operating decision maker to make decisions about resources to be allocated to the segment and assess its performance; and

(iii) its discrete financial information is available.

Sun does have discrete financial information for its separate subsidiaries, which is necessary for tax and regulatory purposes in their jurisdictions of organization. The operating subsidiaries also engage in business activities from which they may earn revenues and incur expenses. However, the second criterion is not met. As explained herein, the Company does not make decisions about resources to be allocated or assess performance at the legal entity level. Only the Company's consolidated results are regularly reviewed by the CODM. Therefore, based on this total analysis, the Company has only one operating segment, the consolidated company.

The Company agrees that further information regarding the Company's somewhat unique management style, which permeates its operations management, would be helpful to investors. Incorporating this additional information at December 29, 2012, would have resulted in the inclusion of the following new section under Management's Discussion and Analysis of Financial Condition and Results of Operations:

Management and Operations Philosophy

Since its inception, Sun has operated as an entrepreneurial enterprise, with an emphasis on individual employee empowerment and a disinclination to create bureaucracy, a formal management structure or administrative impediments to innovation, efficiency and customer service. Accordingly, the Company's organization, management structure, and reporting and decision-making systems are highly unified and unlayered.

In addition to representative and sales offices located throughout the world, Sun has three subsidiaries outside the United States (in the UK, Germany and Korea) and one U.S. subsidiary. These entity distinctions arose out of historical considerations or as the result of acquisitions. Nevertheless, and increasingly as it has developed into a global enterprise, the Company is operated and managed on a consolidated basis. Much of the Company's primary financial and operations data is reported from Sun's various legal entities, which are separate tax-payers and, in many cases, subject to statutory audits in the countries in which they are organized. This information from Sun locations around the world is then compiled and aggregated, with appropriate consolidating entries, on a monthly basis. However, we do not manage or make decisions based on the individual legal entity information. Instead, this is done on the basis of the consolidated information.

Sun has always employed a leadership model in which all management personnel have line responsibilities and participate across functional lines and in multiple areas, including geographical areas. Through a common vision, shared values and networks of informal, overlapping relationships, the Company has emphasized a unified approach. The CEO oversees the Company with a constant focus on consolidated results.

With oversight from its Board of Directors and an emphasis on transparent communication across the entire Company, Sun's operating strategy and business is based upon the creation and manufacture of a comprehensive line of functional products which are sold, through distribution and directly, worldwide for use in a host of mobile and industrial applications. This unified focus places a premium on the delivery of Sun products for fluid power solutions anywhere in the world in the most efficient manner, with little regard for traditional geographic or entity differentiation. Instead, Sun's management looks at where products are sold - the Americas, Europe (which includes the Middle East and Africa), and Asia/Pacific. Decisions as to resource allocation, expansion of facilities and personnel, and capital investment are all made based on information on "sales to" customers, not information about "sales from" Sun subsidiary entities. This reflects the fact that sales are routinely specified, originated or sold beyond and regardless of entity or geographic boundaries. In particular, many of the sales in Europe and Asia come directly from the US and never pass through one of Sun's subsidiary entities in those regions.

Management's focus is on overall Company performance and the evaluation of opportunities for additional "sales to" customers. Sun's CEO truly acts as the chief executive for the entire business; he and the other management leaders oversee operations worldwide, without an intermediate reporting bureaucracy in each location in which Sun has a legal entity. Using "shared offices," leadership responsibilities are disbursed throughout the company, with minimal formal reporting relationships and maximum collaboration among employees worldwide. By focusing on total net orders and total net sales, not individual legal entity performance, Sun is able to better serve its customers. This philosophy permeates not only the management approach to decision-making, but also the Company's compensation system, which is based on company-wide performance, and not individual or entity-level management-by-objective criteria.

Comparison of Years Ended December 29, 2012 and December 31, 2011

Operating Income

Operating income decreased $0.8 million or 1.5% to $54.4 million in 2012, compared to $55.3 million in 2011, with operating margins of 26.6% and 27.1% for 2012 and 2011, respectively. The company derives its operating income based on the consolidated results of its legal entities. The Company has made the decision to consolidate manufacturing for the most part in the U.S. The Company's foreign subsidiaries primarily act as part of our sales and distribution channel, resulting in different operating income margins. Products manufactured in the U.S. are sold worldwide and are the primary reason that operating income in the U.S. is higher than foreign subsidiary operating income.

The U.S. legal entity contributed $44.4 million to our consolidated operating income during 2012 compared to $41.8 million during 2011, an increase of $2.6 million. The increase was primarily related to an increase in volume as operating margins remained flat at approximately 32%. This increased volume was driven by North American sales. Increasingly, the US legal entity ships products directly to customers around the world. Third party export sales from the US were $50.2 million in 2012 compared to $49.7 million in 2011. As demand strengthens internationally, the US legal entity will benefit from these direct export sales.

Our Korean subsidiary contributed $1.2 million to our consolidated operating income during 2012 compared to $2.5 million during 2011, a decrease of $1.3 million. Margins contracted from approximately 12% in 2011 to approximately 7% in 2012. Korea, more than any other subsidiary, sells direct to large OEM customers. Sales volume declined due to lower demand from these customers within Korea and for product ultimately being sold to China. Margins were also impacted by increased material costs.

Our German subsidiary contributed $5.4 million to our consolidated operating income during 2012 compared to $6.7 million during 2011, a decrease of $1.3 million. Margins contracted from approximately 24% in 2011 to approximately 21% in 2012. The decrease in operating margins was primarily related to reduced demand within Europe and increased material costs. Material cost increases were related to purchases of material in U.S. Dollars and a weakening Euro.

Our U.K. subsidiary contributed $3.7 million to our consolidated operating income during 2012 compared to $4.2 million during 2010, a decrease of $0.5 million. Margins improved from approximately 17% in 2011 to approximately 18% in 2012. The decrease in operating income was primarily related to decreased sales volume resulting in $0.6 million in less operating income. This amount was primarily offset by reduced material costs as a percent of sales of approximately $0.5 million.

The Company also believes that the inclusion of additional information in the tax footnote would aid in clarifying where profits are earned. Incorporating this additional information at December 29, 2012, would have resulted in the inclusion of the following in the Company's tax footnote:

14. Income Taxes

The company derives its pretax income based on the consolidated results of its legal entities. The Company has made the decision to consolidate manufacturing for the most part in the U.S. The Company’s foreign subsidiaries primarily act as part of our sales and distribution channel, resulting in different pretax income levels. Products manufactured in the U.S. are sold worldwide and are the primary reason that pretax income in the U.S. is higher than foreign pretax income. The U.S. legal entity had third party export sales of $50,231, $49,672, and $34,955 for the years 2012, 2011, and 2010, respectively.

Comment 2

Exhibit 10.4, page 59

2. We considered your response to comment 5 of our letter dated September 26, 2013 and are unable to concur. Absent an order granting confidential treatment, Item 601(b)(10) of Regulation S-K requires the filing of material contracts, including attachments, in their entirety. Please refile Exhibit 10.4 in its entirety with your next Exchange Act report.

Response to Comment 2

We have refiled with our Form 10-Q for the quarter ended September 28, 2013, Exhibit 10.4, the Amended and Restated Credit and Security Agreement between the Company and Fifth Third Bank as of August 1, 2011, including the exhibits thereto.

The Company believes that the foregoing responds fully to each of the questions in the Staff's October 21, 2013, Comment Letter. Please advise us if you have any questions about our responses.

Respectfully submitted,

SUN HYDRAULICS CORPORATION

By: /s/ Tricia L. Fulton
Tricia L. Fulton
Chief Financial Officer

cc: Allen Carlson, Chief Executive Officer, Sun Hydraulics Corporation
Gregory C. Yadley, Esq., Shumaker, Loop & Kendrick, LLP