



DIVISION OF  
CORPORATION FINANCE

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

September 14, 2010

Mr. Martin S. Headley  
Executive Vice President Finance and Chief Financial Officer  
Brooks Automation, Inc.  
15 Elizabeth Drive  
Chelmsford, MA

**Re: Brooks Automation, Inc.**  
**Form 10-K for the fiscal year ended September 30, 2009**  
**Filed November 18, 2009**  
**File No. 000-25434**

Dear Mr. Headley:

We have completed our review of your filings and do not have any further comments at this time.

Sincerely,

Brian Cascio  
Accounting Branch Chief