

**CERTIFICATIONS OF PRINCIPAL EXECUTIVE OFFICER  
AND PRINCIPAL FINANCIAL OFFICER  
PURSUANT TO  
18 U.S.C. SECTION 1350,  
AS ADOPTED PURSUANT TO  
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

I, Arthur T. Taylor, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Quarterly Report of Kyphon Inc. on Form 10-Q for the fiscal quarter ended September 30, 2007 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that information contained in such Quarterly Report on Form 10-Q fairly presents in all material respects the financial condition and results of operations of Kyphon Inc.

Date: November 9, 2007

By: /s/ Arthur T. Taylor

Arthur T. Taylor  
Vice President and Chief Operating Officer  
(Principal Executive Officer)

I, Maureen L. Lamb, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Quarterly Report of Kyphon Inc. on Form 10-Q for the fiscal quarter ended September 30, 2007 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that information contained in such Quarterly Report on Form 10-Q fairly presents in all material respects the financial condition and results of operations of Kyphon Inc.

Date: November 9, 2007

By: /s/ Maureen L. Lamb

Maureen L. Lamb  
Vice President and Controller  
(Principal Accounting and Financial Officer)