

INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

OMB APPROVAL	
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1. Name and Address of Reporting Person* <u>Heideman Robert J</u>			2. Date of Event Requiring Statement (Month/Day/Year) 12/14/2010		3. Issuer Name and Ticker or Trading Symbol <u>SMITH A O CORP [ AOS ]</u>		
(Last)	(First)	(Middle)	4. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director _____ 10% Owner _____ <input checked="" type="checkbox"/> Officer (give title below) _____ Other (specify below) _____ <p style="text-align: center;">Senior Vice President Corp Tec</p>			5. If Amendment, Date of Original Filed (Month/Day/Year)	
A. O. SMITH CORPORATE TECHNOLOGY CENTER 12100 WEST PARK PLACE						6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person <input type="checkbox"/> Form filed by More than One Reporting Person	
(Street)							
MILWAUKEE	WI	53224					
(City)	(State)	(Zip)					

Table I - Non-Derivative Securities Beneficially Owned

1. Title of Security (Instr. 4)	2. Amount of Securities Beneficially Owned (Instr. 4)	3. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	4. Nature of Indirect Beneficial Ownership (Instr. 5)
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Table II - Derivative Securities Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 4)	2. Date Exercisable and Expiration Date (Month/Day/Year)		3. Title and Amount of Securities Underlying Derivative Security (Instr. 4)	4. Conversion or Exercise Price of Derivative Security	5. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	6. Nature of Indirect Beneficial Ownership (Instr. 5)
	Date Exercisable	Expiration Date				
Employee Stock Options (Right to Buy)	(1)	(1)	Common Stock	6,150	0	D
Restricted Stock Units	(2)	(2)	Common Stock	1,950	0	D

Explanation of Responses:

1. 1,200 employee stock options were granted on 02/11/2008 under the A. O. Smith Combined Incentive Compensation Plan, a transaction exempt under Rule 16b-3. The options become exercisable in three annual installments of 1/3 of the award starting on 02/11/2009. The options expire on 02/11/2018. 3,300 employee stock options were granted on 02/09/2009 under the A. O. Smith Combined Incentive Compensation Plan, a transaction exempt under Rule 16b-3. The options become exercisable in three annual installments of 1/3 of the award starting on 02/09/2010. The options expire on 02/09/2019. 1,650 employee stock options were granted on 02/08/2010 under the A. O. Smith Combined Incentive Compensation Plan, a transaction exempt under Rule 16b-3. The options become exercisable in three annual installments of 1/3 of the award starting on 02/08/2011. The options expire on 02/08/2020.

2. 450 restricted stock units were granted on 02/11/2008 under the A. O. Smith Combined Incentive Compensation Plan, a transaction exempt under Rule 16b-3. The restricted stock units become payable in Common Stock on the vesting date of 02/11/2011. 900 restricted stock units were granted on 02/09/2009 under the A. O. Smith Combined Incentive Compensation Plan, a transaction exempt under Rule 16b-3. The restricted stock units become payable in Common Stock on the vesting date of 02/09/2012. 600 restricted stock units were granted on 02/08/2010 under the A. O. Smith Combined Incentive Compensation Plan, a transaction exempt under Rule 16b-3. The restricted stock units become payable in Common Stock on the vesting date of 02/08/2013.

Remarks:

James F. Stern, Attorney-in-Fact for Robert J. Heideman 12/17/2010

\*\* Signature of Reporting Person

Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

\* If the form is filed by more than one reporting person, see Instruction 5 (b)(v).

\*\* Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.

POWER OF ATTORNEY

Know all by these presents, that, for good and valuable consideration, the sufficiency and receipt of which are hereby acknowledged, the undersigned hereby constitut

(1) execute for and on behalf of the undersigned (in accordance with Section 16(a) of the Securities Exchange Act of 1934, as amended, and the rules thereunder (the

(2) do and perform any and all acts for and on behalf of the undersigned that may be necessary or desirable to complete and execute any such Documents and timely fi

(3) take any other action of any type whatsoever in connection with the foregoing which, in the opinion of such attorney-in-fact, may be of benefit to, in the best :

The undersigned hereby grants to each such attorney-in-fact full power and authority to do and perform any and every act and thing whatsoever requisite, necessary or act's substitute or substitutes) from and against any and all loss, damage or liability that such attorney-in-fact may sustain as a result of any action taken in go

This Power of Attorney shall remain in full force and effect until the undersigned is no longer required to file Documents with respect to the undersigned's holdings

IN WITNESS WHEREOF, the undersigned has caused this Power of Attorney to be executed as of this 15th day of December, 2010.

/s/Robert J. Heideman