

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

SCHEDULE 13G

Under the Securities Exchange Act of 1934

Mastech Holdings, Inc.

(Name of Issuer)

Common Stock, par value \$0.01 per share

(Title of Class of Securities)

57633B100

(CUSIP Number)

December 31, 2009

(Date of Event That Requires Filing of This Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

- Rule 13d-1 (b)
 Rule 13d-1 (c)
 Rule 13d-1 (d)

* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.

The information required in the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

(1) NAMES OF REPORTING PERSONS

Ashok K. Trivedi

(2) CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (See Instructions):

(a) (b)

(3) SEC USE ONLY

(4) CITIZENSHIP OR PLACE OF ORGANIZATION

United States

(5) SOLE VOTING POWER

NUMBER OF
SHARES

877,903

BENEFICIALLY
OWNED BY

(6) SHARED VOTING POWER

EACH
REPORTING

(7) SOLE DISPOSITIVE POWER

PERSON
WITH

1,020,069

(8) SHARED DISPOSITIVE POWER

(9) AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

1,020,069

(10) CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES

(11) PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9

28.3%

(12) TYPE OF REPORTING PERSON

IN

-
- Item 1(a). Name of Issuer:
Mastech Holdings, Inc.
- Item 1(b). Address of Issuer's Principal Executive Offices:
1000 Commerce Drive
Suite 500
Pittsburgh, PA 15275
- Item 2(a). Name of Person(s) Filing:
Ashok K. Trivedi
- Item 2(b). Address of Principal Business Office, or, if None, Residence:
1000 Commerce Drive
Suite 500
Pittsburgh, PA 15275
- Item 2(c). Citizenship:
United States
- Item 2(d). Title of Class of Securities:
Common Stock, par value \$0.01 per share
- Item 2(e). CUSIP Number:
57633B100
- Item 3. If This Statement is Filed Pursuant to Sections 240.13d-1(b) or 240.13d-2(b), Check Whether the Person Filing is a:
Not Applicable.

-
- Item 4. Ownership:
- (a) Amount beneficially owned:
1,020,069
 - (b) Percent of class:
28.3%
 - (c) Number of shares as to which the person has:
 - (i) Sole power to vote or to direct the vote:
877,903
 - (ii) Shared power to vote or to direct the vote:
Not Applicable
 - (iii) Sole power to dispose or to direct the disposition of:
1,020,069**
 - (iv) Shared power to dispose or to direct the disposition of:
Not Applicable
- Item 5. Ownership of Five Percent or Less of a Class.
Not Applicable
- Item 6. Ownership of More than Five Percent on Behalf of Another Person.
Not Applicable
- Item 7. Identification and Classification of the Subsidiary That Acquired the Security Being Reported by the Parent Holding Company or Control Person.
Not Applicable
- Item 8. Identification and Classification of Members of the Group.
Not Applicable
- Item 9. Notice of Dissolution of the Group.
Not Applicable
- Item 10. Certification:
Not Applicable

SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Date: February 16, 2010

Ashok K. Trivedi

By: /s/ Ashok K. Trivedi

Name: Ashok K. Trivedi

Title: Co-Chairman of the Board of
Directors and Director

EXHIBIT A

** Includes 142,166 shares held by two family trusts as to which the Reporting Person serves as a co-trustee with the sole investment power and no voting power.