

EnerSys
Form 424B5
July 02, 2007

[QuickLinks](#) -- Click here to rapidly navigate through this document

Filed Pursuant to Rule 424(b)5
Registration No. 333-136085

PROSPECTUS SUPPLEMENT
(To Prospectus dated December 5, 2006)

6,000,000 Shares

Common Stock

The selling stockholders identified in this prospectus supplement are offering 6,000,000 shares of our common stock. We will not receive any of the proceeds from the sale of our common stock by the selling stockholders.

Our common stock is listed on the New York Stock Exchange under the symbol "ENS." On June 28, 2007, the last reported sales price of our common stock was \$19.15 per share.

Investing in our common stock involves a high degree of risk. See "Risk Factors" beginning on page S-4 of this prospectus supplement and the risks described in our Annual Report on Form 10-K for the fiscal year ended March 31, 2007 which is incorporated by reference herein.

Jefferies & Company, Inc. has agreed to purchase the shares from the selling stockholders at a price per share of \$18.05, subject to the terms and conditions set forth in an underwriting agreement among Jefferies & Company, Inc., the selling stockholders and us. Jefferies & Company, Inc. proposes to offer the shares for sale from time to time in one or more negotiated transactions, or otherwise, at market prices prevailing at the time of sale, at prices related to such prevailing market prices or at negotiated prices.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved these securities or passed on the adequacy or accuracy of this prospectus supplement or the accompanying prospectus. Any representation to the contrary is a criminal offense.

Jefferies & Company, Inc. expects to deliver the shares on or about July 5, 2007.

Jefferies & Company

June 29, 2007

TABLE OF CONTENTS

Prospectus Supplement

| | |
|---|------|
| ABOUT THIS PROSPECTUS SUPPLEMENT | S-1 |
| PROSPECTUS SUPPLEMENT SUMMARY | S-2 |
| RISK FACTORS | S-4 |
| USE OF PROCEEDS | S-7 |
| SELLING STOCKHOLDERS | S-7 |
| CERTAIN U.S. FEDERAL TAX CONSEQUENCES TO NON-U.S. HOLDERS OF COMMON STOCK | S-10 |
| UNDERWRITING | S-13 |
| WHERE YOU CAN FIND MORE INFORMATION | S-17 |
| LEGAL MATTERS | S-18 |
| EXPERTS | S-18 |

Prospectus

| | |
|---|----|
| ABOUT THIS PROSPECTUS | 1 |
| ENERSYS | 1 |
| RISK FACTORS | 2 |
| SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS | 3 |
| USE OF PROCEEDS | 5 |
| DIVIDEND POLICY | 6 |
| DESCRIPTION OF CAPITAL STOCK | 7 |
| SELLING STOCKHOLDERS | 11 |
| PLAN OF DISTRIBUTION | 14 |
| WHERE YOU CAN FIND MORE INFORMATION | 17 |
| LEGAL MATTERS | 18 |
| EXPERTS | 18 |

ABOUT THIS PROSPECTUS SUPPLEMENT

This document is in two parts. The first part is the prospectus supplement, which describes the specific terms of this offering. The second part is the accompanying prospectus, which gives more general information, some of which may not apply to this offering. We urge you to read the entire prospectus and this prospectus supplement, together with the information described under the heading "Where You Can Find More Information" carefully, including the "Risk Factors" on pages S-4 to S-6 of this prospectus supplement and the risk factors incorporated by reference herein.

You should rely only on the information contained in or incorporated by reference in this prospectus supplement and the accompanying prospectus. We have not, and the underwriter has not, authorized anyone to provide you with different or additional information. The selling stockholders are not, and the underwriter is not, making an offer of these securities in any state where the offer is not permitted. You should assume that the information contained in this prospectus supplement, the accompanying prospectus and the documents incorporated herein and therein by reference is accurate only as of its respective date or on the date which is specified in those documents.

S-1

PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights selected information from this document and may not contain all of the information that is important to you. We urge you to read this entire document carefully, including the "Risk Factors" included and incorporated by reference in this prospectus supplement and the accompanying prospectus, as well as those additional documents to which we refer you. See "Where You Can Find More Information." The terms "EnerSys," "we," "our," and "us" refer to EnerSys which is a holding company and its consolidated subsidiaries. We use the term "the company" when we wish to refer only to the holding company and not to EnerSys and its consolidated subsidiaries.

Our fiscal year ends on March 31. References in or incorporated by reference in this prospectus supplement to a fiscal year, such as "fiscal 2007," relate to the fiscal year ended on March 31 of that calendar year. For reading ease, certain financial information included or incorporated by reference in this prospectus supplement is presented on a rounded basis, which may cause minor rounding differences.

EnerSys

We are the world's largest manufacturer, marketer and distributor of industrial batteries. We also manufacture, market and distribute related products such as chargers, power equipment and battery accessories, and we provide related after-market and customer-support services for industrial batteries. We market and sell our products globally in more than 100 countries to over 10,000 customers through a network of distributors, independent representatives and an internal sales force.

Industrial batteries generally are characterized as reserve power batteries or motive power batteries.

Reserve power products are used for backup power for the continuous operation of critical applications in telecommunications systems, uninterruptible power systems, or UPS, applications for computer and computer-controlled systems, and other specialty power applications, including security systems, for premium starting, lighting and ignition applications, switchgear and electrical control systems used in electric utilities and energy pipelines, and commercial and military aircraft, submarines and tactical military vehicles.

Motive power products are used to provide power for manufacturing, warehousing and other material handling equipment, primarily electric industrial forklift trucks, mining equipment, and for diesel locomotive starting, rail car lighting and rail signaling equipment.

Our principal executive offices are located at 2366 Bernville Road, Reading PA 19605. Our telephone number at that address is (610) 208-1991.

THE OFFERING

| | |
|--|---|
| Common stock offered by the selling stockholders | 6,000,000 shares. |
| NYSE symbol | ENS. |
| Dividends | We do not anticipate declaring or paying any cash dividends in the foreseeable future. The timing and amount of future cash dividends, if any, would be determined by our board of directors and would depend upon our earnings, financial condition and cash requirements at the time. See "Risk Factors We have not paid, and may not pay, dividends and therefore, unless our stock appreciates in value, investors in our stock may not benefit from holding our stock" on page S-6 of this prospectus supplement and "Dividend Policy" on page 6 of the accompanying prospectus. |
| Use of proceeds | We will not receive any proceeds from any sale of common stock by the selling stockholders. See "Use of Proceeds," "Selling Stockholders" and "Underwriting." |
| Risk factors | Investing in our common stock involves a high degree of risk. Potential investors are urged to read and consider the risk factors relating to an investment in our common stock set forth under "Risk Factors" in this prospectus supplement and those described in our Annual Report on Form 10-K for the fiscal year ended March 31, 2007, which is incorporated by reference in this prospectus supplement as well as other information we include or incorporate by reference in this prospectus supplement and the accompanying prospectus. |

RISK FACTORS

Investing in our common stock involves a high degree of risk. In addition to the risk factors related to this offering set forth below, please see the risk factors described in our Annual Report on Form 10-K for the fiscal year ended March 31, 2007, which is incorporated by reference into this prospectus supplement. Such risks are not the only risks that we face. Additional risks and uncertainties not currently known to us or that we currently deem to be immaterial may also materially adversely affect our business operations. The risks described could affect our business, financial condition or results of operations. In such a case, you may lose all or part of your original investment. You should carefully consider the risks described in our Annual Report on Form 10-K, the risks described below as well as other information and data set forth in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein and therein before making an investment decision with respect to the common stock.

We could be influenced by Metalmark whose interests may not be aligned with the interests of our other stockholders.

Prior to this offering, funds managed by an affiliate of Metalmark LLC, an independent private equity firm established in 2004 by former principals of Morgan Stanley Capital Partners to manage certain of Morgan Stanley Capital Partners' private equity funds and to make private equity investments in a broad range of industries (referred to herein as Metalmark), owned a majority of the shares of our common stock. The affiliate of Metalmark manages MSCP IV, L.P. and MSCP IV 892, L.P., which together will own approximately 33.87% of our outstanding common stock following the offering, pursuant to a subadvisory agreement described under "Certain Relationships and Related Transactions Relationship with Metalmark and Morgan Stanley" in our Proxy Statement on Schedule 14A, which is incorporated by reference herein from our Annual Report on Form 10-K for the fiscal year ended March 31, 2007. Currently, five of our directors, Howard I. Hoffen, Eric T. Fry, Kenneth F. Clifford, Hwan-yoon F. Chung and Michael C. Hoffman, are employees of Metalmark. As a result of these funds holding 33.87% of our outstanding shares of common stock after giving effect to this offering, and the rights of such funds under the Securityholder Agreement, which is described in portions of our Proxy Statement on Schedule 14A, which are incorporated by reference herein from our Annual Report on Form 10-K for the fiscal year ended March 31, 2007, and Metalmark's rights under the subadvisory agreement, Metalmark may be able to influence all matters requiring stockholder approval, including the election of our directors, the adoption of amendments to our certificate of incorporation, the approval of mergers and sales of all or substantially all our assets, decisions affecting our capital structure and other significant corporate transactions as well as matters affecting our management and policies. Circumstances could arise under which the interests of Metalmark could be in conflict with the interests of our other stockholders. The influence of Metalmark may also have the effect of deterring hostile takeovers, delaying or preventing changes in control or changes in management or limiting the ability of our stockholders to approve transactions that they may deem to be in their best interests.

Following the offering, we will cease to be a "controlled company" for purposes of the New York Stock Exchange listing requirements and will no longer be able to opt out of certain corporate governance requirements.

The Morgan Stanley Funds (as defined under "Selling Stockholders") and the other Institutional Stockholders named under "Selling Stockholders," who are party to the Securityholder Agreement, together hold more than 50% of the voting power of EnerSys. Accordingly, we have qualified as a "controlled company" for purposes of the New York Stock Exchange ("NYSE") corporate governance listing requirements. As such, we have opted out of several of the NYSE's corporate governance requirements. Among other things, this means that our Board of Directors, our Nominating and Corporate Governance Committee have not, to date, been subject to the NYSE's director

independence requirements. Following the offering, Morgan Stanley Funds (as defined under "Selling Stockholders") and the other Institutional Stockholders together will own less than 50% of our common stock and we will cease to be a "controlled company" within the meaning of these rules and will no longer be eligible for the exemptions from the NYSE listing requirements upon which we have relied that are predicated on our status as a "controlled company." Instead, we will be required to become fully compliant with the NYSE's corporate governance listing requirements within permitted transition periods. For instance, within 90 days after our ceasing to be a "controlled company," a majority of the directors who serve on our Nominating and Corporate Governance Committee will have to meet the NYSE's independence requirements. Within one year after our ceasing to be a "controlled company," all of the directors who serve on those committees will have to meet the NYSE's independence requirements and our Board will have to be composed of a majority of directors that meet the NYSE's independence requirements. We may incur incremental costs not reflected in our historical financial statements as a result of any such increased listing compliance, including legal fees and other expenses. In addition, we might not be able to comply with these provisions in a timely fashion. Our failure to comply with these additional NYSE corporate governance listing standards may result in delisting, which could disrupt the trading market for our common shares and result in a significant decline in the value of our common shares.

Shares eligible for future issuance or sale may cause our common stock price to decline, which may negatively impact your investment.

Issuances or sales of substantial numbers of additional shares of our common stock, including in connection with future acquisitions, if any, or the perception that such issuances or sales could occur, may cause prevailing market prices for shares of our common stock to decline and may adversely affect our ability to raise additional capital in the financial markets at a time and price favorable to us. As of the date of this prospectus supplement, our certificate of incorporation provides that we have authority to issue up to 135,000,000 shares of our common stock. As of June 1, 2007, 47,107,504 shares of our common stock were issued and outstanding, and there were no shares of our common stock issued and held in treasury. Also as of such date, there were 2,307,125 shares of our common stock reserved for issuance under stock incentive plans or pursuant to individual option grants or stock awards. The selling stockholders named under "Selling Stockholders," who will collectively own 44.92% of our shares upon completion of the offering, may elect to sell their shares of our common stock or exercise their stock options in order to sell the stock underlying their options. The selling stockholders and our executive officers and directors have agreed that, without the prior written consent of the underwriter, they will not, directly or indirectly, sell any of these shares or exercise any of their options for 45 days after the date of this prospectus supplement, subject to certain exceptions, including, but not limited to, transactions under Rule 10b5-1 plans established by our executive officers existing on the date of this prospectus supplement. These agreements, however, can be waived by the underwriter in its sole discretion. Future sales or a perception that such sales may occur could reduce the market price for our common stock.

Our stock price may be volatile, and your investment in our common stock could decline in value.

The price of our common stock on the New York Stock Exchange constantly changes. Within the last 12 months through June 28, 2007, our stock has traded between \$14.80 and \$21.60 per share. We expect that the market price of our common stock will continue to fluctuate. Holders of our common stock will be subject to the risk of volatility and depressed prices. Our common stock price can fluctuate as a result of a variety of factors, many of which are beyond our control. The factors described under "Special Note Regarding Forward-Looking Statements" in the accompanying prospectus and the other risk factors described in this section, among other factors, may cause the market price of our common stock to change. In addition, the stock market in general has experienced extreme volatility that has often been unrelated to the operating performance of a particular company. These broad market fluctuations may adversely affect the market price of our common stock.

Our revenues and operating results may fluctuate in future periods, and we may fail to meet expectations, which may cause the price of our common stock to decline.

Our quarterly operating results are difficult to predict and may fluctuate significantly from period to period. We cannot predict with certainty the timing or level of sales of our products in the future. If our quarterly sales or operating results fall below the expectations of investors or securities analysts, the price of our common stock could decline substantially. Our operating results may fluctuate due to various factors including, among other things, the continual pricing pressure of our extremely competitive industry, cyclical industry conditions and volatile raw materials costs as well as our exposure to the risk of material environmental, health and safety liabilities as a result of our use of significant amounts of lead and acid in our operations. As a result of these factors, we believe that period-to-period comparisons of our operating results are not a good indication of our future performance.

We have not paid, and may not pay, dividends and therefore, unless our stock appreciates in value, investors in our stock may not benefit from holding our stock.

We have not issued a cash dividend on our common stock since we became a public company and we presently intend to continue this policy. Furthermore, our senior secured credit agreement limits our ability to pay dividends. As a result, investors in our common stock may not be able to benefit from owning our common stock unless the shares that these investors acquire appreciate in value. See "Dividend Policy" on page 6 of the accompanying prospectus.

Our corporate documents and Delaware law contain provisions that could discourage, delay or prevent a change in control of our company even if some stockholders might consider such a development favorable, which may adversely affect the price of our common stock.

Certain provisions in our certificate of incorporation and bylaws, which are described under "Description of Capital Stock," beginning on page 7 of the accompanying prospectus, may discourage, delay or prevent a merger or acquisition involving us that our stockholders may consider favorable. For example, our certificate of incorporation authorizes our board of directors to issue shares of preferred stock to which special rights may be attached, including voting and dividend rights. With these rights, preferred stockholders could make it more difficult for a third party to acquire us. In addition, our certificate of incorporation provides for a staggered board of directors, whereby directors serve for three-year terms, with approximately one third of the directors coming up for reelection each year. Having a staggered board of directors would make it more difficult for a third party to obtain control of our board of directors through a proxy contest, which may be a necessary step in an acquisition of us that is not favored by our board of directors.

In addition, certain other provisions of our corporate documents regarding special meetings of stockholders, advance notice requirements for stockholder proposals and director nominations and amendments of the bylaws and prohibiting stockholder action by written consent and cumulative voting, each of which is described under "Description of Capital Stock Other Provisions of our Certificate of Incorporation and Bylaws" in the accompanying prospectus may also discourage, delay or prevent a merger or acquisition involving us that our stockholders may consider favorable.

We are also subject to the anti-takeover provisions of Section 203 of the Delaware General Corporation Law. Under these provisions, if anyone becomes an "interested stockholder," we may not enter into a "business combination" with that person for three years without special approval, which could discourage a third party from making a takeover offer and could delay or prevent a change of control. For purposes of Section 203, an "interested stockholder" means, generally, someone owning 15% or more of our outstanding voting stock or an affiliate of ours that owned 15% or more of our outstanding voting stock during the past three years, subject to certain exceptions as described in Section 203 see "Description of Capital Stock Section 203 of the Delaware General Corporation Law" in the accompanying prospectus.

USE OF PROCEEDS

We will not receive any proceeds from any sale of common stock by the selling stockholders. See "Selling Stockholders" and "Underwriting."

SELLING STOCKHOLDERS

This prospectus supplement relates to the resale by the selling stockholders identified below of shares of our common stock. We filed the registration statement, of which this prospectus supplement and the accompanying prospectus are a part, pursuant to the provisions of a Securityholder Agreement dated as of July 26, 2004 (referred to herein as the Securityholder Agreement), among Metalmark, certain institutional stockholders (referred to herein as the Institutional Stockholders), certain members of our senior management and our company, which governs certain relationships among such parties. See "Selling Stockholders" on page 11 of the accompanying prospectus and "Certain Relationships and Related Transactions Securityholder Agreement" in our Proxy Statement on Schedule 14A, which is incorporated by reference herein from our Annual Report on Form 10-K for the fiscal year ended March 31, 2007 for more information on the terms of, and the parties to, the Securityholder Agreement.

The table below presents information regarding the selling stockholders and the shares that each such selling stockholder is offering under this prospectus supplement. Unless otherwise indicated, beneficial ownership is calculated based on 47,107,504 shares of our common stock outstanding as of June 1, 2007. The number of shares in the column "Shares of Common Stock Covered by This Prospectus Supplement" represents all of the shares that each selling stockholder is offering under this prospectus supplement. The column "Shares of Common Stock Beneficially Owned After Offering" reflects the beneficial ownership of each selling stockholder after giving effect to this offering. Please carefully read the footnotes located below the selling stockholders table in conjunction with the information presented in the table.

Except as noted in the footnotes to the table below or disclosed under the headings entitled "Board of Directors," "Executive Officers," "Employment Agreements" and "Certain Relationships and Related Transactions" in our Proxy Statement on Schedule 14A, which is incorporated by reference herein from our Annual Report on Form 10-K for the fiscal year ended March 31, 2007, no selling stockholder has had, within the past three years, any position, office, or material relationship with us or any of our predecessors or affiliates.

Edgar Filing: EnerSys - Form 424B5

| Name | Shares of Common Stock Beneficially Owned Before Offering(1)(2) | | Shares of Common Stock Covered by This Prospectus Supplement | Shares of Common Stock Beneficially Owned After Offering(2) | |
|---|---|---------|--|---|---------|
| | Number | Percent | Number | Number | Percent |
| MSCP IV, L.P. and MSCP IV 892, L.P. c/o Metalmark Capital LLC 1177 Avenue of Americas New York, NY 10036(3) | 20,477,438 | 43.47% | 4,523,640 | 15,953,798(4)(5) | 33.87% |
| MSCI IV, L.P. 1585 Broadway New York, NY 10036(3) | 515,697 | 1.09% | 113,922 | 401,775(4) | 0.85% |
| MSGEM Funds 1585 Broadway New York, NY 10036(3) | 1,947,605 | 4.13% | 430,243 | 1,517,362(4) | 3.22% |
| J.P. Morgan Funds 522 Fifth Avenue New York, NY 10036(6) | 2,272,215 | 4.82% | 501,952 | 1,770,263(4) | 3.76% |
| Performance Direct Investments I, L.P. (f/k/a GM Capital Partners I, L.P.) 2 Pickwick Plaza, Suite 310 Greenwich, CT 06830 | 1,117,994 | 2.37% | 246,975 | 871,019 | 1.85% |
| JP Morgan Chase Bank, N.A., as Trustee for First Plaza Group Trust 1 Chase Manhattan Plaza New York, NY 10005 | 829,612 | 1.76% | 183,268 | 646,344 | 1.37% |

- (1) Except as otherwise set forth below, based on 47,107,504 shares of common stock outstanding as of June 1, 2007. In accordance with Rule 13d-3 under Exchange Act, the beneficial ownership with respect to each owner includes options exercisable by such owner within 60 days of June 1, 2007. Information regarding the ownership of our "Institutional Stockholders," which include Morgan Stanley Dean Witter Capital Partners IV, L.P. (referred to herein as MSCP IV, L.P.), MSDW IV 892 Investors, L.P. (referred to herein as MSCP IV 892, L.P.), and Morgan Stanley Dean Witter Capital Investors IV, L.P. (referred to herein as MSCI IV, L.P.) (collectively, referred to herein as the MSCP Funds), Morgan Stanley Global Emerging Markets Private Investment Fund, L.P., and Morgan Stanley Global Emerging Markets Private Investors, L.P. (collectively referred to herein as the MSGEM Funds and, together with the MSCP Funds, as the Morgan Stanley Funds), J.P. Morgan Direct Corporate Finance Institutional Investors LLC, J.P. Morgan Direct Corporate Finance Private Investors LLC, and 522 Fifth Avenue Fund, L.P. (collectively referred to herein as the J.P. Morgan Funds), JP Morgan Chase Bank, N.A., as Trustee for First Plaza Group Trust, and Performance Direct Investments I, L.P. (f/k/a GM Capital Partners I, L.P.), is derived from Schedules 13G filed by the beneficial owners with the Commission with respect to the period ended December 31, 2006.
- (2) Includes outstanding shares of common stock and shares of common stock issuable upon exercise of fully vested options.
- (3) Howard I. Hoffen, Kenneth F. Clifford, Eric T. Fry and Michael C. Hoffman are Managing Directors of Metalmark and, before giving effect to this offering, exercised shared voting or investment power over 20,494,938 shares, including 17,500 shares subject to options and excluding 11,484.4 restricted stock units which are payable in the form of common shares on March 12, 2008, beneficially owned by Metalmark. Messrs. Hoffen, Clifford, Fry and Hoffman disclaim beneficial ownership of such shares as a result of their respective

employment arrangements with Metalmark, except to the extent of their pecuniary interest therein ultimately realized.

S-8

Edgar Filing: EnerSys - Form 424B5

- (4) As noted above, Metalmark, the Institutional Stockholders, certain members of our senior management and our company are parties to the Securityholder Agreement. Metalmark and the Institutional Stockholders may be deemed to be a "group" for purposes of Section 13(d)(3) or Section 13(g)(3) of the Exchange Act and Rule 13d-5(b)(1) thereunder. For more information on the terms of, and the parties to, the Securityholder Agreement, see "Certain Relationships and Related Transactions Securityholder Agreement" in our Proxy Statement on Schedule 14A, which is incorporated by reference herein from our Annual Report on Form 10-K for the fiscal year ended March 31, 2007.
- (5) An affiliate of Metalmark manages MSCP IV, L.P. and MSCP IV 892, L.P. pursuant to a subadvisory agreement (the "Subadvisory Agreement"). For more information on the terms of the Subadvisory Agreement, see "Certain Relationships and Related Transactions Relationship with Metalmark and Morgan Stanley" in our Proxy Statement on Schedule 14A, which is incorporated by reference herein from our Annual Report on Form 10-K for the fiscal year ended March 31, 2007. As a result of its ownership of our outstanding shares of common stock after giving effect to this offering, and its rights under the Securityholder Agreement and the Subadvisory Agreement, Metalmark may be able to influence the outcome of stockholder votes, including votes concerning the election of directors, the adoption or amendment of provisions in our charter or bylaws, the approval of mergers, decisions affecting our capital structure and other significant corporate transactions as well as matters affecting our management and policies.
- (6) Includes J.P. Morgan Direct Corporate Finance Institutional Investors LLC, J.P. Morgan Direct Corporate Finance Private Investors LLC and 522 Fifth Avenue Fund, L.P.

**CERTAIN U.S. FEDERAL TAX CONSEQUENCES TO
NON-U.S. HOLDERS OF COMMON STOCK**

The following is a general discussion of the material U.S. federal income and estate tax consequences of the ownership and disposition of our common stock by a non-U.S. holder. As used in this discussion, the term "non-U.S. holder" means a beneficial owner of our common stock that is not, for U.S. federal income tax purposes:

an individual who is a citizen or resident of the United States;

a corporation created or organized in or under the laws of the United States or any political subdivision of the United States;

a partnership;

an estate whose income is includible in gross income for U.S. federal income tax purposes regardless of its source; or

a trust, in general, if (i) a U.S. court is able to exercise primary supervision over the administration of the trust and (ii) one or more U.S. persons have authority to control all substantial decisions of the trust.

An individual may be treated as a resident of the United States in any calendar year for U.S. federal income tax purposes, instead of a nonresident, by, among other ways, being present in the United States on at least 31 days in that calendar year and for an aggregate of at least 183 days during the current calendar year and the two immediately preceding calendar years. For purposes of this calculation, all of the days in which the individual is present in the United States in the current calendar year are counted, along with, one-third of the days in which the individual is present in the immediately preceding calendar year and one-sixth of the days in which the individual is present in the second preceding calendar year. Residents are treated for U.S. federal income tax purposes as if they were U.S. citizens.

This discussion does not consider:

U.S. state and local or non-U.S. tax consequences;

specific facts and circumstances that may be relevant to a particular non-U.S. holder's tax position;

the tax consequences for the stockholders, partners or beneficiaries of a non-U.S. holder;

the alternative minimum tax;

special tax rules that may apply to particular non-U.S. holders, such as financial institutions, insurance companies, tax-exempt organizations, regulated investment companies, real estate investment trusts, cooperatives, U.S. expatriates, broker dealers, non-U.S. holders that own or acquire 5% or more of our common stock, and traders in securities; or

special tax rules that may apply to a non-U.S. holder that holds our common stock as part of a "straddle," "hedge," "conversion transaction," "synthetic security" or other integrated investment.

The following discussion is based on provisions of the Internal Revenue Code of 1986, as amended (the "Code"), applicable U.S. Treasury regulations and administrative and judicial interpretations, all as in effect on the date of this prospectus supplement, and all of which are subject to change, retroactively or prospectively. The following discussion also assumes that a non-U.S. holder holds our common stock as a capital asset within the meaning of section 1221 of the Code (generally, property held for investment). **EACH NON-U.S. HOLDER SHOULD**

CONSULT ITS TAX ADVISOR REGARDING THE

S-10

U.S. FEDERAL, STATE, LOCAL, AND NON-U.S. INCOME AND OTHER TAX CONSEQUENCES OF ACQUIRING, HOLDING, AND DISPOSING OF OUR COMMON STOCK.

Dividends

Distributions on common stock constitute dividends for U.S. federal income tax purposes to the extent such distributions are made out of our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. We may not pay cash dividends on our common stock in the foreseeable future. See "Dividend Policy." In the event, however, that we pay dividends on our common stock, we will have to withhold U.S. federal withholding tax at a rate of 30% (or at a lower rate under an applicable income tax treaty that allows for a reduced rate of withholding, provided that we have received proper certification that the non-U.S. holder is eligible for the reduced rate under such income tax treaty) from the gross amount of the dividends paid to a non-U.S. holder unless such dividends are effectively connected with a non-U.S. holder's conduct of a trade or business in the United States, as described below.

Non-U.S. holders should consult their tax advisors regarding their entitlement to benefits under an applicable income tax treaty and the manner of claiming the benefits of such treaty. A non-U.S. holder that is eligible for a reduced rate of U.S. federal withholding tax under an income tax treaty may obtain a refund or credit of any excess amounts withheld by filing an appropriate claim for a refund with the U.S. Internal Revenue Service.

Dividends that are effectively connected with a non-U.S. holder's conduct of a trade or business in the United States are not subject to the U.S. federal withholding tax, but, unless otherwise provided in an applicable income tax treaty, are instead taxed in the manner applicable to U.S. persons. In that case, we will not have to withhold U.S. federal withholding tax if the non-U.S. holder complies with applicable certification and disclosure requirements. In addition, dividends received by a foreign corporation that are effectively connected with the conduct of a trade or business in the United States may be subject to a branch profits tax at a 30% rate, or at a lower rate if provided by an applicable income tax treaty.

Gain on Disposal of Common Stock

A non-U.S. holder generally will not be taxed on gain recognized on a disposition of our common stock unless:

the non-U.S. holder is an individual who is present in the United States for 183 days or more during the taxable year of the disposition and meets certain other conditions (though any such person will generally be treated as a resident of the United States);

the gain is effectively connected with the non-U.S. holder's conduct of a trade or business in the United States or, in some instances if an income tax treaty applies, is attributable to a permanent establishment maintained by the non-U.S. holder in the United States; or

we are or have been a "U.S. real property holding corporation" for U.S. federal income tax purposes, and such non-U.S. holder held more than 5 percent of our common stock at any time during the shorter of the five-year period ending on the date of disposition or the period that such non-U.S. holder held our common stock.

We believe that we are not, and we do not anticipate that we will become, a U.S. real property holding corporation.

An individual non-U.S. holder who is subject to U.S. tax because the holder was present in the United States for 183 days or more during the year of disposition is taxed on the amount by which capital gains allocated to U.S. sources (including gains from sale of our common stock) exceed capital losses allocated to U.S. sources incurred during the year at a flat rate of 30%, or at a lower rate if

provided by an applicable income tax treaty. Other non-U.S. holders that are subject to U.S. federal income tax on gain from the disposition of our common stock will be taxed on such gain in the same manner in which citizens or residents of the U.S. would be taxed, and if such non-U.S. holder is a foreign corporation such gain may also be subject to a branch profits tax at a 30% rate, or at a lower rate if provided by an applicable income tax treaty.

Federal Estate Tax

Common stock owned or treated as owned by an individual who is a non-U.S. holder at the time of death will be included in the individual's gross estate for U.S. federal estate tax purposes and may be subject to U.S. federal estate tax unless an applicable estate tax treaty provides otherwise.

U.S. federal legislation enacted in 2001 provides for reductions in the U.S. federal estate tax through 2009 and the elimination of the tax entirely in 2010. Under the legislation, the estate tax would be fully reinstated, as in effect prior to the reductions, in 2011.

Information Reporting and Backup Withholding Tax

We must report annually to the U.S. Internal Revenue Service and to each non-U.S. holder the amount of dividends paid to that holder and the tax withheld from those dividends. Copies of the information returns reporting those dividends and withholding may also be made available by the U.S. Internal Revenue Service to the tax authorities in the country in which the non-U.S. holder is a resident under the provisions of an applicable income tax treaty or agreement.

Under some circumstances, U.S. Treasury regulations require additional information reporting and backup withholding on payments made with respect to or on our common stock. Under currently applicable law, the gross amount of dividends paid to a non-U.S. holder that fails to certify its non-U.S. holder status in accordance with applicable U.S. Treasury regulations generally will be subject to additional information reporting and backup withholding.

The payment of proceeds on the disposition of common stock by a non-U.S. holder to or through a U.S. office of a broker or a non-U.S. office of a U.S. broker generally will be reported to the U.S. (at the current applicable rate of 28%) Internal Revenue Service and, if to or through U.S. offices of a broker, reduced by backup withholding, unless the non-U.S. holder either certifies its status as a non-U.S. holder under penalties of perjury or otherwise establishes an exemption and certain other conditions are met. The payment of proceeds on the disposition of common stock by a non-U.S. holder to or through a non-U.S. office of a non-U.S. broker will not be reduced by backup withholding or reported to the U.S. Internal Revenue Service unless the non-U.S. broker has certain enumerated connections with the United States.

Non-U.S. holders should consult their own tax advisors regarding the application of the information reporting and backup withholding rules to them.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules from a payment to a non-U.S. holder will be refunded, or credited against the holder's U.S. federal income tax liability, if any, provided that certain required information is furnished to the U.S. Internal Revenue Service.

UNDERWRITING

Under the terms of an underwriting agreement, which we will file as an exhibit to a current report on Form 8-K and incorporate by reference in this prospectus supplement and the accompanying prospectus, Jefferies & Company, Inc. (or the underwriter) has agreed to purchase an aggregate of 6,000,000 shares of common stock from the selling stockholders.

The underwriting agreement provides that the obligation of the underwriter to purchase shares of common stock depends on the satisfaction of the conditions contained in the underwriting agreement, including:

the obligation to purchase all of the shares of common stock offered hereby, if any of the shares are purchased;

the representations and warranties made by us and the selling stockholders to the underwriter are true;

there is no material change in our business or in the financial markets; and

we and the selling stockholders deliver customary closing documents to the underwriter.

The underwriter has agreed to purchase the shares from the selling stockholders at a price per share of \$18.05, subject to the terms and conditions set forth in the underwriting agreement. The underwriter proposes to offer the shares of common stock from time to time for sale in one or more transactions (i) at a fixed price or prices, which may be changed, (ii) at market prices prevailing at the time of sale, (iii) at prices related to prevailing market prices, or (iv) at negotiated prices. In connection with the sale of the shares of common stock offered hereby, the underwriter may be deemed to have received compensation in the form of underwriting discounts. The underwriter may effect such transactions by selling shares of common stock to or through dealers, and such dealers may receive compensation in the form of discounts, concessions or commissions from the underwriter and/or purchasers of shares of common stock for whom they may act as agents or to whom they may sell as principal.

The expenses of the offering that are payable by us are estimated to be approximately \$400,000. We have agreed to pay expenses incurred by the selling stockholders in connection with the offering, other than the underwriting discounts and commissions.

Lock-Up Agreements

We, all of our directors and executive officers and the selling stockholders have agreed that, without the prior written consent of the underwriter, subject to certain exceptions, we and they will not directly or indirectly (1) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend, or otherwise transfer or dispose of, directly or indirectly, any shares of our common stock or any securities convertible into or exercisable or exchangeable for our common stock, (2) file any registration statement with the Securities and Exchange Commission relating to the offering of any shares of our common stock or any securities convertible into or exercisable or exchangeable for our common stock, (3) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of our common stock, (4) make any demand for or exercise any right to file or cause to be filed a registration statement, including any amendments, with respect to the registration of any shares of our common stock or securities convertible, exercisable or exchangeable into our common stock or any of our other securities, or (5) publicly disclose the intention to do any of the foregoing, for a period of 45 days after the date of this prospectus supplement. Transactions under Rule 10b5-1 plans established by executive officers or directors existing on the date of this prospectus supplement shall not be subject to the lock-up agreement described above.

The underwriter, in its sole discretion, may release the common stock and other securities subject to the lock-up agreements described above in whole or in part at any time with or without notice. When determining whether or not to release common stock and other securities from lock-up agreements, the underwriter will consider, among other factors, the holder's reasons for requesting the release, the number of shares of common stock and other securities for which the release is being requested and market conditions at the time.

Indemnification

We and the selling stockholders have agreed to indemnify the underwriter against certain liabilities, including liabilities under the Securities Act, and to contribute to payments that the underwriter may be required to make for these liabilities.

Stabilization and Short Positions

The underwriter may engage in stabilizing transactions, short sales and purchases to cover positions created by short sales, and purchases for the purpose of pegging, fixing or maintaining the price of the common stock, in accordance with Regulation M under the Securities Exchange Act of 1934:

Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum.

A short position involves a sale by the underwriter of shares in excess of the number of shares the underwriter is obligated to purchase in the offering, which creates a short position. This short position may be either a covered short position or a naked short position. In a covered short position, the number of shares involved in the sales made by the underwriter in excess of the number of shares the underwriter is obligated to purchase is not greater than the number of shares that the underwriter may purchase by exercising its option to purchase additional shares. In a naked short position, the number of shares involved is greater than the number of shares available to the underwriter under its option to purchase additional shares from us. The underwriter may close out any short position by either exercising its option to purchase additional shares and/or purchasing shares in the open market. In determining the source of shares to close out a short position, the underwriter will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which it may purchase shares through its option to purchase additional shares. A naked short position is more likely to be created if the underwriter is concerned that there could be downward pressure on the price of the shares in the open market after pricing that could adversely affect investors who purchase in the offering.

Covering transactions involve purchases of the common stock in the open market after the distribution has been completed in order to cover short positions.

These stabilizing transactions and covering transactions may have the effect of raising or maintaining the market price of our common stock or preventing or retarding a decline in the market price of the common stock. As a result, the price of the common stock may be higher than the price that might otherwise exist in the open market. These transactions may be effected on the New York Stock Exchange or otherwise and, if commenced, may be discontinued at any time.

Neither we nor the underwriter make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of the common stock. In addition, neither we nor the underwriter make any representation that the underwriter will engage in these stabilizing transactions or that any transaction, once commenced, will not be discontinued without notice.

Electronic Distribution

A prospectus in electronic format may be made available on the Internet sites or through other online services maintained by the underwriter and one or more of the selling group members participating in this offering, or by their affiliates. In those cases, prospective investors may view offering terms online and prospective investors may be allowed to place orders online. The underwriter may agree with the selling stockholders to allocate a specific number of shares for sale to online brokerage account holders. Any such allocation for online distributions will be made by the underwriter on the same basis as other allocations.

Other than the prospectus in electronic format, the information on the underwriter's or any selling group member's web site and any information contained in any other web site maintained by the underwriter or a selling group member is not part of the prospectus or the registration statement of which this prospectus supplement and the accompanying prospectus form a part, has not been approved and/or endorsed by us or the underwriter or selling group member in its capacity as underwriter or selling group member and should not be relied upon by investors.

Stamp and Transfer Taxes

If you purchase shares of common stock offered in this prospectus supplement and the accompanying prospectus, you may be required to pay stamp and transfer taxes and other charges under the laws and practices of the country of purchase, in addition to the offering price listed on the cover page of this prospectus supplement and the accompanying prospectus.

Relationships

The underwriter has performed and may in the future perform investment banking and advisory services for us or the selling stockholders in the ordinary course of its business, for which it may in the future receive customary fees and expenses.

Foreign Selling Restrictions

Notice to Prospective Investors in the United Kingdom

This document is only being distributed to and is only directed at (i) persons who are outside the United Kingdom or (ii) to investment professionals falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the "Order") or (iii) high net worth entities, and other persons to whom it may lawfully be communicated, falling within Article 49(2)(a) to (e) of the Order (all such persons together being referred to as "relevant persons"). The shares of common stock are only available to, and any invitation, offer or agreement to subscribe, purchase or otherwise acquire such common stock will be engaged in only with, relevant persons. Any person who is not a relevant person should not act or rely on this document or any of its contents.

The underwriter has only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of Section 21 of the Financial Services and Markets Act 2000 or FSMA) received by it in connection with the issue or sale of the shares in circumstances in which Section 21(1) of the FSMA does not apply to us and has complied with, and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to the shares in, from or otherwise involving the United Kingdom.

Notice to Prospective Investors in the European Economic Area

To the extent that the offer of the common stock is made in any Member State of the European Economic Area that has implemented the Prospectus Directive before the date of publication of a prospectus in relation to the common stock which has been approved by the competent authority in the

Edgar Filing: EnerSys - Form 424B5

Member State in accordance with the Prospectus Directive (or, where appropriate, published in accordance with the Prospectus Directive and notified to the competent authority in the Member State in accordance with the Prospectus Directive), the offer (including any offer pursuant to this document) is only addressed to qualified investors in that Member State within the meaning of the Prospectus Directive or has been or will be made otherwise in circumstances that do not require us to publish a prospectus pursuant to the Prospectus Directive.

In relation to each Member State of the European Economic Area which has implemented the Prospectus Directive (each, a "Relevant Member State"), the underwriter, with effect from and including the date on which the Prospectus Directive is implemented in that Relevant Member State (the "Relevant Implementation Date"), has not made and will not make an offer of shares to the public in that Relevant Member State prior to the publication of a prospectus in relation to the shares which has been approved by the competent authority in that Relevant Member State or, where appropriate, approved in another Relevant Member State and notified to the competent authority in that Relevant Member State, all in accordance with the Prospectus Directive, except that it may, with effect from and including the Relevant Implementation Date, make an offer of shares to the public in that Relevant Member State at any time:

- (a) to legal entities which are authorized or regulated to operate in the financial markets or, if not so authorized or regulated, whose corporate purpose is solely to invest in securities,
- (b) to any legal entity which has two or more of (1) an average of at least 250 employees during the last financial year; (2) a total balance sheet of more than €43,000,000 and (3) an annual net turnover of more than €50,000,000, as shown in its last annual or consolidated accounts, or
- (c) in any other circumstances which do not require the publication by us of a prospectus pursuant to Article 3 of the Prospectus Directive.

For the purposes of this provision, the expression an "offer of shares to the public" in relation to any shares in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and the shares to be offered so as to enable an investor to decide to purchase or subscribe the shares, as the same may be varied in that Member State by any measure implementing the Prospectus Directive in that Member State and the expression "Prospectus Directive" means Directive 2003/71/EC and includes any relevant implementing measure in each Relevant Member State.

WHERE YOU CAN FIND MORE INFORMATION

We file reports, proxy statements, and other information with the SEC. These reports, proxy statements, and other information can be read and copied at the SEC's public reference room at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the public reference room. The SEC maintains an internet site at <http://www.sec.gov> that contains reports, proxy and information statements and other information regarding companies that file electronically with the SEC, including EnerSys. These reports, proxy statements and other information can also be read at the offices of the New York Stock Exchange, 20 Broad Street, New York, New York 10005 or on our internet site at www.enersys.com. Information on our website is not incorporated into this prospectus supplement or our other SEC filings and is not a part of this prospectus supplement or those filings.

This prospectus supplement and the accompanying prospectus are part of a registration statement filed by us with the SEC. The full registration statement can be obtained from the SEC as indicated above, or from us.

The SEC allows us to "incorporate by reference" the information we file with the SEC. This permits us to disclose important information to you by referencing these filed documents. Any information referenced this way is considered part of this prospectus supplement, and any information filed with the SEC subsequent to this prospectus supplement and prior to the termination of the particular offering referred to in such prospectus supplement will automatically be deemed to update and supersede this information. We incorporate by reference the following documents which have been filed with the SEC:

Annual Report on Form 10-K for the fiscal year ended March 31, 2007 (filed on June 13, 2007);

Current Reports on Form 8-K filed January 16, 2007, February 7, 2007 (other than item 2.02 and exhibit 99.1 under item 9.01, which are furnished and not incorporated herein by reference), April 2, 2007 and May 23, 2007 (other than item 7.01 and exhibit 99.2 under item 9.01, which are furnished and not incorporated herein by reference); and

Registration Statement on Form 8-A dated July 26, 2004.

We incorporate by reference the documents listed above and any future filings made with the SEC in accordance with Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, with the exception of any documents deemed not to be filed and any documents filed pursuant to Item 402(a)(8) of Regulation S-K under the Securities Act.

We will provide without charge upon written or oral request to each person, including any beneficial owner, to whom a prospectus supplement is delivered, a copy of any or all of the documents which are incorporated by reference to this prospectus supplement (other than exhibits unless such exhibits are specifically incorporated by reference in such documents). Requests should be directed to Investor Relations, EnerSys, 2366 Bernville Road, Reading, Pennsylvania 19605, or by calling EnerSys Investor Relations directly at (610) 236-4040.

LEGAL MATTERS

The validity of the securities offered pursuant to this prospectus supplement has been passed upon for us by our counsel, Skadden, Arps, Slate, Meagher & Flom LLP, New York, New York. Davis Polk & Wardwell is acting as counsel to the underwriter.

EXPERTS

The consolidated financial statements of EnerSys appearing in EnerSys' Annual Report (Form 10-K) for the year ended March 31, 2007 (including the schedule appearing therein), and EnerSys management's assessment of the effectiveness of internal control over financial reporting as of March 31, 2007, included therein, have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their reports thereon, included therein, and incorporated herein by reference. Such consolidated financial statements and management's assessment are incorporated herein by reference in reliance upon such reports given on the authority of such firm as experts in accounting and auditing.

S-18

PROSPECTUS

12,500,000 Shares

Common Stock

This prospectus relates to the offer and sale at various times in one or more offerings of shares of up to 12,500,000 shares of common stock of EnerSys. We are not selling any securities under this prospectus and will not receive any of the proceeds from the sale of shares by the selling stockholders.

The shares are being registered to permit the selling stockholders to sell the shares from time to time in the public market. The shares of common stock offered under this prospectus may be offered or sold by the selling stockholders from time to time directly to purchasers or through agents, underwriters, brokers or dealers at prevailing market or privately negotiated prices and on other terms to be determined at the time of sale. See "Plan of Distribution."

You should read this prospectus and any accompanying prospectus supplement, together with the additional information described under the heading "Where You Can Find More Information" carefully before you make your investment decision. The applicable prospectus supplement will contain specific information about the terms of each offering, including, among other things, the identity of each selling stockholder, the amount of our common stock each selling stockholder will be selling and the means of distribution for the shares of our common stock sold by the selling stockholders. A prospectus supplement may also add to or update, but will not contradict, modify or replace, information contained in this prospectus.

This prospectus may not be used to sell securities unless accompanied by a prospectus supplement.

Our common stock is listed on the New York Stock Exchange under the trading symbol "ENS".

Investing in our common stock involves risks, including the risks described in our Annual Report on Form 10-K for the fiscal year ended March 31, 2006, the risk factors described under the caption "Risk Factors" in any applicable prospectus supplement and/or any risk factors set forth in our other filings with the Securities and Exchange Commission, or the Commission, pursuant to Sections 13(a), 13(c), 14, or 15(d) of the Securities Exchange Act of 1934, as amended, or the Exchange Act as discussed on page 2 of this prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus or the accompanying prospectus supplement is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus is December 5, 2006.

TABLE OF CONTENTS

| | |
|---|----|
| ABOUT THIS PROSPECTUS | 1 |
| ENERSYS | 1 |
| RISK FACTORS | 2 |
| SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS | 3 |
| USE OF PROCEEDS | 5 |
| DIVIDEND POLICY | 6 |
| DESCRIPTION OF CAPITAL STOCK | 7 |
| SELLING STOCKHOLDERS | 11 |
| PLAN OF DISTRIBUTION | 14 |
| WHERE YOU CAN FIND MORE INFORMATION | 17 |
| LEGAL MATTERS | 18 |
| EXPERTS | 18 |

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the SEC using a "shelf" registration process. Under this shelf process, the selling stockholders may, from time to time, sell common stock in one or more offerings. This prospectus provides you with a general description of the common stock. Each time the selling stockholders sell common stock, we will provide a prospectus supplement that will contain specific information about the terms of that offering. The prospectus supplement may also add to or update, but will not contradict, modify or replace, information contained in this prospectus. We urge you to read this entire prospectus and any prospectus supplement, together with the information described under the heading "Where You Can Find More Information" carefully, including the "Risk Factors" incorporated in this prospectus and included or incorporated in any accompanying prospectus supplement.

The terms "EnerSys," "we," "our," and "us" refer to EnerSys which is a holding company and its consolidated subsidiaries. We use the term "the company" when we wish to refer only to the holding company and not to EnerSys and its consolidated subsidiaries. Our fiscal year ends on March 31. References in or incorporated by reference in this prospectus to a fiscal year, such as "fiscal 2007," relate to the fiscal year ended on March 31 of that calendar year. For reading ease, certain financial information incorporated by reference in this prospectus is presented on a rounded basis, which may cause minor rounding differences.

ENERSYS

EnerSys is the world's largest manufacturer, marketer and distributor of industrial batteries. We also manufacture, market and distribute related products such as chargers, power equipment and battery accessories, and we provide related after-market and customer-support services for industrial batteries. Industrial batteries generally are characterized as reserve power batteries or motive power batteries.

Reserve power batteries are also known as network, standby or stationary power batteries and are used primarily for backup power applications to ensure continuous power supply in case of main (primary) power failure or outage. Reserve power batteries are used primarily to supply standby direct current, or DC, operating power for:

telecommunications systems, such as wireless, wireline and internet access systems, central and local switching systems, satellite stations and radio transmission stations;

uninterruptible power systems, or UPS, applications for computer and computer-controlled systems, including process control systems;

specialty power applications, including security systems and motor and recreational vehicles;

switchgear and electrical control systems used in electric utilities and energy pipelines; and

commercial and military aircraft, submarines and tactical military vehicles.

Motive power batteries are used to provide power for electric material handling and material handling equipment, primarily electric industrial forklift trucks. They compete primarily with propane- and diesel-powered internal combustion engines used principally in the following applications:

electric industrial forklift trucks in distribution and manufacturing facilities;

mining equipment, including scoops, coal haulers, shield haulers, underground forklifts, shuttle cars and locomotives; and

railroad equipment, including diesel locomotive starting, rail car lighting and rail signaling equipment.

Edgar Filing: EnerSys - Form 424B5

Our principal executive offices are located at 2366 Bernville Road, Reading, PA 19605. Our telephone number at that address is (610) 208-1991.

RISK FACTORS

You should carefully consider the specific risks described in our Annual Report on Form 10-K for the fiscal year ended March 31, 2006, the risk factors described under the caption "Risk Factors" in any applicable prospectus supplement and any risk factors set forth in our other filings with the Commission, pursuant to Sections 13(a), 13(c), 14, or 15(d) of the Exchange Act before making an investment decision. See "Where You Can Find More Information."

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and any accompanying prospectus supplement may contain or incorporate by reference information that includes or is based upon forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, or the Reform Act. Generally, you can identify these statements because they use words like "anticipates," "believes," "will," "estimates," "expects," "future," "intends," "plans" or the negative of such terms or similar terms. All statements addressing operating performance, events, or developments that EnerSys expects or anticipates will occur in the future, including statements relating to sales growth, earnings or earnings per share growth, and market share, as well as statements expressing optimism or pessimism about future operating results, are forward-looking statements within the meaning of the Reform Act. The forward-looking statements are and will be based on management's then-current beliefs and assumptions regarding future events and operating performance and on information currently available to our management, and are applicable only as of the dates of such statements.

Forward-looking statements involve risks, uncertainties and assumptions. Although we do not make forward-looking statements unless we believe we have a reasonable basis for doing so, we cannot guarantee their accuracy. Actual results may differ materially from those expressed in these forward-looking statements due to a number of uncertainties and risks, including the risks described in our Annual Report on Form 10-K for the fiscal year ended March 31, 2006, the risk factors described under the caption "Risk Factors" in any applicable prospectus supplement, any risk factors set forth in our other filings with the Commission pursuant to Sections 13(a), 13(c), 14, or 15(d) of the Exchange Act and other unforeseen risks. You should not put undue reliance on any forward-looking statements. We undertake no obligation to update or revise these statements to reflect events or circumstances occurring after the date of such statements.

Our actual results may differ materially from those contemplated by the forward-looking statements for a number of reasons, including the following factors:

general cyclical patterns of the industries in which our customers operate;

the extent to which we cannot control our fixed and variable costs;

the raw material in our products may experience significant fluctuations in market price and availability;

certain raw materials constitute hazardous materials that may give rise to costly environmental and safety claims;

legislation regarding the restriction of the use of certain hazardous substances in electrical and electronic equipment;

risks involved in foreign operations such as disruption of markets, changes in import and export laws, currency restrictions and currency exchange rate fluctuations;

our ability to raise our selling prices to our customers when our product costs increase;

the extent to which we are able to efficiently utilize our global manufacturing facilities and optimize their capacity;

general economic conditions in the markets in which we operate;

competitiveness of the battery markets in the Americas, Europe and Asia;

our timely development of competitive new products and product enhancements in a changing environment and the acceptance of such products and product enhancements by customers;

Edgar Filing: EnerSys - Form 424B5

our ability to adequately protect our proprietary intellectual property, technology and brand names;

unanticipated litigation and regulatory proceedings to which we might be subject;

changes in our market share in the business segments and regions where we operate;

our ability to implement our cost reduction initiatives successfully and improve our profitability;

unanticipated quality problems associated with our products;

our ability to implement business strategies, including our acquisition strategy, and restructuring plans;

our acquisition strategy may not be successful in locating advantageous targets;

our ability to successfully integrate any assets, liabilities, customers, systems and management personnel we acquire into our operations and our ability to realize related revenue synergies and cost savings within expected time frames;

our debt and debt service requirements which may restrict our operational and financial flexibility, as well as imposing unfavorable interest and financing costs;

adverse changes in our short and long term debt levels under our credit facilities;

our exposure to fluctuations in interest rates on our variable rate debt;

our inability to attract and retain qualified personnel;

credit risk associated with our customers, including risk of insolvency and bankruptcy;

our ability to successfully recover in the event of a disaster affecting our infrastructure; and

terrorist acts or acts of war, whether in the United States or abroad, could cause damage or disruption to our operations, our suppliers, channels to market or customers, or could cause costs to increase, or create political or economic instability, any of which could have a material adverse effect on our business.

This list of factors that may affect future performance is illustrative, but by no means exhaustive. Accordingly, all forward-looking statements should be evaluated with the understanding of their inherent uncertainty. You are advised to consult any further disclosures we make on related subjects in the reports we file with the Commission pursuant to Sections 13(a), 13(c), 14, or 15(d) of the Exchange Act.

USE OF PROCEEDS

We will not receive any proceeds from any sale of common stock by the selling stockholders.

DIVIDEND POLICY

We do not anticipate declaring or paying any cash dividends in the foreseeable future. The timing and amount of future cash dividends, if any, would be determined by our Board of Directors and would depend upon our earnings, financial condition and cash requirements at the time. Under our senior secured credit facility, we may pay dividends on our common stock, subject to an annual limit of \$20.0 million, only if our leverage ratio is equal to or less than 3.0 to 1.0 and the credit ratings accorded the senior secured credit facility by Standard & Poor's and Moody's are at least BB- and Ba3, respectively, each with a stable outlook.

DESCRIPTION OF CAPITAL STOCK

General Matters

Our authorized capital stock consists of 135,000,000 shares of common stock, par value \$0.01 per share, of which 46,697,592 shares were issued and outstanding as of July 2, 2006 and 1,000,000 shares of undesignated preferred stock, par value \$0.01 per share, none of which was outstanding as of July 2, 2006.

The following summary describes the material provisions of our capital stock, including the common stock that the selling stockholders may sell. This summary is not meant to be a complete description of our capital stock or the terms of each offering that may occur pursuant to this prospectus. We urge you to read our certificate of incorporation and our bylaws, which are included as exhibits to the registration statement of which this prospectus forms a part. The particular terms of any offering will be described in the related prospectus supplement.

Certain provisions of our certificate of incorporation and bylaws summarized below may be deemed to have an anti-takeover effect and may delay or prevent a tender offer or takeover attempt that a stockholder might consider in its best interest, including those attempts that might result in a premium over the market price for shares of common stock.

Common Stock

We have one class of common stock. All holders of shares of common stock are entitled to the same rights and privileges. Holders of shares of common stock are entitled to one vote per share on the election or removal of our directors and on all other matters to be voted on by our stockholders.

Holders of shares of common stock are not entitled to any preemptive or preferential rights to subscribe for additional shares of any class of our capital stock. The holders of shares of common stock are entitled to receive dividends, when, as and if declared by our board of directors, out of funds legally available therefor. See "Dividend Policy." Holders of shares of common stock are entitled to share ratably, upon dissolution or liquidation, in the assets available for distribution to holders of shares of common stock after the payment of all prior claims.

Preferred Stock

Our authorized capital stock includes 1,000,000 shares of undesignated preferred stock, none of which was issued or outstanding as of July 2, 2006. Our board of directors is authorized, without further action by our stockholders, to provide for the issuance of such preferred stock in one or more series and to fix the dividend rate, conversion privileges, voting rights, redemption rights, redemption price or prices, liquidation preferences and qualifications, limitations and restrictions thereof with respect to each series. Holders of shares of preferred stock may be entitled to receive a preference payment in the event of any liquidation, dissolution or winding-up of our company before any payment is made to the holders of shares of our common stock. In some circumstances, the issuance of shares of preferred stock may render more difficult or tend to discourage a merger, tender offer or proxy contest, the assumption of control by a holder of a large block of our securities or the removal of incumbent management. Upon the affirmative vote of our board of directors, without stockholder approval, we may issue shares of preferred stock with voting and conversion rights that could adversely affect the holders of shares of our common stock. We have no current intention to issue any additional shares of preferred stock.

Section 203 of the Delaware General Corporation Law

Section 203 of the Delaware General Corporation Law may have the effect of delaying, deferring or preventing a change of control. In general, Section 203 of the Delaware General Corporation Law

prohibits a publicly held Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a period of three years following the date such stockholder became an "interested stockholder," unless:

prior to such date the board of directors approved either the "business combination" or the transaction that resulted in the stockholder becoming an "interested stockholder";

upon consummation of the transaction that resulted in the stockholder becoming an "interested stockholder," the "interested stockholder" owned at least 85% of the voting stock outstanding at the time the transaction commenced, excluding for purposes of determining the voting stock outstanding those shares owned by persons who are directors and also officers and certain other stockholders; or

on or subsequent to such date the "business combination" is approved by the board of directors and authorized at an annual or special meeting of stockholders by the affirmative vote of at least 66²/₃% of the outstanding voting stock that is not owned by the "interested stockholder."

A "business combination" includes certain mergers, stock or asset sales and other transactions resulting in a financial benefit to the "interested stockholder." An "interested stockholder" is a person who, together with affiliates and associates, owns (or in the preceding three years, did own) 15% or more of the outstanding voting stock. The statute could prohibit or delay mergers or other takeover or change in control attempts and, accordingly, may discourage attempts to acquire us.

Limitation of Liability and Indemnification of Directors and Officers

We have included in our certificate of incorporation and bylaws provisions to:

eliminate the personal liability of our directors for monetary damages resulting from breaches of their fiduciary duty, but such provision does not eliminate liability for breaches of the duty of loyalty, acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, violations under Section 174 of the Delaware General Corporation Law or for any transaction from which the director derived an improper personal benefit; and

indemnify our directors and officers to the fullest extent permitted by the Delaware General Corporation Law, including circumstances in which indemnification is otherwise discretionary.

Acting pursuant to the provisions of our certificate of incorporation and bylaws and the provisions of Section 145 of the Delaware General Corporation Law, we have entered into agreements with each of our officers and directors to indemnify them to the fullest extent permitted by such provisions and such law. We also are authorized to carry directors' and officers' insurance providing indemnification for our directors, officers and certain employees for some liabilities. We believe that these indemnification provisions and insurance are useful to attract and retain qualified directors and executive officers.

The limitation of liability and indemnification provisions in our certificate of incorporation and bylaws may discourage stockholders from bringing a lawsuit against directors for breach of their fiduciary duty. These provisions also may have the effect of reducing the likelihood of derivative litigation against directors and officers, even though such an action, if successful, might otherwise benefit us and our stockholders. In addition, your investment may be adversely affected to the extent we pay the costs of settlement and damage awards against directors and officers pursuant to these indemnification provisions.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to our directors or officers pursuant to the provisions described above, or otherwise, we have been advised that, in the opinion of the Commission, such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable.

Other Provisions of our Certificate of Incorporation and Bylaws

Classified Board of Directors. Our certificate of incorporation provides for our board of directors to be divided into three classes of directors serving staggered three-year terms. Each class shall consist, as nearly as may be practicable, of one-third of the total number of directors constituting our entire board of directors. As a result, approximately one-third of our board of directors will be elected each year. Moreover, except as otherwise provided in our Securityholder Agreement (as defined under "Selling Stockholders"), stockholders may remove a director only for cause. This provision, when coupled with the provisions of our certificate of incorporation and bylaws, except as otherwise provided in our Securityholder Agreement, authorizes only our board of directors to fill vacant directorships, preclude a stockholder from removing incumbent directors without cause and simultaneously gaining control of our board of directors by filling the vacancies created by such removal with its own nominees. This provision of our certificate of incorporation may not be amended or repealed by our stockholders except with the consent of the holders of at least two-thirds of our outstanding common stock.

Special Meeting of Stockholders. Our certificate of incorporation provides that special meetings of our stockholders may be called only by our board of directors or our Chairman of the Board. This provision makes it more difficult for stockholders to take action opposed by our board of directors. This provision of our certificate of incorporation may not be amended or repealed by our stockholders except with the consent of the holders of at least two-thirds of our outstanding common stock.

No Stockholder Action by Written Consent. Our certificate of incorporation provides that no action required or permitted to be taken at any annual or special meeting of our stockholders may be taken without a meeting, and the power of our stockholders to consent in writing, without a meeting, to the taking of any action is specifically denied. Such provision limits the ability of any stockholder to take action immediately and without prior notice to our board of directors. Such a limitation on a majority stockholder's ability to act might affect such person's or entity's decision to purchase our voting securities. This provision of our certificate of incorporation may not be amended or repealed by the stockholders except with the consent of the holders of at least two-thirds of our outstanding common stock.

Advance Notice Requirements for Stockholder Proposals and Director Nominations. Our bylaws provide that stockholders seeking to bring business before an annual meeting of stockholders, or to nominate candidates for election as directors at an annual or special meeting of stockholders, must provide timely notice thereof in writing. To be timely, a stockholder's notice must be delivered to, or mailed and received at, our principal executive offices: in the case of an annual meeting that is called for a date that is within 30 days before or after the anniversary date of the immediately preceding annual meeting of stockholders, not less than 90 days nor more than 120 days prior to such anniversary date or, in the case of a special meeting called for the purpose of electing directors, not less than 90 days nor more than 120 days prior to such special meeting or not later than the close of business on the tenth day following the date on which public disclosure of the date of the meeting is made; and in the case of an annual meeting that is called for a date that is not within 30 days before or after the anniversary date of the immediately preceding annual meeting, not later than the close of business on the tenth day following the date on which public disclosure of the date of the meeting was made. Our bylaws also specify certain requirements for a stockholder's notice to be in proper written form. These provisions may preclude some stockholders from bringing matters before the stockholders at an annual or special meeting or from making nominations for directors at an annual or special meeting. As set forth below, our bylaws may not be amended or repealed by our stockholders, except with the consent of holders of at least two-thirds of our outstanding common stock.

Adjournment of Meetings of Stockholders. Our bylaws provide that when a meeting of our stockholders is convened, the presiding officer, if directed by our board of directors, may adjourn the

meeting if no quorum is present for the transaction of business or if our board of directors determines that adjournment is necessary or appropriate to enable the stockholders to consider fully information that our board of directors determines has not been made sufficiently or timely available to stockholders or to otherwise effectively exercise their voting rights. This provision will, under certain circumstances, make more difficult or delay actions by the stockholders opposed by our board of directors. The effect of such provision could be to delay the timing of a stockholders' meeting, including in cases where stockholders have brought proposals before the stockholders that are in opposition to those brought by our board of directors and therefore may provide our board of directors with additional flexibility in responding to such stockholder proposals. As set forth below, our bylaws may not be amended or repealed by our stockholders, except with the consent of holders of at least two-thirds of our outstanding common stock.

No Cumulative Voting. The Delaware General Corporation Law provides that stockholders are not entitled to the right to cumulate votes in the election of directors unless our certificate of incorporation provides otherwise. Our certificate of incorporation does not provide for cumulative voting.

Authorized but Unissued Capital Stock. Our certificate of incorporation authorizes our board of directors to issue one or more classes or series of preferred stock, and to determine, with respect to any such class or series of preferred stock, the voting powers (if any), designations, powers, preferences, rights and qualifications, limitations or restrictions of such preferred stock. We have no current intention to issue any additional shares of preferred stock.

The Delaware General Corporation Law does not require stockholder approval for any issuance of previously authorized shares of our capital stock. However, the listing requirements of the New York Stock Exchange, which will apply so long as our common stock is listed on the New York Stock Exchange, require stockholder approval of certain issuances equal to or exceeding 20% of the then outstanding voting power or then outstanding number of shares of our common stock. These additional shares may be used for a variety of corporate purposes, including future public offerings, to raise additional capital or to facilitate acquisitions.

One of the effects of the existence of unissued and unreserved common stock or preferred stock may be to enable our board of directors to issue shares to persons friendly to current management, which issuance could render more difficult or discourage an attempt to obtain control of our company by means of a merger, tender offer, proxy contest or otherwise, and thereby protect the continuity of our management and possibly deprive the stockholders of opportunities to sell their shares of common stock at prices higher than prevailing market prices.

Amendment of the Bylaws. Our certificate of incorporation provides that our bylaws may not be amended or repealed by our stockholders except with the consent of holders of at least two-thirds of our outstanding common stock and grants our board of directors the authority to amend and repeal our bylaws without a stockholder vote in any manner not inconsistent with the laws of Delaware or our certificate of incorporation. This provision makes it more difficult for our stockholders to make changes to our bylaws that are opposed by our board of directors. This provision of our certificate of incorporation may not be amended or repealed by our stockholders except with the consent of holders of at least two-thirds of our outstanding common stock.

Transfer Agent and Registrar

National City Bank, Cleveland, Ohio, is the transfer agent and registrar for our common stock.

SELLING STOCKHOLDERS

This prospectus relates to the possible resale by the selling stockholders identified below of shares of our common stock. We are filing the registration statement, of which this prospectus is a part, pursuant to the provisions of a Securityholder Agreement dated as of July 26, 2004 (referred to herein as the Securityholder Agreement), among Metalmark Capital LLC, an independent private equity firm established in 2004 by former principals of Morgan Stanley Capital Partners to manage certain of Morgan Stanley Capital Partners' private equity funds and to make private equity investments in a broad range of industries (hereinafter referred to as Metalmark), certain institutional stockholders (hereinafter referred to as the Institutional Stockholders), certain members of our senior management and our company, which governs certain relationships among such parties.

The selling stockholders may from time to time offer and sell pursuant to this prospectus any or all of the shares of common stock owned by them that qualify as "Registrable Securities" under the Securityholder Agreement and registered hereunder, subject to the provisions of the Securityholder Agreement. The selling stockholders, however, make no representations that the shares covered by this prospectus will be offered for sale. We have agreed to keep the registration statement of which this prospectus forms a part effective until the earlier of (i) the second anniversary of the date on which the registration statement was declared effective or (ii) the date on which all of the shares covered by the registration statement have been sold to the public.

The table below presents information regarding the selling stockholders and the shares that each such selling stockholder may offer and sell from time to time under this prospectus. When we refer to the "selling stockholders" in this prospectus, we mean those persons listed in the table below. Unless otherwise indicated, beneficial ownership is calculated based on 46,697,592 shares of our common stock outstanding as of July 2, 2006. The number of shares in the column "Number of Shares of Common Stock Covered by This Prospectus" represents all of the shares that a selling stockholder may offer under this prospectus. Because the selling stockholders may offer, from time to time, all, some or none of their shares under this prospectus, or in another permitted manner, no assurances can be given as to the number of shares that will be sold by the selling stockholders or that will be held by the selling stockholders after completion of any sale. The shares of common stock to be beneficially owned by each selling stockholder after any particular offering will be set forth in the prospectus supplement related thereto. Please carefully read the footnotes located below the selling stockholders table in conjunction with the information presented in the table.

Except as noted in the footnotes to the table below or disclosed under the headings entitled "Board of Directors," "Executive Officers," "Employment Agreements" and "Certain Relationships and Related Transactions" in the company's Definitive Proxy Statement on Schedule 14A filed on June 19,

Edgar Filing: EnerSys - Form 424B5

2006, which is incorporated by reference herein, no selling stockholder has had, within the past three years, any position, office, or material relationship with us or any of our predecessors or affiliates.

| Name | Shares of Common Stock Beneficially Owned Before Any Offering(2)(3) | | Number of Shares of Common Stock Covered by This Prospectus(1)(3) |
|---|---|---------|---|
| | Number | Percent | |
| MSCP IV, L.P. and MSCP IV 892, L.P. c/o Metalmark Capital LLC 1177 Avenue of Americas New York, NY 10036(4) | 25,001,078(5)(6) | 53.5% | 9,057,890 |
| MSCI IV, L.P. 1585 Broadway New York, NY 10036(4) | 629,619(5) | 1.3% | 228,110 |
| MSGEM Funds 1585 Broadway New York, NY 10036 | 2,377,848(5) | 5.1% | 862,000 |
| J.P. Morgan Funds 522 Fifth Avenue New York, NY 10036 | 2,774,167(5)(7) | 5.9% | 1,005,000 |
| GM Stockholders | 2,377,849(5)(8) | 5.1% | 862,000 |
| John D. Craig | 2,295,483(9) | 4.7% | 217,000 |
| Michael T. Phillion | 932,866(10) | 2.0% | 91,000 |
| John A. Shea | 862,187(11) | 1.8% | 73,000 |
| Richard W. Zuidema | 853,934(2) | 1.8% | 71,000 |
| Raymond R. Kubis | 469,477(13) | 1.0% | 33,000 |

(1) Each of the selling stockholders may offer up to the number of shares of common stock listed in the third column of this table. The selling stockholders may elect to sell all or part of their common stock in the event that we commit to an underwritten public offering of our common stock. In addition, the selling stockholders may sell all or part of their common stock in an offering in which we do not participate. The decision by any of the selling stockholders to sell any of their respective shares of common stock in an offering will depend upon the market price of our common stock at that time and other factors deemed relevant by such selling stockholder. See "Plan of Distribution" for a description of the transactions in which the selling stockholders may offer and sell their common stock.

(2) Except as otherwise set forth below, based on 46,697,592 shares of common stock outstanding as of July 2, 2006. Beneficial ownership has been determined in accordance with Rule 13d-3 under Exchange Act, thereby including, with respect to each owner, options exercisable by such owner within 60 days of July 2, 2006. Information regarding the ownership of our Institutional Stockholders, which include Morgan Stanley Dean Witter Capital Partners IV, L.P. ("MSCP IV, L.P."), MSDW IV 892 Investors, L.P. ("MSCP IV 892, L.P."), and Morgan Stanley Dean Witter Capital Investors IV, L.P. ("MSCI IV, L.P.") (collectively, the "MSCP Funds"), Morgan Stanley Global Emerging Markets Private Investment Fund, L.P., and Morgan Stanley Global Emerging

Edgar Filing: EnerSys - Form 424B5

Markets Private Investors, L.P. (collectively, the "MSGEM Funds"), J.P. Morgan Direct Corporate Finance Institutional Investors LLC, J.P. Morgan Direct Corporate Finance Private Investors LLC, and 522 Fifth Avenue Fund, L.P. (collectively, the "J.P. Morgan Funds"), and First Plaza Group Trust and Performance Direct Investments I, L.P. (f/k/a GM Capital Partners I, L.P.) (collectively, the "GM Stockholders"), is derived from Schedules 13G filed by the beneficial owners with the Commission with respect to the period ended December 31, 2004.

- (3) Includes shares of common stock and common stock exercisable upon exercise of fully vested options.
- (4) Howard I. Hoffen, Kenneth F. Clifford, Eric T. Fry and Michael C. Hoffman are Managing Directors of Metalmark and exercise shared voting or investment power over 25,018,578 shares, including 17,500 shares subject to options, beneficially owned by Metalmark. Messrs. Hoffen, Clifford, Fry and Hoffman disclaim beneficial ownership of such shares as a result of their respective employment arrangements with Metalmark, except to the extent of their pecuniary interest therein ultimately realized.
- (5) As noted above, Metalmark, the Institutional Stockholders, certain members of our senior management and our company are parties to the Securityholder Agreement. Metalmark and the Institutional Stockholders may be deemed to be a "group" for purposes of Section 13(d)(3) or Section 13(g)(3) of the Exchange Act and Rule 13d-5(b)(1) thereunder. For more information on the terms of, and the parties to, the Securityholder Agreement, see "Certain Relationships and Related Transactions Securityholder Agreement" in our Definitive Proxy Statement on Schedule 14A filed on June 19, 2006, which is incorporated by reference herein.
- (6) An affiliate of Metalmark manages MSCP IV, L.P. and MSCP IV 892, L.P. pursuant to a subadvisory agreement (the "Subadvisory Agreement"). For more information on the terms of the Subadvisory Agreement, see "Certain Relationships and Related Transactions Relationship with Metalmark and Morgan Stanley" in our Definitive Proxy Statement on Schedule 14A filed on June 19, 2006, which is incorporated by reference herein. As a result of the Securityholder Agreement and the Subadvisory Agreement, Metalmark may be deemed to control our management and policies.
- (7) Includes J.P. Morgan Direct Corporate Finance Institutional Investors LLC, J.P. Morgan Direct Corporate Finance Private Investors LLC and 522 Fifth Avenue Fund, L.P.
- (8) Includes JPMorgan Chase Bank, National Association, as trustee for First Plaza Group Trust, 767 Fifth Avenue, New York, NY 10153 and Performance Direct Investments I, L.P. (f/k/a GM Capital Partners I, L.P.), Two Pickwick Plaza, Greenwich, CT 06830.
- (9) Mr. Craig holds shared voting or investment power over 2,295,483 shares. The number and percentage of shares beneficially owned by Mr. Craig include 2,114,231 shares subject to options.
- (10) Mr. Phillion holds shared voting or investment power over 932,866 shares. The number and percentage of shares beneficially owned by Mr. Phillion include 862,018 shares subject to options.
- (11) Mr. Shea holds shared voting or investment power over 862,187 shares. The number and percentage of shares beneficially owned by Mr. Shea include 812,600 shares subject to options.
- (12) Mr. Zuidema holds shared voting or investment power over 853,934 shares. The number and percentage of shares beneficially owned by Mr. Zuidema include 804,347 shares subject to options.
- (13) Mr. Kubis holds shared voting or investment power over 469,477 shares. The number and percentage of shares beneficially owned by Mr. Kubis include 445,875 shares subject to options.

PLAN OF DISTRIBUTION

We are registering the shares of common stock covered by this prospectus for the selling stockholders. As used in this prospectus, "selling stockholders" includes the selling security holders identified under "Selling Stockholders." The common stock may be sold from time to time by the selling stockholders. Such sales may be made in the over-the-counter market at prices and at terms then prevailing or at prices related to the then current market price, or in negotiated transactions. The selling stockholders will act independently of EnerSys in making decisions with respect to the timing, manner and size of each sale.

The selling stockholders may negotiate and pay underwriters' or broker-dealers' commissions, discounts or concessions for their services as applicable. In compliance with the guidelines of the National Association of Securities Dealers, Inc., or the NASD, the aggregate maximum discount, commission or agency fees or other items constituting underwriting compensation to be received by any NASD member or independent broker-dealer will not exceed 8% of any offering pursuant to this prospectus and any applicable prospectus supplement.

If more than 10% of the net proceeds of any offering of securities made under this prospectus will be received by NASD members participating in the offering or affiliates or associated persons of such NASD members, the offering will be conducted in accordance with NASD Conduct Rule 2710(h).

Underwriters or broker-dealers engaged by the selling stockholders may allow other underwriters or broker-dealers to participate in resales.

The common stock may be sold in one or more of the following types of transactions:

(a) A sale to one or more underwriters for resale to the public or to institutional investors in one or more transactions;

(i) If a selling stockholder notifies us of any material arrangement that it has entered into with an underwriter(s), we will execute an underwriting agreement with such underwriter(s) and file a supplemental prospectus, if required, pursuant to Rule 424(b) under the Securities Act of 1933. In that supplemented prospectus, we will disclose the name of each such underwriter, the number of shares to be sold, the price at which such shares were sold, the commissions paid or discounts or concessions allowed to such underwriter(s), where applicable, and any other facts material to the transaction.

(ii) The selling stockholders and any underwriters involved in the sale or resale of the common stock may qualify as "underwriters" within the meaning of Section 2(a)(11) of the Securities Act. In addition, the underwriters' commissions, discounts or concessions may qualify as underwriters' compensation under the Securities Act. If a selling stockholder qualifies as an "underwriter," it will be subject to the prospectus delivery requirements of Section 5(b)(2) of the Securities Act.

(b) A block trade in which a selling stockholder will engage a broker-dealer as agent, who will then attempt to sell the common stock, or position and resell a portion of the block, as principal, in order to facilitate the transaction;

(c) Derivative transactions with third parties;

(i) If the applicable prospectus supplement indicates, in connection with those derivatives, the third parties may sell securities covered by this prospectus and the applicable prospectus supplement, including in short sale transactions. If so, the third party may use securities pledged by the selling stockholder or borrowed from the selling stockholder or others to settle those sales or to close out any related open borrowings of stock, and may use securities received from the selling stockholder in settlement of those derivatives to close out any related open borrowings of stock.

Edgar Filing: EnerSys - Form 424B5

The third party in such sale transactions will be an underwriter and, if not identified in this prospectus, will be identified in the applicable prospectus supplement (or a post-effective amendment).

(d) Other hedging transactions, whereby the selling stockholder may:

(i) enter into transactions with a broker-dealer or affiliate thereof in connection with which such broker-dealer or affiliate will engage in short sales of the common stock pursuant to this prospectus, in which case such broker-dealer or affiliate may use shares of common stock received from the selling stockholders to close out its short positions;

(ii) sell common stock short itself and redeliver such shares to close out its short positions;

(iii) enter into option or other types of transactions that require the selling stockholder to deliver common stock to a broker-dealer or an affiliate thereof, who will then resell or transfer the common stock under this prospectus; or

(iv) loan or pledge the common stock to a broker-dealer or an affiliate thereof, who may sell the loaned shares or, in an event or default in the case of a pledge, sell the pledged shares pursuant to this prospectus; or

(e) Sales to third parties who may deliver the common stock upon exchange of exchangeable securities issued by such third parties or their affiliates, which in either case may deliver this prospectus in connection with the sale of those exchangeable securities. Such transactions may be combined with other transactions of the types described above. In particular, such third parties or their affiliates may engage in sales of common stock (including short sales) to hedge their position prior to the exchange of their exchangeable securities, may deliver this prospectus in connection with some or all of those sales and may deliver shares of common stock covered by this prospectus to close out any short positions created in connection with those sales.

In addition to selling its common stock under this prospectus, a selling stockholder may:

(a) agree to indemnify any underwriter or broker-dealer against certain liabilities related to the selling of the common stock, including liabilities arising under the Securities Act;

(b) transfer its common stock in other ways not involving market maker or established trading markets, including directly by gift, distribution, or other transfer;

(c) sell its common stock under Rule 144 of the Securities Act rather than under this prospectus, if the transaction meets the requirements of Rule 144; or

(d) sell its common stock by any other legally available means.

For any particular offering pursuant to this shelf registration statement:

(a) an underwriter may allow, and dealers may reallow, concessions on sales to certain other dealers;

(b) we and the selling stockholders may agree to indemnify an underwriter against certain liabilities, including liabilities under the Securities Act, or to contribute to payments an underwriter may be required to make in connection with these liabilities; and

(c) we, our executive officers, our directors and the selling stockholders may agree, subject to certain exceptions, that for a certain period from the date of the prospectus supplement under which the securities are offered, we and they will not, without the prior written consent of an underwriter, offer, sell, contract to sell, pledge or otherwise dispose of any shares of our common stock or any securities convertible into or exchangeable for our common stock. However, an underwriter, in its sole discretion, may release any of the securities subject to these lock-up agreements at any time without

notice. We expect an underwriter to exclude from these lock-up agreements, securities exercised and/or sold pursuant to 10b5-1 pre-set selling programs that are in place at the time of an offering made pursuant to this prospectus and any prospectus supplement hereto.

In connection with any particular offering pursuant to this shelf registration statement, an underwriter may engage in stabilizing transactions, short sales, syndicate covering transactions and penalty bids.

Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum price.

Short selling involves sales by an underwriter of shares in excess of the number of shares an underwriter is obligated to purchase. The short position may be either a covered short position or a naked short position. In a covered short position, the number of shares sold by an underwriter is not greater than the number of shares that it may purchase in its option to purchase additional shares. In a naked short position, the number of shares involved is greater than the number of shares in its option to purchase additional shares. An underwriter may close out any short position by either exercising its option to purchase additional shares and/or purchasing shares in the open market.

Syndicate covering transactions involve purchases of the common stock in the open market after the distribution has been completed in order to cover syndicate short positions. In determining the source of shares to close out the short position, an underwriter will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through its option to purchase additional shares. If an underwriter sells more shares than could be covered by its option to purchase additional shares, a naked short position, the position can only be closed out by buying shares in the open market. A naked short position is more likely to be created if an underwriter is concerned that there could be downward pressure on the price of the shares in the open market after pricing that could adversely affect investors who purchase in the offering.

Penalty bids permit representatives to reclaim a selling concession from a syndicate member when the common stock originally sold by the syndicate member is purchased in a stabilizing or syndicate covering transaction to cover syndicate short positions.

These stabilizing transactions, syndicate covering transactions and penalty bids may have the effect of raising or maintaining the market price of our common stock or preventing or retarding a decline in the market price of the common stock. As a result, the price of our common stock may be higher than the price that might otherwise exist in the open market. These transactions may be effected on the New York Stock Exchange or otherwise and, if commenced, may be discontinued at any time.

A prospectus in electronic format may be made available on the web sites maintained by an underwriter, or selling group member, if any, participating in any particular offering and an underwriter participating in any particular offering may distribute prospectuses electronically. Any representatives may agree to allocate a number of shares to an underwriter and selling group members for sale to their online brokerage account holders. Internet distributions will be allocated by an underwriter and selling group members that will make internet distributions on the same bases as other allocations.

Any selling stockholder who is a "broker dealer" will be deemed to be an "underwriter" within the meaning of Section 2(11) of the Securities Act, unless such selling stockholder purchased its shares in the ordinary course of business, and at the time of its purchase of the shares to be resold, did not have any view to or arrangements or understandings, directly or indirectly, with any person to distribute the shares. The selling stockholders have each informed us that they are not registered broker dealers. Certain selling stockholders have identified themselves to us as affiliates of broker dealers. See "Selling Stockholders." The selling stockholders who are affiliates of broker dealers have each informed us that they did not receive the common stock outside of the ordinary course of business nor, at the time of issuance of the common stock, did they have any view to or any arrangements or understandings, directly or indirectly, with any person to distribute the shares of common stock.

WHERE YOU CAN FIND MORE INFORMATION

We file reports, proxy statements, and other information with the SEC. These reports, proxy statements, and other information can be read and copied at the SEC's public reference room at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the public reference room. The SEC maintains an internet site at <http://www.sec.gov> that contains reports, proxy and information statements and other information regarding companies that file electronically with the SEC, including EnerSys. These reports, proxy statements and other information can also be read at the offices of the New York Stock Exchange, 20 Broad Street, New York, New York 10005 or on our internet site at www.enersys.com. Information on our website is not incorporated into this prospectus or our other SEC filings and is not a part of this prospectus or those filings.

This prospectus is part of a registration statement filed by us with the SEC. The full registration statement can be obtained from the SEC as indicated above, or from us.

The SEC allows us to "incorporate by reference" the information we file with the SEC. This permits us to disclose important information to you by referencing these filed documents. Any information referenced this way is considered part of this prospectus, and any information filed with the SEC subsequent to this prospectus and prior to the termination of the particular offering referred to in such prospectus supplement will automatically be deemed to update and supersede this information. We incorporate by reference the following documents which have been filed with the SEC:

Annual Report on Form 10-K for the fiscal year ended March 31, 2006 (filed on June 14, 2006);

Quarterly Report on Form 10-Q for the fiscal quarters ended July 2, 2006 (filed August 8, 2006) and October 1, 2006 (filed November 8, 2006);

Current Reports on Form 8-K filed June 22, 2006 and July 6, 2006 (other than item 7.01 and exhibit 99.1 under item 9.01, which are furnished and not incorporated herein by reference), July 26, 2006 and December 1, 2006 (other than item 7.01 and exhibit 99.1 under item 9.01, which are furnished and not incorporated by reference);

Definitive Proxy Statement on Schedule 14A filed on June 19, 2006; and

Registration Statements on Form 8-A dated July 26, 2004.

We incorporate by reference the documents listed above and any future filings made with the SEC in accordance with Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, with the exception of any documents deemed not to be filed and any documents filed pursuant to Item 402(a)(8) of Regulation S-K under the Securities Act.

We will provide without charge upon written or oral request to each person, including any beneficial owner, to whom a prospectus is delivered, a copy of any or all of the documents which are incorporated by reference to this prospectus (other than exhibits unless such exhibits are specifically incorporated by reference in such documents). Requests should be directed to Investor Relations, EnerSys, 2366 Bernville Road, Reading, Pennsylvania 19605, or by calling EnerSys Investor Relations directly at (610) 236-4040.

LEGAL MATTERS

Unless otherwise specified in a prospectus supplement accompanying this prospectus, Skadden, Arps, Slate, Meagher & Flom LLP, New York, New York, will provide opinions regarding the authorization and validity of the common stock. Skadden, Arps, Slate, Meagher & Flom LLP may also provide opinions regarding certain other matters. Any underwriters will also be advised about legal matters by their own counsel, which will be named in the prospectus supplement.

EXPERTS

The consolidated financial statements of EnerSys appearing in EnerSys' Annual Report (Form 10-K) for the year ended March 31, 2006 (including the schedule appearing therein), and EnerSys management's assessment of the effectiveness of internal control over financial reporting as of March 31, 2006 included therein, have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their reports thereon, included therein, and incorporated herein by reference. Such consolidated financial statements and management's assessment are incorporated herein by reference in reliance upon such reports given on the authority of such firm as experts in accounting and auditing.

6,000,000 Shares

Common Stock

PROSPECTUS SUPPLEMENT

June 29, 2007

Jefferies & Company

QuickLinks

[TABLE OF CONTENTS](#)

[ABOUT THIS PROSPECTUS SUPPLEMENT](#)

[PROSPECTUS SUPPLEMENT SUMMARY](#)

[EnerSys](#)

[THE OFFERING](#)

[RISK FACTORS](#)

[USE OF PROCEEDS](#)

[SELLING STOCKHOLDERS](#)

[CERTAIN U.S. FEDERAL TAX CONSEQUENCES TO NON-U.S. HOLDERS OF COMMON STOCK](#)

[UNDERWRITING](#)

[WHERE YOU CAN FIND MORE INFORMATION](#)

[LEGAL MATTERS](#)

[EXPERTS](#)

[TABLE OF CONTENTS](#)

[ABOUT THIS PROSPECTUS](#)

[ENERSYS](#)

[RISK FACTORS](#)

[SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS](#)

[USE OF PROCEEDS](#)

[DIVIDEND POLICY](#)

[DESCRIPTION OF CAPITAL STOCK](#)

[SELLING STOCKHOLDERS](#)

[PLAN OF DISTRIBUTION](#)

[WHERE YOU CAN FIND MORE INFORMATION](#)

[LEGAL MATTERS](#)

[EXPERTS](#)