

GENERAC HOLDINGS INC.
Form 424B3
June 14, 2013

Table of Contents

The information in this preliminary prospectus supplement is not complete and may be changed. This preliminary prospectus supplement and the accompanying prospectus are not an offer to sell these securities and are not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

Filed Pursuant to Rule 424(b)(3)
Registration No. 333-185136

Subject to Completion, dated June 13, 2013

Preliminary Prospectus Supplement
(to Prospectus dated November 26, 2012)

6,500,000 Shares

Generac Holdings Inc.

Common Stock

All of the shares of common stock in this offering are being sold by the selling stockholders identified in this prospectus supplement. We will not receive any proceeds from the sale of shares of common stock in this offering.

Our common stock is listed on the New York Stock Exchange under the symbol "GNRC." On June 13, 2013, the last sale price of our common stock as reported on the New York Stock Exchange was \$35.64 per share.

| | Per Share | Total |
|---|-----------|-------|
| Public offering price | \$ | \$ |
| Underwriting discounts and commissions | \$ | \$ |
| Proceeds to selling stockholders, before expenses | \$ | \$ |

The selling stockholders have granted the underwriter a 30-day option to purchase up to 975,000 additional shares from the selling stockholders at the public offering price, less underwriting discounts and commissions.

Investing in our common stock involves a high degree of risk. See "Risk Factors" beginning on page S-4 of this prospectus supplement and on page 5 of the accompanying prospectus. You should also consider the risk factors described in the documents incorporated by reference in this prospectus supplement and the accompanying prospectus.

Neither the Securities and Exchange Commission (the "SEC") nor any state securities commission has approved or disapproved of 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.

Delivery of the shares of common stock is expected to be made on or about _____, 2013.

Morgan Stanley

, 2013

TABLE OF CONTENTS

Prospectus Supplement

| | |
|---|-------------|
| <u>About this Prospectus Supplement</u> | <u>S-ii</u> |
| <u>Summary</u> | <u>S-1</u> |
| <u>Risk Factors</u> | <u>S-4</u> |
| <u>Cautionary Note Regarding Forward-Looking Statements</u> | <u>S-7</u> |
| <u>Use of Proceeds</u> | <u>S-9</u> |
| <u>Price Range of Our Common Stock and Dividends</u> | <u>S-9</u> |
| <u>Dividend Policy</u> | <u>S-10</u> |
| <u>Selling Stockholders</u> | <u>S-11</u> |
| <u>Material U.S. Federal Income Tax Considerations to Non-U.S. Holders</u> | <u>S-13</u> |
| <u>Underwriting</u> | <u>S-17</u> |
| <u>Legal Matters</u> | <u>S-23</u> |
| <u>Experts</u> | <u>S-23</u> |
| <u>Where You Can Find Additional Information; Incorporation of Certain Documents by Reference</u> | <u>S-23</u> |

Prospectus

| | |
|---|-----------|
| <u>About this Prospectus</u> | <u>1</u> |
| <u>Where You Can Find Additional Information; Incorporation of Certain Documents by Reference</u> | <u>2</u> |
| <u>Cautionary Note Regarding Forward-Looking Statements</u> | <u>3</u> |
| <u>About Generac</u> | <u>5</u> |
| <u>Risk Factors</u> | <u>5</u> |
| <u>Use of Proceeds</u> | <u>6</u> |
| <u>Selling Stockholders</u> | <u>6</u> |
| <u>Description of Capital Stock</u> | <u>6</u> |
| <u>Plan of Distribution</u> | <u>10</u> |
| <u>Legal Matters</u> | <u>13</u> |
| <u>Experts</u> | <u>13</u> |

You should rely only on the information contained and incorporated by reference in this prospectus supplement, the accompanying prospectus and any related free writing prospectus prepared by or on behalf of us. We and the selling stockholders have not, and the underwriter has not, authorized any other person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. The selling stockholders are not, and the underwriter is not, making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. The information contained or incorporated by reference in this prospectus supplement, the accompanying prospectus or any related free writing prospectus prepared by or on behalf of us is accurate only as of the date of the applicable document. Our business, financial condition, results of operations and prospects may have changed since that date.

Table of Contents

ABOUT THIS PROSPECTUS SUPPLEMENT

This document consists of two parts. The first part is this prospectus supplement, which describes the specific terms of this offering. The second part is the accompanying prospectus, which contains more general information, some of which may not apply to this offering. You should read both this prospectus supplement and the accompanying prospectus, together with additional information described below under the heading "Where You Can Find Additional Information; Incorporation of Certain Documents by Reference" in their entirety before making an investment decision. To the extent there is a variation between information contained in this prospectus supplement, on the one hand, and the information contained in the accompanying prospectus, on the other hand, you should rely on the information in this prospectus supplement.

Any statement made in this prospectus supplement or in a document incorporated or deemed to be incorporated by reference in this prospectus supplement will be deemed to be modified or superseded for purposes of this prospectus supplement to the extent that a statement contained in this prospectus supplement or in any other subsequently filed document that is also incorporated or deemed to be incorporated by reference in this prospectus supplement modifies or supersedes that statement. Any statement so modified or superseded will not be deemed, except as so modified or superseded, to constitute a part of this prospectus supplement.

Table of Contents

SUMMARY

This summary description about us and our business highlights selected information contained elsewhere in, or incorporated by reference into, this prospectus supplement and the accompanying prospectus. This summary does not contain all of the information that you should consider before investing in our common stock. You should read in their entirety this prospectus supplement, the accompanying prospectus and any related free writing prospectus, together with all documents incorporated by reference herein and therein. You should also carefully consider the matters discussed, and incorporated by reference, herein in the sections entitled "Risk Factors." Unless otherwise indicated or the context requires otherwise, the term "selling stockholders" refers to the selling stockholders named in this prospectus supplement under the caption "Selling Stockholders." References to "Generac," "we," "us," "our company" or similar terms refer to Generac Holdings Inc. and its subsidiaries.

Our Company

We are a leading designer and manufacturer of a wide range of generators and other engine powered products for the residential, light commercial, industrial and construction markets. As the only significant market participant focused predominantly on these products, we have one of the leading market positions in the power equipment market in North America. We design, manufacture, source and modify engines, alternators, transfer switches and other components necessary for our products. Our products are fueled by natural gas, liquid propane, gasoline, diesel and Bi-Fuel and are available through a broad network of independent dealers, retailers, wholesalers, and equipment rental companies.

We have what we believe is an industry leading, multi-layered distribution network, and our products are available in thousands of outlets across North America. We sell and distribute our products to and through independent residential and industrial dealers, electrical wholesalers, national accounts, private label arrangements, retailers, catalogs, e-commerce merchants, equipment rental companies, equipment dealers and construction companies. We have a significant market share in the residential and light commercial generator markets, which we believe are currently under-penetrated. We believe that our leading market position is largely attributable to our strategy of providing a broad product line of high-quality, innovative and affordable products through our extensive and multi-layered distribution network. In addition, through recent acquisitions, we are also a leading provider of light towers, mobile generators and industrial diesel gensets for international markets ranging in sizes up to 2,500kW.

We operate several manufacturing plants located principally in Wisconsin and Mexico totaling over two million square feet. We also maintain inventory warehouses in the United States that accommodate material storage and rapid response requirements of our customers.

Corporate Information

Generac is a Delaware corporation, which was formed in 2006 and is headquartered in Waukesha, Wisconsin. Generac Power Systems, Inc., our principal operating subsidiary, is a Wisconsin corporation founded in 1959. Our principal executive offices are located at S45 W29290 Hwy. 59, Waukesha, Wisconsin 53189. Our main telephone number is (262) 544-4811. Our website address is www.generac.com. Our website and any of the information on our website or any other website identified herein is not part of this prospectus supplement or the accompanying prospectus, and you should rely only on the information contained or incorporated by reference in this prospectus supplement or the accompanying prospectus.

Generac®, Guardian®, Centurion®, Quietsource® and Magnum® are registered trademarks of Generac Power Systems. All other trademarks and trade names identified in this prospectus supplement, the accompanying prospectus or the documents incorporated by reference therein, including Bi-Fuel, are the property of unrelated third parties.

Table of Contents

Recent Developments

Special Cash Dividend to Shareholders

On May 31, 2013, our board of directors declared a special cash dividend of \$5.00 per share on our outstanding common stock, which is payable on June 21, 2013 to stockholders of record on June 12, 2013. Investors in this offering will not receive the special cash dividend on the shares of common stock that they purchase in this offering, and there is no assurance that we will declare or pay dividends on our common stock in the future. See "Risk Factors Risks Relating to This Offering There are no assurances that we will pay dividends on our common stock in the foreseeable future."

To fund the special cash dividend, we recently completed a recapitalization in which we incurred approximately \$414.5 million of additional debt. As part of this recapitalization, we amended and restated our senior secured term loan facility and incurred an aggregate amount of approximately \$1.2 billion in new term loans. We used a portion of the proceeds to refinance such senior secured term loan credit facilities, and we intend to use a portion of the proceeds of the new debt financing to pay the special cash dividend. In addition, we obtained a one-year extension to our \$150 million senior secured asset-based revolving credit facility, which remains undrawn.

The increase in outstanding debt may increase our interest expense from recent historical levels. See "Risk Factors Risks Relating to This Offering Our recent dividend recapitalization has increased our indebtedness, which could adversely affect our financial condition."

Table of Contents

THE OFFERING

| | |
|--|--|
| Shares of common stock offered by the selling stockholders | 6,500,000 shares. |
| Option to purchase additional shares | The selling stockholders have granted the underwriter a 30-day option to purchase up to 975,000 additional shares from the selling stockholders at the public offering price, less underwriting discounts and commissions. |
| Use of proceeds | We will not receive any proceeds from the sale of shares of common stock by the selling stockholders. See "Use of Proceeds." |
| Dividend policy | While we have declared dividends in the past, and have declared a special cash dividend in connection with our new debt financing, we do not anticipate paying any other dividends on our common stock in the foreseeable future. However, we may change this policy in the future. See "Recent Developments Special Cash Dividend to Shareholders" and "Dividend Policy." |
| Risk factors | Investing in our common stock involves a high degree of risk. See "Risk Factors" in this prospectus supplement, the accompanying prospectus, any free writing prospectus prepared by or on behalf of us and other documents incorporated by reference herein or therein for a discussion of factors you should consider before investing in our common stock. |
| New York Stock Exchange symbol | "GNRC." |

Table of Contents

RISK FACTORS

You should carefully consider the risks described below and under the caption "Risk Factors" included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2012 and our Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2013, respectively, which are incorporated by reference in this prospectus supplement and the accompanying prospectus, before making a decision to invest in our common stock. The risks and uncertainties described below and in our annual and quarterly reports incorporated by reference in this prospectus supplement and the accompanying prospectus are not the only ones facing us. Additional risks and uncertainties not presently known to us, or that we currently deem immaterial, could negatively impact our results of operations or financial condition in the future. If any of such risks actually occur, our business, financial condition or results of operations could be materially affected. In that case, the trading price of our common stock could decline, and you may lose all or part of your investment.

Risks Relating to This Offering

After this offering, our principal stockholder will continue to have substantial control over us.

Upon completion of this offering, affiliates of CCMP Capital Advisors, LLC, or CCMP, will collectively beneficially own approximately 11.7% of our outstanding common stock (or 10.3% if the underwriter exercises its option to purchase additional shares in full). See "Selling Stockholders." As a consequence, CCMP or its affiliates will be able to continue to exert a significant degree of influence or actual control over our management and affairs and will control matters requiring stockholder approval, including the election of directors, a merger, consolidation or sale of all or substantially all of our assets, and any other significant transaction. The interests of this stockholder may not always coincide with our interests or the interests of our other stockholders. For instance, this concentration of ownership may have the effect of delaying or preventing a change in control of us otherwise favored by our other stockholders and could depress our stock price.

There are no assurances that we will pay dividends on our common stock in the foreseeable future.

While we have declared dividends in the past, and have declared a special cash dividend in connection with our new debt financing, we do not anticipate paying any other dividends in the foreseeable future on our common stock. Investors in this offering will not receive the special cash dividend on the shares of common stock that they purchase in this offering. We intend to retain all future earnings for the operation and expansion of our business and the repayment of outstanding debt. In addition, the terms of our senior secured credit facilities limit our ability to pay dividends on our common stock. As a result, capital appreciation, if any, of our common stock will be the sole source of gain for the foreseeable future. While we may change this policy at some point in the future, we cannot assure you that we will make such a change. See "Dividend Policy."

Our recent dividend recapitalization has increased our indebtedness, which could adversely affect our financial condition.

Our dividend recapitalization, discussed above under "Summary Recent Developments Special Cash Dividend to Shareholders," has increased our outstanding indebtedness. In addition, our amended and restated senior secured term loan facility includes a \$300.0 million uncommitted incremental term loan facility. If we obtain additional commitments and borrow under the facility, our indebtedness could further increase. This may affect our future financial condition and may increase the risk described in our Annual Report on Form 10-K for the fiscal year ended December 31, 2012 under "Risk Factors Risks related to our capital structure We have a significant amount of indebtedness which could adversely affect our cash flow and our ability to remain in compliance with debt covenants and make payments on our indebtedness."

Table of Contents

Future sales of our common stock may cause our stock price to decline.

If we or our stockholders sell substantial amounts of our common stock in the public market following this offering, the market price of our common stock could decline. These sales might also make it more difficult for us to sell additional equity securities at a time and price that we deem appropriate. As of May 31, 2013, we had 68,402,809 shares of our common stock outstanding. The shares offered in this offering will not change the total number of shares outstanding. All of the shares of our common stock sold in this offering will be freely tradable in the public market unless purchased by our "affiliates" as that term is defined in Rule 144 under the Securities Act of 1933, as amended (the "Securities Act"). The shares of our common stock held by certain of our affiliates are "restricted securities" as defined in Rule 144 under the Securities Act.

In connection with this offering, we and the selling stockholders have agreed that, subject to limited exceptions, for a period of 45 days from the date of this prospectus supplement, we and they will not, directly or indirectly, offer, sell, offer to sell, contract to sell or otherwise dispose of any shares of our common stock without the prior written consent of the underwriter, except in limited circumstances. However, the underwriter, in its sole discretion, may release any of the securities subject to these lock-up agreements at any time without notice.

Subject to the lock-up agreements and vesting requirements, 10,340,726 restricted securities (or 9,365,726 restricted securities if the underwriter exercises its option to purchase additional shares in full) may be sold into the public market in the future without registration under the Securities Act to the extent permitted under Rule 144. All of these restricted securities will be eligible for sale under Rule 144 following expiration of the lock-up agreements described above subject to vesting and limitations on sales by affiliates. In addition, certain stockholders holding 9,222,870 outstanding shares (or 8,247,870 outstanding shares if the underwriter exercises its option to purchase additional shares in full) of these restricted securities have registration rights which could allow those holders to sell additional shares under the registration statement on Form S-3 we currently have on file with the SEC, or they may sell their shares freely through a future registration statement filed under the Securities Act.

In addition, pursuant to registration statements on Form S-8 under the Securities Act, we have registered an aggregate of 9,137,835 shares of our common stock for issuance under our Amended and Restated 2010 Equity Incentive Plan, or the Omnibus Plan, of which an aggregate of 4,397,723 shares of common stock are available for future awards as of May 31, 2013. We may increase the number of shares registered for this purpose at any time, subject to stockholder approval. Subject to any restrictions imposed on the restricted shares and options granted under our Omnibus Plan, shares registered under the registration statements on Form S-8 will be available for sale into the public markets.

The price of our common stock may be volatile.

Securities markets worldwide have experienced, and are likely to continue to experience, significant price and volume fluctuations. This market volatility, as well as general economic, market or political conditions could reduce the market price of our common stock regardless of our results of operations. The trading price of our common stock is likely to be highly volatile and could be subject to wide price fluctuations in response to various factors, including, among other things, the risk factors described in this prospectus supplement and the accompanying prospectus, and other factors beyond our control. Factors affecting the trading price of our common stock include, but are not limited to:

market conditions in the broader stock market;

actual or anticipated variations in our quarterly financial and operating results;

variations in operating results of similar companies;

introduction of new products by us, our competitors or our customers;

Table of Contents

our ability to enter new markets and successfully complete and integrate acquisitions;

issuance of new, negative or changed securities analysts' reports or recommendations or estimates;

investor perceptions of us and the industries in which we or our customers operate;

sales, or anticipated sales, of our stock, including sales by existing stockholders;

additions or departures of key personnel;

regulatory or political developments;

stock-based compensation expense under applicable accounting standards;

litigation and governmental investigations; and

changing economic conditions.

These and other factors may cause the market price and demand for shares of our common stock to fluctuate substantially, which may limit or prevent investors from readily selling their shares of common stock and may otherwise negatively affect the liquidity of our common stock. In addition, in the past, when the market price of a stock has been volatile, holders of that stock have sometimes instituted securities class action litigation against the company that issued the stock. Securities litigation against us, regardless of the merits or outcome, could result in substantial costs and divert the time and attention of our management from our business, which could significantly harm our business, profitability and reputation.

Anti-takeover provisions in our amended and restated certificate of incorporation and by-laws could prohibit a change of control that our stockholders may favor and could negatively affect our stock price.

Provisions in our amended and restated certificate of incorporation and by-laws may make it more difficult and expensive for a third party to acquire control of us even if a change of control would be beneficial to the interests of our stockholders. These provisions could discourage potential takeover attempts and could adversely affect the market price of our common stock. These provisions may also prevent or frustrate attempts by our stockholders to replace or remove our management. For example, our amended and restated certificate of incorporation and by-laws:

permit our board of directors to issue preferred stock with such terms as they determine, without stockholder approval;

provide that only one-third of the members of the board are elected at each stockholders meeting and prohibit removal without cause;

require advance notice for stockholder proposals and director nominations; and

contain limitations on convening stockholder meetings.

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These provisions make it more difficult for stockholders or potential acquirers to acquire us without negotiation and could discourage potential takeover attempts and could adversely affect the market price of our common stock.

S-6

Table of Contents

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

Some of the statements made in this prospectus supplement, the accompanying prospectus, information incorporated by reference into each of them and any related free-writing prospectus contain forward-looking statements that involve risks and uncertainties that could cause actual results to differ materially from those in the forward-looking statements. Forward-looking statements give our current expectations and projections relating to our financial condition, results of operations, plans, objectives, future performance and business. You can identify forward-looking statements by the fact that they do not relate strictly to historical or current facts. These statements may include words such as "anticipate," "estimate," "expect," "project," "plan," "intend," "believe," "confident," "may," "should," "can have," "likely," "future" and other words and terms of similar meaning in connection with any discussion of the timing or nature of future operating or financial performance or other events.

The forward-looking statements contained in this prospectus supplement, the accompanying prospectus, the documents incorporated by reference herein and therein and any related free-writing prospectus are based on assumptions that we have made in light of our industry experience and on our perceptions of historical trends, current conditions, expected future developments and other factors we believe are appropriate under the circumstances. As you read and consider this prospectus supplement, the accompanying prospectus, the documents incorporated by reference herein and any related free-writing prospectus, you should understand that these statements are not guarantees of performance or results. They involve risks, uncertainties (some of which are beyond our control) and assumptions. Although we believe that these forward-looking statements are based on reasonable assumptions, you should be aware that many factors could affect our actual financial results and cause them to differ materially from those anticipated in the forward-looking statements. The forward-looking statements contained in this prospectus supplement, the accompanying prospectus, the documents incorporated by reference herein and any related free-writing prospectus include estimates regarding:

our business, financial and operating results and future economic performance;

proposed new product and service offerings; and

management's goals, expectations and objectives and other similar expressions concerning matters that are not historical facts.

Factors that could affect our actual financial results and cause them to differ materially from those anticipated in the forward-looking statements include:

demand for our products;

frequency and duration of major power outages;

availability, cost and quality of raw materials and key components used in producing our products;

the impact on our results of the substantial increase in our outstanding indebtedness due to our recent dividend recapitalization transaction that is described above under "Summary Recent Developments Special Cash Dividend to Shareholders";

the possibility that the expected synergies, efficiencies and cost savings of the acquisition of the Ottomotores businesses or other acquisitions will not be realized, or will not be realized within the expected time period;

the risk that the Ottomotores businesses or other acquisitions that we make will not be integrated successfully;

competitive factors in the industry in which we operate;

our dependence on our distribution network;

S-7

Table of Contents

our ability to invest in, develop or adapt to changing technologies and manufacturing techniques;

loss of our key management and employees;

increase in product and other liability claims; and

changes in environmental, health and safety laws and regulations.

Should one or more of these risks or uncertainties materialize, or should any of these assumptions prove incorrect, our actual results may vary in material respects from those projected in any forward-looking statements. You should consider these important factors, as well as the risk factors set forth in this prospectus supplement, the accompanying prospectus and in the documents incorporated by reference herein and therein, in evaluating any statement made in this prospectus supplement.

Any forward-looking statement made by us in this prospectus supplement, the accompanying prospectus, the documents incorporated by reference herein or therein or in any related free-writing prospectus speaks only as of the date on which we make it. Factors or events that could cause our actual results to differ may emerge from time to time, and it is not possible for us to predict all of them. We undertake no obligation to update any forward-looking statement, whether as a result of new information, future developments or otherwise, except as may be required by law.

Table of Contents**USE OF PROCEEDS**

We will not receive any proceeds from the sale of shares by the selling stockholders (including any proceeds from the sale of shares by the selling stockholders pursuant to an exercise of the underwriter's option to purchase additional shares). We will pay the expenses, other than underwriting discounts and commissions, associated with the sale of shares by the selling stockholders.

PRICE RANGE OF OUR COMMON STOCK AND DIVIDENDS

Our common stock is listed on the New York Stock Exchange under the symbol "GNRC." The last reported sales price of our common stock as reported for trading on the New York Stock Exchange on June 13, 2013 was \$35.64. As of May 31, 2013, there were approximately 123 holders of our common stock. The following table sets forth on a per share basis the high and low sales prices on the New York Stock Exchange for our common stock during the periods indicated and the dividends paid per share with respect to each period.

| | Stock Price Range | |
|--|-------------------|-------------------------|
| | High | Low |
| Year Ending 2013 | | |
| Second Quarter (through June 13, 2013) | \$ 41.48 | \$ 32.41 ⁽¹⁾ |
| First Quarter | 41.40 | 32.72 |
| Year Ended 2012 | | |
| Fourth Quarter | \$ 39.18 | \$ 24.43 |
| Third Quarter | 25.33 | 18.35 |
| Second Quarter | 30.61 | 22.40 ⁽²⁾ |
| First Quarter | 30.50 | 24.27 |
| Year Ended 2011 | | |
| Fourth Quarter | \$ 29.06 | \$ 18.29 |
| Third Quarter | 21.41 | 15.41 |
| Second Quarter | 21.10 | 17.10 |
| First Quarter | 20.85 | 14.72 |

(1) On June 21, 2013, we will pay a special cash dividend of \$5.00 per share on our common stock to stockholders of record on June 12, 2013. Investors in this offering will not receive the special cash dividend on the shares of common stock that they purchase in this offering.

(2) On June 29, 2012, we paid a special cash dividend of \$6.00 per share on our common stock to stockholders of record on June 20, 2012.

Table of Contents

DIVIDEND POLICY

On May 31, 2012, our board of directors declared a special cash dividend of \$6.00 per share on our common stock, or approximately \$408 million in the aggregate, including approximately \$4 million of accrued dividends for unvested restricted stock. The special cash dividend was paid on June 29, 2012 to stockholders of record on June 20, 2012.

On May 31, 2013, our board of directors declared a special cash dividend of \$5.00 per share on our common stock, or approximately \$342 million in the aggregate, including approximately \$1 million of accrued dividends for unvested restricted stock. The special cash dividend is payable on June 21, 2013 to stockholders of record on June 12, 2013. See "Summary Recent Developments Special Cash Dividend to Shareholders." Investors in this offering will not receive the special cash dividend on the shares of common stock that they purchase in this offering.

We do not anticipate paying any other dividends in the foreseeable future on our common stock. See "Risk Factors Risks Relating to This Offering There are no assurances that we will pay dividends on our common stock in the foreseeable future." We intend to retain all future earnings to reduce debt and fund the development and growth of our business. However, in the future, subject to the factors described below and our future liquidity and capitalization, we may change this policy and choose to pay dividends. Our ability to pay dividends on our common stock is currently restricted by the terms of our senior secured credit facilities and may be further restricted by any future indebtedness we incur. Our business is conducted through our subsidiaries, including our principal operating subsidiary, Generac Power Systems. Dividends from, and cash generated by our subsidiaries will be our principal sources of cash to repay indebtedness, fund operations and pay dividends. Accordingly, our ability to pay dividends to our stockholders is dependent on the earnings and distributions of funds from our subsidiaries, including Generac Power Systems.

Any future determination to pay dividends will be at the discretion of our board of directors and will take into account:

restrictions in our senior secured credit facilities;

general economic and business conditions;

our financial condition and results of operations;

our capital requirements;

future acquisition possibilities;

the ability of our subsidiaries, including Generac Power Systems, to pay dividends and make distributions to us; and

such other factors as our board of directors may deem relevant.

Table of Contents**SELLING STOCKHOLDERS**

The following table sets forth the number of shares of common stock owned by the selling stockholders prior to this offering, the number of shares of common stock to be offered for sale by the selling stockholders in this offering, the number of shares of common stock to be owned by the selling stockholders after completion of the offering and the percentage of our outstanding shares of common stock owned by the selling stockholders prior to this offering and to be owned after the completion of this offering.

Beneficial ownership of shares is determined under rules of the SEC and generally includes any shares over which a person exercises sole or shared voting or investment power. Except as indicated by footnote, and subject to community property laws where applicable, we believe based on the information provided to us that the persons and entities named in the table below have sole voting and investment power with respect to all shares of our common stock shown as beneficially owned by them. Percentage of beneficial ownership is based on 68,402,809 shares of common stock outstanding as of May 31, 2013. Shares of common stock subject to options or warrants currently exercisable or exercisable within 60 days of the date of this prospectus supplement are deemed to be outstanding and beneficially owned by the person holding the options or warrants for the purpose of computing the percentage of beneficial ownership of that person but are not deemed outstanding for the purpose of computing the percentage of beneficial ownership for any other person. Except as otherwise indicated, the persons named in the table below have sole voting and investment power with respect to all shares of capital stock held by them. Unless otherwise indicated, the address for each selling stockholder listed below is Generac Holdings Inc., S45 W29290 Hwy. 59, Waukesha, Wisconsin 53187.

| Selling Stockholders | Shares Beneficially Owned | | Shares Offered | Shares Beneficially Owned | | Shares Beneficially Owned After This Offering Assuming Full Exercise of the Option to Purchase Additional Shares | |
|----------------------------------|---------------------------|------------|----------------|---------------------------|------------|--|------------|
| | Before This Offering | Percentage | | After This Offering | Percentage | Number | Percentage |
| | | | | | | | |
| CCMP Capital, LLC ⁽¹⁾ | 14,512,998 | 21.2% | 6,500,000 | 8,012,998 | 11.7% | 7,037,998 | 10.3% |

(1)

In the case of CCMP Capital, LLC, or CCMP Capital, includes 8,792,054 shares of common stock owned by CCMP Capital Investors II, L.P., or CCMP Capital Investors, 1,171,969 shares of common stock owned by CCMP Capital Investors (Cayman) II, L.P., or CCMP Cayman, and together with CCMP Capital Investors, the CCMP Capital Funds, and 4,534,040 shares of common stock owned by CCMP Generac Co-Invest, L.P., or Generac Co-Invest.

In connection with this offering, CCMP Capital Investors will sell 3,941,792 shares of common stock, CCMP Cayman will sell 525,436 shares of common stock and Generac Co-Invest will sell 2,032,772 shares of common stock.

If the underwriter exercises its option to purchase additional shares in full, CCMP Capital Investors will sell 591,269 additional shares of common stock, CCMP Cayman will sell 78,815 additional shares of common stock and Generac Co-Invest will sell 304,916 additional shares of common stock.

The general partner of the CCMP Capital Funds is CCMP Capital Associates, L.P., or CCMP Capital Associates. The general partner of CCMP Capital Associates is CCMP Capital Associates GP, LLC, or CCMP Capital Associates GP. CCMP Capital Associates GP is wholly-owned by CCMP Capital. The general partner of Generac Co-Invest is CCMP Generac Co-Invest GP, LLC, or Generac Co-Invest GP. Generac Co-Invest GP is wholly-owned by CCMP Capital.

CCMP Capital ultimately exercises voting and dispositive power over the shares held by the CCMP Capital Funds and Generac Co-Invest. Voting and disposition decisions at CCMP Capital with respect

Table of Contents

to such shares are made by an investment committee, the members of which are Stephen Murray, Greg Brenneman and Timothy Walsh.

The address of each of the CCMP Capital entities (other than CCMP Cayman) is c/o CCMP Capital, LLC, 245 Park Avenue, New York, New York 10167. The address of CCMP Cayman is c/o Intertrust Corporate Services (Cayman) Limited, 190 Elgin Avenue, George Town, Grand Cayman KY1-9005, Cayman Islands.

Each of Messrs. Murray, Walsh and Brenneman disclaims any beneficial ownership of any shares beneficially owned by the CCMP Capital Funds or Generac Co-Invest.

The number of shares beneficially owned by CCMP Capital and its affiliates includes 14,935 shares of common stock granted to Messrs. Murray and Walsh in their capacity as directors, and Stephen McKenna, a former director, because CCMP Capital is deemed to have voting and dispositive power over those shares.

Material Relationships with Selling Stockholders

CCMP is a significant stockholder and this prospectus supplement has been filed pursuant to registration rights granted in the shareholders' agreement, or the Shareholders' Agreement, dated as of November 10, 2006. See "Description of Capital Stock Common Stock Registration Rights" in the accompanying prospectus. CCMP was also a party to an advisory services and monitoring agreement, which terminated in February 2010 at the time of our IPO. Stephen Murray, one of our directors, is the President and Chief Executive Officer of CCMP Capital. Timothy Walsh is also one of our directors and is a Managing Director of CCMP Capital.

Table of Contents

MATERIAL U.S. FEDERAL INCOME TAX CONSIDERATIONS TO NON-U.S. HOLDERS

The following is a general discussion of the material U.S. federal income and estate tax consequences of the purchase, ownership and disposition of our common stock that may be relevant to you if you are a non-U.S. Holder (as defined below), and is based upon the Internal Revenue Code of 1986, as amended (the "Code"), the Treasury Department regulations promulgated thereunder, and administrative and judicial interpretations thereof, all as of the date hereof and all of which are subject to change, possibly with retroactive effect. This discussion is limited to non-U.S. Holders who hold shares of our common stock as capital assets within the meaning of Section 1221 of the Code. Moreover, this discussion does not address all of the tax consequences that may be relevant to you in light of your particular circumstances, nor does it discuss special tax provisions, which may apply to you if you are subject to special treatment under U.S. federal income tax laws, such as certain financial institutions or financial services entities, insurance companies, tax-exempt entities, dealers in securities or currencies, entities that are treated as partnerships for U.S. federal income tax purposes, "controlled foreign corporations," "passive foreign investment companies," former U.S. citizens or long-term residents, persons deemed to sell common stock under the constructive sale provisions of the Code, and persons that hold common stock as part of a straddle, hedge, conversion transaction, or other integrated investment. Furthermore, this discussion does not address any state, local or foreign tax laws.

As used in this discussion, the term "non-U.S. Holder" means a beneficial owner of our common stock that is not an entity treated as a partnership for U.S. federal income tax purposes and is not, for U.S. federal income tax purposes:

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

any corporation (or other entity taxable as a corporation for U.S. federal income tax purposes) that is created or organized in or under the laws of the United States, any state thereof or the District of Columbia;

any estate the income of which is subject to U.S. federal income taxation regardless of its source; or

any trust if (i) a court within the United States is able to exercise primary supervision over the administration of the trust and one or more U.S. persons (as defined in the Code) have the authority to control all substantial decisions of the trust or (ii) it was in existence on August 20, 1996 and has a valid election in effect under applicable Treasury Department regulations to be treated as a domestic trust for U.S. federal income tax purposes.

If you are an individual, you generally will be deemed to be a resident alien, as opposed to a nonresident alien, by virtue of being present in the United States (1) for at least 183 days during the calendar year or (2) for at least 31 days in the calendar year and for an aggregate of at least 183 days during a three-year period ending in the current calendar year. For purposes of (2), all the days present in the current year, one-third of the days present in the immediately preceding year, and one-sixth of the days present in the second preceding year are counted. Resident aliens are subject to U.S. federal income tax as if they were U.S. citizens.

If a partnership, including any entity or arrangement treated as a partnership for U.S. federal income tax purposes, is a holder of our common stock, the tax treatment of a partner in the partnership will generally depend upon the status of the partner, the activities of the partnership and certain determinations made at the partner level. A holder that is a partnership, and the partners in such partnership, should consult their own tax advisors regarding the tax consequences of the purchase, ownership and disposition of our common stock.

EACH PROSPECTIVE PURCHASER OF OUR COMMON STOCK IS ADVISED TO CONSULT A TAX ADVISOR WITH RESPECT TO CURRENT AND POSSIBLE FUTURE TAX CONSEQUENCES OF PURCHASING, OWNING AND DISPOSING OF OUR COMMON STOCK,

Table of Contents

AS WELL AS ANY TAX CONSEQUENCES THAT MAY ARISE UNDER THE LAWS OF ANY U.S. STATE, MUNICIPALITY OR OTHER TAXING JURISDICTION, IN LIGHT OF THE PROSPECTIVE PURCHASER'S PARTICULAR CIRCUMSTANCES.

Dividends

If distributions are paid on shares of our common stock, such distributions will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. If a distribution exceeds our current and accumulated earnings and profits, such excess will constitute a return of capital that reduces, but not below zero, a non-U.S. Holder's tax basis in our common stock. Any remainder will constitute gain from the sale or exchange of our common stock. Except as provided in the following paragraph, if dividends are paid, as a non-U.S. Holder, you will be subject to withholding of U.S. federal income tax at a 30% rate, or a lower rate as may be specified by an applicable income tax treaty, on the gross amount of the dividends paid to you. To claim the benefit of a lower rate under an income tax treaty, you must properly file with the payor an Internal Revenue Service Form W-8BEN, or other applicable form, claiming an exemption from or reduction in withholding under the applicable tax treaty. Such form must be provided to us or our paying agent prior to the payment of dividends and must be updated periodically. In addition, where dividends are paid to a non-U.S. Holder that is a partnership or other pass-through entity, persons holding an interest in the entity may need to provide certification claiming an exemption or reduction in withholding under the applicable treaty.

If dividends are considered effectively connected with the conduct of a trade or business by you within the United States and, if required by an applicable income tax treaty, are attributable to a United States permanent establishment of yours, those dividends will be subject to U.S. federal income tax on a net basis at applicable graduated individual or corporate rates but will not be subject to withholding tax, provided a properly executed Internal Revenue Service Form W-8ECI, or other applicable form, is filed with the payor. If you are a foreign corporation, any effectively connected dividends may, under certain circumstances, be subject to an additional "branch profits tax" at a rate of 30% or a lower rate as may be specified by an applicable income tax treaty.

You must comply with the certification procedures described above, or, in the case of payments made outside the United States with respect to an offshore account, certain documentary evidence procedures, directly or, under certain circumstances, through an intermediary, to obtain the benefits of a reduced rate under an income tax treaty with respect to dividends paid with respect to your common stock. In addition, if you are required to provide an Internal Revenue Service Form W-8ECI or other applicable form, as discussed in the preceding paragraph, you must also provide your U.S. taxpayer identification number.

If you are eligible for a reduced rate of U.S. withholding tax pursuant to an income tax treaty, you may obtain a refund from the Internal Revenue Service of any excess amounts withheld by timely filing an appropriate claim for refund with the Internal Revenue Service.

Gain on Disposition of Common Stock

As a non-U.S. Holder, you generally will not be subject to U.S. federal income or withholding tax on any gain recognized on a sale or other disposition of common stock unless:

the gain is considered effectively connected with the conduct of a trade or business by you within the United States and, if required by an applicable income tax treaty, is attributable to a United States permanent establishment of yours (in which case the gain will be subject to U.S. federal income tax on a net basis at applicable individual or corporate rates and, if you are a foreign corporation, the gain may, under certain circumstances, be subject to an additional branch profits tax equal to 30% or a lower rate as may be specified by an applicable income tax treaty);

Table of Contents

you are an individual who is present in the United States for 183 or more days in the taxable year of the sale or other disposition and certain other conditions are met (in which case, except as otherwise provided by an applicable income tax treaty, the gain, which may be offset by U.S. source capital losses (provided you timely file a U.S. federal income tax return with respect to such losses), generally will be subject to a flat 30% U.S. federal income tax, even though you are not considered a resident alien under the Code); or

we are or become a United States real property holding corporation ("USRPHC"). We believe that we are not currently, and are not likely to become, a USRPHC. Even if we were to become a USRPHC, gain on the sale or other disposition of common stock by you generally would not be subject to U.S. federal income tax provided:

the common stock was "regularly traded on an established securities market"; and

you do not actually or constructively own more than 5% of the common stock during the shorter of (i) the five-year period ending on the date of such disposition or (ii) the period of time during which you held such shares.

Federal Estate Tax

Individuals, or an entity the property of which is includable in an individual's gross estate for U.S. federal estate tax purposes, should note that common stock held at the time of such individual's death will be included in such 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.

Information Reporting and Backup Withholding Tax

We must report annually to the Internal Revenue Service and to each of you the amount of dividends paid to you and the tax withheld with respect to those dividends, regardless of whether withholding was required. Copies of the information returns reporting those dividends and withholding may also be made available to the tax authorities in the country in which you reside under the provisions of an applicable income tax treaty or other applicable agreements.

Backup withholding is generally imposed (at a 28% rate) on certain payments to persons that fail to furnish the necessary identifying information to the payor. You generally will be subject to backup withholding tax with respect to dividends paid on your common stock unless you certify to the payor your non-U.S. status. Dividends subject to withholding of U.S. federal income tax as described above in " Dividends" would not be subject to backup withholding.

The payment of proceeds of a sale of common stock effected by or through a United States office of a broker is subject to both backup withholding and information reporting unless you provide the payor with your name and address and you certify your non-U.S. status or you otherwise establish an exemption. In general, backup withholding and information reporting will not apply to the payment of the proceeds of a sale of common stock by or through a foreign office of a broker. If, however, such broker is, for U.S. federal income tax purposes, a U.S. person, a controlled foreign corporation, a foreign person that derives 50% or more of its gross income for certain periods from the conduct of a trade or business in the United States or a foreign partnership that at any time during its tax year either is engaged in the conduct of a trade or business in the United States or has as partners one or more U.S. persons that, in the aggregate, hold more than 50% of the income or capital interest in the partnership, backup withholding will not apply but such payments will be subject to information reporting, unless such broker has documentary evidence in its records that you are a non-U.S. Holder and certain other conditions are met or you otherwise establish an exemption.

Table of Contents

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules generally will be allowed as a refund or a credit against your U.S. federal income tax liability provided the required information is furnished in a timely manner to the Internal Revenue Service.

Additional Withholding Requirements

In addition to withholding taxes discussed above, a 30% U.S. federal withholding tax will generally be imposed on dividends paid by U.S. issuers, and on the gross proceeds from the disposition of certain stock, paid to or through a "foreign financial institution" (as specially defined under these rules), unless such institution enters into an agreement with the U.S. Treasury to collect and provide to the U.S. Treasury substantial information regarding U.S. account holders, including certain account holders that are foreign entities with U.S. owners, with such institution. In certain circumstances, the information may be provided to local tax authorities pursuant to intergovernmental agreements between the United States and a foreign country. A U.S. federal withholding tax of 30% will also generally be imposed on the same types of payments to or through a non-financial foreign entity unless such entity provides the withholding agent with a certification that it does not have any substantial U.S. owners (as defined under these rules) or a certification identifying the direct and indirect substantial U.S. owners of the entity. This withholding would apply to dividends paid on our common stock after December 31, 2013, and to the gross proceeds from sales or other dispositions of our common stock after December 31, 2016. Under certain circumstances, a holder may be eligible for refunds or credits of such taxes. You should consult your tax advisor regarding the possible implications of this additional withholding requirement on your investment in our common stock.

Table of Contents

UNDERWRITING

Morgan Stanley & Co. LLC is acting as the underwriter in connection with this offering. We and the selling stockholders have entered into an underwriting agreement with the underwriter with respect to the shares of common stock being offered. Subject to certain conditions, the underwriter has agreed to purchase 6,500,000 shares from the selling stockholders at the public offering price less the underwriting discounts and commissions set forth on the cover page of this prospectus supplement.

The underwriter is committed to purchase all of the shares of common stock being offered by the selling stockholders if it purchases any shares of common stock.

The underwriter has a 30-day option from the date of this prospectus supplement to buy up to an additional 975,000 shares of our common stock from the selling stockholders.

The underwriter proposes to offer the shares of common stock directly to the public at the public offering price set forth on the cover page of this prospectus supplement and to certain dealers at a price less a concession not in excess of \$ _____ per share. After the initial public offering of the shares, the offering price and other selling terms may be changed by the underwriter. Sales of shares outside the United States may be made by affiliates of the underwriter. The offering of the shares by the underwriter is subject to receipt and acceptance and subject to the underwriter's right to reject any order in whole or in part. The underwriter has informed us that it does not intend to confirm sales to discretionary accounts that exceed 5% of the total number of shares offered by it.

The underwriting fee is equal to the public offering price per share of common stock less the amount paid by the underwriter to the selling stockholders per share of common stock. The underwriting fee is \$ _____ per share. The following table shows the per share and total underwriting discounts and commissions to be paid to the underwriter by the selling stockholders. Such amounts are shown assuming both no exercise and full exercise of the underwriter's option to purchase up to an additional 975,000 shares of our common stock from the selling stockholders.

| | No Exercise | Full Exercise |
|-----------|--------------------|----------------------|
| Per Share | \$ _____ | \$ _____ |
| Total | \$ _____ | \$ _____ |

Pursuant to the Shareholders' Agreement, we have agreed to pay all expenses related to the registration of the shares being offered hereby. We estimate that the total expenses of this offering, including registration, filing and listing fees, printing fees and legal and accounting expenses, including selling stockholder expenses, but excluding the underwriting discounts and commissions, will be approximately \$ _____ and will be paid by us.

We and the selling stockholders have agreed to indemnify the underwriter against certain liabilities, including liabilities under the Securities Act.

We have agreed that we will not (i) offer, pledge, announce the intention to sell, 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 or otherwise transfer or dispose of, directly or indirectly, or file with the SEC a registration statement under the Securities Act relating to, any shares of our common stock or securities convertible into or exchangeable or exercisable for any shares of our common stock, or publicly disclose the intention to make any offer, sale, pledge, disposition or filing, or (ii) enter into any swap or other arrangement that transfers all or a portion of the economic consequences associated with the ownership of any shares of common stock or any such other securities (regardless of whether any of these transactions are to be settled by the delivery of shares of common stock or such other securities, in cash or otherwise), in each case without the prior written consent of the underwriter for a period of 45 days after the date of this prospectus supplement, other than the shares of our common stock issued upon the exercise of options granted under our existing management incentive plans.

Table of Contents

The selling stockholders entered into lock-up agreements prior to the commencement of this offering pursuant to which each of these entities, with limited exceptions, for a period of 45 days after the date of this prospectus supplement, may not, without the prior written consent of the underwriter, (1) offer, pledge, announce the intention to sell, 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, 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 (including, without limitation, common stock or such other securities which may be deemed to be beneficially owned by such selling stockholders in accordance with the rules and regulations of the SEC and securities which may be issued upon exercise of a stock option or warrant) or (2) enter into any swap or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of the common stock or such other securities, whether any such transaction described in clause (1) or (2) above is to be settled by delivery of common stock or such other securities, in cash or otherwise, or (3) make any demand for or exercise any right with respect to the registration of any shares of our common stock or any security convertible into or exercisable or exchangeable for our common stock.

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

A prospectus supplement and accompanying prospectus in electronic format may be made available on the websites maintained by the underwriter or by selling group members, if any, participating in the offering. The underwriter may agree to allocate a number of shares to the underwriter and selling group members for sale to their online brokerage account holders. Internet distributions will be allocated by the underwriter and selling group members that may make Internet distributions on the same basis as other allocations.

In connection with this offering, the underwriter may purchase and sell shares of common stock in the open market. These transactions may include short sales, stabilizing transactions and purchases to cover positions created by short sales. Short sales involve the sale by the underwriter of a greater number of shares than it is required to purchase in the offering. The underwriter must close out any short position by purchasing shares in the open market. A short position is more likely to be created if the underwriter is concerned that there may be downward pressure on the price of the shares of common stock in the open market after pricing that could adversely affect investors who purchase in the offering. Stabilizing transactions consist of various bids for or purchases of shares of common stock made by the underwriter in the open market prior to the completion of the offering.

Purchases to cover a short position and stabilizing transactions, as well as other purchases by the underwriter for its own account, may have the effect of preventing or retarding a decline in the market price of our shares of common stock, and together with the imposition of the penalty bid, may stabilize, maintain or otherwise affect the market price of the shares of common stock. As a result, the price of the shares of common stock may be higher than the price that otherwise might exist in the open market. If these activities are commenced, they may be discontinued at any time. These transactions may be effected on the New York Stock Exchange, in the over-the-counter market or otherwise.

Other than in the United States, no action has been taken by us or the underwriter that would permit a public offering of the shares of common stock offered by this prospectus supplement in any jurisdiction where action for that purpose is required. The shares of common stock offered by this prospectus supplement may not be offered or sold, directly or indirectly, nor may this prospectus or any other offering material or advertisements in connection with the offer and sale of any such shares of common stock be distributed or published in any jurisdiction, except under circumstances that will result in compliance with the applicable rules and regulations of that jurisdiction. This prospectus supplement does not constitute an offer to sell or a solicitation of an offer to buy any shares of common stock offered by this prospectus supplement in any jurisdiction in which such an offer or a solicitation is unlawful.

Table of Contents

Selling Restrictions

European Economic Area

In relation to each Member State of the European Economic Area which has implemented the Prospectus Directive (each, a "Relevant Member State") an offer to the public of any shares which are the subject of the offering contemplated by this prospectus supplement (the "Shares") may not be made in that Relevant Member State, except that an offer to the public in that Relevant Member State of any Shares may be made at any time under the following exemptions under the Prospectus Directive, if they have been implemented in that Relevant Member State:

- (a) to any legal entity which is a qualified investor as defined in the Prospectus Directive;
- (b) to fewer than 100 or, if the Relevant Member State has implemented the relevant provision of the 2010 PD Amending Directive, 150, natural or legal persons (other than qualified investors as defined in the Prospectus Directive), as permitted under the Prospectus Directive, subject to obtaining the prior consent of the representatives for any such offer; or
- (c) in any other circumstances falling within Article 3(2) of the Prospectus Directive, provided that no such offer of Shares shall result in a requirement for the publication by us or the underwriter of a prospectus pursuant to Article 3 of the Prospectus Directive.

For the purposes of this provision, the expression an "offer 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 any Shares to be offered so as to enable an investor to decide to purchase any Shares, as the same may be varied in that Member State by any measure implementing the Prospectus Directive in that Member State, the expression "Prospectus Directive" means Directive 2003/71/EC (and amendments thereto, including the 2010 PD Amending Directive, to the extent implemented in the Relevant Member State), and includes any relevant implementing measure in the Relevant Member State, and the expression "2010 PD Amending Directive" means Directive 2010/73/EU.

United Kingdom

In the United Kingdom, this document is being distributed only to, and is directed only at, and any offer subsequently made may only be directed at persons who are "qualified investors" (as defined in the Prospectus Directive) (i) who have professional experience in matters relating to investments falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, as amended (the "Order") and/or (ii) who are high net worth companies (or persons to whom it may otherwise be lawfully communicated) falling within Article 49(2)(a) to (d) of the Order (all such persons together being referred to as "relevant persons"). This document must not be acted on or relied on in the United Kingdom by persons who are not relevant persons. In the United Kingdom, any investment or investment activity to which this document relates is only available to, and will be engaged in with, relevant persons.

Hong Kong

The shares may not be offered or sold by means of any document other than (i) in circumstances which do not constitute an offer to the public within the meaning of the Companies Ordinance (Cap.32, Laws of Hong Kong), or (ii) to "professional investors" within the meaning of the Securities and Futures Ordinance (Cap.571, Laws of Hong Kong) and any rules made thereunder, or (iii) in other circumstances which do not result in the document being a "prospectus" within the meaning of the Companies Ordinance (Cap.32, Laws of Hong Kong), and no advertisement, invitation or document relating to the shares may be issued or may be in the possession of any person for the purpose of issue (in each case whether in Hong Kong or elsewhere), which is directed at, or the contents of which are likely to be accessed or read by, the public in Hong Kong (except if permitted to do so under the laws of Hong Kong) other than with respect

Table of Contents

to shares which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" within the meaning of the Securities and Futures Ordinance (Cap. 571, Laws of Hong Kong) and any rules made thereunder.

Singapore

This prospectus supplement has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the shares may not be circulated or distributed, nor may the shares be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor under Section 274 of the Securities and Futures Act, Chapter 289 of Singapore (the "SFA"), (ii) to a relevant person, or any person pursuant to Section 275(1A), and in accordance with the conditions, specified in Section 275 of the SFA or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the shares are subscribed or purchased under Section 275 by a relevant person which is: (a) a corporation (which is not an accredited investor) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or (b) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary is an accredited investor, shares, debentures and units of shares and debentures of that corporation or the beneficiaries' rights and interest in that trust shall not be transferable for 6 months after that corporation or that trust has acquired the shares under Section 275 except: (1) to an institutional investor under Section 274 of the SFA or to a relevant person, or any person pursuant to Section 275(1A), and in accordance with the conditions, specified in Section 275 of the SFA; (2) where no consideration is given for the transfer; or (3) by operation of law.

Japan

The securities have not been and will not be registered under the Financial Instruments and Exchange Law of Japan (the Financial Instruments and Exchange Law) and the underwriter has agreed that it will not offer or sell any securities, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan (which term as used herein means any person resident in Japan, including any corporation or other entity organized under the laws of Japan), or to others for re-offering or resale, directly or indirectly, in Japan or to a resident of Japan, except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the Financial Instruments and Exchange Law and any other applicable laws, regulations and ministerial guidelines of Japan.

Switzerland

The shares may not be publicly offered in Switzerland and will not be listed on the SIX Swiss Exchange ("SIX") or on any other stock exchange or regulated trading facility in Switzerland. This document has been prepared without regard to the disclosure standards for issuance prospectuses under art. 652a or art. 1156 of the Swiss Code of Obligations or the disclosure standards for listing prospectuses under art. 27 ff. of the SIX Listing Rules or the listing rules of any other stock exchange or regulated trading facility in Switzerland. Neither this document nor any other offering or marketing material relating to the shares or the offering may be publicly distributed or otherwise made publicly available in Switzerland.

Neither this document nor any other offering or marketing material relating to the offering, the issuer, the shares have been or will be filed with or approved by any Swiss regulatory authority. In particular, this document will not be filed with, and the offer of shares will not be supervised by, the Swiss Financial Market Supervisory Authority, and the offer of shares has not been and will not be authorized under the

Table of Contents

Swiss Federal Act on Collective Investment Schemes ("CISA"). The investor protection afforded to acquirers of interests in collective investment schemes under the CISA does not extend to acquirers of shares.

Australia

No prospectus or other disclosure document (as defined in the Corporations Act 2001 (Cth) of Australia (the "Corporations Act")) in relation to the common shares has been or will be lodged with the Australian Securities & Investments Commission. This document has not been lodged with SIC and is only directed to certain categories of exempt persons.

Accordingly, if you receive this document in Australia: (a) you confirm and warrant that you are either: (i) a "sophisticated investor" under section 708(8)(a) or (b) of the Corporations Act; (ii) a "sophisticated investor" under section 708(8)(c) or (d) of the Corporations Act and that you have provided an accountant's certificate to us which complies with the requirements of section 708(8)(c)(i) or (ii) of the Corporations Act and related regulations before the offer has been made; (iii) a person associated with the company under section 708(12) of the Corporations Act; or (iv) a "professional investor" within the meaning of section 708(11)(a) or (b) of the Corporations Act, and to the extent that you are unable to confirm or warrant that you are an exempt sophisticated investor, associated person or professional investor under the Corporations Act, any offer made to you under this document is void and incapable of acceptance; and (b) you warrant and agree that you will not offer any of the common shares for resale in Australia within 12 months of that common shares being issued unless any such resale offer is exempt from the requirement to issue a disclosure document under section 708 of the Corporations Act.

Chile

The shares are not registered in the Securities Registry (Registro de Valores) or subject to the control of the Chilean Securities and Exchange Commission (Superintendencia de Valores y Seguros de Chile). This prospectus supplement and other offering materials relating to the offer of the shares do not constitute a public offer of, or an invitation to subscribe for or purchase, the shares in the Republic of Chile, other than to individually identified purchasers pursuant to a private offering within the meaning of Article 4 of the Chilean Securities Market Act (Ley de Mercado de Valores) (an offer that is not "addressed to the public at large or to a certain sector or specific group of the public").

Dubai International Financial Centre

This prospectus supplement relates to an Exempt Offer in accordance with the Offered Securities Rules of the Dubai Financial Services Authority ("DFSA"). This prospectus supplement is intended for distribution only to persons of a type specified in the Offered Securities Rules of the DFSA. It must not be delivered to, or relied on by, any other person. The DFSA has no responsibility for reviewing or verifying any documents in connection with Exempt Offers. The DFSA has not approved this prospectus supplement nor taken steps to verify the information set forth herein and has no responsibility for the prospectus. The securities to which this prospectus relates may be illiquid and/or subject to restrictions on their resale. Prospective purchasers of the securities offered should conduct their own due diligence on the securities. If you do not understand the contents of this prospectus you should consult an authorized financial advisor.

Other Relationships

The underwriter and its affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, investment research, principal investment, hedging, financing and brokerage activities.

Table of Contents

An affiliate of the underwriter was a joint lead arranger and joint lead bookrunner of our amended and restated senior secured term loan credit facility described in "Summary Recent Developments Special Cash Dividend to Shareholders" and is a lender under our amended and restated senior secured term loan credit facility.

The underwriter and its affiliates have provided in the past to us and our affiliates and may provide from time to time in the future certain commercial banking, financial advisory, investment banking and other services for us and such affiliates in the ordinary course of their business, for which they have received and may continue to receive customary fees and commissions. For example, the underwriter acted as underwriter in two previous offerings of our common stock by the selling stockholders in February and May 2013. In addition, from time to time, the underwriter and its affiliates may effect transactions for their own account or the account of customers, and hold on behalf of themselves or their customers, long or short positions in our debt or equity securities or loans, and may do so in the future.

In the ordinary course of their various business activities, the underwriter and its affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own accounts and for the accounts of their customers, and such investment and securities activities may involve securities and/or instruments of the issuer. The underwriter and its affiliates may also make investment recommendations and/or publish or express independent research views in respect of such securities or instruments and may at any time hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

Table of Contents

LEGAL MATTERS

Weil, Gotshal & Manges LLP, New York, New York, has passed upon the validity of the common stock offered hereby on behalf of us. Certain legal matters in connection with this offering will be passed upon for the underwriter by Simpson Thacher & Bartlett LLP, New York, New York.

EXPERTS

The consolidated financial statements of Generac Holdings Inc. at December 31, 2012 and 2011, and for each of the three years in the period ended December 31, 2012, incorporated by reference in this prospectus supplement have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their report thereon, and are included in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND ADDITIONAL INFORMATION; INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

We file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy materials filed with the SEC at the SEC's public reference room, located at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the operation of its public reference room. Its SEC filings are also available to the public on the SEC's Internet site at <http://www.sec.gov>. Its SEC filings can also be found on our website at <http://www.generac.com>. However, the information on our website is not a part of this prospectus. In addition, you can inspect reports and other information we file at the office of the New York Stock Exchange, Inc., 20 Broad Street, New York, New York 10005.

We have filed with the SEC a registration statement on Form S-3 with respect to the shares of common stock offered hereby. This prospectus supplement does not contain all the information set forth in the registration statement, parts of which are omitted in accordance with the rules and regulations of the SEC. For further information with respect to us and the common stock offered hereby, reference is made to the registration statement.

The SEC allows us to "incorporate by reference" information into this prospectus supplement, which means that we can disclose important information about us by referring you to another document filed separately with the SEC. The information incorporated by reference is considered to be a part of this prospectus supplement. This prospectus supplement incorporates by reference the documents and reports listed below (other than portions of these documents that are deemed to have been furnished and not filed):

our Annual Report on Form 10-K for the year ended December 31, 2012, filed with the SEC on March 13, 2013;

our Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2013, filed with the SEC on May 7, 2013;

our Current Reports on Form 8-K filed with the SEC on February 25, 2013, April 10, 2013, May 8, 2013, June 4, 2013 and June 13, 2013; and

the description of our common stock contained or incorporated by reference in our Registration Statement on Form 8-A, as filed with the SEC on February 2, 2010, and any amendments or reports filed for the purpose of updating such description.

We also incorporate by reference the information contained in all other documents we file with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act (other than portions of these documents that are deemed to have been furnished and not filed in accordance with SEC rules, including current reports on Form 8-K furnished under Item 2.02 and Item 7.01 (including any financial statements

Table of Contents

of exhibits relating thereto furnished pursuant to Item 9.01)) after the date of this prospectus supplement and prior to the termination of this offering. The information contained in any such document will be considered part of this prospectus supplement from the date the document is filed with the SEC.

Any statement contained in a document incorporated or deemed to be incorporated by reference in this prospectus supplement will be deemed to be modified or superseded to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference in this prospectus supplement modifies or supersedes that statement. Any statement so modified or superseded will not be deemed, except as so modified or superseded, to constitute a part of this prospectus supplement.

We undertake to provide without charge to any person, including any beneficial owner, to whom a copy of this prospectus is delivered, upon oral or written request of such person, a copy of any or all of the documents that have been incorporated by reference in this prospectus supplement, other than exhibits to such other documents (unless such exhibits are specifically incorporated by reference therein). Requests for such copies should be directed to Generac Holdings Inc., S45 W29290 Hwy. 59, Waukesha, Wisconsin 53189, (262) 506-6064, Attn: Investor Relations.

Table of Contents

PROSPECTUS

Generac Holdings Inc.

Common Stock

This prospectus relates solely to sales of our common stock by selling stockholders, some of whom may be our affiliates. The selling stockholders, which will be named in a prospectus supplement, may offer and sell shares of our common stock from time to time in amounts, at prices and on terms that will be determined at the time of the offering. We will not receive any proceeds from the sale of shares of common stock to be offered by the selling stockholders.

This prospectus describes the general manner in which the shares of our common stock may be offered and sold by the selling stockholders. We will provide specific terms of any offering, including the identities of the selling stockholders, in a supplement to this prospectus. Any prospectus supplement may also add, update, or change information contained in this prospectus. You should carefully read this prospectus and the applicable prospectus supplement, as well as the documents incorporated by reference herein or therein, before you invest in our common stock. This prospectus may not be used to offer or sell any shares of common stock unless accompanied by a prospectus supplement.

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

Investing in our common stock involves a high degree of risk. See "Risk Factors" beginning on page 5.

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

November 26, 2012

TABLE OF CONTENTS

| | |
|---|-----------|
| <u>About this Prospectus</u> | <u>1</u> |
| <u>Where You Can Find Additional Information; Incorporation of Certain Documents by Reference</u> | <u>2</u> |
| <u>Cautionary Note Regarding Forward-Looking Statements</u> | <u>3</u> |
| <u>About Generac</u> | <u>5</u> |
| <u>Risk Factors</u> | <u>5</u> |
| <u>Use of Proceeds</u> | <u>6</u> |
| <u>Selling Stockholders</u> | <u>6</u> |
| <u>Description of Capital Stock</u> | <u>6</u> |
| <u>Plan of Distribution</u> | <u>10</u> |
| <u>Legal Matters</u> | <u>13</u> |
| <u>Experts</u> | <u>13</u> |

Table of Contents

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission, or the SEC, as a "well-known seasoned issuer," as defined in Rule 405 of the Securities Act, using the "shelf" registration process. Under the shelf registration process, certain selling stockholders may, sell the shares of common stock described in this prospectus in one or more offerings from time to time.

This prospectus provides you with a general description of the common stock that a selling stockholder may offer. Each time any selling stockholder offers to sell shares of our 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, update or change information contained in this prospectus. If there is any inconsistency between the information in this prospectus and any prospectus supplement, you should rely on the information provided in the prospectus supplement. This prospectus does not contain all of the information included in the registration statement. The registration statement filed with the SEC includes or incorporates by reference exhibits that provide more details about the matters discussed in this prospectus. You should carefully read this prospectus, the related exhibits filed with the SEC and any prospectus supplement, together with the additional information described below under the heading "Where You Can Find Additional Information; Incorporation of Certain Documents by Reference."

In this prospectus, except as otherwise indicated or as the context otherwise requires, "Generac," "we," "our," "the Company" and "us" refer to Generac Holdings Inc., a Delaware corporation and its subsidiaries.

You should rely only on the information contained or incorporated by reference in this prospectus. We have not authorized any person to provide you with any information or represent anything about us or this offering that is not contained or incorporated by reference in this prospectus. If given or made, any such other information or representation should not be relied upon as having been authorized by us or any selling stockholder. No selling stockholder is making an offer to sell shares of our common stock in any jurisdiction where an offer or sale is not permitted.

Under no circumstances should the delivery to you of this prospectus create any implication that the information contained in this prospectus is correct as of any time after the date of this prospectus. Our business, financial condition, results of operations and prospects may have changed since that date.

THIS PROSPECTUS MAY NOT BE USED TO SELL ANY SHARES OF OUR COMMON STOCK UNLESS ACCOMPANIED BY A PROSPECTUS SUPPLEMENT.

Table of Contents

WHERE YOU CAN FIND ADDITIONAL INFORMATION; INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

We file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy materials filed with the SEC at the SEC's Public Reference Room, located at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the operation of its public reference room. Our SEC filings are also available to the public on the SEC's Internet site at <http://www.sec.gov>. Our SEC filings can also be found on our website at <http://www.generac.com>. However, except for our filings with the SEC that are incorporated by reference into this prospectus, the information on or accessible through our website is not a part of this prospectus. In addition, you can inspect reports and other information we file at the office of the New York Stock Exchange, 20 Broad Street, New York, New York 10005.

We have filed with the SEC a registration statement on Form S-3 with respect to the shares of common stock offered hereby. This prospectus does not contain all the information set forth in the registration statement, parts of which are omitted in accordance with the rules and regulations of the SEC. For further information with respect to us and the common stock offered hereby, reference is made to the registration statement.

The SEC allows us to "incorporate by reference" information into this prospectus, which means that we can disclose important information about us by referring you to another document filed separately with the SEC. The information incorporated by reference is considered to be a part of this prospectus. This prospectus incorporates by reference the documents and reports listed below (other than portions of these documents that are deemed to have been furnished and not filed):

our Annual Report on Form 10-K for the year ended December 31, 2011, filed with the SEC on March 9, 2012;

our Quarterly Reports on Form 10-Q for the quarterly periods ended March 31, 2012, June 30, 2012 and September 30, 2012, filed with the SEC on May 8, 2012, August 7, 2012 and November 6, 2012, respectively, and Amendment No. 1 to our Quarterly Report for the quarterly period ended September 30, 2012 filed with the SEC on November 8, 2012;

our Current Reports on Form 8-K filed on February 10, 2012, March 16, 2012, March 19, 2012, May 11, 2012 (to the extent filed and not furnished), May 22, 2012, May 31, 2012, June 13, 2012, September 20, 2012 and November 26, 2012; and

the description of our common stock contained or incorporated by reference in our Registration Statement on Form 8-A, as filed with the SEC on February 2, 2010, and any amendments or reports filed for the purpose of updating such description.

We also incorporate by reference the information contained in all other documents we file with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act (other than portions of these documents that are deemed to have been furnished and not filed in accordance with SEC rules, including current reports on Form 8-K furnished under Item 2.02 and Item 7.01 (including any financial statements of exhibits relating thereto furnished pursuant to Item 9.01)) after the date of this prospectus and prior to the termination of this offering. The information contained in any such document will be considered part of this prospectus from the date the document is filed with the SEC.

Any statement contained in a document incorporated or deemed to be incorporated by reference in this prospectus will be deemed to be modified or superseded to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference in this prospectus modifies or supersedes that statement. Any statement so modified or superseded will not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

Table of Contents

We undertake to provide without charge to any person, including any beneficial owner, to whom a copy of this prospectus is delivered, upon oral or written request of such person, a copy of any or all of the documents that have been incorporated by reference in this prospectus, other than exhibits to such other documents (unless such exhibits are specifically incorporated by reference therein). Requests for such copies should be directed to Generac Holdings Inc., S45 W29290 Hwy. 59, Waukesha, Wisconsin 53189, (262) 506-6064, Attn: Investor Relations.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the documents incorporated by reference herein and in any prospectus supplement contain forward-looking statements that involve risks and uncertainties that could cause actual results to differ materially from those in the forward looking statements. Forward-looking statements give our current expectations and projections relating to our financial condition, results of operations, plans, objectives, future performance and business. You can identify forward-looking statements by the fact that they do not relate strictly to historical or current facts. These statements may include words such as "anticipate," "estimate," "expect," "project," "plan," "intend," "believe," "confident," "may," "should," "can have," "likely," "future" and other words and terms of similar meaning in connection with any discussion of the timing or nature of future operating or financial performance or other events.

The forward-looking statements contained in this prospectus, any prospectus supplement and the documents incorporated by reference herein or therein are based on assumptions that we have made in light of our industry experience and on our perceptions of historical trends, current conditions, expected future developments and other factors we believe are appropriate under the circumstances. As you read and consider this prospectus, any prospectus supplement and the documents incorporated by reference herein or therein, you should understand that these statements are not guarantees of performance or results. They involve risks, uncertainties (some of which are beyond our control) and assumptions. Although we believe that these forward-looking statements are based on reasonable assumptions, you should be aware that many factors could affect our actual financial results and cause them to differ materially from those anticipated in the forward-looking statements. The forward-looking statements contained in this prospectus, any prospectus supplement and in the documents incorporated by reference herein and therein include estimates regarding:

our business, financial and operating results and future economic performance;

proposed new product and service offerings; and

management's goals, expectations and objectives and other similar expressions concerning matters that are not historical facts.

Factors that could affect our actual financial results and cause them to differ materially from those anticipated in the forward-looking statements include:

demand for our products;

frequency and duration of major power outages;

availability, cost and quality of raw materials and key components used in producing our products;

the impact on our results of the substantial increases in our outstanding indebtedness and related interest expense due to the dividend recapitalization completed in May 2012;

the possibility that the expected synergies, efficiencies and cost savings of the acquisition of the Magnum Products business in October 2011 or other acquisitions will not be realized, or will not be realized within the expected time period;

Table of Contents

the risk that the Magnum Products business or other acquisitions that we make will not be integrated successfully;

competitive factors in the industry in which we operate;

our dependence on our distribution network;

our ability to invest in, develop or adapt to changing technologies and manufacturing techniques;

loss of our key management and employees;

increase in product and other liability claims; and

changes in environmental, health and safety laws and regulations.

Should one or more of these risks or uncertainties materialize, or should any of these assumptions prove incorrect, our actual results may vary in material respects from those projected in these forward-looking statements. You should consider these important factors, as well as the risk factors set forth in this prospectus, any prospectus supplement and in the documents incorporated by reference herein and therein, in evaluating any statement made in this prospectus or any prospectus supplement.

Any forward-looking statement made by us in this prospectus, any prospectus supplement or in the documents incorporated by reference herein or therein speaks only as of the date on which we make it. Factors or events that could cause our actual results to differ may emerge from time to time, and it is not possible for us to predict all of them. We undertake no obligation to update any forward-looking statement, whether as a result of new information, future developments or otherwise, except as may be required by law.

Table of Contents

ABOUT GENERAC

We are a leading designer and manufacturer of a wide range of generators and other engine powered products for the residential, light commercial, industrial and construction markets. We are the only significant market participant focused predominantly on these products, and we have one of the leading market positions in the power equipment markets in the United States and Canada. We design, manufacture, source and modify engines, alternators, automatic transfer switches and other components necessary for our products. Our products are fueled by natural gas, liquid propane, gasoline, diesel and Bi-Fuel and are available through a broad network of independent dealers, retailers, wholesalers, and equipment rental companies.

We have what we believe is an industry leading, multi-layered distribution network, and our products are available in thousands of outlets across the United States and Canada. We sell and distribute our products to and through independent residential and industrial dealers, electrical and HVAC wholesalers, national accounts, private label arrangements, retailers, catalogs, e-commerce merchants, equipment rental companies, equipment dealers and construction companies. We currently sell our products primarily in North America. We have a significant market share in the residential and light commercial standby generator markets, which we believe are currently underpenetrated. We also have a leading share in the market for portable generators. We believe that our leading market position is largely attributable to our strategy of providing a broad product line of high-quality, innovative and affordable products through our extensive and multi-layered distribution network. In addition, through our acquisition of Magnum Products LLC in October 2011, we are a leading provider of light towers and mobile generators.

We own and operate four manufacturing plants and one distribution facility in Eagle, Waukesha, Berlin and Whitewater, Wisconsin, totaling approximately 1,200,000 total square feet. In addition, we recently purchased a facility in Jefferson, Wisconsin that is approximately 250,000 square feet, which will be used for manufacturing and inventory storage. We also maintain inventory warehouses in the United States that accommodate material storage and rapid response requirements of our customers.

Corporate Information

Generac is a Delaware corporation, which was formed in 2006 and is headquartered in Waukesha, Wisconsin. Generac Power Systems, Inc., our principal operating subsidiary, is a Wisconsin corporation founded in 1959. Our principal executive offices are located at S45 W29290 Hwy. 59, Waukesha, Wisconsin 53189. Our main telephone number is (262) 544-4811. Our website address is www.generac.com. Our website and any of the information on our website or any other website identified herein is not part of this prospectus, and you should rely only on the information contained or incorporated by reference in this prospectus.

Generac®, Guardian®, Centurion®, Quietsource® and Magnum® are registered trademarks of Generac Power Systems. All other trademarks and trade names identified in this prospectus or the documents incorporated by reference therein, including Bi-Fuel, are the property of unrelated third parties.

RISK FACTORS

An investment in our common stock involves a high degree of risk. Before making an investment decision, you should carefully consider the specific risks described under the heading "Risk Factors" in the applicable prospectus supplement and under the caption "Risk Factors" in any of our filings with the SEC pursuant to Sections 13(a), 14 or 15(d) of the Exchange Act, including, without limitation, our Annual Report on Form 10-K for the fiscal year ended December 31, 2011 and our Quarterly Reports on Form 10-Q for the quarterly periods ended March 31, 2012, June 30, 2012 and September 30, 2012, respectively, which are on file with the SEC and incorporated by reference in this prospectus. If any of

Table of Contents

these risks, as well as other risks and uncertainties that are not yet identified or that we currently think are immaterial, actually occur, our business, results of operations or financial condition could be materially and adversely affected. In such an event, the trading price of our common stock could decline and you could lose part or all of your investment.

USE OF PROCEEDS

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

SELLING STOCKHOLDERS

Information about selling stockholders, including their identities and the common stock to be registered on their behalf, will be set forth in a prospectus supplement, in a post-effective amendment or in filings we make with the SEC under the Exchange Act that are incorporated by reference into this prospectus. The selling stockholders may include certain of our affiliates.

DESCRIPTION OF CAPITAL STOCK

The following is a description of the material terms of our amended and restated certificate of incorporation and bylaws. This summary does not purport to be complete and is qualified in its entirety by reference to the actual terms and provisions of our amended and restated certificate of incorporation and bylaws, copies of which are filed as exhibits to the registration statement of which this prospectus is a part.

Authorized Capitalization

Our authorized capital stock consists of 500,000,000 shares of common stock, par value \$0.01 per share, and 50,000,000 shares of preferred stock, par value \$0.01 per share. As of October 31, 2012, 68,110,374 shares of our common stock are outstanding, and there are no outstanding shares of preferred stock.

Common Stock

The holders of our common stock are entitled to the following rights.

Voting Rights

Each share of common stock entitles the holder to one vote with respect to each matter presented to our stockholders on which the holders of common stock are entitled to vote. Our common stock votes as a single class on all matters relating to the election and removal of directors on our board of directors and as provided by law, with each share of common stock entitling its holder to one vote. Holders of our common stock do not have cumulative voting rights. Accordingly, holders of a majority of the shares of common stock entitled to vote in any election of directors may elect all of the directors standing for election. Except as otherwise provided in our amended and restated certificate of incorporation or required by law, all matters to be voted on by our stockholders must be approved by a majority of the shares present in person or by proxy at the meeting and entitled to vote on the subject matter.

Dividend Rights

Holders of common stock share equally in any dividend declared out of legally available funds by our board of directors, subject to any preferential rights of the holders of any outstanding preferred stock.

Table of Contents

Liquidation Rights

In the event of any voluntary or involuntary liquidation, dissolution or winding up of our affairs, holders of our common stock would be entitled to share ratably in our assets that are legally available for distribution to stockholders after payment of liabilities. If we have any preferred stock outstanding at such time, holders of the preferred stock may be entitled to distribution and/or liquidation preferences. In either such case, we must pay the applicable distribution to the holders of our preferred stock before we may pay distributions to the holders of our common stock.

Other Rights

Our stockholders have no subscription, redemption or conversion privileges. Our common stock does not entitle its holders to preemptive rights for additional shares and does not have any sinking fund provisions. All of the outstanding shares of our common stock are fully paid and nonassessable. The rights, preferences and privileges of the holders of our common stock are subject to the rights of the holders of shares of any series of preferred stock which we may issue.

Registration Rights

Our existing stockholders have certain registration rights with respect to our common stock pursuant to the shareholders' agreement, or the Shareholders' Agreement, entered into with certain of our stockholders, including affiliates of CCMP Capital Advisors, LLC, or CCMP, and the management stockholders party thereto. The Shareholders' Agreement provides for, among other things, (1) demand registration rights, which require us to effect registration of the Registrable Securities (as defined in the Shareholders' Agreement) upon a written request from CCMP, subject to certain limitations; (2) piggy-back registration rights; and (3) shelf demand registration rights.

Preferred Stock

Our board of directors is authorized to provide for the issuance of preferred stock in one or more series and to fix the preferences, powers and relative, participating, optional or other special rights, and qualifications, limitations or restrictions thereof, including the dividend rate, conversion rights, voting rights, redemption rights and liquidation preference and to fix the number of shares to be included in any such series without any further vote or action by our stockholders. Any preferred stock so issued may rank senior to our common stock with respect to the payment of dividends or amounts upon liquidation, dissolution or winding up, or both. In addition, any such shares of preferred stock may have class or series voting rights. The issuance of preferred stock may have the effect of delaying, deferring or preventing a change in control of our company without further action by the stockholders and may adversely affect the voting and other rights of the holders of our common stock. Our board of directors has not authorized the issuance of any shares of preferred stock, and we have no agreements or current plans for the issuance of any shares of preferred stock.

Anti-takeover Effects of our Amended and Restated Certificate of Incorporation and Bylaws

Our amended and restated certificate of incorporation and bylaws contain provisions that may delay, defer or discourage another party from acquiring control of us. These provisions, which are summarized below, discourage coercive takeover practices or inadequate takeover bids. These provisions are also designed to encourage persons seeking to acquire control of us to first negotiate with our board of directors, which we believe may result in an improvement of the terms of any such acquisition in favor of our stockholders. However, they also give our board the power to discourage acquisitions that some stockholders may favor.

Table of Contents

Board Composition and Filling Vacancies

We have a classified board of directors. This may discourage third-party proxy contests, tender offers or attempts to obtain control of us even if such changes would be beneficial to us and our stockholders.

Our amended and restated certificate of incorporation provides that directors may be removed only for cause by the affirmative vote of the holders of a majority of the voting power of the outstanding shares of common stock entitled to vote. Furthermore, any vacancy on our board of directors, however occurring, including a vacancy resulting from an increase in the size of our board, may only be filled by the affirmative vote of a majority of our directors then in office even if less than a quorum.

No Stockholder Action by Written Consent

Our amended and restated certificate of incorporation provides that, subject to the rights of any holders of preferred stock to act by written consent instead of a meeting, stockholder action may be taken only at an annual meeting or special meeting of stockholders and may not be taken by written consent instead of a meeting, unless affiliates of CCMP own at least 50% of our outstanding common stock or the action to be taken by written consent of stockholders and the taking of this action by written consent has been expressly approved in advance by the board of directors. Failure to satisfy any of the requirements for a stockholder meeting could delay, prevent or invalidate stockholder action.

Meetings of Stockholders

Our amended and restated certificate of incorporation provides that only a majority of the members of our board of directors then in office or the Chief Executive Officer may call special meetings of the stockholders and only those matters set forth in the notice of the special meeting may be considered or acted upon at a special meeting of stockholders. Our amended and restated bylaws limit the business that may be conducted at an annual meeting of stockholders to those matters properly brought before the meeting.

Advance Notice Requirements

Our amended and restated bylaws establish an advance notice procedure for stockholders to make nominations of candidates for election as directors or to bring other business before an annual meeting of our stockholders. The amended and restated bylaws provide that any stockholder wishing to nominate persons for election as directors at, or bring other business before, an annual meeting must deliver to our secretary a written notice of the stockholder's intention to do so. To be timely, the stockholder's notice must be delivered to or mailed and received by us not later than the 90th day nor earlier than the 120th day prior to the anniversary date of the preceding annual meeting, except that if the annual meeting is not within 30 days before or 60 days after the date contemplated at the time of the previous year's proxy statement, we must receive the notice not earlier than the 120th day prior to such annual meeting and not later than the 90th day prior to such annual meeting. If a public announcement of the date of such annual meeting is made fewer than 100 days prior to the date of such annual meeting, then notice must be received by us no later than the tenth day following the public announcement of the date of the meeting. The notice must include the information specified in the amended and restated bylaws. These provisions may preclude stockholders from bringing matters before an annual or special meeting of stockholders or from making nominations for directors at an annual or special meeting of stockholders.

Table of Contents

Amendment to Bylaws and Certificate of Incorporation

Any amendment to our amended and restated certificate of incorporation must first be approved by a majority of our board of directors and (i) if required by law, thereafter be approved by a majority of the outstanding shares entitled to vote on the amendment or (ii) if related to provisions regarding the classification of the board of directors, the removal of directors, stockholder action by written consent, the ability to call special meetings of stockholders, indemnification, corporate opportunities or the amendment of our bylaws or certificate of incorporation, thereafter be approved by 66²/₃% of the outstanding shares entitled to vote on the amendment. Our amended and restated bylaws may be amended (x) by the affirmative vote of a majority of the directors then in office, subject to any limitations set forth in the amended and restated bylaws, without further stockholder action or (y) by the affirmative vote of at least 66²/₃% of the outstanding shares entitled to vote on the amendment, without further action by our board of directors.

Authorized but Unissued Shares

The authorized but unissued shares of our common stock and our preferred stock are available for future issuance without any further vote or action by our stockholders. These additional shares may be utilized for a variety of corporate purposes, including future public offerings to raise additional capital, corporate acquisitions and employee benefit plans. The existence of authorized but unissued shares of our common stock and our preferred stock could render more difficult or discourage an attempt to obtain control over us by means of a proxy contest, tender offer, merger or otherwise.

Delaware Anti-takeover Statute

Our amended and restated certificate of incorporation provides that the provisions of Section 203 of the Delaware General Corporation Law, or the DGCL, which relate to business combinations with interested stockholders, do not apply to us. Section 203 of the DGCL prohibits a publicly held Delaware corporation from engaging in a business combination transaction with an interested stockholder (a stockholder who owns more than 15% of our common stock) for a period of three years after the interested stockholder became such unless the transaction fits within an applicable exemption, such as board approval of the business combination or the transaction that resulted in such stockholder becoming an interested stockholder. These provisions would apply even if the business combination could be considered beneficial by some stockholders. By opting out of Section 203 of the DGCL, a stockholder that becomes an interested stockholder will be able to engage in a business combination transaction with us without prior board approval.

Corporate Opportunities

Our amended and restated certificate of incorporation provides that CCMP and its affiliates have no obligation to offer us an opportunity to participate in business opportunities presented to CCMP or its respective affiliates even if the opportunity is one that we might reasonably have pursued (and therefore may be free to compete with us in the same business or similar businesses), and that neither CCMP nor its respective affiliates will be liable to us or our stockholders for breach of any duty by reason of any such activities unless, in the case of any person who is a director or officer of our company, such business opportunity is expressly offered to such director or officer in writing solely in his or her capacity as an officer or director of our company.

Listing

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

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Computershare Trust Company, N.A.

Table of Contents

PLAN OF DISTRIBUTION

The selling stockholders may offer and sell all or a portion of the shares of common stock covered by this prospectus from time to time, in one or more or any combination of the following transactions:

on the New York Stock Exchange, in the over the counter market or on any other national securities exchange on which our shares are listed or traded;

in privately negotiated transactions;

in underwritten transactions;

in a block trade in which a broker dealer will attempt to sell the offered shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;

through collared hedging transactions, whether through an options exchange or otherwise;

through purchases by a broker dealer as principal and resale by the broker dealer for its account pursuant to this prospectus; and

through any other method permitted by applicable law.

The selling stockholders may sell the shares of common stock at prices then prevailing or related to the then current market price or at negotiated prices. The offering price of the shares of common stock from time to time will be determined by the selling stockholders and, at the time of the determination, may be higher or lower than the market price of our common stock on the New York Stock Exchange or any other exchange or market.

The shares may be offered to the public, from time to time, through broker-dealers acting as agent or principal, including through underwriting syndicates represented by one or more managing underwriters or directly by one or more of such firms in one or more transactions, including negotiated transactions, at a fixed public offering price or at varying prices determined at the time of sale. The obligations of the underwriters to purchase the shares of common stock will be subject to the conditions set forth in the applicable underwriting agreement. Any public offering price and any discounts or concessions allowed or reallocated or paid by underwriters or dealers to other dealers may be changed from time to time.

In connection with an underwritten offering, underwriters or agents may receive compensation in the form of discounts, concessions or commissions from the selling stockholders or from purchasers of the offered shares for whom they may act as agents. In addition, underwriters may sell the shares to or through dealers, and those dealers may receive compensation in the form of discounts, concessions or commissions from the underwriters and/or commissions from the purchasers for whom they may act as agents. The selling stockholders and any underwriters, dealers or agents participating in a distribution of the shares may be deemed to be "underwriters" within the meaning of the Securities Act, and any profit on the sale of the shares by the selling stockholders and any commissions received by broker dealers may be deemed to be underwriting commissions under the Securities Act. Pursuant to a requirement by the Financial Industry Regulatory Authority, Inc., or FINRA, the maximum commission or discount to be received by a FINRA member or independent broker/dealer may not be greater than 8% of the gross proceeds received by the selling stockholders for the sale of any shares of common stock being registered pursuant to Rule 415 under the Securities Act.

We and the selling stockholders each may agree to indemnify an underwriter, broker dealer or agent against certain liabilities related to the selling of the common stock, including liabilities arising under the Securities Act. Under the Shareholders' Agreement, we have agreed to indemnify the selling stockholders against certain liabilities related to the sale of the common stock, including liabilities arising under the Securities Act. Under the Shareholders' Agreement, we have also agreed to pay the costs, expenses and fees of registering the shares of common stock; however, the selling stockholders

Table of Contents

will pay any underwriting discounts or commissions relating to the sale of the shares of common stock in any underwritten offering.

Any underwriters, broker-dealers or agents may be customers of, engage in transactions with or perform advisory services for us or the selling stockholders in the ordinary course of business. We and the selling stockholders will describe the nature of any such relationships in the applicable prospectus supplement.

The prospectus supplement applicable to a particular offering will include the following information:

the name of the selling stockholder;

the number of shares of common stock being offered;

the terms of the offering;

the names of the participating underwriters, broker dealers or agents;

any discounts, commissions or other compensation paid to underwriters or broker dealers and any discounts, commissions or concessions allowed or reallocated or paid by any underwriters to dealers;

the public offering price; and

other material terms of the offering.

The selling stockholders are subject to the applicable provisions of the Exchange Act, and the rules and regulations under the Exchange Act, including Regulation M. This regulation may limit the timing of purchases and sales of any of the shares of common stock offered in this prospectus by the selling stockholders. The anti-manipulation rules under the Exchange Act may apply to sales of shares of common stock in the market and to the activities of the selling stockholders and their affiliates. Furthermore, Regulation M may restrict the ability of any person engaged in the distribution of the shares of common stock to engage in market making activities for the particular securities being distributed for a period of up to five business days before the distribution. The restrictions may affect the marketability of the shares and the ability of any person or entity to engage in market making activities for the shares of common stock.

To facilitate the offering of shares of common stock covered by this prospectus, certain persons participating in the offering may engage in transactions that stabilize, maintain or otherwise affect the price of the shares of common stock. This may include over-allotments or short sales of the shares of common stock, which involve the sale by persons participating in the offering of more securities than the selling stockholders sold to them. In these circumstances, these persons would cover such over-allotments or short positions by making purchases in the open market or by exercising their over-allotment option, if any. In addition, these persons may stabilize or maintain the price of the shares of common stock by bidding for or purchasing shares of common stock in the open market or by imposing penalty bids, whereby selling concessions allowed to dealers participating in the offering may be reclaimed if shares of common stock sold by them are repurchased in connection with stabilization transactions. The effect of these transactions may be to stabilize or maintain the market price of the shares of common stock at a level above that which might otherwise prevail in the open market. These transactions may be discontinued at any time.

In the ordinary course of their business activities, any underwriters and their affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers and may at any time hold long and short positions in such securities and

Table of Contents

instruments. Such investment and securities activities may involve securities and instruments of Generac.

To the extent required, this prospectus may be amended and/or supplemented from time to time to describe a specific plan of distribution.

Instead of selling the shares of common stock under this prospectus, the selling stockholders may sell the shares of common stock in compliance with the provisions of Rule 144 under the Securities Act, if available, or pursuant to other available exemptions from the registration requirements of the Securities Act. In addition, registration of the shares of common stock covered by this prospectus does not mean that the shares of common stock will be offered or sold.

Table of Contents

LEGAL MATTERS

Weil, Gotshal & Manges LLP, New York, New York, will pass upon the validity of the common stock offered by this prospectus.

EXPERTS

The consolidated financial statements of Generac Holdings Inc. at December 31, 2011 and 2010, and for each of the three years in the period ended December 31, 2011, incorporated by reference in this prospectus and the registration statement have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their report thereon, and are included in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

Table of Contents

6,500,000 Shares

Generac Holdings Inc.

Common Stock

Prospectus Supplement

Morgan Stanley
