UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-3 **REGISTRATION STATEMENT**

UNDER THE SECURITIES ACT OF 1933

Loar Holdings Inc. (Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)		82-2665180 (IRS Employer Identification Number)
(Address, including zip code, and telepl	20 New King Street White Plains, New York 10604 (914) 909-1311 none number, including area code, of registran	nt's principal executive offices)
	with copies to:	
Dirkson Charles President, Chief Executive Officer and Executive Co-Chairman Loar Holdings Inc. 20 New King Street White Plains, New York 10604 (914) 909-1311	Michael Manella Vice President, General Counsel and Secretary Loar Holdings Inc. 20 New King Street White Plains, New York 10604 (914) 909-1311	Aslam A. Rawoof Benesch, Friedlander, Coplan & Aronoff LLP 1155 Avenue of the Americas, Floor 26 New York, New York 10036 (646) 593-7050
	ode, and telephone number, including area cod	de, of agent for service)
Approximate date of commencement of proposed sale to the p	ublic: From time to time after this Registration	on Statement becomes effective.
If the only securities being registered on this form are being offered	ed pursuant to dividend or interest reinvestme	ent plans, please check the following box.
If any of the securities being registered on this form are to be offe securities offered only in connection with dividend or interest rein		t to Rule 415 under the Securities Act of 1933, other than
If this Form is filed to register additional securities for an offering Securities Act registration statement number of the earlier effective		
If this Form is a post-effective amendment filed pursuant to Rule statement number of the earlier effective registration statement for		lowing box and list the Securities Act registration
If this Form is a registration statement pursuant to General Instruc Commission pursuant to Rule 462(e) under the Securities Act, che		eto that shall become effective upon filing with the
If this Form is a post-effective amendment to a registration statem of securities pursuant to Rule 413(b) under the Securities Act, che		filed to register additional securities or additional classes
Indicate by check mark whether the registrant is a large accelerate growth company. See the definitions of "large accelerated filer," the Exchange Act.		
Large accelerated filer □ Non-accelerated filer ⊠		Accelerated filer □ Smaller reporting company □ Emerging growth company ⊠
If an emerging growth company, indicate by check mark if the reg financial accounting standards provided pursuant to Section 7(a)(2)		insition period for complying with any new or revised

PROSPECTUS

70,563,595 Shares



LOAR HOLDINGS INC.

Common Stock

The selling stockholders identified herein (the "Selling Stockholders"), from time to time, may offer to sell up to 70,563,595 shares of our common stock, par value \$0.01 per share (our "Common Stock" or the "Common Shares"). We are registering such shares under the terms of an agreement that provides registration rights to the Selling Stockholders. We are not selling any shares of our Common Stock under this Prospectus and we will not receive any proceeds from the sale of any shares of our Common Stock sold by the Selling Stockholders.

Our common stock is listed on the New York Stock Exchange (the "NYSE") under the symbol "LOAR." The last reported sale price of our common stock on April 30, 2025 was \$94.58 per share.

At the time the Selling Stockholders offer shares registered by this Prospectus, we will provide a prospectus supplement, if required, that will contain specific information about the terms of the offering and that may add to or update the information in this Prospectus. You should read this Prospectus and any applicable prospectus supplement carefully before you invest.

The Selling Stockholders may offer the shares in amounts, at prices and on terms determined by market conditions at the time of the offering. The Selling Stockholders also may sell shares directly to investors or through underwriters, agents or dealers. If the Selling Stockholders use underwriters, agents or dealers to sell the shares, we will name them and describe their compensation in a prospectus supplement.

Investing in our Common Stock involves risks. You should review carefully the risks and uncertainties described under the heading "Risk Factors" beginning on page 2 of this Prospectus and under similar headings in the other documents filed with the Securities and Exchange Commission (the "SEC") that are incorporated by reference in this Prospectus, as well as those contained in any applicable prospectus supplement.

Neither the SEC nor any state securities commission has approved or disapproved of these securities or determined if this Prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this Prospectus is May 1, 2025

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The terms "Company," "Loar," "we," "us," "our" and similar terms, unless the context otherwise requires, refer to Loar Holdings Inc. together with Loar Group Inc. and its other subsidiaries.

We are responsible for the information contained and incorporated by reference in this Prospectus, any accompanying prospectus supplement and in any related free writing prospectus we prepare or authorize. Neither we nor the Selling Stockholders have authorized anyone to provide you with any other information, and we take no responsibility for any other information that others may provide you. This Prospectus and any accompanying prospectus supplement do not constitute an offer to sell, or a solicitation of an offer to purchase, any securities other than the registered securities to which they relate, nor do this Prospectus and any accompanying prospectus supplement constitute an offer to sell, or a solicitation of an offer to purchase, the securities offered hereby, or thereby in any jurisdiction to or from any person whom or from whom it is unlawful to make such offer or solicitation of an offer in such jurisdiction. The information appearing or incorporated by reference in this Prospectus, any accompanying prospectus supplement, and any related free writing prospectus, is accurate only as of the date thereof, regardless of the time of delivery of this Prospectus, any accompanying prospectus supplement, or any related free writing prospectus, or of any sale of our securities. Our business, financial condition, and results of operations may have changed since those dates. It is important for you to read and consider all the information contained in this Prospectus and in any accompanying prospectus supplement, including the documents incorporated by reference herein or therein, before making your investment decision.

ABOUT THIS PROSPECTUS

This Prospectus is part of a Registration Statement we filed with the SEC using a "shelf" registration process. Under this shelf registration process, the Selling Stockholders may, from time to time, offer and sell, in one or more offerings, shares of our Common Stock.

At the time the Selling Stockholders offer shares of our Common Stock registered by this Prospectus, if required, we will provide a prospectus supplement that will contain specific information about the terms of the offering and that may add to or update the information in this Prospectus or incorporated by reference in this Prospectus. If the information in this Prospectus is inconsistent with a prospectus supplement, you should rely on the information in that prospectus supplement. You should read this Prospectus, the information incorporated by reference into this Prospectus and any applicable prospectus supplement as well as any post-effective amendments to the Registration Statement of which this Prospectus forms a part before you make any investment decision.

The rules of the SEC allow us to incorporate information by reference into this Prospectus. This information incorporated by reference is considered to be part of this Prospectus. See "Information Incorporated by Reference." You should read both this Prospectus and any applicable prospectus supplement together with additional information described under the heading "Where You Can Find More Information."

We are responsible for the information incorporated by reference or contained in this Prospectus, any applicable prospectus supplement or in any free writing prospectus prepared by or on behalf of us that we have referred to you. Neither we nor any Selling Stockholder have authorized anyone to provide you with additional information or information different from that contained in this Prospectus, any applicable prospectus supplement or in any free writing prospectus filed with the SEC and we and they take no responsibility for any other information that others may give you. The Selling Stockholders are offering to sell, and seeking offers to buy, shares of our Common Stock only in jurisdictions where offers and sales are permitted. The information contained in this Prospectus is accurate only as of the date of this Prospectus, regardless of the time of delivery of this Prospectus or of any sale of shares of our Common Stock. Our business, financial condition, liquidity or results of operations may have changed since such date.

RISK FACTORS

Our business is subject to risks and uncertainties. You should carefully consider and evaluate all of the information included and incorporated by reference in this Prospectus, including the risk factors below and the risk factors incorporated by reference from Part I, Item 1A of our most recent Annual Report on Form 10-K, as they may be updated by Part II, Item 1A of our Quarterly Reports on Form 10-Q and our other SEC filings filed after such Annual Report, which are incorporated by reference herein. See "Information Incorporated by Reference." The prospectus supplement related to an offering may also include certain risks relating to that offering. Additional risks not presently known to us or that we currently deem immaterial may also impair our business operations. Our business, financial condition, liquidity or results of operations could be materially adversely affected by the materialization of any of these risks, and you may lose all or part of your investment.

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

Certain statements contained or incorporated by reference in this prospectus include express or implied forward-looking statements. Forward-looking statements include all statements that are not historical facts including those that reflect our current views with respect to, among other things, our operations and financial performance. Forward-looking statements are included throughout this prospectus and relate to matters such as our industry, business strategy, goals, and expectations concerning our market position, future operations, margins, profitability, capital expenditures, liquidity and capital resources, and other financial and operating information. We have used the words "anticipate," "assume," "believe," "continue," "could," "estimate," "expect," "intend," "may," "plan," "potential," "predict," "project," "future," "will," "seek," "foreseeable," the negative version of these words or similar terms and phrases to identify forward-looking statements in this prospectus.

The forward-looking statements contained or incorporated by reference in this prospectus are based on management's current expectations and are not guarantees of future performance. Our expectations and beliefs are expressed in management's good faith, and we believe there is a reasonable basis for them, however, the forward-looking statements are subject to various known and unknown risks, uncertainties, assumptions, or changes in circumstances that are difficult to predict or quantify. Actual results may differ materially from these expectations due to changes in global, regional, or local economic, business, competitive, market, regulatory, and other factors, many of which are beyond our control. We believe that these factors include but are not limited to the following:

- · our business focuses almost exclusively on the aerospace and defense industry;
- we rely heavily on certain customers for a significant portion of our sales;
- we have in the past consummated acquisitions and intend to continue to pursue acquisitions, and our business may be adversely affected if
 we cannot consummate acquisitions on satisfactory terms, or if we cannot effectively integrate acquired operations;
- we depend on our executive officers, senior management team and highly trained employees and any work stoppage, difficulty hiring similar employees, or ineffective succession planning could adversely affect our business;
- · our sales to manufacturers of aircraft are cyclical, and a downturn in sales to these manufacturers may adversely affect us;
- · our business depends on the availability and pricing of certain components and raw materials from suppliers;
- · our operations depend on our manufacturing facilities, which are subject to physical and other risks that could disrupt production;
- our business may be adversely affected if we were to lose our government or industry approvals, if more stringent government regulations
 were enacted or if industry oversight were to increase;
- our commercial business is sensitive to the number of flight hours that our customers' planes spend aloft, the size and age of the worldwide aircraft fleet and our customers' profitability, and these items are, in turn, affected by general economic and geopolitical and other worldwide conditions:
- technology failures or cyber security breaches or other unauthorized access to our information technology systems or sensitive or proprietary information could have an adverse effect on the Company's business and operations;
- our inability to adequately enforce and protect our intellectual property or defend against assertions of infringement could prevent or restrict our ability to compete;
- · we could incur substantial costs as a result of violations of or liabilities under environmental laws and regulations;

- tariffs on certain imports to the United States and other potential changes to U.S. tariff and import/export regulations may have a negative effect on global economic conditions and our business, financial results and financial condition;
- our indebtedness, which is subject to variable interest rates, could adversely affect our financial health and could harm our ability to react to changes to our business;
- to service our indebtedness, we will require a significant amount of cash, and our ability to generate cash depends on many factors beyond
 our control, and any failure to meet our debt service obligations could harm our business, financial condition and results of operations;
- pursuant to the Voting Agreement, dated as of April 29, 2024 (the "Voting Agreement"), by and between Loar Holdings Inc., funds advised
 by Abrams Capital Management, L.P. ("Abrams Capital"), GPV Loar LLC, Dirkson Charles and Brett Milgrim, such parties directly control
 a majority of the voting power of the shares of our common stock eligible to vote in the election of our directors, and their interests may
 conflict with ours or yours in the future; and
- the other factors discussed under "Risk Factors" set forth in Part I Item 1A of our Annual Report on Form10-K for the year ended December 31, 2024, as well as those included in other reports we file from time to time with the SEC (including our Quarterly Reports on Form 10-Q and Current Reports on Form 8-K).

THE COMPANY

We specialize in the design, manufacture, and sale of niche aerospace and defense components that are essential for today's aircraft and aerospace and defense systems. Our focus on mission-critical, highly engineered solutions with high-intellectual property content resulted in approximately 85% of our 2024 net sales being derived from proprietary products where we believe we hold market-leading positions. Furthermore, our products have significant aftermarket exposure, which has historically generated predictable and recurring revenue. We estimate that approximately 53% of our 2024 net sales were derived from aftermarket products.

We currently operate as a Delaware corporation under the name Loar Holdings Inc., which is a holding company that holds all of the equity interests of Loar Group Inc., the entity which directly and indirectly holds all of the equity interests in our operating subsidiaries. Loar Holdings, LLC was formed August 21, 2017. Loar Holdings, LLC became a Delaware corporation on April 16, 2024 and changed its name to Loar Holdings Inc. in a corporate conversion, the purpose of which was to reorganize our structure so that the entity that offered our common stock to the public in our initial public offering would be a corporation rather than a limited liability company and so that our existing investors and new investors in our initial public offering would own our common stock rather than equity interests in a limited liability company.

Our principal offices are located at 20 New King Street, White Plains, New York 10604. Our telephone number is 914-909-1311. We maintain a website at loargroup.com. The reference to our website is intended to be an inactive textual reference only. The information contained on, or that can be accessed through, our website is not part of this prospectus.

As used in this Prospectus, the terms "Company," "Loar," "we," "our" and similar terms, unless the context otherwise requires, refer to Loar Holdings Inc. together with Loar Group Inc. and its other subsidiaries.

USE OF PROCEEDS

All shares of our Common Stock sold pursuant to this Prospectus will be offered and sold by the Selling Stockholders. We will not receive any proceeds from such sale.

SELLING STOCKHOLDERS

From time to time, the Selling Stockholders may sell up to 70,563,595 shares of our Common Stock pursuant to this Prospectus, in one or more offerings. Information about specific offerings and the identification of the specific Selling Stockholders participating in such offering will be set forth in a prospectus supplement, if required.

We have determined beneficial ownership in accordance with the rules of the SEC. These rules generally attribute beneficial ownership of securities to persons who possess sole or shared voting power or investment power with respect to those securities, or have the right to acquire such powers within 60 days. Under these rules, more than one person may be deemed beneficial owner of the same securities, and a person may be deemed to be a beneficial owner of securities as to which such person has no economic interest. In addition, the rules include shares of common stock issuable pursuant to the exercise of stock options or warrants that are either immediately exercisable on or before June 30, 2025, which is 60 days after May 1, 2025. These shares are deemed to be outstanding and beneficially owned by the person holding those options or warrants for the purpose of computing the percentage ownership of that person, but they are not treated as outstanding for the purpose of computing the percentage ownership of any other person. The information contained in the following table is not necessarily indicative of beneficial ownership for any other purpose, and the inclusion of any shares in the table does not constitute an admission of beneficial ownership of those shares. Unless otherwise indicated, the persons or entities identified in this table have sole voting and investment power with respect to all shares shown as beneficially owned by them, subject to applicable community property laws

We cannot advise you as to whether the Selling Stockholders will in fact sell any or all of the shares of our Common Stock registered hereunder. In addition, the Selling Stockholders may sell, transfer or otherwise dispose of, at any time and from time to time, the shares of our Common Stock in transactions exempt from the registration requirements of the Securities Act after the date of this Prospectus, subject to applicable law, including Rule 144 of the Securities Act. See "Plan of Distribution."

The table below is based on 93,556,071 shares of our Common Stock outstanding as of April 21, 2025.

Any prospectus supplement may add, update, substitute, or change the information contained in this Prospectus, including the identity of each Selling Stockholder and the number of shares registered on their behalf.

Unless otherwise specified below, none of the Selling Stockholders hold any position or office with us, or have or have had any other material relationship with us within the past three years.

Except as otherwise noted below, the address for persons listed in the table is c/o Loar Holdings Inc., 20 New King Street, White Plains, NY 10604.

	Common Beneficiall		Shares of Common Stock That May be	Common Stock Beneficially Owned After Sale of All Common Stock That May be Sold Hereunder ⁽¹⁾	
Name of Selling Stockholder	Shares	Percentage	Sold Hereunder	Shares	Percentage
Abrams Capital Management, L.P. and affiliates ⁽²⁾	37,427,917	40.0	37,427,917		
Blackstone Alternative Credit Advisors LP and affiliates(3)	12,475,962	13.3	12,475,962	_	_
GPV Loar LLC ⁽⁴⁾	9,357,002	10.0	9,357,002	_	_
Dirkson Charles ⁽⁵⁾	4,863,377	5.2	4,721,377	142,000	*
Brett Milgrim ⁽⁶⁾	4,615,868	4.9	4,473,868	142,000	*
Glenn D'Alessandro(7)	1,137,510	1.2	1,060,510	77,000	*
Michael Manella(8)	1,123,959	1.2	1,046,959	77,000	*

Represents less than 1.0% of outstanding shares.

- Assumes each of the Selling Stockholders sells all of their shares of our Common Stock covered by this Prospectus and does not acquire beneficial ownership of any additional shares of our Common Stock.
- (2) Shares reported herein include shares deemed to be beneficially owned by (i) Abrams Capital Partners II, L.P. ("ACP II"), Riva Capital Partners IV, L.P. ("Riva IV"), Abrams Capital Partners I, L.P. ("ACPI"), Whitecrest Partners, L.P. ("WCP"), Great Hollow International, L.P. ("GHI") and Riva Capital Partners V, L.P. ("Riva V"); (ii) Abrams Capital, LLC ("AC LLC") that are held for the account of ACPI, ACPII, and WCP for which AC LLC serves as general partner; (iii) Riva Capital Management IV, LLC ("RCM IV") that are held for the account of Riva IV for which RCM IV serves as general partner; (iv) Riva Capital Management V, LLC ("RCM V"; together with AC LLC, GHP, and RCM IV, the "GP Entities") that are held for the account of Riva V for which RCM V serves as general partner and (v) Great Hollow Partners, LLC ("GHP") that are held for the account of GHI for which GHP serves as general partner. Furthermore, shares reported herein also include shares deemed to be beneficially owned by Abrams Capital Management, L.P. (the "LP") and Abrams Capital Management, LLC (the "LLC"). The LP serves as investment manager for ACP II, Riva IV, Riva V, ACPI, WCP and GHI. The LLC is the general partner of the LP. David Abrams is the managing member of the GP Entities and the LLC and, as such, may be deemed to beneficially own shares that are beneficially owned by the GP Entities and/or the LLC. The principal business address of these entities is 222 Berkeley Street, 21st Floor, Boston, MA 02116. Mr. Abrams is a member of our Board of Directors (the "Board").
- (3) Reflects shares held by GSO Capital Opportunities Fund III LP, Blackstone Private Credit Fund, BCRED Twin Peaks LLC, GSO Orchid Fund LP and GSO Barre des Ecrins Master Fund SCSp. (each, a "Blackstone Holder").
 - GSO Capital Opportunities Associates III LLC is the general partner of GSO Capital Opportunities Fund III LP. GSO Holdings I L.L.C. is the managing member of GSO Capital Opportunities Associates III LLC.
 - BCRED Twin Peaks LLC is wholly-owned by Blackstone Private Credit Fund. Blackstone Credit BDC Advisors LLC is the investment manager of Blackstone Private Credit Fund. Blackstone Advisors LP is the sole member of Blackstone Credit BDC Advisors LLC.

GSO Orchid Associates LLC is the general partner of GSO Orchid Fund LP. GSO Holdings III L.L.C. is the sole member of GSO Orchid Associates LLC.

Blackstone Europe Fund Management S.à r.l is the manager of GSO Barre des Ecrins Master Fund SCSp. Blackstone Alternative Credit Advisors LP is the investment manager of Blackstone Europe Fund Management S.à r.l.

GSO Advisor Holdings L.L.C. is the special limited partner of Blackstone Alternative Credit Advisors LP with the investment and voting power over the securities beneficially owned by Blackstone Alternative Credit Advisors LP. Blackstone Holdings I L.P. is the managing member of GSO Holdings I L.L.C. with respect to securities beneficially owned by the GSO Capital Opportunities Fund III LP and is the sole member of GSO Advisor Holdings L.L.C. Blackstone Holdings IV L.P. is the general partner of Blackstone Holdings IV L.P. Blackstone Holdings IV L.P. is the sole member of GSO Holdings III L.L.C. Blackstone Holdings IV GP LP is the general partner of Blackstone Holdings IV L.P. Blackstone Holdings IV GP Management (Delaware) L.P. Blackstone Holdings IV GP Management (Delaware) L.P. Blackstone Holdings IV GP Management L.L.C. is the general partner of Blackstone Holdings IV GP Management (Delaware) L.P. Blackstone Inc. is the sole member of Blackstone Holdings IV II GP L.L.C. and Blackstone Holdings IV GP Management L.L.C. The sole holder of the Series II preferred stock of Blackstone Inc. is Blackstone Group Management L.L.C. is wholly owned by Blackstone Inc.'s senior managing directors and controlled by its founder, Stephen A. Schwarzman. Each of the foregoing entities and individuals disclaims beneficial ownership of the securities held directly by the Blackstone Holders (other than each Blackstone Holder to the extent of its direct holdings). The principal business address of these entities is c/o Blackstone Inc. 345 Park Avenue, 31st Floor, New York, New York 10154.

- (4) Shares reported herein are owned by GPV Loar LLC, a Delaware limited liability company ("GPV Loar"), the sole Manager of which is Paul S. Levy. As a result, Mr. Levy may be deemed to have beneficial ownership of the shares held directly by GPV Loar. The address for GPV Loar and Mr. Levy is 440 Royal Palm Way, Palm Beach, FL 33480. Mr. Levy is a member of our Board.
- (5) Shares reported herein include shares owned by the Charles Family Trust 13, the trustee of which is Dirkson Charles. As a result, Mr. Charles may be deemed to have beneficial ownership of the shares held directly by the Charles Family Trust 13. Shares reported herein also include 142,000 shares of common stock issuable pursuant to the exercise of Tranche A options that vested on April 29, 2025. Mr. Charles is our President, Chief Executive Officer, Executive Co-Chairman and Director.
- (6) Shares reported herein include shares owned by BNM Capital LLC, a Delaware limited liability company, the sole Investments Manager of which is Brett Milgrim. As a result, Mr. Milgrim may be deemed to have beneficial ownership of the shares held directly by BNM Capital LLC. Shares reported herein also include 142,000 shares of common stock issuable pursuant to the exercise of Tranche A options that vested on April 29, 2025. Mr. Milgrim is our Executive Co-Chairman and Director.
- (7) Shares reported herein include 77,000 shares of common stock issuable pursuant to the exercise of Tranche A options that vested on April 29, 2025. Mr. D'Alessandro is our Treasurer and Chief Financial Officer.
- (8) Shares reported herein include shares owned by the Michael J. Manella as Trustee of the Michael J. Manella Living Trust 2006. As a result, Mr. Manella may be deemed to have beneficial ownership of the shares held directly by the Michael J. Manella as Trustee of the Michael J. Manella Living Trust—2006. Shares reported herein include 77,000 shares of common stock issuable pursuant to the exercise of Tranche A options that vested on April 29, 2025. Mr. Manella is our Vice President, General Counsel and Secretary.

Registration Rights Agreement

Any offering under this Prospectus will be made pursuant to the registration rights agreement (the "Registration Rights Agreement") with Abrams Capital, GPV Loar LLC, Blackstone Credit, Dirkson Charles and Brett Milgrim (together, the "Demand Stockholders"), as well as Glenn D'Alessandro and Michael Manella (together with the Demand Stockholders, the "Piggyback Stockholders").

Demand Registrations

Under the Registration Rights Agreement, the Demand Stockholders are able to require us to file a registration statement (a "Demand Registration") under the Securities Act and we are required to notify holders of registrable securities that are party to the Registration Rights Agreement (the "Holders") in the event of such request (a "Demand Registration Request"). The holders of a majority of registrable securities among all Demand Stockholders may each issue up to two Demand Registration Requests for long-form registrations on Form S-1 or any similar long-form registration statement so long as (i) the proposed maximum aggregate offering value of the registrable securities requested to be registered equals at least \$50 million or (ii) all of the remaining registration Requests in any twelve month period for short-form registrations on Form S-3 or any similar short-form registration statement so long as (i) the proposed maximum aggregate offering value of the registrable securities requested to be registered equals at least \$20 million or (ii) all of the remaining registrable securities held by any Demand Stockholders are sold in such offering. In addition, each of the Demand Stockholders may issue up to two requests in any twelve month period for take-down offerings ("Shelf Offering") off of a shelf registration statement ("Take-down Request") so long as (i) the proposed maximum aggregate offering value of the registrable securities requested to be included equals at least \$20 million or (ii) all of the remaining registrable securities held by any Demand Stockholders are sold in such offering. All eligible holders are entitled to participate in any Demand Registration or Shelf Offering upon proper notice to us, and we are required to use our best efforts to effect such participation in accordance with the terms of the Demand Registration. Request or Take-down Request, subject to the Additional Lock-up (as defined below) and certain rights we have to delay or postpone such registration.

Piggyback Registrations

Under the Registration Rights Agreement, if at any time we propose or are required to register any of our equity securities under the Securities Act (other than a Demand Registration or in connection with registration on Form S-4 or S-8 promulgated by the SEC or any successor or similar forms) (a "piggyback registration"), we will be required to notify each Piggyback Stockholder of its right to participate in such registration. We will use reasonable best efforts to cause all eligible securities requested to be included in the registration to be so included, subject to the Additional Lock-up. We have the right to withdraw or postpone a registration statement in which eligible holders have elected to exercise piggyback registration rights, and eligible holders are entitled to withdraw their registration requests prior to the execution of an underwriting agreement with respect to any such registration.

Additional Lock-up

All holders of registrable securities under the Registration Rights Agreement are subject to lock-up provisions under which they have agreed not to sell or otherwise transfer their shares for a period of 90 days following the date of the final prospectus for any other public offering. Mr. Charles and Mr. Milgrim are not permitted to sell or otherwise transfer the shares each of them held immediately following the closing of our initial public offering until and including September 30, 2027 (the "Additional Lock-up"), subject to limited waivers and exceptions, including (i) an exception for Mr. Charles to transfer up to \$30 million of such shares held by him and (ii) an exception for Mr. Milgrim to transfer up to \$30 million of such shares held by Abrams Capital sells during the Additional Lock-up period as a percentage of the total number of shares held by Abrams Capital immediately following the closing of our initial public offering exceeds 50%, then an additional exception to the Additional Lock-up would apply permitting either Mr. Charles or Mr. Milgrim to initiate a sale of shares to sell up to a pro rata amount calculated on the basis of such percentage.

The Registration Rights Agreement also provides that we will pay certain expenses of the Holders relating to such registrations and indemnify them against certain liabilities which may arise under the Securities Act.

The foregoing description of the Registration Rights Agreement is intended as a summary only and is qualified in its entirety by reference to the Registration Rights Agreement, which is filed on a Current Report on Form 8-K dated May 3, 2024, and is incorporated by reference herein.

DESCRIPTION OF CAPITAL STOCK

General

Our authorized capital stock consists of 485,000,000 shares of common stock, par value \$0.01 per share, and 1,000,000 shares of undesignated preferred stock, par value \$0.01 per share. We had 93,556,071 shares of our common stock outstanding as of April 21, 2025. The following description of our capital stock is intended as a summary only and is qualified in its entirety by reference to our certificate of incorporation and bylaws, which are filed as exhibits to the registration statement of which this prospectus forms a part, and to the applicable provisions of the Delaware General Corporation Law ("DGCL"). As of March 25, 2025, we had 42 holders of record of our common stock and no preferred stock was issued and outstanding.

Common Stock

Dividend Rights. Holders of outstanding shares of common stock are entitled to receive dividends out of assets legally available at the times and in the amounts as our Board may determine from time to time.

Voting Rights. Each outstanding share of common stock is entitled to one vote on all matters submitted to a vote of stockholders. Holders of shares of our common stock have no cumulative voting rights.

Preemptive Rights. Our common stock is not entitled to preemptive or other similar subscription rights to purchase any of our securities.

Conversion or Redemption Rights. Our common stock is neither convertible nor redeemable.

Liquidation Rights. Upon our liquidation, the holders of our common stock will be entitled to receive pro rata our assets that are legally available for distribution, after payment of all debts and other liabilities and subject to the prior rights of any holders of preferred stock then outstanding.

Preferred Stock

Our Board may, without further action by our stockholders, from time to time, direct the issuance of shares of preferred stock in series and may, at the time of issuance, determine the designations, powers, preferences, privileges, and relative participating, optional or special rights as well as the qualifications, limitations or restrictions thereof, including dividend rights, conversion rights, voting rights, terms of redemption and liquidation preferences, any or all of which may be greater than the rights of the common stock. Satisfaction of any dividend preferences of outstanding shares of preferred stock would reduce the amount of funds available for the payment of dividends on shares of our common stock. Holders of shares of preferred stock may be entitled to receive a preference payment in the event of our liquidation before any payment is made to the holders of shares of our common stock.

The issuance of shares of preferred stock could, depending on the terms of the series, impede or discourage an acquisition attempt or other transaction that some, or a majority, of the holders of our common stock might believe to be in their best interests or in which the holders of our common stock might receive a premium for their common stock over the market price of the common stock. In addition, the issuance of preferred stock may adversely affect the holders of our common stock by restricting dividends on the common stock, diluting the voting power of the common stock or subordinating the liquidation rights of the common stock. The issuance of preferred stock could have the effect of delaying, deferring or preventing a change of control, or other corporate action. As a result of these or other factors, the issuance of preferred stock may have an adverse impact on the market price of our common stock.

Registration Rights

In connection with our initial public offering, we entered into the Registration Rights Agreement. See above under "Selling Stockholders—Registration Rights Agreement."

Voting Agreement

Abrams Capital, GPV Loar LLC, Dirkson Charles and Brett Milgrim have entered into the Voting Agreement pursuant to which (i) Abrams Capital, Dirkson Charles and Brett Milgrim agree to vote all of the shares of our common stock then owned by them and their controlled affiliates at any meeting at which Paul S. Levy, a designee of GPV Loar LLC, is standing for election as a director in favor of his election, (ii) GPV Loar LLC, Dirkson Charles and Brett Milgrim agree to vote all of the shares of our common stock then owned by them and their controlled affiliates at any meeting at which any person identified by Abrams Capital as an Abrams Capital designee is standing for election as a director in favor of the election of such Abrams designee, (iii) Abrams Capital, GPV Loar LLC and Brett Milgrim agree to vote all of the shares of our common stock then owned by them and their controlled affiliates at any meeting at which Dirkson Charles is standing for election as a director in favor of his election and (iv) Abrams Capital, GPV Loar LLC and Dirkson Charles agree to vote all of the shares of our common stock then owned by them and their controlled affiliates at any meeting at which Brett Milgrim is standing for election as a director in favor of his election and their controlled affiliates at any meeting at which Brett Milgrim is standing for election as a director in favor of his election. The Voting Agreement terminates automatically upon the earlier of (a) the 10th anniversary of its effective date and (b) the first date that the aggregate number of shares of our common stock beneficially owned by either Abrams Capital and its controlled affiliates or GPV Loar LLC and its controlled affiliates is equal to or less than 10%.

The foregoing description of the Voting Agreement is intended as a summary only and is qualified in its entirety by reference to the Voting Agreement, a form of which was filed as Exhibit 10.4 to our Registration Statement on Form S-1, filed with the SEC April 2, 2024.

Dividends

The DGCL permits a corporation to declare and pay dividends out of "surplus" or, if there is no "surplus," out of its net profits for the fiscal year in which the dividend is declared and/or the preceding fiscal year. "Surplus" is defined as the excess of the net assets of the corporation over the amount determined to be the capital of the corporation by the board of directors. The capital of the corporation is typically calculated to be (and cannot be less than) the aggregate par value of all issued shares of capital stock. Net assets equal the fair value of the total assets minus total liabilities. The DGCL also provides that dividends may not be paid out of net profits if, after the payment of the dividend, capital is less than the capital represented by the outstanding stock of all classes having a preference upon the distribution of assets.

Declaration and payment of any dividend will be subject to the discretion of our Board. The time and amount of dividends will be dependent upon our financial condition, operations, cash requirements and availability, debt repayment obligations, capital expenditure needs and restrictions in our debt instruments, industry trends, the provisions of Delaware law affecting the payment of dividends to stockholders and any other factors our Board may consider relevant.

Anti-Takeover Effects of Our Certificate of Incorporation and Our Bylaws

Our certificate of incorporation, bylaws and the DGCL contain provisions, which are summarized in the following paragraphs, that are intended to enhance the likelihood of continuity and stability in the composition of our Board. However, these provisions may have an anti-takeover effect and may delay, deter or prevent a merger or acquisition of the Company by means of a tender offer, a proxy contest or other takeover attempt that a stockholder might consider in its best interest, including those attempts that might result in a premium over the prevailing market price for the shares of common stock held by stockholders. We believe the benefits of these provisions, including increased protection of our potential ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure our company, outweigh the disadvantages of discouraging takeover proposals.

These provisions include:

Classified Board. Our certificate of incorporation provides that our Board is divided into three classes of directors, with the classes as nearly equal in number as possible, and with the directors serving three-year

terms. As a result, approximately one-third of our Board will be elected each year. The classification of directors has the effect of making it more difficult for stockholders to change the composition of our Board. Our certificate of incorporation provides that, subject to any rights of holders of preferred stock to elect additional directors under specified circumstances, the number of directors will be fixed exclusively pursuant to a resolution adopted by our Board. Our Board has ten members.

Stockholder Action by Written Consent. Pursuant to Section 228 of the DGCL, any action required to be taken at any annual or special meeting of the stockholders may be taken without a meeting, without prior notice and without a vote if a consent or consents in writing, setting forth the action so taken, is signed by the holders of outstanding stock having not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting at which all shares of our stock entitled to vote thereon were present and voted, unless our certificate of incorporation provides otherwise. Our certificate of incorporation precludes stockholder action by written consent.

Special Meetings of Stockholders. Our certificate of incorporation and bylaws provide that, except as required by law, special meetings of our stockholders may be called at any time only by or at the direction of our Board or the chairman of our Board. Our bylaws prohibit the conduct of any business at a special meeting other than as specified in the notice for such meeting. These provisions may have the effect of deferring, delaying or discouraging hostile takeovers, or changes in control or management of the Company.

Advance Notice Procedures. Our bylaws establish advance notice procedures with respect to stockholder proposals and stockholder nomination of candidates for election as directors. These provisions may have the effect of precluding the conduct of certain business at a meeting if the proper procedures are not followed. In order for any matter to be "properly brought" before a meeting, a stockholder has to comply with advance notice requirements and provide us with certain information. Generally, to be timely, a stockholder's notice must be received at our principal executive offices not less than 90 days nor more than 120 days prior to the first anniversary date of the immediately preceding annual meeting of stockholders. Our bylaws also specify requirements as to the form and content of a stockholder's notice. Our bylaws allow the chair of the meeting at a meeting of the stockholders to adopt rules and regulations for the conduct of meetings, which may have the effect of precluding the conduct of certain business at a meeting if the rules and regulations are not followed. These provisions may also discourage or deter a potential acquirer from conducting a solicitation of proxies to elect the acquirer's own slate of directors or otherwise attempting to obtain control of us.

Removal of Directors; Vacancies. Our certificate of incorporation provides all directors may only be removed for cause, and only by the affirmative vote of holders of at least 66 2/3% in voting power of all the then-outstanding shares of stock of the Company entitled to vote thereon, voting together as a single class. In addition, our certificate of incorporation also provides that, subject to the rights granted to one or more series of preferred stock then outstanding, any newly created directorship on our Board that results from an increase in the number of directors and any vacancy occurring on our Board may only be filled by a majority of the directors then in office, even if less than a quorum, or by a sole remaining director (and not by the stockholders).

No Cumulative Voting. Under Delaware law, the right to vote cumulatively does not exist unless the certificate of incorporation specifically authorizes cumulative voting. Our certificate of incorporation does not authorize cumulative voting. Therefore, stockholders holding a majority in voting power of the shares of our stock entitled to vote generally in the election of directors are able to elect all of our directors.

Authorized but Unissued Shares. Our authorized but unissued shares of common stock and preferred stock will be available for future issuance without stockholder approval, subject to stock exchange rules. 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. One of the effects of the existence of authorized but unissued common stock or preferred stock may be to enable our Board to issue shares to persons friendly to current management, which issuance could render more difficult or discourage an attempt to obtain

control of the Company by means of a merger, tender offer, proxy contest or otherwise, and thereby protect the continuity of our management and possibly deprive our stockholders of opportunities to sell their shares of common stock at prices higher than prevailing market prices.

Business Combinations. We are not subject to the provisions of Section 203 of the DGCL. In general, Section 203 prohibits a publicly held Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a three-year period following the time that the person becomes an interested stockholder, unless the business combination is approved in a prescribed manner. A "business combination" includes, among other things, a merger, asset or stock sale or other transaction resulting in a financial benefit to the interested stockholder. An "interested stockholder" is a person who, together with affiliates and associates, owns, or did own within three years prior to the determination of interested stockholder status, 15% or more of the corporation's voting stock.

Under Section 203, a business combination between a corporation and an interested stockholder is prohibited unless it satisfies one of the following conditions: (1) before the stockholder became an interested stockholder, the board of directors approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder; (2) upon consummation of the transaction that resulted in the stockholder becoming an interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the voting stock outstanding, shares owned by persons who are directors and also officers, and employee stock plans, in some instances; or (3) at or after the time the stockholder became an interested stockholder, the business combination was approved by the board of directors and authorized at an annual or special meeting of the stockholders by the affirmative vote of at least two-thirds of the outstanding voting stock which is not owned by the interested stockholder.

A Delaware corporation may "opt out" of these provisions with an express provision in its original certificate of incorporation or an express provision in its certificate of incorporation or bylaws resulting from a stockholders' amendment approved by at least a majority of the outstanding voting shares.

We opted opt out of Section 203.

Supermajority Approval Requirements

Our certificate of incorporation and bylaws provide that our Board is expressly authorized to make, alter, amend, change, add to, rescind or repeal, in whole or in part, our bylaws without a stockholder vote in any matter not inconsistent with the laws of the State of Delaware and our certificate of incorporation. Any amendment, alteration, rescission or repeal of our bylaws by our stockholders requires the affirmative vote of the holders of at least 66 2/3% in voting power of all the then-outstanding shares of stock of the Company entitled to vote thereon, voting together as a single class.

The DGCL provides generally that the affirmative vote of a majority of the outstanding shares entitled to vote thereon, voting together as a single class, is required to amend a corporation's certificate of incorporation, unless the certificate of incorporation requires a greater percentage.

Our certificate of incorporation provides that the following provisions in our certificate of incorporation may be amended, altered, repealed or rescinded only by the affirmative vote of the holders of at least 66 2/3% in voting power of all the then-outstanding shares of stock of the Company entitled to vote thereon, voting together as a single class:

- the provision requiring a 66 2/3% supermajority vote for stockholders to amend our bylaws;
- the provisions providing for a classified board of directors (the election and term of our directors);
- the provisions regarding resignation and removal of directors;

- the provisions regarding entering into business combinations with interested stockholders;
- the provisions regarding stockholder action by written consent;
- the provisions regarding calling special meetings of stockholders;
- the provisions regarding filling vacancies on our Board and newly created directorships;
- · the provision establishing the Court of Chancery of the State of Delaware as the exclusive forum for certain litigation;
- · the provisions eliminating monetary damages for breaches of fiduciary duty by a director or officer; and
- the amendment provision requiring that the above provisions be amended only with a 66 2/3% supermajority vote.

The combination of the classification of our Board, the lack of cumulative voting and the supermajority voting requirements will make it more difficult for our existing stockholders to replace our Board as well as for another party to obtain control of us by replacing our Board. Because our Board has the power to retain and discharge our officers, these provisions could also make it more difficult for existing stockholders or another party to effect a change in management.

Dissenters' Rights of Appraisal and Payment

Under the DGCL, with certain exceptions, our stockholders have appraisal rights in connection with a merger or consolidation of us. Pursuant to the DGCL, stockholders who properly request and perfect appraisal rights in connection with such merger or consolidation will have the right to receive payment of the fair value of their shares as determined by the Delaware Court of Chancery.

Stockholders' Derivative Actions

Under the DGCL, any of our stockholders may bring an action in our name to procure a judgment in our favor, also known as a derivative action, provided that the stockholder bringing the action is a holder of our shares at the time of the transaction to which the action relates or such stockholder's stock thereafter devolved by operation of law.

Exclusive Forum

Our certificate of incorporation provides that, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware (or, if the Court of Chancery does not have jurisdiction, the United States District Court for the District of Delaware) will be the sole and exclusive forum for (1) any derivative action or proceeding brought on our behalf, (2) any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers or other employees to us or our stockholders, (3) any action asserting a claim against the Company or any director or officer of the Company arising pursuant to any provision of the DGCL, our certificate of incorporation or our bylaws or (4) any other action asserting a claim against the Company or any director or officer of the Company that is governed by the internal affairs doctrine; provided that for the avoidance of doubt, the forum selection provision that identifies the Court of Chancery of the State of Delaware as the exclusive forum for certain litigation, including any "derivative action", will not apply to suits to enforce a duty or liability created by the Securities Act, the Exchange Act or any other claim for which there is exclusive federal or concurrent federal and state jurisdiction.

Additionally, unless we consent in writing to the selection of an alternative forum, to the fullest extent permitted by law, the federal district courts of the United States of America shall be the exclusive forum for the

resolution of any complaint asserting a cause of action arising under the Securities Act and the Exchange Act. However, Section 22 of the Securities Act creates concurrent jurisdiction for federal and state courts over all suits brought to enforce a duty or liability created by the Securities Act or the rules and regulations thereunder and accordingly, we cannot be certain that a court would enforce these exclusive forum provisions. Although we believe these exclusive forum provisions benefit us by providing increased consistency in the application of Delaware law and federal securities laws in the types of lawsuits to which each applies, the exclusive forum provisions may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or any of our directors, officers or stockholders, which may discourage lawsuits with respect to such claims. Our stockholders will not be deemed to have waived our compliance with the federal securities laws and the rules and regulations thereunder as a result of our exclusive forum provisions. Further, in the event a court finds any such exclusive forum provision contained in our certificate of incorporation to be unenforceable or inapplicable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could harm our business, operating results and financial condition.

Any person or entity purchasing or otherwise acquiring any interest in shares of our capital stock will be deemed to have notice of and to have consented to the provisions of our certificate of incorporation described above. Although we believe these provisions benefit us by providing increased consistency in the application of Delaware law for the specified types of actions and proceedings, the provisions may have the effect of discouraging lawsuits against us or our directors and officers.

Conflicts of Interest

Delaware law permits corporations to adopt provisions renouncing any interest or expectancy in certain opportunities that are presented to the corporation or its officers, directors or stockholders. Our certificate of incorporation, to the maximum extent permitted from time to time by Delaware law, renounces any interest or expectancy that we have in, or right to be offered an opportunity to participate in, specified business opportunities that are from time to time presented to certain of our officers, directors or stockholders or their respective affiliates, other than those officers, directors, stockholders or affiliates who are our or our subsidiaries' employees. Our certificate of incorporation provides that, to the fullest extent permitted by law, no non-employee director (including any non-employee director who serves as one of our officers in both his director and officer capacities) or his or her affiliates will have any duty to refrain from (1) engaging in a corporate opportunity in the same or similar lines of business in which we or our affiliates now engage or propose to engage or (2) otherwise competing with us or our affiliates. In addition, to the fullest extent permitted by law, in the event that any non-employee director acquires knowledge of a potential transaction or other business opportunity which may be a corporate opportunity for itself or himself or its or his affiliates or for us or our affiliates, such person will have no duty to communicate or offer such transaction or business opportunity to us or any of our affiliates and they may take any such opportunity for themselves or offer it to another person or entity. Our certificate of incorporation does not renounce our interest in any business opportunity that is expressly offered to a non-employee director solely in his or her capacity as a director or officer of the Company. To the fullest extent permitted by law, no business opportunity will be deemed to be a potential corporate opportunity for us unless we would be permitted to und

Limitations on Liability and Indemnification of Officers and Directors

The DGCL authorizes corporations to limit or eliminate the personal liability of directors and certain officers to corporations and their stockholders for monetary damages for breaches of directors' fiduciary duties, subject to certain exceptions. Our certificate of incorporation includes a provision that eliminates the personal liability of directors and officers for monetary damages for any breach of fiduciary duty as a director or officer, except to the extent such exemption from liability or limitation thereof is not permitted under the DGCL. The effect of these provisions is to eliminate the rights of us and our stockholders, through stockholders' derivative suits on our behalf, to recover monetary damages from a director for breach of fiduciary duty as a director,

including breaches resulting from grossly negligent behavior. This provision does not limit or eliminate the liability of any officer in any action by or in the right of the Company, including any derivative claims. Further, the exculpation does not apply to any director or officer if the director or officer has breached the duty of loyalty to the corporation and its stockholders, acted in bad faith, knowingly or intentionally violated the law, or derived an improper benefit from his or her actions as a director or officer. In addition, exculpation does not apply to any director in connection with the authorization of illegal dividends, redemptions or stock repurchases.

Our bylaws provide that we must indemnify and advance expenses to our directors and officers to the fullest extent authorized by the DGCL. We also will be expressly authorized to carry directors' and officers' liability insurance providing indemnification for our directors, officers and certain employees for some liabilities. We believe that these indemnification and advancement provisions and insurance will be useful to attract and retain qualified directors and officers.

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

There is currently no pending material litigation or proceeding involving any of our directors, officers or employees for which indemnification is sought.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Equiniti Trust Company, LLC.

Listing

Our common stock is listed on the NYSE under the trading symbol "LOAR."

PLAN OF DISTRIBUTION

The Selling Stockholders identified in this Prospectus may offer, from time to time, shares of our Common Stock. We are registering such shares under the terms of the Registration Rights Agreement. We will not receive any of the proceeds from the sale of shares of our Common Stock by the Selling Stockholders.

The Selling Stockholders may sell all or a portion of the shares of our Common Stock directly to purchasers or through underwriters, broker-dealers or agents, who may receive compensation in the form of discounts, concessions or commissions from the Selling Stockholders or the purchasers of the shares. These discounts, concessions or commissions as to any particular underwriter, broker-dealer or agent may be in excess of those customary in the types of transactions involved.

The shares of our Common Stock may be sold in one or more transactions on any national securities exchange or quotation service on which the shares may be listed or quoted at the time of sale, in the over-the-counter market or in transactions otherwise than on these exchanges or systems or in the over-the-counter market and in one or more transactions at fixed prices, at prevailing market prices at the time of sale, at varying prices determined at the time of sale or at negotiated prices. These sales may be effected in transactions, which may involve crosses or block transactions. Additionally, the Selling Stockholders may enter into derivative transactions with third parties, or sell securities not covered by this Prospectus to third parties in privately negotiated transactions. The Selling Stockholders may use any one or more of the following methods when selling shares:

- · on any national securities exchange or quotation service on which the shares may be listed or quoted at the time of sale, including NYSE;
- · in the over-the-counter market;
- in transactions otherwise than on these exchanges or services or in theover-the-counter market;
- through the writing or settlement of options or other hedging transactions, whether the options are listed on an options exchange or otherwise;
- · distributions to members, partners, stockholders or other equityholders of the Selling Stockholder;
- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal
 to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- · privately negotiated transactions;
- · settlement of short sales entered into after the effective date of the Registration Statement of which this Prospectus forms a part;
- broker-dealers may agree with a Selling Stockholder to sell a specified number of such shares at a stipulated price per share;
- · a combination of any such methods of sale; and
- any other method permitted pursuant to applicable law.

The Selling Stockholders may offer our Common Stock to the public through underwriting syndicates represented by managing underwriters or through underwriters without an underwriting syndicate. If underwriters are used for the sale of our Common Stock, the securities will be acquired by the underwriters for their own account. The underwriters may resell our Common Stock in one or more transactions, including in negotiated transactions at a fixed public offering price or at varying prices determined at the time of sale. In connection with any such underwritten sale of our Common Stock, underwriters may receive compensation from the Selling Stockholders, for whom they may act as agents, in the form of discounts, concessions or commissions. Underwriters may sell our Common Stock to or through dealers, and the dealers may receive compensation in the

form of discounts, concessions or commissions from the underwriters or commissions from the purchasers for whom they may act as agents. Such compensation may be in excess of customary discounts, concessions or commissions.

If underwriters are used for the sale of our Common Stock, to the extent required by law, the names of the underwriters will be set forth in any applicable prospectus supplement used by the underwriters to sell those securities. The Selling Stockholders may use underwriters with whom we or the Selling Stockholders have a material relationship. We will describe the nature of such relationship in any applicable prospectus supplement naming the underwriter or underwriters.

If underwriters are used for the sale of our Common Stock, unless otherwise indicated in this Prospectus or a prospectus supplement relating to a particular offering of Common Stock, the obligations of any underwriters to purchase the securities will be subject to customary conditions precedent, and the underwriters will be obligated to purchase all of the securities offered if any of the securities are purchased.

If underwriters are used for the sale of our Common Stock, in connection with such offering, the underwriters may advise us that they may engage in stabilizing transactions, which involves making bids for, purchasing and selling shares of our Common Stock in the open market for the purpose of preventing or delaying a decline in the market price of our Common Stock while such offering is in progress. These stabilizing transactions may include making short sales of our Common Stock, which involves the sale by the underwriters of a greater number of shares of our Common Stock than they are required to purchase in such offering, and purchasing shares of our Common Stock on the open market to cover positions created by short sales. Short sales may be "covered" shorts, which are short positions in an amount not greater than any underwriters' option to purchase additional shares, or may be "naked" shorts, which are short positions in excess of that amount. The underwriters may close out any covered short position either by exercising an option to purchase additional shares, in whole or in part, or by purchasing shares in the open market. In making this determination, the underwriters will consider, among other things, the price of shares available for purchase in the open market compared to the price at which the underwriters may purchase shares through any option to purchase additional shares. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of our Common Stock in the open market that could adversely affect investors who purchase in an offering. To the extent that the underwriters create a naked short position, they will purchase shares in the open market to cover the position.

The anti-manipulation rules of Regulation M under the Exchange Act may apply to sales of the shares of our Common Stock pursuant to this Prospectus and any applicable prospectus supplement and to the activities of the Selling Stockholders. In addition, we will make copies of this Prospectus and any applicable prospectus supplement available to the Selling Stockholders for the purpose of satisfying the prospectus delivery requirements of the Securities Act. To the extent applicable, Regulation M may also restrict the ability of any person engaged in the distribution of our Common Stock to engage in market-making activities with respect to our Common Stock. All of the foregoing may affect the marketability of our Common Stock and the ability of any person or entity to engage in market-making activities with respect to our Common Stock.

In addition, any securities that qualify for sale pursuant to Rule 144 or Regulation S under the Securities Act or under Section 4(a)(1) of the Securities Act may be sold under such rules rather than pursuant to this Prospectus or a prospectus supplement.

The Selling Stockholders may enter into hedging transactions with broker-dealers, which may in turn engage in short sales of the shares of our Common Stock in the course of hedging the positions they assume. The Selling Stockholders may also sell short the shares and deliver our Common Stock to close out short positions, or loan or pledge the shares to broker-dealers that in turn may sell these shares. The Selling Stockholders may also enter into option or other transactions with broker-dealers or other financial institutions or the creation of one or more derivative securities that require the delivery to such broker-dealer or other financial institution of shares offered

by this Prospectus and any applicable prospectus supplement, which shares such broker-dealer or other financial institution may resell pursuant to this Prospectus and any applicable prospectus supplement. The Selling Stockholders also may transfer and donate shares of our Common Stock in other circumstances in which case the transferees, donees, pledgees or other successors in interest will be the selling beneficial owners for purposes of this Prospectus and any applicable prospectus supplement.

The aggregate proceeds to the Selling Stockholders from the sale of the shares of our Common Stock will be the purchase price of the shares less discounts and commissions, if any.

In offering the shares of our Common Stock covered by this Prospectus and any applicable prospectus supplement, the Selling Stockholders and any broker-dealers who execute sales for the Selling Stockholders may be deemed to be "underwriters" within the meaning of Section 2(a)(11) of the Securities Act in connection with such sales. Any profits realized by the Selling Stockholders and the compensation of any broker-dealer may be deemed to be underwriting discounts and commissions. Selling Stockholders who are "underwriters" within the meaning of Section 2(a)(11) of the Securities Act will be subject to the prospectus delivery requirements of the Securities Act and may be subject to certain statutory and regulatory liabilities, including liabilities imposed pursuant to Sections 11, 12 and 17 of the Securities Act and Rule 10b-5 under the Exchange Act.

In order to comply with the securities laws of certain states, if applicable, the shares of our Common Stock must be sold in such jurisdictions only through registered or licensed brokers or dealers. In addition, in certain states the shares may not be sold unless the shares are registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and is complied with.

At the time a particular offering of the shares is made, a prospectus supplement, if required, will be distributed, which will set forth the name of the Selling Stockholder, the aggregate amount of shares being offered by the Selling Stockholder and the terms of the offering, including, to the extent required, (1) the name or names of any underwriters, broker-dealers or agents, (2) any discounts, commissions and other terms constituting compensation from the Selling Stockholder and (3) any discounts, commissions or concessions allowed or re-allowed to be paid to broker-dealers.

Agents and underwriters and their respective affiliates may engage in transactions with, or perform services for us in the ordinary course of business for which they may receive customary fees and reimbursement of expenses.

The estimated offering expenses payable by the Selling Stockholders and/or the Company, in addition to any underwriting discounts and commissions that will be paid by the Selling Stockholders, will be described in any applicable prospectus supplement.

LEGAL MATTERS

The validity of the shares of common stock offered by this prospectus will be passed upon for us by Benesch, Friedlander, Coplan & Aronoff LLP, New York, New York. Any underwriters will also be advised about the validity of the securities and other legal matters by their own counsel, which will be named in any applicable prospectus supplement.

EXPERTS

The consolidated financial statements of Loar Holdings Inc. appearing in Loar Holdings Inc.'s Annual Report (Form 10-K) for the year ended December 31, 2024, have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their report thereon included therein, and incorporated herein by reference. Such financial statements are, and audited financial statements to be included in subsequently filed documents will be, incorporated herein in reliance upon the report of Ernst & Young LLP pertaining to such financial statements (to the extent covered by consents filed with the Securities and Exchange Commission) given on the authority of such firm as experts in accounting and auditing.

INFORMATION INCORPORATED BY REFERENCE

The SEC allows us to incorporate by reference into this Prospectus the information we file with it, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference in this Prospectus is considered to be an important part of this Prospectus, and information that we file later with the SEC will automatically update and supersede the information already incorporated by reference. Because we are incorporating by reference future filings with the SEC, this Prospectus is continually updated and those future filings may modify or supersede some of the information included or incorporated in this Prospectus. This means that you must look at all of the SEC filings that we incorporate by reference to determine if any of the statements in this Prospectus or in any document previously incorporated by reference have been modified or superseded. This Prospectus incorporates by reference the documents listed below, which we have already filed with the SEC, and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, including all filings made between the date of this Prospectus and the termination of any offering (excluding, in each case, any portions of such documents or future filings that have been "furnished" but not "filed" for purposes of the Exchange Act):

- 1. Annual Report on Form 10-K for the fiscal year ended December 31, 2024, filed with the SEC on March 31, 2025.
- The information specifically incorporated by reference into our Annual Report on Form 10-K for the fiscal year ended December 31, 2024 from our definitive proxy statement on Schedule 14A, filed with the SEC on April 22, 2025.
- 3. The description of our Common stock contained in our Registration Statement on Form 8-A filed with the SEC on April 24, 2024, pursuant to Section 12(b) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), including any amendments or reports filed for the purpose of updating such description.
- Current Report on Form 8-K filed on <u>February 21, 2025</u>, as amended by Amendment No. 1 to Current Report on Form8-K/A filed on <u>February 25, 2025</u>.
- 5. Current Report on Form 8-K filed on March 7, 2025.

We will provide at no cost to each person to whom a copy of this Prospectus is delivered, upon the written or oral request of any such person, a copy of the documents incorporated by reference as described above (other than exhibits, unless specifically incorporated by reference in such document). Requests for such a copy should be directed to Loar Holdings Inc., 20 New King Street, White Plains, New York 10604; Attention: Investor Relations; (914) 909-1311; IR@loargroup.com.

Notwithstanding the foregoing, unless specifically stated to the contrary, information that we furnish (and that is not deemed "filed" with the SEC) under Items 2.02 and 7.01 of any Current Report on Form 8-K, including the related exhibits under Item 9.01, is not incorporated by reference into this Prospectus or the Registration Statement of which this Prospectus is a part.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the SEC. The SEC maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC at https://www.sec.gov. Our filings with the SEC are also available on our website at https://www.loargroup.com. Information contained on or that can be accessed through our website does not constitute part of this Prospectus and the inclusion of our website address in this Prospectus or any accompanying prospectus supplement is an inactive textual reference only. You should not consider information contained on our website to be part of this Prospectus or any accompanying prospectus supplement in deciding whether to purchase our securities.

70,563,595 Shares



LOAR HOLDINGS INC.

Common Stock

PROSPECTUS

May 1, 2025

PART II. INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution.

The following table sets forth the estimated expenses in connection with this Registration Statement.

SEC registration fee	\$ *
Legal fees and expenses	†
Accounting fees and expenses	†
Printing fees	†
Miscellaneous	†

^{*} Under SEC Rules 456(b) and 457(r), the SEC registration fee will be paid at the time of any particular offering of securities under this registration statement, and is therefore not currently determinable.

Item 15. Indemnification of Directors and Officers.

Section 102(b)(7) of the DGCL allows a corporation to provide in its certificate of incorporation that directors and/or officers of the corporation will not be personally liable to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director or officer, except where the director or officer breached the duty of loyalty, failed to act in good faith, engaged in intentional misconduct or knowingly violated a law, authorized the payment of a dividend or approved a stock repurchase in violation of Delaware corporate law or obtained an improper personal benefit. Our certificate of incorporation provides for this limitation of liability.

Section 145 of the DGCL ("Section 145") provides, among other things, that a Delaware corporation may indemnify any person who was, is or is threatened to be made, party to any threatened, pending, or completed action, suit or proceeding, whether civil, criminal, administrative, or investigative (other than an action by or in the right of such corporation), by reason of the fact that such person is or was an officer, director, employee, or agent of such corporation or is or was serving at the request of such corporation as a director, officer, employee, or agent of another corporation or enterprise. The indemnity may include expenses (including attorneys' fees), judgments, fines, and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit, or proceeding, provided such person acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the corporation's best interests and, with respect to any criminal action or proceeding, had no reasonable cause to believe that his or her conduct was unlawful. A Delaware corporation may indemnify any persons who were or are a party to any threatened, pending, or completed action or suit by or in the right of the corporation by reason of the fact that such person is or was a director, officer, employee, or agent of another corporation or enterprise. The indemnity may include expenses (including attorneys' fees) actually and reasonably incurred by such person in connection with the defense or settlement of such action or suit, provided such person acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the corporation's best interests, provided further that no indemnification is permitted without judicial approval if the officer, director, employee, or agent is adjudged to be liable to the corporation. Where an officer or director is successful on the merits or otherwise in the defense of any action referred to above, the corporation must indemnify him or h

Section 145 further authorizes a corporation to purchase and maintain insurance on behalf of any person who is or was a director, officer, employee, or agent of the corporation or is or was serving at the request of the corporation as a director, officer, employee, or agent of another corporation or enterprise, against any liability asserted against such person and incurred by such person in any such capacity, or arising out of his or her status as such, whether or not the corporation would otherwise have the power to indemnify such person under Section 145.

[†] These fees are calculated based on the number of issuances and accordingly cannot be estimated at this time and will be reflected in the applicable prospectus supplement.

Our bylaws provide that we must indemnify, and advance expenses to, our directors and officers to the full extent authorized by the DGCL. We have also entered into indemnification agreements with our directors, which agreements require us to indemnify these individuals to the fullest extent permitted under Delaware law against liabilities that may arise by reason of their service to us, and to advance expenses incurred as a result of any proceeding against them as to which they could be indemnified.

The indemnification rights set forth above shall not be exclusive of any other right which an indemnified person may have or hereafter acquire under any statute, provision of our certificate of incorporation, our bylaws, agreement, vote of stockholders or disinterested directors or otherwise. Notwithstanding the foregoing, we shall not be obligated to indemnify a director or officer in respect of a proceeding (or part thereof) instituted by such director or officer, unless such proceeding (or part thereof) has been authorized by our Board pursuant to the applicable procedure outlined in the bylaws.

Section 174 of the DGCL provides, among other things, that a director, who willfully or negligently approves of an unlawful payment of dividends or an unlawful stock purchase or redemption, may be held jointly and severally liable for such actions. A director who was either absent when the unlawful actions were approved or dissented at the time may avoid liability by causing his or her dissent to such actions to be entered in the books containing the minutes of the meetings of the board of directors at the time such action occurred or immediately after such absent director receives notice of the unlawful acts.

We maintain standard policies of insurance that provide coverage (1) to our directors and officers against loss rising from claims made by reason of breach of duty or other wrongful act, and (2) to us with respect to indemnification payments that we may make to such directors and officers.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers, or persons controlling us under any of the foregoing provisions, in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

Item 16. Exhibits.

The following documents are filed herewith or incorporated herein by reference.

Exhibit Number	Description of Document
1.1*	Form of Underwriting Agreement
4.1	Certificate of Incorporation of Loar Holdings Inc. (incorporated by reference to Exhibit 3.1 to the Company's Amendment No. 1 to Registration Statement on Form S-1/A filed on April 17, 2024)
4.2	Bylaws of Loar Holdings Inc. (incorporated by reference to Exhibit 3.1 to the Company's Amendment No. 2 to Registration Statement on Form S-1/A filed on April 17, 2024)
5.1	Opinion of Benesch, Friedlander, Coplan & Aronoff LLP
23.1	Consent of Ernst & Young LLP
23.2	Consent of Benesch, Friedlander, Coplan & Aronoff LLP (contained in Exhibit 5.1)
24.1	Powers of Attorney (included on the Signature Page to this Registration Statement)
107	Filing Fee Table

^{*} To be filed, if necessary, as an exhibit to a post-effective amendment to this Registration Statement or as an exhibit to a Current Report on Form 8-K or other report to be filed by the Company pursuant to Section 13(a) or 15(d) of the Exchange Act and incorporated herein by reference.

Item 17. Undertakings.

- (a) The undersigned registrant hereby undertakes:
 - (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:
 - (i) to include any prospectus required by Section 10(a)(3) of the Securities Act;
 - (ii) to reflect in the prospectus any facts or events arising after the effective date of the Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the Registration Statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of a prospectus filed with the SEC, pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective Registration Statement; and
 - to include any material information with respect to the plan of distribution not previously disclosed in the Registration Statement or any material change to such information in the Registration Statement;

provided, however, that paragraphs (a)(1)(i), (a)(1)(ii) and (a)(1)(iii) above do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the SEC by the registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in the Registration Statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the Registration Statement.

- (2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new Registration Statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (4) That, for the purpose of determining liability under the Securities Act to any purchaser:
 - (A) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the Registration Statement as of the date the filed prospectus was deemed part of and included in this Registration Statement; and
 - (B) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a Registration Statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act shall be deemed to be part of and included in the Registration Statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the Registration Statement relating to the securities in the Registration Statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof; provided, however, that no statement made in a Registration Statement or prospectus that is part of the Registration Statement or made in a document

incorporated or deemed incorporated by reference into the Registration Statement or prospectus that is part of the Registration Statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the Registration Statement or prospectus that was part of this Registration Statement or made in any such document immediately prior to such effective date.

- (b) The undersigned registrant hereby undertakes that, for the purpose of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to Section 13(a) or 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in this Registration Statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.
- (c) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to requirements of the Securities Act of 1933, as amended, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of White Plains, State of New York, on May 1, 2025.

LOAR HOLDINGS INC.

By /s/ Dirkson Charles
Dirkson Charles
President, Chief Executive Officer and Executive
Co-Chairman

POWER OF ATTORNEY

Each person whose signature appears below constitutes and appoints Dirkson Charles, Glenn D'Alessandro and Michael Manella as his or her true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution for him or her and in his or her name, place and stead, in any and all capacities to sign any and all amendments (including post-effective amendments) to this Registration Statement, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, and to take such actions in, and file with, the appropriate applications, statements, consents and other documents as may be necessary or expedient to register any securities of the registrant for sale, granting unto said attorney-in-fact and agent full power and authority to do so and perform each and every act and thing requisite or necessary to be done in and about the premises, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all the said attorney-in-fact and agent or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed below by the following persons in the capacities indicated on the dates indicates.

Signatures	Title	Date
/s/ Dirkson Charles Dirkson Charles	President, Chief Executive Officer, Executive Co-Chairman and Director (principal executive officer)	May 1, 2025
/s/ Glenn D'Alessandro Glenn D'Alessandro	Treasurer and Chief Financial Officer (principal financial and accounting officer)	May 1, 2025
/s/ David Abrams David Abrams	Director	May 1, 2025
/s/ Raja Bobbili Raja Bobbili	Director	May 1, 2025
/s/ Alison Bomberg Alison Bomberg	Director	May 1, 2025
/s/ Anthony Carpenito Anthony Carpenito	Director	May 1, 2025

/s/ M. Chad Crow M. Chad Crow	Director	May 1, 2025
/s/ Taiwo Danmola Taiwo Danmola	Director	May 1, 2025
/s/ Paul S. Levy Paul S. Levy	Director	May 1, 2025
/s/ Margaret McGetrick Margaret McGetrick	Director	May 1, 2025
/s/ Brett Milgrim Brett Milgrim	Executive Co-Chairman and Director	May 1, 2025

Loar Holdings Inc. 20 New King Street White Plains, New York 10604 RE: Form S-3 Registration Statement

Ladies and Gentlemen:

We have acted as special counsel for Loar Holdings Inc., a Delaware corporation (the "Company"), in connection with the Company's Registration Statement on Form S-3 (the "Registration Statement") filed with the United States Securities and Exchange Commission (the 'Commission") on May 1, 2025, together with all exhibits, pursuant to the Securities Act of 1933, as amended (the "Securities Act"), relating to the offer and sale by certain selling shareholders of an aggregate of up to 70,563,595 shares (the "Shares") of the Company's common stock, par value \$0.01 per share.

In connection with our acting as hereinabove described, we have examined and relied solely on originals or copies, certified or otherwise identified to our satisfaction as being true copies, of all such records of the Company, all such agreements, certificates of officers of the Company and others, and such other documents, certificates and corporate or other records as we have deemed necessary as a basis for the opinion expressed in this letter, including, without limitation, the following:

- (a) the Certificate of Incorporation of the Company, as certified by the Secretary of State of the State of Delaware as of May 1, 2025, and the Bylaws of the Company, as certified by the Secretary of the Company; and
- (b) the Registration Statement and all exhibits thereto.

As to facts material to the opinion expressed in this letter, we have relied on statements and certificates of officers and of state authorities.

In rendering the opinion expressed in this letter, we have assumed, with your permission and without any investigation on our part, that:

- (a) all signatures are genuine;
- (b) all natural persons have legal capacity; and
- (c) all writings and other records submitted to us as originals are authentic, and that all writings and other records submitted to us as certified, electronic, photostatic, or other copies, facsimiles or images conform to authentic originals.

We have investigated such questions of law for the purpose of rendering the opinion in this letter as we have deemed necessary. We express no opinion in this letter concerning any law other than the Delaware General Corporation Law, which we assume to be the only applicable laws with respect to such opinion.

On the basis of and in reliance on the foregoing, and subject to the limitations, qualifications and exceptions set forth below, we are of the opinion that the Shares are duly authorized and validly issued and outstanding, fully paid and nonassessable.

Loar Holdings Inc. May 1, 2025 Page 2 of 2

The above opinion is subject to the following additional limitations, qualifications and exceptions:

- A. the effect and application of bankruptcy, insolvency, fraudulent conveyance, reorganization, moratorium and other laws now or hereafter in effect which relate to or limit creditors' rights and remedies generally;
- B. the effect and application of general principles of equity, whether considered in a proceeding in equity or at law;
- C. limitations imposed by or resulting from the exercise by any court of its discretion; and
- D. limitation imposed by reason of generally applicable public policy principle or considerations.

We do not assume any responsibility for the accuracy, completeness or fairness of any information, including, but not limited to, financial information, furnished to you by the Company concerning the business or affairs of the Company or any other information furnished to you of a factual nature

We express no opinions:

- I. regarding any federal securities laws, rules, or regulations (including, without limitation, any laws administered by, and any rules or regulations administered or promulgated by, the United States Securities and Exchange Commission);
 - II. regarding any state securities laws, rules, or regulations (including, without limitation, any so-called "Blue Sky" laws);
- III. regarding any antitrust and unfair competition laws and regulations, laws and regulations relating to tying arrangements, banking laws or regulations, regulations of the Board of Governors of the Federal Reserve System, or insurance laws or regulations; or
 - IV. regarding compliance with fiduciary duty requirements.

We hereby consent to the filing of this opinion letter as Exhibit 5.1 to the Registration Statement and to the reference to our firm under the caption "Legal Matters" in the prospectus included in the Registration Statement. In giving such consent, we do not thereby admit that we are within the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission. The opinion so rendered may not be relied upon for any other purpose, or relied upon by any other person, firm, or entity for any purpose. This letter may not be paraphrased or summarized, nor may it be duplicated, quoted or reproduced in part.

Very truly yours,

/s/ Benesch, Friedlander, Coplan & Aronoff LLP BENESCH, FRIEDLANDER, COPLAN & ARONOFF LLP

Consent of Independent Registered Public Accounting Firm

We consent to the reference to our firm under the caption "Experts" in this Registration Statement(Form S-3) and related Prospectus of Loar Holdings Inc. for the registration of common stock and to the incorporation by reference therein of our report dated March 31, 2025, with respect to the consolidated financial statements of Loar Holdings Inc. included in its Annual Report (Form 10-K) for the year ended December 31, 2024, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Stamford, Connecticut May 1, 2025

Calculation of Filing Fee Tables

Form S-3 (Form Type)

Loar Holdings Inc.

(Exact Name of Registrant as Specified in its Charter)

Table 1: Newly Registered and Carry Forward Securities

	Security Type	Security Class Title	Fee Calculation or Carry Forward Rule	Amount Registered Newly	Proposed Maximum Offering Price Per Unit Registered	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee	Carry Forward Form Type	Carry Forward File Number	Carry Forward Initial Effective Date	Filing Fee Previously Paid In Connection with Unsold Securities to be Carried Forward
Fees to be Paid	Equity	Common Stock, par value \$0.01 per share	Rule 456(b) and Rule 457(r)	(1)	(1)	(1)	(1)	(1)				
Fees Previously Paid	N/A	N/A	N/A	N/A	N/A	N/A		N/A				
				Carry	Forward S	Securities				•	•	
Carry Forward Securities	N/A	N/A	N/A	N/A		N/A			N/A	N/A	N/A	N/A
	Total Offering Amounts				N/A		N/A					
	Total Fees Previously Paid						N/A					
	Total Fee Offsets						N/A					
	Net Fee Due						N/A					

⁽¹⁾ An indeterminate aggregate amount or number of shares of the Registrant's common stock is being registered hereunder, as may from time to time be offered, at indeterminate prices. In accordance with Rules 456(b) and 457(r) under the Securities Act of 1933, as amended, the Registrant is deferring payment of all of the related registration fees and such registration fees will be subsequently paid on a "pay as you go" basis. The Registrant will calculate the registration fee applicable to an offer of securities pursuant to this Registration Statement based on the fee payment rate in effect on the date of such fee payment.