UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM S-3 REGISTRATION STATEMENT

UNDER

THE SECURITIES ACT OF 1933

Markforged Holding Corporation

(Exact Name of Registrant as Specified in Its Charter)

Delaware (State or other jurisdiction of incorporation or organization) 3559 (Primary Standard Industrial Classification Code Number) 98-154859 (I.R.S. Employer Identification Number)

480 Pleasant St. Watertown, MA 02472

(Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

Shai Terem Chief Executive Officer Markforged Holding Corporation 480 Pleasant St. Watertown, MA 02472 (866) 496-1805

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Kenneth J. Gordon, Esq. Michael J. Minahan, Esq. Aaron J. Berman, Esq. Goodwin Procter LLP 100 Northern Avenue Boston, MA 02210 (617) 570-1000 Stephen Karp General Counsel and Secretary Markforged Holding Corporation 480 Pleasant St. Watertown, MA 02472 (866) 496-1805

Approximate date of commencement of proposed sale to the public: From time to time on or after the effective date of this registration statement.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box: 🗆

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box:

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Securities Exchange Act of 1934

 Large accelerated filer
 Accelerated filer
 Accelerated filer

 Non-accelerated filer
 Smaller reporting company
 Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act. \Box

The Registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment that specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

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The information in this preliminary prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell these securities and is not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

SUBJECT TO COMPLETION DATED August 31, 2022

PRELIMINARY PROSPECTUS



4,100,000 SHARES OF COMMON STOCK OF MARKFORGED HOLDING CORPORATION

This prospectus relates to the resale or other disposition from time to time of up to 4,100,000 shares (the "Shares") of common stock, par value \$0.0001 per share, of Markforged Holding Company (the "Company"), by the Selling Securityholder identified in this prospectus, including its transferees, pledgees or donees or their respective successors. The Shares offered by the Selling Securityholder consist of 4,100,000 shares of common stock that were issued in a private placement pursuant to that certain Sale and Purchase Agreement (the "Purchase Agreement"), by and between the Company and Höganäs Aktiebolag, a limited liability company incorporated under the laws of Sweden (the "Seller") dated as of July 11, 2022 (the "Acquisition").

The Selling Securityholder identified in this prospectus may offer the shares of common stock pursuant to this prospectus from time to time through public or private transactions at fixed prices, at market prices prevailing at the time of sale, at prices related to prevailing market prices or at privately negotiated prices. The Selling Securityholder may sell shares to or through underwriters, broker-dealers or agents, who may receive compensation in the form of discounts, concessions or commissions from the Selling Securityholder, the purchasers of the shares, or both. For additional information on the methods of sale that may be used by the Selling Securityholder, see the section entitled "Plan of Distribution". For further information regarding the Selling Securityholder, see the section entitled "Selling Securityholder".

We are not selling any shares of common stock under this prospectus and will not receive any proceeds from the sale by the Selling Securityholder of such shares. We are paying the cost of registering the shares of common stock covered by this prospectus as well as various related expenses. The Selling Securityholder is responsible for all selling commissions, transfer taxes and other costs related to the offer and sale of their shares.

You should carefully read this prospectus and any amendments or supplements accompanying this prospectus, together with any documents incorporated by reference herein or therein, before you make your investment decision.

The Selling Securityholder may sell any, all or none of the securities offered by this prospectus and we do not know when or in what amount the Selling Securityholder may sell its common stock hereunder following the effective date of the registration statement of which this prospectus forms a part.

Our common stock is listed on New York Stock Exchange ("NYSE") under the symbol "MKFG". On August 30, 2022, the closing sale prices of our common stock as reported by the NYSE was \$2.40 per share.

Investing in our securities involves risks that are described in the "*Risk Factors*" section beginning on page 10 of this prospectus and under similar headings in any amendments or supplements to this prospectus and the documents incorporated herein by reference.

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

The date of this prospectus is

, 2022.

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You should rely only on the information provided in this prospectus, as well as the information incorporated by reference into this prospectus and any applicable prospectus supplement or free writing prospectus. Neither we nor the Selling Securityholder have authorized anyone to provide you with different information. As used throughout this prospectus, references to the "Selling Securityholder" shall mean the person listed in the table set forth in the section titled "*Selling Securityholder*" and the pledgees, donees, transferees, assignees, successors, designees and others who later come to hold any of the Selling Securityholder's interest in the common stock, other than through a public sale.

No offers of these securities will be made in any jurisdiction where the offer is not permitted. You should not assume that the information in this prospectus, any applicable prospectus supplement or free writing prospectus or any documents incorporated by reference is accurate as of any date other than the date of the applicable document. Since the respective dates of this prospectus and the documents incorporated by reference into this prospectus, our business, financial condition, results of operations and prospects may have changed.

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 that we filed with the United States Securities and Exchange Commission (the "SEC") using a "shelf" registration process. Under the shelf registration process, the Selling Securityholder may, from time to time, sell or otherwise dispose of the securities offered by it described in this prospectus. We will not receive any proceeds from the sale or other disposition by such Selling Securityholder of the securities offered by it described in this prospectus.

Neither we nor the Selling Securityholder have authorized anyone to provide you with any information or to make any representations other than those contained in or incorporated by reference into this prospectus or any applicable prospectus supplement or any free writing prospectuses prepared by or on behalf of us or to which we have referred you. Neither we nor the Selling Securityholder take responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. Neither we nor the Selling Securityholder will make an offer to sell these securities in any jurisdiction where such offer or sale are not permitted. No dealer, salesperson or other person is authorized to give any information or to represent anything not contained in this prospectus, any applicable prospectus supplement or any related free writing prospectus. As used throughout this prospectus, references to "person" shall mean any individual, firm, corporation, partnership, limited liability company, incorporated or unincorporated association, joint stock company, governmental authority or instrumentality or other entity of any kind.

You should assume that the information appearing in or incorporated by reference into this prospectus or any prospectus supplement is accurate as of the date on the front of those documents only, regardless of the time of delivery of this prospectus or any applicable prospectus supplement, or any sale of a security. Our business, financial condition, results of operations and prospects may have changed since those dates.

The Selling Securityholder and its permitted transferees may use this shelf registration statement to sell securities from time to time through any means described in the section titled "*Plan of Distribution*". More specific terms of any securities that the Selling Securityholder and its permitted transferees offer and sell may be provided in a prospectus supplement that describes, among other things, the specific amounts and prices of the securities being offered and the terms of the offering.

We may also provide a prospectus supplement or post-effective amendment to the registration statement to add information to, or update or change information contained in, this prospectus. Any statement contained in this prospectus will be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in such prospectus supplement or post-effective amendment modifies or supersedes such statement. Any statement so modified will be deemed to constitute a part of this prospectus only as so modified, and any statement so superseded will be deemed not to constitute a part of this prospectus and any applicable prospectus supplement or post-effective amendment to the registration statement together with the additional information to which we refer you in the sections of this prospectus titled "Where You Can Find More Information" and "Documents Incorporated by Reference".

Unless the context indicates otherwise, references in this prospectus to the "company", "Company", "Markforged Holding Corporation", "we", "us", "our" and similar terms refer to Markforged Holding Corporation and its consolidated subsidiaries. References to "AONE" refer to our predecessor company, one, prior to the consummation of the domestication of Markforged Holding Corporation as a corporation incorporated in the State of Delaware (the "Domestication") and the merger of Caspian Merger Sub Inc., a Delaware corporation and subsidiary of AONE, with and into MarkForged, Inc., with MarkForged, Inc. surviving the merger as a wholly owned subsidiary of Markforged Holding Corporation.

This prospectus contains summaries of certain provisions contained in some of the documents described herein, but reference is made to the actual documents for complete information. All of the summaries are qualified in their entirety by the actual documents. Copies of some of the documents referred to herein have been filed, will be filed or will be incorporated by reference as exhibits to the registration statement of which this prospectus is a part, and you may obtain copies of those documents as described below under "Where You Can Find More Information".

TRADEMARKS

This document contains references to trademarks, service marks and trade names owned by us or belonging to other entities. Solely for convenience, trademarks, service marks and trade names referred to in this prospectus may appear without the $^{\textcircled{B}}$ or $^{\texttt{M}}$ symbols, but such references are not intended to indicate, in any way, that the applicable licensor will not assert, to the fullest extent under applicable law, its rights to these trademarks, service marks and trade names. Markforged Holding Corporation does not intend its use or display of other companies' trade names, trademarks or service marks to imply a relationship with, or endorsement or sponsorship of it by any other companies. All trademarks, service marks and trade names included in this document are the property of their respective owners.

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains and each prospectus supplement may contain statements that are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act") and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and are not historical facts. This includes, without limitation, statements regarding the financial position, business strategy and the plans and objectives of management for our future operations of Markforged Holding Corporation. These statements constitute projections, forecasts and forward-looking statements, and are not guarantees of performance. Such statements can be identified by the fact that they do not relate strictly to historical or current facts. When used in this prospectus, words such as "anticipate", "believe", "continue", "could", "estimate", "expect", "intend", "may", "might", "plan", "possible", "potential", "predict", "project", "should", "strive", "would" and similar expressions may identify forward-looking statements, but the absence of these words does not mean that a statement is not forward-looking.

Forward-looking statements in this prospectus and in any document incorporated by reference in this prospectus may include, for example, statements about:

- the benefits of the Acquisition, and other recent acquisitions and our ability to realize such benefits;
- our financial performance;
- the effect of uncertainties related to the novel coronavirus pandemic("COVID-19") and global supply chain disruptions;
- the expected growth of the additive manufacturing industry;
- our anticipated growth and our ability to achieve and maintain profitability in the future;
- the impact of the regulatory environment and complexities with compliance related to such environment on us;
- the effect of and our ability to respond to general economic, political and business conditions, including recent increases in interest rates, rising inflation, foreign exchange fluctuations and risk of recession;
- our ability to access sources of capital, including debt financing and other sources of capital to finance operations and growth;
- the success of our marketing efforts and our ability to expand our customer base;
- our ability to develop and deliver new products, features and functionality that are competitive and meet market needs;
- our ability to maintain an effective system of internal controls over financial reporting;
- · our ability to remediate our material weaknesses in our internal control of financial reporting;
- our ability to grow and manage growth profitably and retain key employees;
- · the outcome of legal or governmental proceedings that may be instituted against us; and
- other factors detailed under the section titled "Risk Factors" and in any applicable prospectus supplement and any documents incorporated by reference herein and therein.

These forward-looking statements are based on information available as of the date of this prospectus and current expectations, forecasts and assumptions, and involve a number of judgments, risks and uncertainties. Factors that may cause actual results to differ materially from current expectations include, among other things, those listed in the section entitled "Risk Factors" in our Annual Report on Form 10-K for the fiscal year ended December 31, 2021, and our subsequent Quarterly Reports on Form 10-Q, as well as any amendments thereto reflected in

subsequent filings with the SEC, and under the heading "Risk Factors" in this prospectus. Accordingly, forward-looking statements should not be relied upon as representing our views as of any subsequent date, and we do not undertake any obligation to update forward-looking statements to reflect events or circumstances after the date they were made, whether as a result of new information, future events or otherwise, except as may be required under applicable securities laws.

As a result of a number of known and unknown risks and uncertainties, our actual results or performance may be materially different from those expressed or implied by these forward-looking statements. You should not place undue reliance on these forward-looking statements.

PROSPECTUS SUMMARY

This summary highlights selected information from this prospectus and does not contain all of the information that is important to you in making an investment decision. This summary is qualified in its entirety by the more detailed information included elsewhere or incorporated by reference in this prospectus. Before making your investment decision with respect to our securities, you should carefully read this entire prospectus, any applicable prospectus supplement or free writing prospectus and the documents referred to in the sections of this prospectus entitled "Where You Can Find More Information" and "Documents Incorporated by Reference".

Company Overview

Our platform, The Digital Forge, is an intuitive additive manufacturing platform powering engineers, designers and manufacturing professionals globally. The Digital Forge combines precise & reliable 3D printers and metal and composite proprietary materials with its cloud-based learning software offering to empower manufacturers to create more resilient and agile supply chains. Founded in 2013 by two MIT-educated engineers, Markforged is based in greater Boston, Massachusetts, where we have our own in-house manufacturing facility and where we design all of our industrial 3D printers, software and metal and composite proprietary materials.

Engineers and product developers are constrained by the physical parameters of conventional manufacturing processes. These parameters define the design possibilities, adding cost and lead time to manufacturing programs and placing firm boundaries on the performance of parts and products. Additive manufacturing lifts many of these limitations, opening up new design capabilities that allow engineers to harness and sustain measurable advantages in durability, weight and customizability.

Traditional manufacturing faces significant limitations that impact profitability and market responsiveness. In mature economies, like the United States, manufacturers find it increasingly difficult to hire the skilled technicians required to operate the legacy equipment that powers a majority of manufacturing operations. According to a 2020 report from The Economist, the generation of specialized tool and die makers that are exiting the labor market and the emerging workforce that is replacing these individuals are trained on completely different educational foundations built on information technology and digital aptitude.

We believe this phenomenon will intensify the struggle to find skilled technicians for businesses that fail to adopt modern manufacturing technologies.

Designed to scale into the future, our software-enabled platform delivers clear value today to thousands of customers (including both direct customers and customers of our value added resellers that have purchased one or more of our products) around the world. Our customers have printed millions of parts, meeting customer needs across the entire product development lifecycle, including prototyping, tooling, production and aftermarket spares and replacement parts as well as mid-volume and high-volume production parts. Blue chip customers in leading-edge industries such as aerospace, military and defense, industrial automation, space exploration, healthcare and automotive rely on our platform for mission-critical, end-use parts on-demand and at the point-of-need.

Our portfolio of rugged 3D printers include: (i) desktop printers that produce quality parts in settings where space is limited, (ii) industrial composite printers that provide powerful, predictable functionality through their software, sensors, materials and print modes and (iii) metal printers that can fabricate strong, complex metal parts in a variety of advanced metals. Across all our models, our powerful yet easy-to-use platform, and our industrial-grade materials, enable engineers to make functional parts for manufacturing environments and other demanding applications.

Our software platform was developed alongside our first printers and shipped as a fully integrated solution. As we have grown, we have continued to develop and scale our software, providing a single platform to interact with

each of our hardware devices and driving consistent reliability for our customers. From simple file storage and versioning to accessible live telemetry, our products are designed to address the unseen minutiae that can inhibit manufacturers' productivity. In a manufacturing ecosystem inundated with non-intuitive user experiences, the simplicity and power of our software drives adoption of our platform with higher customer satisfaction and retention rates.

Today, manufacturers face many limitations from idea generation to finished industrial goods. Part design is inherently limited by traditional subtractive manufacturing methods, such as Computer Numerically Controlled machining. In addition, in many cases, the existing manufacturing workforce does not have the necessary skills to meet the demands of the next generation of manufacturing, which is embracing digital technologies.

We envision a different future where smart 3D printers distributed in networks that extend directly to the point-of-need can overcome these limitations. We are working to make this future a reality today. For example, a military customer stations Markforged printers in combat zones to create digital supply chains, producing parts in the field, on-demand. A state government customer recently sponsored a pandemic-readiness project that distributed 300 Markforged printers across the state to create a large emergency alert system for manufacturing physical parts on demand. As a further example, a global consumer products company has utilized Markforged printers in more than 30 factories to optimize assembly line production. As we continue to innovate with faster, larger and more precise machines capable of reliably printing more specific materials, we expect to see examples like these scale in both the value they deliver our customers and the impact of additive technology on the broader manufacturing industry.

In 2014, we first commercialized our patented Continuous Fiber Reinforcement ("CFR"), which is a process that uses continuous strands of composite fibers to make parts as strong as and capable of replacing aluminum. In 2018, we released the Metal X system, which is now capable of printing 17-4 PH Stainless Steel, Copper, H13 Tool Steel, Inconel 635, and A2 and D2 Tool Steel in a shop or office environment. These products connect to our secure cloud infrastructure and are controlled via web browser, providing a single, simple digital workflow for printing both carbon fiber and metal for organizations that scale from one user to thousands. We have the ability to leverage data from our existing global fleet of printers connected to cloud architecture to enhance our research and development capabilities for the future benefit of our customers. The data generated by our fleet of thousands of connected printers flows into Blacksmith, an AI-powered, closed-loop manufacturing solution, which is currently offered as a software subscription.

The Markforged team combines cutting-edge technical expertise with industry experience in commercializing new technologies. Shai Terem, our President and Chief Executive Officer, is a veteran of the digital printing technology industry previously serving as President of the Americas at Kornit, where he led an aggressive and successful restructuring of the region and, prior to that, as Americas VP of Finance & Operations for Stratasys, where he held several operational responsibilities within the company. Mark Schwartz, our Chief Financial Officer, has extensive experience as a public company Chief Financial Officer as well as leading capital market transactions and as part of management teams at high-growth hardware manufacturing and SaaS and AI companies.

Markforged is Delivering the Promise of Additive Manufacturing Today.

We invented The Digital Forge, a platform designed to overcome both the constraints of conventional manufacturing as well as the limitations of legacy 3D printing solutions. Manufacturers can produce parts that are functionally applicable for the most demanding engineering applications on affordable machines roughly the size of a microwave or conventional oven. The parts printed on The Digital Forge are based in continuous carbon fiber, a high-strength material that empowers engineers to use the parts for applications that were previously reserved for metal parts. Moreover, the software that powers The Digital Forge was designed to be cloud-first. In

contrast to legacy additive solutions, Markforged's printers can be accessed and controlled from anywhere in the world and entire libraries of part inventory can be digitized and printed only when needed. This smart, simple, empowering and robust platform is designed to give engineers, designers and manufacturing professionals the power to solve their manufacturing problems today and build anything they imagine.

Our Growth Strategy

Our future growth is driven by five key strategies:

- **Continue to Fuel Integrated Platform with Software Solutions.** Our integrated platform is designed to scale in both capability and size over time. As we invest additional resources into the feature set of our platform, we expect to be able to solve more customer problems and applications. As we solve more problems, customers will print more parts. As we print more parts, more data will be generated, making our premium software solutions, including Blacksmith and enterprise-grade fleet management, smarter. As our premium software solutions get smarter, we will be able to print better, more accurate parts. As we print better parts, more customers will adopt our premium software solutions, which will continue to drive this growth and improvement cycle more rapidly.
- Expand Customer Use Cases and Applications. As we develop printers that are faster, larger and more precise, and add new industrial
 materials to our capabilities, we continually expand the possible use cases for our customers. We regularly release new printers,
 software functionality and materials that customers may apply to a variety of new problems and use cases.
- Drive Deeper, More Efficient Go-To-Market Coverage. As we grow our global distribution footprint and drive optimizations in our go-to-market model, we will grow our sales. For example, in the last year, we formed partnerships with global distributors providing the opportunity to scale and access to hundreds of thousands of potential manufacturing customers across the world.
- Expand Position as a Trusted Brand. Due to the innovative technology that we have invented, which is addressing significant global
 problems in manufacturing, we have the opportunity to invest resources to build a meaningful industrial technology brand. As our brand
 grows, we expect to generate more organic interest in our products, lowering our cost to acquire customers, which will facilitate our
 growth and improvement cycle and help expand our business.
- *Target Strategic M&A Opportunities.* We expect to grow inorganically by acquiring companies with technologies and people to complement our platform and team and have completed multiple acquisitions since the start of the second quarter of 2022.

Implications of Being an Emerging Growth Company

We are an "emerging growth company" as defined in Section 2(a)(19) of the Securities Act, as modified by the Jumpstart Our Business Startups Act of 2012 (the "JOBS Act"). As such, we are eligible for and intend to take advantage of certain exemptions from various reporting requirements applicable to other public companies that are not emerging growth companies for as long as we continue to be an emerging growth company, including (i) the exemption from the auditor attestation requirements with respect to internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act, (ii) the exemptions from say-on-pay, say-on-frequency and say-on-golden parachute voting requirements and (iii) reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements.

We will remain an emerging growth company until the earlier of: (i) the last day of the fiscal year (a) following the fifth anniversary of the closing of the IPO, (b) in which we have total annual gross revenue of at least \$1.07 billion, or (c) in which we are deemed to be a "large accelerated filer" under the Exchange Act, which

would occur if the market value of our common equity held by non-affiliates exceeds \$700.0 million as of the last business day of our most recently completed second fiscal quarter; or (ii) the date on which we have issued more than \$1.0 billion in non-convertible debt securities during the prior three-year period.

In addition, the JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. This allows an emerging growth company to delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have elected to avail ourselves of this extended transition period and, as a result, we may adopt new or revised accounting standards on the relevant dates on which adoption of such standards is required for non-public companies instead of the dates required for other public companies.

Implications of Being a Smaller Reporting Company

We are also a "smaller reporting company" as defined in Rule 12b-2 of the Exchange Act. Smaller reporting companies may take advantage of certain reduced disclosure obligations, including, among other things, providing only two years of audited financial statements. We will remain a smaller reporting company until the last day of any fiscal year for so long as either (1) the market value of our shares of common stock held by non-affiliates does not equal or exceed \$250.0 million as of the prior June 30th, or (2) our annual revenues did not equal or exceed \$100.0 million during such completed fiscal year and the market value of our shares of common stock held by non-affiliates did not equal or exceed \$700.0 million as of the prior June 30th. To the extent we take advantage of any reduced disclosure obligations, it may make comparison of our financial statements with other public companies difficult or impossible.

Corporate Information

Our corporate headquarters is located at 480 Pleasant Street, Watertown, Massachusetts 02472. Our website address is https://markforged.com/. The information contained in or accessible from our website is not incorporated into this prospectus, and you should not consider it part of this prospectus. We have included our website address in this prospectus solely as an inactive textual reference.

THE OFFERING							
Issuer	Markforged Holding Corporation						
Shares of common stock offered by the Selling Securityholder	4,100,000 shares of common stock issued in connection with the Acquisition to the Selling Securityholder.						
Terms of the offering	The Selling Securityholder will determine when and how it will dispose of the securities registered under this prospectus for resale. See " <i>Plan of Distribution</i> ".						
Use of proceeds	We will not receive any proceeds from the sale of the securities registered under this prospectus by the Selling Securityholder.						
Risk Factors	See " <i>Risk Factors</i> " and the other information included or incorporated by reference in this prospectus for a discussion of factors you should consider before investing in our securities.						
NYSE symbol	Our common stock is listed on NYSE under the symbol "MKFG".						

RISK FACTORS

An investment in our securities involves risks and uncertainties. Before making an investment decision, you should carefully consider these risks as well as other information we include or incorporate by reference in this prospectus. In particular, you should carefully consider the information under the heading "*Risk Factors*," as well as the factors listed under the heading "*Forward-Looking Statements*", in each case contained in our Annual Report on Form 10-K for our most recent fiscal year, in any Quarterly Reports on Form10-Q that have been filed since our most recent Annual Report on Form10-K and in any other documents that we file (not furnish) with the SEC under the Exchange Act, each of which is incorporated by reference in this prospectus. Any of the risks described could significantly and negatively affect our business, financial condition, results of operations, cash flows and prospects and the trading price of our securities. The risks and uncertainties identified are not the only risks and uncertainties we face. If any of the material risks or uncertainties that we face were to occur, you could lose part or all of your investment.

USE OF PROCEEDS

All of the securities offered by the Selling Securityholder pursuant to this prospectus will be sold by the Selling Securityholder for its own account. We will not receive any of the proceeds from any resales or issuances of securities offered hereby.

The Selling Securityholder will pay any underwriting discounts and commissions and expenses incurred by it for brokerage, accounting, tax or legal services or any other expenses incurred in disposing of the securities. We will bear the costs, fees and expenses incurred in effecting the registration of the securities covered by this prospectus, including all registration and filing fees, NYSE listing fees and fees and expenses of our counsel and our independent registered public accounting firm.

DESCRIPTION OF CAPITAL STOCK

The following description of the capital stock of Markforged Holding Corporation is a summary of certain provisions of the securities that are registered under Section 12 of the Securities and Exchange Act of 1934, as amended, and does not purport to be complete. It is subject to and qualified in its entirety by reference to our Certificate of Incorporation and our Bylaws, each of which is incorporated by reference as an exhibit to this Registration Statement, and by the provisions of applicable law. We urge you to read the applicable provisions of Delaware law and our Certificate of Incorporation and Bylaws carefully and in their entirety for additional information.

General

Our authorized capital stock consists of One Billion (1,000,000,000) shares of common stock, par value \$0.0001 per share and One Hundred Million (100,000,000) shares of undesignated preferred stock, par value \$0.0001 per share.

Common Stock

Holders of our Common Stock are entitled to one vote for each share held of record on all matters submitted to a vote of stockholders, including the election or removal of directors. The holders of our Common Stock do not have cumulative voting rights in the election of directors. Holders of our common stock are entitled to receive ratably any dividends declared by our board of directors out of funds legally available for that purpose, subject to any preferential dividend rights of any outstanding preferred stock. Our common stock has no preemptive rights, conversion rights or other subscription rights or redemption or sinking fund provisions. In the event of our liquidation, dissolution or winding up, holders of our common stock will be entitled to share ratably in all assets remaining after payment of all debts and other liabilities and any liquidation preference of any outstanding preferred stock.

Warrants

Public Shareholders' Warrants

As used in this section titled "*Public Shareholders' Warrants*", references to "warrants" are to the redeemable warrants (including those that underlie the units) that were offered and sold by AONE in its initial public offering and registered pursuant to the IPO registration statement or the redeemable warrants of Markforged Holding Corporation issued as a matter of law upon the conversion thereof at the time of the Domestication, as context requires (the "public warrants"). References to "ordinary shares" are to AONE Class A ordinary shares, par value \$0.0001 per share, and the AONE Class B ordinary shares, par value \$0.0001 per share, collectively.

Each whole warrant entitles the registered holder to purchase one share of our Common Stock at a price of \$11.50 per share, subject to adjustment as discussed below, provided in each case that we have an effective registration statement under the Securities Act covering the shares of our Common Stock issuable upon exercise of the warrants and a current prospectus relating to them is available (or we permit holders to exercise their warrants on a cashless basis under the circumstances specified in the warrant agreement) and such shares are registered, qualified or exempt from registration under the securities, or blue sky, laws of the state of residence of the holder. Pursuant to the Warrant Agreement, a warrant holder may exercise its warrants only for a whole number of shares. This means only a whole warrant may be exercised at a given time by a warrant holder. No fractional warrants will be issued upon separation of the units and only whole warrants will trade. The warrants will expire on July 14, 2026, at 5:00 p.m., New York City time, or earlier upon redemption or liquidation.

The Company will not be obligated to deliver any shares of our Common Stock pursuant to the exercise of a warrant and will have no obligation to settle such warrant exercise unless a registration statement under the Securities Act with respect to the shares underlying the warrants is then effective and a prospectus relating thereto is current, subject to the Company satisfying its obligations described below with respect to registration,

or a valid exemption from registration is available. No warrant will be exercisable and the Company will not be obligated to issue shares of our Common Stock upon exercise of a warrant unless the shares issuable upon such warrant exercise have been registered, qualified or deemed to be exempt under the securities laws of the state of residence of the registered holder of the warrants. In the event that the conditions in the two immediately preceding sentences are not satisfied with respect to a warrant, the holder of such warrant will not be entitled to exercise such warrant and such warrant may have no value and expire worthless. In no event will the Company be required to net cash settle any warrant. In the event that a registration statement is not effective for the exercised warrants, the purchaser of a unit containing such warrant will have paid the full purchase price for the unit solely for the share of our Common Stock underlying such unit. The Company registered shares of our Common Stock issuable upon exercise of the warrant Agreement, the Company has agreed to use its commercially reasonable efforts to maintain the effectiveness of such registration statement and a current prospectus relating to those shares of our Common Stock until the warrants expire or are redeemed, as specified in the warrant agreement; provided that if such shares are at the time of any exercise of a warrant not listed on a national securities exchange such that they satisfy the definition of a "covered security" under Section 18(b)(1) of the Securities Act, the Company may, at its option, require holders of public warrants who exercise their warrants to do so on a "cashless basis" in accordance with Section 3(a)(9) of the Securities Act and, in the event the Company so elects, it will not be required to file or maintain in effect a registration statement.

Redemptions for warrants for cash when the price per share of our Common Stock equals or exceeds \$18.00. Once the warrants become exercisable, we may call the public warrants for redemption:

- in whole and not in part;
- at a price of \$0.01 per warrant;
- upon not less than 30 days' prior written notice of redemption to each warrant holder; and
- if, and only if, the closing price of the shares of our Common Stock equals or exceeds \$18.00 per share (as adjusted for sharesub-divisions, share capitalizations, reorganizations, recapitalizations and the like) for any 20 trading days within a 30-trading day period ending on the third trading day prior to the date on which notice of the redemption is given to the warrant holders.

We will not redeem the warrants as described above unless a registration statement under the Securities Act covering the issuance of shares of our Common Stock issuable upon exercise of the warrants is then effective and a current prospectus relating to those shares is available throughout the 30-day redemption period, except if the warrants may be exercised on a cashless basis and such cashless exercise is exempt from registration under the Securities Act. If and when the warrants become redeemable by us, we may exercise our redemption right even if we are unable to register or qualify the underlying securities for sale under all applicable state securities laws. As a result, we may redeem the warrants as set forth above even if the holders are otherwise unable to exercise the warrants.

We have established the last of the redemption criterion discussed above to prevent a redemption call unless there is at the time of the call a significant premium to the warrant exercise price. If the foregoing conditions are satisfied and we issue a notice of redemption of the warrants, each warrant holder will be entitled to exercise his, her or its warrant prior to the scheduled redemption date. However, the price of a share of our Common Stock may fall below the \$18.00 redemption trigger price (as adjusted for share sub-divisions, share capitalizations, reorganizations, recapitalizations and the like) as well as the \$11.50 (for whole shares) warrant exercise price after the redemption notice is issued.

Redemption of warrants for shares of our Common Stock when the price per share equals or exceeds \$10.00 Commencing ninety days after the warrants become exercisable, we may redeem the outstanding warrants:

in whole and not in part;

- at \$0.10 per warrant upon a minimum of 30 days' prior written notice of redemption *provided* that during such 30 day period holders will be able to exercise their warrants on a cashless basis prior to redemption and receive that number of shares determined by reference to the table below, based on the redemption date and the "fair market value" of a share of our Common Stock (as defined below) except as otherwise described below provided, further, that if the warrants are not exercised on a cashless basis or otherwise during such 30 day period, we shall redeem such warrants for \$0.10 per share;
- if, and only if, the closing price of shares of our Common Stock equals or exceeds \$10.00 per public share (as adjusted for share subdivisions, share dividends, reorganizations, reclassifications, recapitalizations and the like) on the trading day before we send the notice of redemption to the warrant holders;
- if, and only if, the private placement warrants are also concurrently called for redemption on the same terms as the outstanding public warrants, as described above; and
- if, and only if, there is an effective registration statement covering the issuance of the shares of our Common Stock issuable upon exercise of the warrants and a current prospectus relating thereto available throughout the 30-day period after written notice of redemption is given.

Redemption Date	Fair Market Value of Class A Ordinary Shares								
(period to expiration of warrants)	\leq 10.00	11.00	12.00	13.00	14.00	15.00	16.00	17.00	\geq 18.00
57 months	0.257	0.277	0.294	0.310	0.324	0.337	0.348	0.358	0.365
54 months	0.252	0.272	0.291	0.307	0.322	0.335	0.347	0.357	0.365
51 months	0.246	0.268	0.287	0.304	0.320	0.333	0.346	0.357	0.365
48 months	0.241	0.263	0.283	0.301	0.317	0.332	0.344	0.356	0.365
45 months	0.235	0.258	0.279	0.298	0.315	0.330	0.343	0.356	0.365
42 months	0.228	0.252	0.274	0.294	0.312	0.328	0.342	0.355	0.364
39 months	0.221	0.246	0.269	0.290	0.309	0.325	0.340	0.354	0.364
36 months	0.213	0.239	0.263	0.285	0.305	0.323	0.339	0.353	0.364
33 months	0.205	0.232	0.257	0.280	0.301	0.320	0.337	0.352	0.364
30 months	0.196	0.224	0.250	0.274	0.297	0.316	0.335	0.351	0.364
27 months	0.185	0.214	0.242	0.268	0.291	0.313	0.332	0.350	0.364
24 months	0.173	0.204	0.233	0.260	0.285	0.308	0.329	0.348	0.364
21 months	0.161	0.193	0.223	0.252	0.279	0.304	0.326	0.347	0.364
18 months	0.146	0.179	0.211	0.242	0.271	0.298	0.322	0.345	0.363
15 months	0.130	0.164	0.197	0.230	0.262	0.291	0.317	0.342	0.363
12 months	0.111	0.146	0.181	0.216	0.250	0.282	0.312	0.339	0.363
9 months	0.090	0.125	0.162	0.199	0.237	0.272	0.305	0.336	0.362
6 months	0.065	0.099	0.137	0.178	0.219	0.259	0.296	0.331	0.362
3 months	0.034	0.065	0.104	0.150	0.197	0.243	0.286	0.326	0.361
0 months	—	_	0.042	0.115	0.179	0.233	0.281	0.323	0.361

Beginning on the date the notice of redemption is given until the warrants are redeemed or exercised, holders may elect to exercise their warrants on a cashless basis. The numbers in the table below represent the number of shares of our Common Stock that a warrant holder will receive upon a cashless exercise in connection with a redemption by us pursuant to this redemption feature, based on the "fair market value" of our shares of our Common Stock on the corresponding redemption date (assuming holders elect to exercise their warrants and such warrants are not redeemed for \$0.10 per warrant), determined based on volume weighted average price of such shares as reported during the 10 trading days ending on the third trading day prior to the date on which the notice of redemption is sent to the holders of warrants, and the number of months that the corresponding redemption date precedes the expiration date of the warrants, each as set forth in the table below.

The share prices set forth in the column headings of the table below will be adjusted as of any date on which the number of shares issuable upon exercise of a warrant is adjusted as set forth in the first three paragraphs under

the heading "*—Anti-dilution Adjustments*" below. The adjusted share prices in the column headings will equal the share prices immediately prior to such adjustment, multiplied by a fraction, the numerator of which is the number of shares deliverable upon exercise of a warrant immediately prior to such adjustment and the denominator of which is the number of shares deliverable upon exercise of a warrant as so adjusted. The number of shares in the table below shall be adjusted in the same manner and at the same time as the number of shares issuable upon exercise of a warrant.

The exact fair market value and redemption date may not be set forth in the table above, in which case, if the fair market value is between two values in the table or the redemption date is between two redemption dates in the table, the number of shares of our Common Stock to be issued for each warrant exercised will be determined by a straight-line interpolation between the number of shares set forth for the higher and lower fair market values and the earlier and later redemption dates, as applicable, based on a 365 or 366-day year, as applicable. For example, if the volume-weighted average price of shares of our Common Stock as reported during the 10 trading days ending on the third trading day prior to the date on which the notice of redemption is sent to the holders of the warrants is \$11.00 per share, and at such time there are 57 months until the expiration of the warrants, holders may choose to, in connection with this redemption date are not as set forth in the table above, if the volume-weighted average price of shares of our Common Stock for each whole warrant. For an example where the exact fair market value and redemption date are not as set forth in the table above, if the volume-weighted average price of shares of our Common Stock for each whole warrant. For an example where the exact fair market value and redemption date are not as set forth in the table above, if the volume-weighted average price of shares of our Common Stock as reported during thay sending on the third trading day prior to the date on which the notice of redemption is sent to the holders of the warrants is \$13.50 per share, and at such time there are 38 months until the expiration of the warrant. Finally, as reflected in the table above, if the warrants are out of the money and about to expire, they cannot be exercised on a cashless basis in connection with a redemption by us pursuant to this redemption feature, since they will not be exerciseable for any shares of our Common Stock.

This redemption feature is structured to allow for all of the outstanding warrants to be redeemed when shares of our Common Stock are trading at or above \$10.00, which may be at a time when the trading price of such shares is below the exercise price of the warrants. We have established this redemption feature to provide us with the flexibility to redeem the warrants without the warrants having to reach the \$18.00 per share threshold set forth above. Holders choosing to exercise their warrants in connection with a redemption pursuant to this feature will, in effect, receive a number of shares for their warrants based on an option pricing model with a fixed volatility input as of the date of this prospectus. This redemption right provides us with an additional mechanism by which to redeem all of the outstanding warrants, and therefore have certainty as to our capital structure as the warrants would no longer be outstanding and would have been exercised or redeemed. We will be required to pay the applicable redemption price to warrant holders if we choose to exercise this redemption right and it will allow us to quickly proceed with a redemption of the warrants if we determine it is in our best interest to do so. As such, we would redeem the warrants in this manner when we believe it is in our best interest to update our capital structure to remove the warrants and pay the redemption price to the warrant holders.

As stated above, we can redeem the warrants when our Common Stock is trading at a price starting at \$10.00 per share, which is below the exercise price of \$11.50, because it will provide certainty with respect to our capital structure and cash position while providing warrant holders with the opportunity to exercise their warrants on a cashless basis for the applicable number of shares. If we choose to redeem the warrants when the our Common Stock is trading at a price below the exercise price of the warrants, this could result in the warrant holders receiving fewer shares than they would have received if they had chosen to wait to exercise their warrants if and when such our Common Stock was trading at a price higher than the exercise price of \$11.50.

No fractional shares will be issued upon exercise. If, upon exercise, a holder would be entitled to receive a fractional interest in a share, we will round down to the nearest whole number of the shares of our Common Stock to be issued to the holder. If, at the time of redemption, the warrants are exercisable for a security other than shares of our Common Stock pursuant to the Warrant Agreement, the warrants may be exercised for such

security. At such time as the warrants become exercisable for a security other than the our Common Stock, we (or the surviving company) will use its commercially reasonable efforts to register under the Securities Act the security issuable upon the exercise of the warrants.

Redemption procedures and cashless exercise. If we call the warrants for redemption when the price per share of our Common Stock equals or exceeds \$18.00 as described above, we will have the option to require any holder that wishes to exercise his, her or its warrant to do so on a "cashless basis". In determining whether to require all holders to exercise their warrants on a "cashless basis", we will consider, among other factors, our cash position, the number of warrants that are outstanding and the dilutive effect on our shareholders of issuing the maximum number of shares issuable upon the exercise of our warrants. If this option is elected, all holders of warrants would pay the exercise price by surrendering their warrants for that number of shares of our Common Stock equal to the quotient obtained by dividing (x) the product of the number of Class A ordinary shares underlying the warrants, multiplied by the exercise price of the "fair market value" (defined below) over the exercise price of the warrants by (y) the fair market value. The "fair market value" will mean the average closing price of our Common Stock for the 10 trading days ending on the third trading day prior to the date on which the notice of redemption is sent to the holders of warrants. In such event, the notice of redemption will contain the information necessary to calculate the number of shares to be received upon exercise of the warrants, including the "fair market value" in such case. Requiring a cashless exercise in this manner will reduce the number of shares to be issued and thereby lessen the dilutive effect of a warrant redemption. If the warrants are called for redemption and cashless basis using the same formula described above that other warrant holders would have been required to use had all warrant holders been required to exercise their warrants on a cashless basis, as described in more detail below.

A holder of a warrant may notify us in writing in the event it elects to be subject to a requirement that such holder will not have the right to exercise such warrant, to the extent that after giving effect to such exercise, such person (together with such person's affiliates), to the warrant agent's actual knowledge, would beneficially own in excess of 4.9% or 9.8% (as specified by the holder) of our Common Stock issued and outstanding immediately after giving effect to such exercise.

Anti-dilution Adjustments. If the number of outstanding shares of our Common Stock is increased by a capitalization or share dividend payable in such shares, or by a sub-divisions of common stock or other similar event, then, on the effective date of such capitalization or share dividend, sub-divisions or similar event, the number of shares issuable on exercise of each warrant will be increased in proportion to such increase in the outstanding shares of our Common Stock. A rights offering made to all or substantially all holders of ordinary shares entitling holders to purchase shares of our Common Stock at a price less than the "historical fair market value" (as defined below) will be deemed a share dividend of a number of shares equal to the product of (i) the number of shares of our Common Stock actually sold in such rights offering (or issuable under any other equity securities sold in such rights offering that are convertible into or exercisable for shares of our Common Stock) and (ii) one minus the quotient of (x) the price per share of our Common Stock paid in such rights offering the price payable for such shares, (i) if the rights offering is for securities convertible into or exercisable for such shares value. For these purposes, (i) if the rights offering is for securities convertible into or exercisable for such shares or conversion and (ii) "historical fair market value" means the volume-weighted average price of our Common Stock as reported during the 10 trading day period ending on the trading day prior to the first date on which the such shares trade on the applicable exchange or in the applicable market, regular way, without the right to receive such rights.

In addition, if we, at any time while the warrants are outstanding and unexpired, pay a dividend or make a distribution in cash, securities or other assets to all or substantially all the holders of shares of our Common Stock on account of such shares (or other securities into which the warrants are convertible), other than (a) as described above or (b) any cash dividends or cash distributions which, when combined on a per share basis with all other

cash dividends and cash distributions paid on our Common Stock during the 365-day period ending on the date of declaration of such dividend or distribution does not exceed \$0.50 (as adjusted to appropriately reflect any other adjustments and excluding cash dividends or cash distributions that resulted in an adjustment to the exercise price or to the number of shares of our Common Stock issuable on exercise of each warrant) but only with respect to the amount of the aggregate cash dividends or cash distributions equal to or less than \$0.50 per share.

If the number of outstanding shares of our Common Stock is decreased by a consolidation, combination, reverse sharesub-division or reclassification of such shares or other similar event, then, on the effective date of such consolidation, combination, reverse share sub-division, reclassification or similar event, the number of shares of our Common Stock issuable on exercise of each warrant will be decreased in proportion to such decrease in outstanding shares.

Whenever the number of shares of our Common Stock purchasable upon the exercise of the warrants is adjusted, as described above, the warrant exercise price will be adjusted by multiplying the warrant exercise price immediately prior to such adjustment by a fraction (x) the numerator of which will be the number of shares of our Common Stock purchasable upon the exercise of the warrants immediately prior to such adjustment and (y) the denominator of which will be the number of shares so purchasable immediately thereafter.

In case of any reclassification or reorganization of the outstanding shares of our Common Stock (other than those described above or that solely affects the par value of such shares), or in the case of any merger or consolidation of us with or into another corporation (other than a consolidation or merger in which we are the continuing corporation and that does not result in any reclassification or reorganization of our issued and outstanding shares of our Common Stock), or in the case of any sale or conveyance to another corporation or entity of the assets or other property of us as an entirety or substantially as an entirety in connection with which we are dissolved, the holders of the warrants will thereafter have the right to purchase and receive, upon the basis and upon the terms and conditions specified in the warrants and in lieu of the shares immediately theretofore purchasable and receivable upon the exercise of the rights represented thereby, the kind and amount of shares or other securities or property (including cash) receivable upon such reclassification, reorganization, merger or consolidation, or upon a dissolution following any such sale or transfer, that the holder of the warrants would have received if such holder had exercised their warrants immediately prior to such event. If less than 70% of the consideration receivable by the holders of shares of our Common Stock in such a transaction is payable in the form of shares in the successor entity that is listed for trading on a national securities exchange or is quoted in an established over-the-counter market, or is to be so listed for trading or quoted immediately following such event, and if the registered holder of the warrant properly exercises the warrant within thirty days following public disclosure of such transaction, the warrant. The purpose of such exercise price reduction is to provide additional value to holders of the warrants when an extraordinary transaction occurs during the exercise period of the warrants when an extraordinary

The warrants have been issued in registered form under a Warrant Agreement between Continental Stock Transfer & Trust Company, as warrant agent, and us. The Warrant Agreement provides that the terms of the warrants may be amended without the consent of any holder to cure any ambiguity or correct any defective provision or correct any mistake, including to conform the provisions of the warrant agreement to the description of the terms of the warrants and the Warrant Agreement set forth in this prospectus, but requires the approval by the holders of at least 50% of the then outstanding public warrants to make any change that adversely affects the interests of the registered holders. Refer to the Warrant Agreement, a copy of which is filed as an exhibit to the registration statement of which this prospectus is a part, for a complete description of the terms and conditions applicable to the warrants.

The warrant holders do not have the rights or privileges of holders of ordinary shares and any voting rights until they exercise their warrants and receive shares of our Common Stock. After the issuance of shares of our

Common Stock upon exercise of the warrants, each holder will be entitled to one vote for each share held of record on all matters to be voted on by stockholders.

We have agreed that, subject to applicable law, any action, proceeding or claim against us arising out of or relating in any way to the Warrant Agreement will be brought and enforced in the courts of the State of New York or the United States District Court for the Southern District of New York, and AONE irrevocably submits to such jurisdiction, which jurisdiction will be the exclusive forum for any such action, proceeding or claim. This provision applies to claims under the Securities Act but does not apply to claims under the Exchange Act or any claim for which the federal district courts of the United States of America are the sole and exclusive forum.

Private Placement Warrants

As used in this section titled "Private Placement Warrants", references to "the private placement warrants" are to the private placement warrants issued by AONE at its initial public offering and the warrants of Markforged Holding Corporation issued as a matter of law upon the conversion thereof at the time of the Domestication.

The private placement warrants (including the our Common Stock issuable upon exercise of the private placement warrants) are not redeemable by us (except as described above under "—*Public Shareholders' Warrants*—*Redemption of warrants when the price per share of our Common Stock equals or exceeds \$10.00*") so long as they are held by the Sponsor or its permitted transferees. The Sponsor, or its permitted transferees, has the option to exercise the private placement warrants on a cashless basis and have certain registration rights described herein. If the private placement warrants are held by holders other than the Sponsor or its permitted transferees, the private placement warrants will be redeemable by us in all redemption scenarios and exercisable by the holders on the same basis as the public warrants.

Except as described under "—*Public Shareholders' Warrants*—*Redemption of warrants when the price per share of our Common Stock equals or exceeds* \$10.00", if holders of the private placement warrants elect to exercise them on a cashless basis, they would pay the exercise price by surrendering his, her or its warrants for that number of shares of our Common Stock equal to the quotient obtained by dividing (x) the product of the number of shares of our Common Stock underlying the warrants, multiplied by the excess of the "historical fair market value" (defined below) less the exercise price of the warrants by (y) the historical fair market value. For these purposes, the "historical fair market value" shall mean the average last reported sale price of our Common Stock for the 10 trading days ending on the third trading day prior to the date on which the notice of warrant exercise is sent to the Warrant Agent.

Preferred Stock

Our board of directors has the authority, without further action by our stockholders, to issue up to 100,000,000 shares of preferred stock in one or more series and to fix the rights, preferences, privileges and restrictions thereof. These rights, preferences and privileges could include dividend rights, conversion rights, voting rights, terms of redemption, liquidation preferences, sinking fund terms and the number of shares constituting, or the designation of, such series, any or all of which may be greater than the rights of common stock. The issuance of our preferred stock could adversely affect the voting power of holders of common stock and the likelihood that such holders will receive dividend payments and payments upon our liquidation. In addition, the issuance of preferred stock could have the effect of delaying, deferring or preventing a change in control of our company or other corporate action. No shares of preferred stock are outstanding, and we have no present plan to issue any shares of preferred stock.

Dividends

The General Corporation Law of the State of Delaware, as amended (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 equals 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 is subject to the discretion of our board of directors. The time and amount of dividends is 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 distributions to stockholders and any other factors our board of directors may consider relevant. We have no current plans to pay dividends on our common stock. Any decision to declare and pay dividends in the future will be made at the sole discretion of our board of directors may done of directors and will depend on, among other things, our results of operations, cash requirements, financial condition, contractual restrictions and other factors that our board of directors may deem relevant. Because we are a holding company and have no direct operations, we will only be able to pay dividends from funds we receive from our subsidiaries. In addition, our ability to pay dividends may be limited by the agreements governing indebtedness that we or our subsidiaries incur in the future.

Annual Stockholder Meetings

Our bylaws provide that annual stockholder meetings will be held at a date, time and place, if any, as exclusively selected by our board of directors. To the extent permitted under applicable law, we may conduct meetings by remote communications, including by webcast.

Anti-Takeover Effects of the Certificate of Incorporation and Bylaws and Certain Provisions of Delaware Law

Our certificate of incorporation and our bylaws contain and the DGCL contains provisions, summarized in the following paragraphs, that are intended to enhance the likelihood of continuity and stability in the composition of our board of directors. These provisions are intended to avoid costly takeover battles, reduce our vulnerability to a hostile change of control and enhance the ability of our board of directors to maximize stockholder value in connection with any unsolicited offer to acquire us. However, these provisions may have an anti-takeover effect and may delay, deter or prevent a merger or acquisition of Markforged Holding Corporation 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 our Common Stock held by stockholders.

Delaware Law

We are governed by the provisions of Section 203 of the DGCL. In general, Section 203 prohibits a public Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a period of three years after the date of the transaction in which the person became an interested stockholder, unless the business combination is approved in a prescribed manner. A "business combination" includes mergers, asset sales or other transactions resulting in a financial benefit to the stockholder. An "interested stockholder" is a person who, together with affiliates and associates, owns 15% or more of the corporation's outstanding voting stock. These provisions may have the effect of delaying, deferring or preventing a change in our control.

Authorized but Unissued Capital Stock

Delaware law does not require stockholder approval for any issuance of authorized shares, however the listing requirements of the NYSE apply if and so long as the our Common Stock remains listed on the NYSE. Additional shares that may be used in the future may be issued for a variety of corporate purposes, including future public offerings, to raise additional capital or to facilitate acquisitions.

Our board of directors may generally issue preferred shares on terms calculated to discourage, delay or prevent a change of control of Markforged Holding Corporation or the removal of our management. Moreover, our authorized but unissued shares of preferred stock will be available for future issuances without stockholder approval and could be utilized for a variety of corporate purposes, including future offerings to raise additional capital, to facilitate acquisitions and employee benefit plans.

One of the effects of the existence of unissued and unreserved common stock or preferred stock may be to enable our board of directors to issue shares to persons friendly to current management, which issuance could render more difficult or discourage an attempt to obtain control of us 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 our Common Stock at prices higher than prevailing market prices.

Classified Board of Directors

Our certificate of incorporation provides that our board of directors will be divided into three classes of directors, with each director serving a three-year term. As a result, approximately one-third of our board of directors 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 of directors.

Removal of Directors; Vacancies

Under the DGCL, unless otherwise provided in our charter, a director serving on a classified board may be removed by the stockholders only for cause. Our certificate of incorporation provides that directors may be removed for cause only by the affirmative vote of the holders of not less than two-thirds (2/3) of the outstanding shares of capital stock then entitled to vote at an election of directors, voting together as a single class, subject to the rights, if any, of any series of preferred stock to elect directors and to remove any director whom the holders of any such series have the right to elect. Further, at least forty-five (45) days prior to any annual or special meeting of stockholders at which it is proposed that any director be removed from office, written notice of such proposed removal and the alleged grounds thereof must be sent to the director whose removal will be considered at the meeting. In addition, the number of directors, and not stockholders, may fill vacancies on the board of directors. These provisions prevent a stockholder from increasing the size of our board of directors and the gaining control of the board of directors by filling the resulting vacancies with its own nominees. This has the effect of making it more difficult to change the composition of our board of directors and promote continuity of management.

No Cumulative Voting

Under Delaware law, the right to vote cumulatively does not exist unless the charter specifically authorizes cumulative voting. Our certificate of incorporation does not authorize cumulative voting.

Special Stockholder Meetings

Except as otherwise required by statute and subject to the rights, if any, of the holders of any series of preferred stock then outstanding, special meetings of our stockholders may be called only by the board of directors acting pursuant to a resolution approved by the affirmative vote of a majority of the directors then in office, and special meetings of stockholders may not be called by any other person or persons. Only those matters set forth in the notice of the special meeting may be considered or acted upon at a special meeting of our stockholders. These provisions might delay the ability of our stockholders to force consideration of a proposal or for stockholders controlling a majority of our capital stock to take any action, including the removal of directors.

Requirements for Advance Notification of Director Nominations and Stockholder Proposals

Our bylaws establish advance notice procedures with respect to stockholder proposals and the nomination of candidates for election as directors, other than nominations made by or at the direction of the board of directors. In order for any matter to be "properly brought" by a stockholder before a meeting, a stockholder will have to comply with advance notice requirements and provide us with certain information. Generally, to be timely, a stockholder's notice relating to the nomination of a director to our board of directors or other business at an annual meeting 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. Stockholders may not bring nominations for the election of a director or other business before a special meeting of stockholders, unless such special meeting is to be held in lieu of an annual meeting of stockholders, in which case, the foregoing requirements for "timely notice" will apply. These provisions may also defer, delay or discourage a potential acquirer from conducting a solicitation of proxies to elect the acquirer's own slate of directors or otherwise attempting to influence or obtain control of us.

Consent of Stockholders in Lieu of Meeting

Any action required or permitted to be taken by our stockholders at any annual or special meeting of stockholders must be effected at a duly called meeting of stockholders, and may not be taken or effected by a written consent of stockholders in lieu thereof.

Dissenters' Rights of Appraisal and Payment

Under the DGCL, with certain exceptions, our stockholders will have appraisal rights in connection with a merger or consolidation of Markforged Holding Corporation. 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 Selection

Our bylaws provide that, unless we consent in writing to an alternative forum, the Court of Chancery of the State of Delaware will be the sole and exclusive forum for any state law claim for (1) any derivative action or proceeding brought on our behalf, (2) any action asserting a claim of breach of or based on a fiduciary duty owed by any of our current or former directors, officers, or employees to us or our stockholders, (3) any action asserting a claim arising pursuant to any provision of the Delaware General Corporation Law, our certificate of incorporation or our bylaws (including the interpretation, validity or enforceability thereof) or (4) any action asserting a claim that is governed by the internal affairs doctrine, in each case subject to the Court of Chancery having personal jurisdiction over the indispensable parties named as defendants therein, or the Delaware Forum Provision. The Delaware Forum Provision will not apply to any causes of action arising under the Securities Act or the Exchange Act. Our bylaws further provide that, unless we consent in writing to the selection of an alternative forum, the federal district courts of the United States shall be the sole and exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act. In addition, our bylaws provide that any person or entity purchasing or otherwise acquiring any interest in shares of our common stock is deemed to have notice of and consented to the foregoing provisions; provided, however, that stockholders cannot and will not be deemed to have waived our compliance with the federal securities laws and the rules and

regulations thereunder. This exclusive forum provision does not apply to suits brought to enforce any liability or duty created by the Exchange Act. The enforceability of similar choice of forum provisions in other companies' certificates of incorporation and bylaws has been challenged in legal proceedings, and it is possible that a court could find these types of provisions to be inapplicable or unenforceable.

Amendment of Bylaws

Our bylaws may be amended or repealed by a majority vote of our board of directors or by the holders of at least two thirds (2/3) of the voting power of all of the then-outstanding shares entitled to vote generally in the election of directors, voting together as a single class.

Limitations on Liability and Indemnification of Officers and Directors

The DGCL authorizes corporations to limit or eliminate the personal liability of directors 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 for monetary damages for any breach of fiduciary duty as a director, 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 our rights and our stockholders' rights, 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. However, exculpation does not apply to any director if the director has acted in bad faith, knowingly or intentionally violated the law, authorized illegal dividends or redemptions or derived an improper benefit from his or her actions as a director. Our bylaws provide that we must indemnify and advance expenses to our directors and officers to the fullest extent authorized by the DGCL. We are also expressly authorized to carry directors' and officers' liability insurance provisions and insurance are useful to attract and retain qualified directors and executive officers.

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

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 will be Continental Stock Transfer & Trust Company. The transfer agent and registrar's address is 1 State Street, 30th Floor, New York, New York 10004.

Listing

Our Common Stock and warrants are listed on the NYSE under the symbols "MKFG" and "MKFG WS", respectively.

SELLING SECURITYHOLDER

This prospectus relates to the resale of up to 4,100,000 shares of common stock issued in connection with the Acquisition in one or more offerings by the Selling Securityholder.

On July 11, 2022, we entered into the Purchase Agreement. Pursuant to the terms of the Purchase Agreement, we issued 4,100,000 shares of common stock to the Selling Securityholder in a private placement. We will not receive any proceeds from the resale of the common stock by the Selling Securityholder. We are registering the above-referenced shares of common stock to permit the Selling Securityholder and its pledgees, donees, transferees, or other successors-in interest that receive their shares after the date of this prospectus to resell or otherwise dispose of the shares in the manner contemplated under *"Plan of Distribution"* herein.

The Selling Securityholder may from time to time offer and sell any or all of the shares of common stock set forth below pursuant to this prospectus and any accompanying prospectus supplement. The percentage of beneficial ownership after the offered securities are sold is calculated based on 188,828,031 shares of common stock outstanding as of August 30, 2022.

The following table is prepared based on information provided to us by the Selling Securityholder or included in filings by the Selling Securityholder pursuant to Section 13(d) or Section 16 of the Exchange Act and the rules and regulations thereunder. Unless otherwise indicated in the footnotes below, we believe that the Selling Securityholder has sole voting and investment power with respect to all shares beneficially owned. The following table sets forth, as of the date of this prospectus, the name of the Selling Securityholder, and the aggregate number of shares of common stock that the Selling Securityholder may offer pursuant to this prospectus.

				Securities Benefic	cially	
	Securities Beneficially O	Securities Beneficially Owned		Owned After the		
	Prior to the Offerin	Prior to the Offering this Offering			re Sold	
	Number of		Number of	Number of		
Name of Selling	Shares of		Shares of	Shares of		
Securityholder	Common Stock	%	Common Stock	Common Stock	%	
Höganäs Aktiebolag ⁽¹⁾	4,100,000	2.2%	4,100,000			

. . ..

(1) The address of Höganäs Aktiebolag is SE-263 83 Höganäs, Sweden.

Selling Securityholder information for each additional Selling Securityholder, if any, will be set forth by prospectus supplement to the extent required prior to the time of any offer or sale of Selling Securityholder's shares pursuant to this prospectus. To the extent permitted by law, a prospectus supplement may add, update, substitute, or change the information contained in this prospectus, including the identity of each Selling Securityholder and the number of shares of common stock registered on its behalf. A Selling Securityholder may sell or otherwise transfer all, some or none of such shares of common stock in this offering. See "*Plan of Distribution*".

Registration Rights

To our knowledge, the Selling Securityholder has not had any position with, held any office of, or had any other material relationship with us during the past three years, except that pursuant to the Purchase Agreement, we agreed to prepare and file with the SEC a registration statement that permits the resale or other disposition of the Selling Securityholder's common stock issued pursuant to the Purchase Agreement and, subject to certain exceptions, use commercially reasonable efforts to keep the registration statement of which this prospectus forms a part effective under the Securities Act for so long as such securities registered for resale thereunder retain their character as registrable securities. We have also agreed, among other things, to indemnify the Selling Securityholder and its officers, directors, agents, partners, members, managers, stockholders, affiliates and employees from certain liabilities and to pay all fees and expenses incident to our obligations under the Purchase Agreement.

PLAN OF DISTRIBUTION

The Selling Securityholder, which, as used herein, includes donees, pledgees, transferees, distributes or other successors-in-interest selling shares of common stock, which we refer to collectively as the securities, or interests in the securities received after the date of this prospectus from the Selling Securityholder as a gift, pledge, partnership distribution or other transfer, may, from time to time, sell, transfer, distribute or otherwise dispose of certain of their securities or interests in the securities on any stock exchange, market or trading facility on which the securities are traded, or in private transactions. These dispositions may be at fixed prices, at prevailing market prices at the time of sale, at prices related to the prevailing market price, at varying prices determined at the time of sale, or at negotiated prices.

The Selling Securityholder may use any one or more of the following methods when disposing of the securities or their interests therein:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- one or more underwritten offerings on a firm commitment or best efforts basis;
- "at the market" to or through market makers or into an existing market for securities
- block trades in which the broker-dealer will attempt to sell the securities 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 accounts;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- distributions or transfers to their members, partners or shareholders;
- short sales effected after the date of the registration statement of which this prospectus is a part is declared effective by the SEC;
- · through the writing or settlement of options or other hedging or derivative transactions, whether through an options exchange or otherwise;
- · in market transactions, including transactions on a national securities exchange or quotations service orover-the-counter market;
- through trading plans entered into by a Selling Securityholder pursuant to Rule10b5-1 under the Exchange Act that are in place at the time of
 an offering pursuant to this prospectus and any applicable prospectus supplement hereto that provide for periodic sales of their securities on
 the basis of parameters described in such trading plans;
- directly to one or more purchasers, including through a specific bidding, auction or other process or in privately negotiated transactions;
- in "at the market" offerings, as defined in Rule 415 under the Securities Act, at negotiated prices, at prices prevailing at the time of sale or at
 prices related to such prevailing market prices, including sales made directly on a national securities exchange or sales made through a market
 maker other than on an exchange or other similar offerings through sales agents;
- · through agents;
- through broker-dealers who may agree with the Selling Securityholder to sell a specified number of such securities at a stipulated price per share;
- in other ways not involving market makers or established trading markets;

- by entering into transactions with third parties who may (or may cause others to) issue securities convertible or exchangeable into, or the return of which is derived in whole or in part from the value of, our common stock; and
- a combination of any such methods of sale or any other method permitted pursuant to applicable law.

The Selling Securityholder may, from time to time, pledge or grant a security interest in some portion or all of the securities owned by them and, if a Selling Securityholder defaults in the performance of its secured obligations, the pledgees or secured parties may offer and sell such securities, as applicable, from time to time, under this prospectus, or under an amendment or supplement to this prospectus amending the list of the Selling Securityholder to include the pledgee, transferee or other successors in interest as the Selling Securityholder under this prospectus. The Selling Securityholder also may transfer the securities in other circumstances, in which case the transferees, pledgees or other successors in interest will be the selling beneficial owners for purposes of this prospectus.

In connection with the sale of the securities or interests in the securities, the Selling Securityholder may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the securities in the course of hedging the positions they assume. The Selling Securityholder may also sell the securities short and deliver the securities to close out their short positions, or loan or pledge the securities to broker-dealers that in turn may sell the securities. The Selling Securityholder 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 the securities, which securities such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

The aggregate proceeds to the Selling Securityholder from the sale of the securities offered by them will be the purchase price of such securities less discounts or commissions, if any. The Selling Securityholder reserves the right to accept and, together with their agents from time to time, to reject, in whole or in part, any proposed purchase of the securities to be made directly or through agents. We will not receive any of the proceeds from any offering by the Selling Securityholder.

There can be no assurance that the Selling Securityholder will sell all or any of the securities offered by this prospectus. The Selling Securityholder also may in the future resell securities in open market transactions in reliance upon Rule 144 under the Securities Act, provided that they meet the criteria and conform to the requirements of that rule, or pursuant to other available exemptions from the registration requirements of the Securities Act.

The Selling Securityholder and any underwriters, broker-dealers or agents that participate in the sale of the securities or interests in the securities may be "underwriters" within the meaning of Section 2(11) of the Securities Act. Any discounts, commissions, concessions or profit they earn on any resale of the securities may be underwriting discounts and commissions under the Securities Act. If the Selling Securityholder is an "underwriter" within the meaning of Section 2(11) of the Securities Act, then the Selling Securityholder will be subject to the prospectus delivery requirements of the Securities Act. Underwriters and their controlling persons, dealers and agents may be entitled, under agreements entered into with us and the Selling Securityholder, to indemnification against and contribution toward specific civil liabilities, including liabilities under the Securities Act.

To the extent required, the securities to be sold, the respective purchase prices and public offering prices, the names of any agent, dealer or underwriter, and any applicable discounts, commissions, concessions or other compensation with respect to a particular offer will be set forth in an accompanying prospectus supplement or, if appropriate, a post-effective amendment to the registration statement that includes this prospectus.

To facilitate the offering of shares of the securities, certain persons participating in the offering may engage in transactions that stabilize, maintain or otherwise affect the price of the securities. This may include over-

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

The Selling Securityholder may solicit offers to purchase the securities directly from, and it may sell such securities directly to, institutional investors or others. In this case, no underwriters or agents would be involved. The terms of any of those sales, including the terms of any bidding or auction process, if utilized, will be described in the applicable prospectus supplement.

It is possible that one or more underwriters may make a market in our securities, but such underwriters will not be obligated to do so and may discontinue any market making at any time without notice. We cannot give any assurance as to the liquidity of the trading market for our securities.

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

Under the Purchase Agreement, we have agreed to indemnify the Selling Securityholder party thereto against certain liabilities that they may incur in connection with the sale of the securities registered hereunder, including liabilities under the Securities Act, and to contribute to payments that the Selling Securityholder may be required to make with respect thereto.

We have agreed to maintain the effectiveness of this prospectus until all such securities have been sold under this prospectus or are no longer outstanding, or the later of (a) the date which a legal opinion is issued to effect the removal of restrictive legends on the Selling Securityholder's shares and (b) one year from the date of effectiveness of the registration statement on Form S-3 to which this prospectus is part. We have agreed to pay all expenses in connection with this offering related to registration. The Selling Securityholder will pay, on a pro rata basis, any underwriting fees, discounts, selling commissions, stock transfer taxes and certain legal expenses relating to the offering. We will make copies of this prospectus available to the Selling Securityholder for the purpose of satisfying the prospectus delivery requirements of the Securities Act.

The Selling Securityholder may use this prospectus in connection with resales of the securities. This prospectus and any accompanying prospectus supplement will identify the Selling Securityholder, the terms of the securities and any material relationships between us and the Selling Securityholder. Selling Securityholder may be deemed to be an underwriter under the Securities Act in connection with the securities they resell and any profits on the sales may be deemed to be underwriting discounts and commissions under the Securities Act. Unless otherwise set forth in a prospectus supplement, the Selling Securityholder will receive all the net proceeds from the resale of the securities.

The Selling Securityholder may elect to make an in-kind distribution of the securities to its members, partners or shareholders pursuant to the registration statement of which this prospectus is a part by delivering a prospectus. To the extent that such members, partners or shareholders are not affiliates of ours, such members, partners or shareholders would thereby receive freely tradable securities pursuant to the distribution through a registration statement.

If at the time of any offering made under this prospectus a member of FINRA participating in the offering has a "conflict of interest" as defined in FINRA Rule 5121 ("Rule 5121"), that offering will be conducted in accordance with the relevant provisions of Rule 5121.

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To our knowledge, there are currently no plans, arrangements or understandings between the Selling Securityholder and any broker-dealer or agent regarding the sale of the securities by the Selling Securityholder. Upon our notification by the Selling Securityholder that any material arrangement has been entered into with an underwriter or broker-dealer for the sale of securities through a block trade, special offering, exchange distribution, secondary distribution or a purchase by an underwriter or broker-dealer, we will file, if required by applicable law or regulation, a supplement to this prospectus pursuant to Rule 424(b) under the Securities Act disclosing certain material information relating to such underwriter or broker-dealer and such offering.

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

The Selling Securityholder and any other persons participating in the sale or distribution of the securities will be subject to applicable provisions of the Securities Act and the Exchange Act, and the rules and regulations thereunder, including, without limitation, Regulation M. These provisions may restrict certain activities of, and limit the timing of purchases and sales of any of the securities by, the Selling Securityholder or any other person, which limitations may affect the marketability of the shares of the securities.

We are required to pay all fees and expenses incident to the registration of the securities to be offered and sold pursuant to this prospectus, which we expect to be approximately \$0.1 million.

LEGAL MATTERS

Goodwin Procter LLP, Boston, Massachusetts has passed upon the validity of the securities of Markforged Holding Corporation offered by this prospectus and certain other legal matters related to this prospectus. Any underwriters will be advised about legal matters by their own counsel, which will be named in a prospectus supplement.

EXPERTS

The financial statements incorporated in this prospectus by reference to the Annual Report on Form10-K for the year ended December 31, 2021 have been so incorporated in reliance on the report of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-3, including exhibits, under the Securities Act with respect to the securities offered hereby. This prospectus is part of the registration statement, but does not contain all of the information included in the registration statement or the exhibits. Statements contained in this prospectus as to the contents of any contract or other document referred to are not necessarily complete and in each instance, if such contract or document is filed as an exhibit, reference is made to the copy of such contract or other document filed as an exhibit to the registration statement, each statement being qualified in all respects by such reference.

We file annual, quarterly and current reports, proxy statements and other information with the SEC. Our SEC filings are available to the public on the Internet at a website maintained by the SEC located at http://www.sec.gov. Those filings are also available to the public on, or accessible through, our website under the heading "Investor Relations" at www.markforged.com. The information contained on, or otherwise accessible through, our website, however, is not, and should not be deemed to be, a part of this prospectus.

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DOCUMENTS INCORPORATED BY REFERENCE

The SEC allows us to "incorporate by reference" into this prospectus the documents that we file with the SEC, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus. We incorporate by reference into this prospectus the following documents, excluding the portions of any document not deemed to be "filed" with the SEC:

- our Annual Report on Form 10-K for the fiscal year ended December 31, 2021, filed with the SEC on March 31, 2022.
- our <u>Definitive Proxy Statement</u> on Schedule 14A filed with the SEC on April 29, 2022, to the extent incorporated by reference into Part III of the Annual Report on <u>Form 10-K</u> for the fiscal year ended December 31, 2021.
- our Quarterly Reports on Form 10-Q for the fiscal quarters ended March 31, 2022 and June 30, 2022, filed with the SEC on<u>May 12, 2022</u> and <u>August 11, 2022</u>, respectively.
- our Current Reports on Form 8-K, filed with the SEC on January 12, 2022, June 21, 2022, July 12, 2022 and August 31, 2022.
- the description of the registrant's common stock contained in the registrant's registration statement on <u>Form 8-A</u> (File No. 000-39453) filed by the registrant with the Commission under Section 12(b) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), on August 17, 2020, as updated by <u>Exhibit 4.3</u> of the Annual Report on Form 10-K for the fiscal year ended December 31, 2021, and including any amendments or reports filed for the purpose of updating such description.

All documents that the registrant subsequently files pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act prior to the filing of a posteffective amendment to this registration statement which indicates that all of the shares of common stock offered have been sold or which deregisters all of such shares then remaining unsold, shall be deemed to be incorporated by reference in this registration statement and to be a part hereof from the date of the filing of such documents. We are not, however, incorporating, in each case, any documents or information that we are deemed to furnish and not file in accordance with SEC rules.

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

Under no circumstances will any information furnished under current items 2.02 or 7.01 ofForm 8-K be deemed incorporated herein by reference unless such Form 8-K expressly provides to the contrary.

You may request a copy of any or all of the documents incorporated by reference but not delivered with this prospectus, at no cost, by writing or telephoning us at the following address and number: Markforged Holding Corporation, 480 Pleasant Street, Watertown, Massachusetts 02472, telephone (866) 496-1805. We will not, however, send exhibits to those documents, unless the exhibits are specifically incorporated by reference in those documents.



4,100,000 SHARES OF COMMON STOCK OF MARKFORGED HOLDING CORPORATION

PROSPECTUS

, 2022

You should rely only on the information contained in this prospectus. We have not authorized anyone to provide you with different information. You should not assume that the information contained in this prospectus is accurate as of any date other than the date of this prospectus. We are not making an offer of these securities in any state where the offer is not permitted.

PART II Information Not Required in Prospectus

ITEM 14. Other Expenses of Issuance and Distribution.

The expenses payable by Markforged Holding Corporation in connection with the distribution of the securities being registered (other than underwriting discounts and commissions, if any) are set forth below. Each item listed is estimated, except for the SEC registration fee.

	Amount
SEC registration fee	\$ 917.87
Accounting fees and expenses	\$ 20,000.00
Legal fees and expenses	\$ 50,000.00
Total expenses	\$ 70,917.87

* Estimated expenses not presently known.

ITEM 15. Indemnification of Directors and Officers.

Section 145 of the DGCL authorizes a corporation to indemnify its directors and officers against liabilities arising out of actions, suits and proceedings to which they are made or threatened to be made a party by reason of the fact that they have served or are currently serving as a director or officer to a corporation. The indemnity may cover expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the director or officer in connection with any such action, suit or proceeding. Section 145 permits corporations to pay expenses (including attorneys' fees) incurred by directors and officers in advance of the final disposition of such action, suit or proceeding. In addition, Section 145 provides that a corporation has the power to purchase and maintain insurance on behalf of its directors and officers against any liability asserted against them and incurred by them in their capacity as a director or officer, or arising out of their status as such, whether or not the corporation would have the power to indemnify the director or officer against such liability under Section 145.

We have adopted provisions in our certificate of incorporation and bylaws that limit or eliminate the personal liability of our directors to the fullest extent permitted by the DGCL, as it now exists or may in the future be amended. Consequently, a director will not be personally liable to us or our stockholders for monetary damages or breach of fiduciary duty as a director, except for liability for:

- any breach of the director's duty of loyalty to us or our stockholders;
- any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- · any unlawful payments related to dividends or unlawful stock purchases, redemptions or other distributions; or
- any transaction from which the director derived an improper personal benefit.

These limitations of liability do not alter director liability under the federal securities laws and do not affect the availability of equitable remedies such as an injunction or rescission.

In addition, our bylaws provide that:

- we will indemnify our directors, officers and, in the discretion of our board of directors, certain employees to the fullest extent permitted by the DGCL, as it now exists or may in the future be amended; and
- we will advance reasonable expenses, including attorneys' fees, to our directors and, in the discretion of our board of directors, to our officers and certain employees, in connection with legal proceedings relating to their service for or on behalf of us, subject to limited exceptions.

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We have entered into indemnification agreements with each of our directors and with certain of our executive officers. These agreements provide that we will indemnify each of our directors, certain of our executive officers and, at times, their affiliates to the fullest extent permitted by Delaware law. We will advance expenses, including attorneys' fees (but excluding judgments, fines and settlement amounts), to each indemnified director, executive officer or affiliate in connection with any proceeding in which indemnification is available and we will indemnify our directors and officers for any action or proceeding arising out of that person's services as a director or officer brought on behalf of us and/or in furtherance of our rights. Additionally, each of our director's services and advance of expenses and/or insurance provided by their affiliates, which indemnification relates to and might apply to the same proceedings arising out of such director's services as a director referenced herein. Nonetheless, we have agreed in the indemnification agreements that our obligations to those same directors are primary and any obligation of the affiliates of those directors to advance expenses or to provide indemnification for the expenses or liabilities incurred by those directors are secondary.

We also maintain general liability insurance which covers certain liabilities of our directors and officers arising out of claims based on acts or omissions in their capacities as directors or officers, including liabilities under the Securities Act.

ITEM 16. Exhibits.

INDEX TO EXHIBITS

The following exhibits are included or incorporated by reference in this registration statement on FormS-3 (certain documents have been previously filed with the SEC pursuant to the Exchange Act by Markforged Holding Corporation (Commission File Number 333-258775)):

Exhibit Number	Exhibit Title
2.1+*	Sale and Purchase Agreement, dated as of July 11, 2022, by and between Höganäs Aktiebolag and Markforged Holding Corporation (incorporated by reference to Exhibit 2.1 to Markforged Holding Corporation's Form 8-K filed July 12, 2022).
4.4*	Warrant Agreement, dated August 17, 2020, between one and Continental Stock Transfer & Trust Company, as warrant agent (incorporated by reference to Exhibit 4.4 to one's Registration Statement on Form S-4/A filed June 4, 2021).
4.5*	Specimen Common Stock Certificate of Markforged Holding Corporation (incorporated by reference to Exhibit 4.5 to Markforged Holding Corporation's Registration Statement on Form S-4/A filed June 4, 2021).
5.1	Opinion of Goodwin Procter LLP.
23.1	Consent of PricewaterhouseCoopers LLP.
23.2	Consent of Goodwin Procter LLP (included as part of Exhibit 5.1).
24.1	Power of Attorney (included on signature page of this Registration Statement).
107	Filing Fee Table.

* Previously filed.

+ Schedules and exhibits have been omitted pursuant to Item 601(b)(2) of Regulation S-K. The registrant agrees to furnish supplementally a copy of any omitted schedule or exhibit to the SEC upon request.

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ITEM 17. Undertakings.

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 prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

(iii) 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 (i), (ii) and (iii) do not apply if the registration statement is on Form S-1, Form S-3, Form SF-3 or Form F-3 and the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission 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:

Each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness.

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 first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use; and

- (5) that, for the purpose of determining liability of the registrant under the Securities Act to any purchaser in the initial distribution of the securities, the undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:
 - (a) any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;

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- (b) any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
- (c) the portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of an undersigned registrant; and
- (d) any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 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 Securities and Exchange Commission, such indemnification is against public policy as expressed in the Securities Act of 1933 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 of 1933 and will be governed by the final adjudication of such issue.

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SIGNATURES AND POWER OF ATTORNEY

Pursuant to the requirements of the Securities Act, 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 Watertown, State of Massachusetts, on August 31, 2022.

MARKFORGED HOLDING CORPORATION

By: /s/ Shai Terem

Name: Shai Terem Title: *Chief Executive Officer*

Each person whose signature appears below constitutes and appoints each of Shai Terem, Mark Schwartz and Stephen Karp, acting alone or together with another attorney-in-fact, as such person's true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution, for such person and in such person's name, place and stead, in any and all capacities, to sign any or all amendments (including post-effective amendments) to this registration statement, and to file the same, with all exhibits thereto, and all documents in connection therewith, with the SEC, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as such person might or could do in person, hereby ratifying and confirming all that any said attorney-in-fact and agent, or any substitute or substitutes of any of them, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Shai Terem Shai Terem	Director, President, and Chief Executive Officer (Principal Executive Officer)	August 31, 2022
/s/ Mark Schwartz Mark Schwartz	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	August 31, 2022
/s/ Edward Anderson Edward Anderson	Director	August 31, 2022
/s/ Kevin Earnest Hartz Kevin Earnest Hartz	Director	August 31, 2022
/s/ Michael Medici Michael Medici	Director	August 31, 2022
/s/ Paul Milbury Paul Milbury	Director	August 31, 2022
/s/ Antonio Rodriguez Antonio Rodriguez	Director	August 31, 2022

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/s/ Carol Meyers Carol Meyers	Director	August 31, 2022
/s/ Alan Masarek Alan Masarek	Director	August 31, 2022



Exhibit 5.1

Goodwin Procter LLP 100 Northern Avenue Boston, MA 02210

goodwinlaw.com +1 617 570 1000

August 31, 2022

Markforged Holding Corporation 480 Pleasant St. Watertown, MA 02472

Re: Securities Registered under Registration Statement on Form S-3

We have acted as counsel to you in connection with your filing of a Registration Statement on FormS-3 (as amended or supplemented, the '<u>Registration</u> <u>Statement</u>'') filed on August 31, 2022 with the Securities and Exchange Commission (the '<u>Commission</u>'') pursuant to the Securities Act of 1933, as amended (the '<u>Securities Act</u>''), relating to the registration by Markforged Holding Corporation, a Delaware corporation (the '<u>Company</u>''), of the offer and resale from time to time by the selling stockholder listed in the Registration Statement under ''Selling Securityholder'' of up to 4,100,000 shares (the '<u>Shares</u>'') of the Company's common stock, par value \$0.0001 per share.

We have reviewed such documents and made such examination of law as we have deemed appropriate to give the opinions set forth below. We have relied, without independent verification, on certificates of public officials and, as to matters of fact material to the opinions set forth below, on certificates of officers of the Company.

The opinion set forth below is limited to the Delaware General Corporation Law.

Based on the foregoing, we are of the opinion that the Shares have been duly authorized and validly issued and are fully paid and nonassessable.

We hereby consent to the inclusion of this opinion as Exhibit 5.1 to the Registration Statement and to the references to our firm under the caption "Legal Matters" in the Registration Statement. In giving our consent, we do not admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations thereunder.

Very truly yours,

/s/ GOODWIN PROCTER LLP

GOODWIN PROCTER LLP

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on FormS-3 of Markforged Holding Corporation of our report dated March 31, 2022 relating to the financial statements, which appears in Markforged Holding Corporation's Annual Report on Form 10-K for the year ended December 31, 2021. We also consent to the reference to us under the heading "Experts" in such Registration Statement.

/s/ PricewaterhouseCoopers LLP Boston, Massachusetts August 31, 2022

Calculation of Filing Fee Tables

Form S-3

(Form Type)

Markforged Holdings Corporation

(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	Proposed Maximum Offering Price Per Unit	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
				Ne	wly Regist	tered Securities						
Fees to Be Paid Fees Previously	Equity	Common Stock, par value \$0.0001 per share	Other	4,100,000 (1)	\$2.4150	\$9,901,500.00 ⁽²⁾	0.0000927	\$917.87				
Paid												
				(Carry Forw	ard Securities						
Carry Forward Securities												
			Total Offe	ring Amounts		\$9,901,500.00		\$917.87				
		To	otal Fees Pr	reviously Paid				\$0.00				
	1		Tot	al Fee Offsets				\$0.00				
				Net Fee Due				\$917.87				

(1) Consists of 4,100,000 shares of the common stock of Markforged Holding Corporation, par value \$0.0001 per share (the "Common Stock"), to be offered by the selling securityholders named in the registration statement to which this exhibit relates (the "Registration Statement"). In accordance with Rule 416 under the Securities Act of 1933, as amended (the "Securities Act"), the Registration Statement also covers an indeterminate number of additional shares of common stock that may be offered or issued to prevent dilution resulting from stock splits, stock dividends or similar transactions.

(2) Estimated solely for the purpose of calculating the amount of the registration fee pursuant to Rule 457(c) under the Securities Act, based upon the average of the high and low prices of the Common Stock as reported on the New York Stock Exchange on August 30, 2022, which was \$2.4150.