UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

POST-EFFECTIVE AMENDMENT NO. 1 TO FORM S-8 REGISTRATION STATEMENT NO. 333-252197 POST-EFFECTIVE AMENDMENT NO. 1 TO FORM S-8 REGISTRATION STATEMENT NO. 333-229391 **UNDER THE SECURITIES ACT OF 1933**

NORTHERN TECHNOLOGIES INTERNATIONAL CORPORATION

(Exact name of registrar	nt as specified in its charter)
Delaware (State or other jurisdiction of incorporation or organization)	41-0857886 (I.R.S. Employer Identification No.)
4201 Woodland Road	, , , , , , , , , , , , , , , , , , , ,
P.O. Box 69	
Circle Pines, Minnesota	55014
(Address of Principal Executive Offices)	(Zip Code)
Northern Technologies International	l Corporation 2019 Stock Incentive Plan l Corporation 2024 Stock Incentive Plan e of the plan)
	rick Lynch
	ief Executive Officer
	International Corporation odland Road
	Box 69
Circle Pines,	Minnesota 55014
(Name and addres	s of agent for service)
,	225-6600 g area code, of agent for service)
Conias r	equested to:
	Culbert, Esq.
•	umbert, Esq.
Fox Rot	hschild LLP
•	Center
	Street, Suite 3600
	innesota 55402-3601 607-7000
(012)	
Indicate by check mark whether the registrant is a large accelerated filer, an emerging growth company. See the definitions of "large accelerated filer," "company" in Rule 12b-2 of the Exchange Act.	
Large accelerated filer \square	Accelerated filer □
Non-accelerated filer ⊠	Smaller reporting company ⊠
	Emerging growth company \square
If an emerging growth company, indicate by check mark if the registrant has	s 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. \square

EXPLANATORY NOTE

This Post-Effective Amendment No. 1 (this "Post-Effective Amendment No. 1") relates to each of the following Registration Statements on Form S-8 (collectively, the "2019 Plan Registration Statements") of Northern Technologies International Corporation (the "Company" or the "Registrant") filed with the Securities and Exchange Commission (the "SEC") to register under the Securities Act of 1933, as amended (the "Securities Act"), that number of shares of common stock, all with par value \$0.02 per share, of the Company (the "Common Stock") as indicated below, pursuant to the Northern Technologies International Corporation 2019 Stock Incentive Plan, as amended and restated (the "2019 Plan"):

- · Registration Statement on Form S-8 (Registration No. 333-252197) filed by the Company with the SEC on January 19, 2021 registering 800,000 shares of Common Stock; and
- · Registration Statement on Form S-8 (Registration No. 333-229391) filed by the Company with the SEC on January 28, 2019 registering 800,000 shares of Common Stock.

All figures have been adjusted to reflect the two-for-one stock split effected on June 28, 2019.

On January 19, 2024 (the "Effective Date"), the stockholders of the Company approved and adopted the Northern Technologies International Corporation 2024 Stock Incentive Plan (the "2024 Plan"), which was approved by the Company's Board of Directors on November 9, 2023. As of the Effective Date, the Company's authority to grant new awards under the 2019 Plan terminated upon stockholder approval of the 2024 Plan on such date. The maximum number of shares of Common Stock available for issuance under the 2024 Plan, subject to adjustment pursuant to the terms of the 2024 Plan, is (i) 800,000 shares of Common Stock (the "New 2024 Plan Shares"); plus (ii) 157,059 shares of Common Stock remaining available for issuance under the 2019 Plan but not subject to outstanding awards under the 2019 Plan as of the Effective Date (the "2019 Plan Carryover Shares"); plus (iii) up to 1,387,415 shares of Common Stock subject to awards outstanding under the 2019 Plan as of the Effective Date but only to the extent such awards are subsequently forfeited, cancelled, expire, or otherwise terminate without the issuance of such shares of Common Stock after the Effective Date (the "2019 Plan Unused Award Shares").

The Company is filing this Post-Effective Amendment No. 1 to each of the 2019 Plan Registration Statements, pursuant to the undertaking in Item 512(a)(1)(iii) of SEC Regulation S-K, which requires the Company to disclose a material change in the plan of distribution as it was originally disclosed in the 2019 Plan Registration Statements, to reflect that the Company's authority to grant new awards under the 2019 Plan terminated and to add the 2024 Plan and reflect that, as of the Effective Date, the previously registered 2019 Plan Carryover Shares and any 2019 Plan Unused Award Shares may be issued under the 2024 Plan, a copy of which is incorporated herein by reference as an exhibit hereto along with a new opinion as the validity of the 2019 Plan Carryover Shares and any 2019 Plan Unused Award Shares issuable pursuant to the 2024 Plan.

This Post-Effective Amendment No. 1 amends and supplements the items listed below. All other items of the Registration Statements are incorporated herein by reference without change (the 2019 Plan Registration Statements as amended by this Post-Effective Amendment No. 1, collectively, the "Amended 2019 Plan Registration Statements").

No additional shares of Common Stock are being registered hereby.

Contemporaneously with the filing of this Post-Effective Amendment No. 1, the Company is filing a new Registration Statement on Form S-8 to register the New 2024 Plan Shares available for offer or sale pursuant to the 2024 Plan and such indeterminate number of shares as may become available under the 2024 Plan as a result of the adjustment provisions thereof pursuant to Rule 416(a) under the Securities Act.

PART I INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

Information required by Part I of Form S-8 to be contained in the Section 10(a) prospectus is omitted from the Amended 2019 Plan Registration Statements in accordance with the provisions of Rule 428 under the Securities Act. The documents containing the information specified in Part I will be delivered to the participants in the 2024 Plan covered by these Amended 2019 Plan Registration Statements as required by Rule 428(b)(1). Such documents are not required to be filed with the SEC as part of these Amended 2019 Plan Registration Statements.

PART II INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The Company hereby incorporates by reference into these Amended 2019 Plan Registration Statements the following documents which have been previously filed (not furnished) with the SEC (File No. 001-11038):

- (a) The Company's Annual Report on Form 10-K for the year ended August 31, 2023 filed with the SEC on November 21, 2023;
- (b) The Company's Quarterly Report on Form 10-Q for the quarter ended November 30, 2023 filed with the SEC on January 11, 2024;
- (c) The Company's Current Report on Form 8-K (other than portions thereof furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits accompanying such reports that are related to such items) filed with the SEC on <u>January 19, 2024</u>;
- (d) The Company's Definitive Proxy Statement on Schedule 14A for the Company's 2024 Annual Meeting of Stockholders held on January 19, 2024 filed with the SEC on December 4, 2023; and
- (e) The description of the Common Stock contained in Exhibit 4.2 to the Company's Annual Report on Form 10-K for the year ended August 31, 2023 filed with the SEC on November 21, 2023 and any amendment or report filed for the purpose of updating such description.

In addition, all other documents filed (not furnished) by the Company pursuant to Section 13(a), Section 13(c), Section 14 or Section 15(d) of the Exchange Act on or after the date of this Post-Effective Amendment No. 1 and prior to the filing of a post-effective amendment to these Amended 2019 Plan Registration Statements that indicates that all securities offered hereby and thereby have been sold or that deregisters all securities then remaining unsold shall be deemed to be incorporated in these Amended 2019 Plan Registration Statements by reference and to be a part of these Amended 2019 Plan Registration Statements from the date of filing of such documents; *provided*, *however*, that documents or information deemed to have been furnished to and not filed with the SEC in accordance with the rules of the SEC shall not be deemed incorporated by reference into these Amended 2019 Plan Registration Statements

Any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of these Amended 2019 Plan Registration Statements to the extent that a statement contained herein or in any subsequently filed document which also 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 these Amended 2019 Plan Registration Statements.

Item 6. Indemnification of Directors and Officers.

Delaware General Corporation Law

Section 145(a) of the General Corporation Law of the State of Delaware (the "DGCL") provides that a corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation) by reason of the fact that the person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with such action, suit or proceeding if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe the person's conduct was unlawful. The termination of any action, suit or proceeding by judgment, order, settlement, conviction or upon a plea of nolo contendere or its equivalent, shall not, of itself, create a presumption that the person did not act in good faith and in a manner which the person reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had reasonable cause to believe that the person's conduct was unlawful.

Section 145(b) of the DGCL states that a corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to procure a judgment in its favor by reason of the fact that the person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against expenses (including attorneys' fees) actually and reasonably incurred by the person in connection with the defense or settlement of such action or suit if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the corporation and except that no indemnification shall be made in respect of any claim, issue or matter as to which the person shall have been adjudged to be liable to the corporation unless and only to the extent that the Delaware Court of Chancery or the court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, the person is fairly and reasonably entitled to indemnity for such expenses as the Delaware Court of Chancery or such other court shall deem proper.

Section 145(c) of the DGCL provides that to the extent that a present or former director or officer of a corporation has been successful on the merits or otherwise in defense of any action, suit or proceeding referred to in subsections (a) and (b) of Section 145, or in defense of any claim, issue or matter therein, such person shall be indemnified against expenses (including attorneys' fees) actually and reasonably incurred by such person in connection therewith.

Section 145(d) of the DGCL states that any indemnification under subsections (a) and (b) of Section 145 (unless ordered by a court) shall be made by the corporation only as authorized in the specific case upon a determination that indemnification of the present or former director, officer, employee or agent is proper in the circumstances because the person has met the applicable standard of conduct set forth in subsections (a) and (b) of Section 145. Such determination shall be made with respect to a person who is a director or officer at the time of such determination (1) by a majority vote of the directors who are not parties to such action, suit or proceeding, even though less than a quorum, (2) by a committee of such directors designated by majority vote of such directors, even though less than a quorum, (3) if there are no such directors, or if such directors so direct, by independent legal counsel in a written opinion or (4) by the stockholders.

Section 145(f) of the DGCL states that the indemnification and advancement of expenses provided by, or granted pursuant to, the other subsections of Section 145 shall not be deemed exclusive of any other rights to which those seeking indemnification or advancement of expenses may be entitled under any bylaw, agreement, vote of stockholders or disinterested directors or otherwise, both as to action in such person's official capacity and as to action in another capacity while holding such office.

Section 145(g) of the DGCL provides that a corporation shall have the power to purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against any liability asserted against such person and incurred by such person in any such capacity or arising out of such person's status as such, whether or not the corporation would have the power to indemnify such person against such liability under the provisions of Section 145.

Section 145(j) of the DGCL states that the indemnification and advancement of expenses provided by, or granted pursuant to, Section 145 shall, unless otherwise provided when authorized or ratified, continue as to a person who has ceased to be a director, officer, employee or agent and shall inure to the benefit of the heirs, executors and administrators of such a person.

Section 102(b)(7) of the DGCL permits a corporation to provide in its certificate of incorporation that a director or officer of the corporation shall not be personally liable to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director or an officer, except for liability for any breach of the director's or officer's duty of loyalty to the corporation or its stockholders, for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, for unlawful payments of dividends or unlawful stock purchases or redemptions in the case of a director, for any transaction from which the director or officer derived an improper personal benefit or in the case of an officer any action by or in the right of the corporation. No such provision shall eliminate or limit the liability of a director or officer for any act or omission occurring prior to the date when such provision becomes effective.

Certificate of Incorporation

The Company has adopted provisions in its Restated Certificate of Incorporation that limit director and officer liability in accordance with, and to the fullest extent provided by, the provisions of the DGCL as they may from time to time be amended.

Bylaws

The Company's Second Amended and Restated Bylaws provide for the indemnification of eligible persons, including directors and officers, to the maximum extent permitted by law.

Indemnification Agreements

The Company has entered into agreements with its directors and executive officers that require the Company to indemnify them against certain liabilities that may arise by reason of their status or service as directors or executive officers to the fullest extent permitted by the Company's Restated Certificate of Incorporation, Second Amended and Restated Bylaws and DGCL or other applicable law.

Insurance Policies

The Company purchased an insurance policy that purports to insure our directors and officers against certain liabilities incurred by them in the discharge of their functions as directors and officers.

Northern Technologies International Corporation 2019 Stock Incentive Plan

Section 21.10 of the Northern Technologies International Corporation 2019 Stock Incentive Plan, as amended and restated, provides that, subject to any limitations and requirements of Delaware law, each individual who is or will have been a member of the Board, or a committee appointed by the Board, or an officer or employee of the Company to whom authority was delegated in accordance with Section 3.1 of the 2019 Plan, will be indemnified and held harmless by the Company against and from any loss, cost, liability or expense that may be imposed upon or reasonably incurred by him or her in connection with or resulting from any claim, action, suit or proceeding to which he or she may be a party or in which he or she may be involved by reason of any action taken or failure to act under the 2019 Plan and against and from any and all amounts paid by him or her in settlement thereof, with the Company's approval, or paid by him or her in satisfaction of any judgment in any such action, suit or proceeding against him or her, provided he or she will give the Company an opportunity, at its own expense, to handle and defend the same before he or she undertakes to handle and defend it on his/her own behalf.

Northern Technologies International Corporation 2024 Stock Incentive Plan

Section 21.11 of the Northern Technologies International Corporation 2024 Stock Incentive Plan provides that, subject to any limitations and requirements of Delaware law, each individual who is or will have been a member of the Board, or a committee appointed by the Board, or an officer or employee of the Company to whom authority was delegated in accordance with Section 3.1 of the 2024 Plan, will be indemnified and held harmless by the Company against and from any loss, cost, liability or expense that may be imposed upon or reasonably incurred by him or her in connection with or resulting from any claim, action, suit or proceeding to which he or she may be a party or in which he or she may be involved by reason of any action taken or failure to act under the 2024 Plan and against and from any and all amounts paid by him or her in settlement thereof, with the Company's approval, or paid by him or her in satisfaction of any judgment in any such action, suit or proceeding against him or her, provided he or she will give the Company an opportunity, at its own expense, to handle and defend the same before he or she undertakes to handle and defend it on his/her own behalf.

The foregoing description of Section 145 of the DGCL, our Restated Certificate of Incorporation, Second Amended and Restated Bylaws, 2019 Plan and the 2024 Plan is only a summary and is qualified in its entirety by the full text of each of the foregoing.

The Company understands that it is the position of the SEC that insofar as the foregoing provisions may be invoked to disclaim liability for damages arising under the Securities Act, that such provisions are against public policy as expressed in the Securities Act and are therefore unenforceable.

Item 8. Exhibits.

The following exhibits are filed with or incorporated by reference into these Amended 2019 Plan Registration Statements:

Exhibit No.	Description		
4.1	Restated Certificate of Incorporation of Northern Technologies International Corporation, dated January 31, 2023 (Incorporated by reference to Exhibit 3.1 to the Company's Quarterly Report on Form 10-Q for the fiscal quarter ended February 28, 2023 (File No.		
	<u>001-11038))</u>		
4.2	Second Amended and Restated Bylaws of Northern Technologies International Corporation (Incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K as filed with the Securities and Exchange Commission on November 14, 2022 (File No. 001-11038))		
4.3	Specimen Stock Certificate Representing Common Stock of Northern Technologies International Corporation (Incorporated by reference to Exhibit 4.1 to the Company's Registration Statement on Form 10 (File No. 001-19331) (Filed on paper - hyperlink is not required pursuant to Rule 105 of Regulation S-T))		
5.1	Opinion of Fox Rothschild LLP regarding the validity of the shares of Common Stock being registered (Filed herewith)		
23.1	Consent of Baker Tilly US, LLP (Filed herewith)		
23.2	Consent of Fox Rothschild LLP (Included within the opinion filed as Exhibit 5.1)		
24.1	Power of Attorney (Included on signature page to this Registration Statement)		
99.1	Northern Technologies International Corporation 2024 Stock Incentive Plan (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K as filed with the Securities and Exchange Commission on January 19, 2024 (File No. 001-11038)).		

Item 9. Undertakings.

- (a) The Registrant hereby undertakes:
- (1) To file, during any period in which offers or sales are being made, a post-effective amendment to these Amended 2019 Plan Registration Statements:
 - (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 these Amended 2019 Plan Registration Statements (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in these Amended 2019 Plan Registration Statements. 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 SEC 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 Filing Fee Tables" or "Calculation of Registration Fee" table, as applicable, in the effective registration statement; and
 - (iii) To include any material information with respect to the plan of distribution not previously disclosed in these Amended 2019 Plan Registration Statements or any material change to such information in these Amended 2019 Plan Registration Statements:

Provided, however, that paragraphs (a)(1)(i) and (a)(1)(ii) herein do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed with or furnished to the SEC by the Registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in these Amended 2019 Plan Registration Statements.

- (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.
- (b) The Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the Registrant's annual report pursuant to Section 13(a) or 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in these Amended 2019 Plan Registration Statements shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (c) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to the directors, officers, and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer, or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer, or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Post-Effective Amendment No. 1 to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Circle Pines, State of Minnesota, on January 22, 2024.

NORTHERN TECHNOLOGIES INTERNATIONAL CORPORATION

By: /s/ G. Patrick Lynch
G. Patrick Lynch
President and Chief Executive Officer

POWER OF ATTORNEY

We, the undersigned officers and directors of Northern Technologies International Corporation hereby severally constitute and appoint G. Patrick Lynch and Matthew C. Wolsfeld, and each of them singly (with full power to each of them to act alone), our true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution in each of them for each of the undersigned and in each of the undersigned's name, place and stead, and in any and all capacities, to sign any and all amendments (including post-effective amendments) to these Amended 2019 Plan Registration Statements, and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, 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 or necessary to be done in and about the premises, as fully to all intents and purposes as each of the undersigned might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them, or any of their substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Post-Effective Amendment No. 1 has been signed by the following persons in the capacities and on the dates indicated.

Name and Signature	Title	Date
/s/ G. Patrick Lynch G. Patrick Lynch	President and Chief Executive Officer and Director (principal executive officer)	January 22, 2024
/s/ Matthew C. Wolsfeld Matthew C. Wolsfeld	Chief Financial Officer and Secretary (principal financial and accounting officer)	January 22, 2024
/s/ Richard J. Nigon Richard J. Nigon	Chairman of the Board	January 22, 2024
/s/ Nancy E. Calderon Nancy E. Calderon	Director	January 22, 2024
/s/ Sarah E. Kemp Sarah E. Kemp	Director	January 22, 2024
/s/ Sunggyu Lee, Ph.D. Sunggyu Lee, Ph.D.	Director	January 22, 2024

Name and Signature	Title	Date
/s/ Ramani Narayan, Ph.D. Ramani Narayan, Ph.D.	Director	January 22, 2024
/s/ Cristina Pinho Cristina Pinho	Director	January 22, 2024
/s/ Konstantin von Falkenhausen Konstantin von Falkenhausen	Director	January 22, 2024



City Center
33 South Sixth Street
Suite 3600
Minneapolis, MN 55402

€ 612.607.7000 € 612.607.7100

January 22, 2024

Northern Technologies International Corporation 4201 Woodland Road P.O. Box 69 Circle Pines, Minnesota 55014

Re: Northern Technologies International Corporatin
Post-Effective Amendment No. 1 Registration Statements on Form S-8

Ladies and Gentlemen:

We have acted as counsel to Northern Technologies International Corporation, a Delaware corporation (the "Company"), in connection with the preparation of the Post-Effective Amendment No. 1 (the "Post-Effective Amendment") to each of the following Registration Statements on Form S-8 (collectively, the "2019 Plan Registration Statements"), which 2019 Plan Registration Statements registered under the Securities Act of 1933, as amended (the "Securities Act"), that number of shares of common stock, all with par value \$0.02 per share, of the Company (the "Common Stock") as indicated below, pursuant to the Northern Technologies International Corporation 2019 Stock Incentive Plan, as amended and restated (the "2019 Plan"); such Post-Effective Amendment to be filed by the Company with the Securities and Exchange Commission (the "SEC") on January 22, 2024:

- · Registration Statement on Form S-8 (Registration No. 333-252197) filed by the Company with the SEC on January 19, 2021 registering 800,000 shares of Common Stock; and
- · Registration Statement on Form S-8 (Registration No. 333-229391) filed by the Company with the SEC on January 28, 2019 registering 800,000 shares of Common Stock.

All figures have been adjusted to reflect the two-for-one stock split effected on June 28, 2019.

The Post-Effective Amendment reflects that as of January 19, 2024 (the "Effective Date"), the date of stockholder approval of the Northern Technologies International Corporation 2024 Stock Incentive Plan (the "2024 Plan"), the Company's authority to grant new awards under the 2019 Plan terminated and all shares of Common Stock that remained available for issuance under the 2019 Plan but not subject to outstanding awards under the 2019 Plan as of the Effective Date became available for issuance under the 2024 Plan (the "2019 Plan Carryover Shares"), as well as any shares of Common Stock subject to awards outstanding under the 2019 Plan as of the Effective Date, but only to the extent that such awards will become available upon forfeiture, cancellation, expiration, or otherwise terminate without the issuance of such shares of Common Stock after the Effective Date (the "2019 Plan Unused Award Shares" and together with the 2019 Plan Carryover Shares, the "Shares").

In connection with this opinion, we have examined and relied upon the originals, or copies certified or otherwise identified to our satisfaction, of such records, documents, certificates and other instruments as in our judgment are necessary or appropriate to enable us to render the opinions expressed below. As to certain factual matters, we have relied upon certificates of the officers of the Company and have not sought to independently verify such matters.

In rendering this opinion, we have assumed the genuineness and authenticity of all signatures on original documents; the legal capacity of all natural persons; the authenticity of all documents submitted to us as originals; the conformity to originals of all documents submitted to us as certified or photocopies; the authenticity of the originals of such latter documents, including electronic signatures made and/or transmitted using electronic signature technology (e.g., via DocuSign or similar electronic signature technology); that any such signed electronic record shall be valid and as effective to bind the party so signing as a paper copy bearing such party's handwritten signature; the accuracy and completeness of all documents and records reviewed by us; the accuracy, completeness and authenticity of certificates issued by any governmental official, office or agency and the absence of change in the information contained therein from the effective date of any such certificate; and other than for the Company, the due authorization, execution and delivery of all documents where authorization, execution and delivery are prerequisites to the effectiveness of such documents.

Our opinion herein is expressed solely with respect to the General Corporation Law of the State of Delaware (including the statutory provisions, all applicable provisions of the Delaware Constitution and reported judicial decisions interpreting the foregoing) and is based on these laws as in effect on the date hereof. We express no opinion as to whether the laws of any jurisdiction are applicable to the subject matter hereof. We are not rendering any opinion as to compliance with any federal or other state law, rule or regulation relating to securities, or to the sale or issuance thereof.

On the basis of the foregoing and in reliance thereon, and subject to the qualifications herein stated, we are of the opinion that the Shares registered pursuant to the 2019 Plan Registration Statements, as amended by the Post-Effective Amendment, have been duly and validly authorized and reserved for issuance and that upon the issuance of the Shares and payment therefor in accordance with the provisions of the 2024 Plan, the Shares will be validly issued, fully paid and non-assessable.

We hereby consent to the filing of this opinion as an exhibit to the Post-Effective Amendment. In giving such 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 of the SEC thereunder. This opinion is expressed as of the date hereof, and we disclaim any undertaking to update or supplement this opinion or to advise you of any subsequent changes in the facts stated or assumed herein or of any subsequent changes in applicable law.

Very truly yours,

/s/ Fox Rothschild LLP

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Post-Effective Amendment No. 1 to the Registration Statements on Form S-8 of our report dated November 21, 2023 relating to the consolidated financial statements of Northern Technologies International Corporation and subsidiaries (the Company), appearing in the Annual Report on Form 10 K of the Company for the year ended August 31, 2023.

/s/ Baker Tilly US, LLP

Minneapolis, Minnesota January 22, 2024