

Form 144

FORM 144

NOTICE OF PROPOSED SALE OF SECURITIES
PURSUANT TO RULE 144 UNDER THE SECURITIES ACT OF 1933

144: Filer Information

Filer CIK 0001838776
Filer CCC XXXXXXXXX
Is this a LIVE or TEST Filing? LIVE TEST

Submission Contact Information

Name
Phone
E-Mail Address

144: Issuer Information

Name of Issuer MKS Instruments, Inc.
SEC File Number 000-23621
Address of Issuer 2 Tech Drive
Suite 201
Andover
MASSACHUSETTS
01810
Phone 978-645-5500

Name of Person for Whose Account the Securities are To Be Sold Carlyle Partners VI Cayman Holdings, L.P.

See the definition of "person" in paragraph (a) of Rule 144. Information is to be given not only as to the person for whose account the securities are to be sold but also as to all other persons included in that definition. In addition, information shall be given as to sales by all persons whose sales are required by paragraph (e) of Rule 144 to be aggregated with sales for the account of the person filing this notice.

Relationship to Issuer Former 10% stockholder

144: Securities Information

Title of the Class of Securities To Be Sold	Name and Address of the Broker	Number of Shares or Other Units To Be Sold	Aggregate Market Value	Number of Shares or Other Units Outstanding	Approximate Date of Sale	Name the Securities Exchange
Common Stock	J.P. Morgan Securities LLC 383 Madison Avenue New York NY 10179	610656	65492856.00	66767385	06/28/2023	NASDAQ

Furnish the following information with respect to the acquisition of the securities to be sold and with respect to the payment of all or any part of the purchase price or other consideration therefor:

144: Securities To Be Sold

Title of the Class	Date you Acquired	Nature of Acquisition	Name of Person from	Is this	Date Donor	Amount of Securities	Date of Payment	Nature of Payment *
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	Transaction	Whom Acquired	a Gift?	Acquired	Acquired
Common Stock	08/17/2022	Acquired upon exchange of common shares of Atotech Limited for per share consideration of cash and shares of Common Stock of the Issuer.	Issuer	<input type="checkbox"/>	5180030 08/17/2022 Share exchange

* If the securities were purchased and full payment therefor was not made in cash at the time of purchase, explain in the table or in a note thereto the nature of the consideration given. If the consideration consisted of any note or other obligation, or if payment was made in installments describe the arrangement and state when the note or other obligation was discharged in full or the last installment paid.

Furnish the following information as to all securities of the issuer sold during the past 3 months by the person for whose account the securities are to be sold.

144: Securities Sold During The Past 3 Months

Name and Address of Seller	Title of Securities Sold	Date of Sale	Amount of Securities Sold	Gross Proceeds
Carlyle Partners VI Cayman Holdings, L.P. c/o Walkers Corporate Services Limited 190 Elgin Avenue George Town, Grand Cayman E9 KY1-9001	Common Stock	05/08/2023	1221311	105185409.88
Carlyle Partners VI Cayman Holdings, L.P. c/o Walkers Corporate Services Limited 190 Elgin Avenue George Town, Grand Cayman E9 KY1-9001	Common Stock	06/01/2023	1221312	118174149.12

144: Remarks and Signature

Remarks

Date of Notice 06/28/2023

ATTENTION:

The person for whose account the securities to which this notice relates are to be sold hereby represents by signing this notice that he does not know any material adverse information in regard to the current and prospective operations of the Issuer of the securities to be sold which has not been publicly disclosed. If such person has adopted a written trading plan or given trading instructions to satisfy Rule 10b5-1 under the Exchange Act, by signing the form and indicating the date that the plan was adopted or the instruction given, that person makes such representation as of the plan adoption or instruction date.

Signature Carlyle Partners VI Cayman Holdings, L.P., By: TC Group VI Cayman, L.P., By: TC Group VI Cayman, L.L.C., By: /s/ Jeremy W. Anderson, Authorized Person

ATTENTION: Intentional misstatements or omission of facts constitute Federal Criminal Violations (See 18 U.S.C. 1001)