SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE TO

(Amendment No. 5)

Tender Offer Statement under Section 14(d)(1) or 13(e)(1) of the Securities Exchange Act of 1934

WESCO International, Inc.

(Name of Subject Company (Issuer) and Filing Person (Offeror))

1.75% CONVERTIBLE SENIOR DEBENTURES DUE 2026 2.625% CONVERTIBLE SENIOR DEBENTURES DUE 2025

(Title of Class of Securities)

95082PAF2 and 95082PAG0 95082PAE5 (CUSIP Number of Class of Securities)

Stephen A. Van Oss Senior Vice President and Chief Administrative Officer 225 West Station Square Drive Suite 700 Pittsburgh, Pennsylvania 15219 (412) 454-2200

(Name, address and telephone number of person authorized to receive notices and communications on behalf of filing person)

Copies to:

Kristen L. Stewart Jeffrey W. Acre **K&L Gates LLP** Henry W. Oliver Building 535 Smithfield Street Pittsburgh, Pennsylvania 15222-2312 Telephone: (412) 355-6500

Vincent Pagano John D. Lobrano Simpson Thacher & Bartlett LLP 425 Lexington Avenue New York, New York 10017-3954 Telephone: (212) 455-2000

CALCULATION OF FILING FEE

Transaction Valuation*	Amount of Filing Fee**
\$3.45,000,000	#10.000
\$345,000,000	\$19,890

- Estimated solely for the purpose of determining the amount of the filing fee, based on the acquisition of a maximum of \$356,435,644 aggregate principal amount of WESCO International, Inc.'s 1.75% Convertible Senior Debentures due 2026 and 2.625% Convertible Senior Debentures due 2025, in exchange for a maximum of \$345,000,000 aggregate principal amount of WESCO International, Inc.'s 6.0% Convertible Senior Debentures due 2029 that may be issued in the exchange offer.
- The amount of the filing fee calculated in accordance with Rule 0-11(a)(2) of the Securities Exchange Act of 1934, as amended, by multiplying .0000558 by the aggregate transaction value.
- Check the box if any part of the fee is offset as provided by Rule 0-11(a)(2) and identify the filing with which the offsetting fee was previously \checkmark paid. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.

Amount Previously Paid: \$19,890

Form or Registration No.: Form S-4

Filing Party: WESCO International, Inc.

Date Filed: July 27, 2009

Check the box if the filing relates solely to preliminary communications made before the commencement of a tender offer.

Check the appropriate boxes below to designate any transactions to which the statement relates:

- third-party tender offer subject to Rule 14d-1.
- \checkmark issuer tender offer subject to Rule 13e-4.
- going-private transaction subject to Rule 13e-3.
- amendment to Schedule 13D under Rule 13d-2.

Check the following box if the filing is a final amendment reporting the results of the tender offer: o

SCHEDULE TO

This Amendment No. 5 (this "Amendment") amends and supplements the Tender Offer Statement on Schedule TO (as amended, the "Schedule TO") initially filed with the Securities and Exchange Commission (the "SEC") on July 27, 2009. The Schedule TO relates to an offer by WESCO International, Inc., a Delaware corporation (the "Company"). Upon the terms and subject to the conditions set forth in the prospectus dated August 12, 2009 (the "Prospectus") and the related Letter of Transmittal, the Company is offering to exchange \$960 principal amount of its newly issued 6.0% Convertible Senior Debentures due 2029 (the "2029 Debentures") for each \$1,000 principal amount of the Company's 1.75% Convertible Senior Debentures due 2026 (the "2026 Debentures") and \$1,010 principal amount of the Company's 2029 Debentures for each \$1,000 principal amount of the Company's 2.625% Convertible Senior Debentures due 2025 (the "2025 Debentures"), provided that the maximum amount of 2029 Debentures that the Company will issue is \$345,000,000. We refer to this offer as the "Exchange Offer."

The Exchange Offer is subject to the conditions discussed in the Prospectus under "The Exchange Offer — Conditions to the Exchange Offer," including, among other things, the condition that the Registration Statement to which the Prospectus relates not be subject to a stop order or any proceedings for that purpose and the condition that a minimum aggregate principal amount of 2026 Debentures and 2025 Debentures shall have been tendered such that at least \$100.0 million aggregate principal amount of 2029 Debentures will be issued in the Exchange Offer. The Exchange Offer will expire at midnight, New York City time, on August 21, 2009, unless extended or earlier terminated by the Company (such date, as the same may be extended or earlier terminated, the "Expiration Date").

This Schedule TO is being filed in satisfaction of the reporting requirements of Rules 13e-4(b)(1) and (c)(2) promulgated under the Securities Exchange Act of 1934, as amended. Except as specifically provided herein, this Amendment does not modify any of the information previously reported on the Schedule TO.

Item 4. Terms of the Transaction.

(a) Material Terms.

The information set forth in Item 8.01 of the Company's Current Report on Form 8-K dated August 21, 2009, filed pursuant to Rule 425 under the Securities Act of 1933 and deemed filed pursuant to Rule 13e-4(c) under the Securities Exchange Act of 1934, is incorporated herein by reference and supplements the information in Item 4(a) of the previously filed Schedule TO.

Item 12. Exhibits.

Item 12 of the Schedule TO is hereby amended and supplemented by adding the exhibits referenced below.

(a)(1)(vi)	Press Release, dated August 21, 2009 (incorporated herein by reference to Exhibit 99.1 to the Company's Current Report, dated August 21,
	2009, pursuant to Rule 425 under the Securities Act of 1933 and deemed filed pursuant to Rule 13e-4(c) under the Securities Exchange
	Act of 1934).

(a)(4)(viii) Exhibit (a)(1)(vi) is incorporated herein by reference.

(a)(4)(vix) Text of the website that is being maintained at http://www.gbsc-usa.com/wesco updated at 4:30 p.m., New York City time, on August 21, 2009 (incorporated by reference to the Company's filing pursuant to Rule 425 under the Securities Act of 1933 and deemed filed pursuant to Rule 13e-4(c) under the Securities Exchange Act of 1934).

SIGNATURES

After due inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

WESCO INTERNATIONAL, INC.

By: /s/ Stephen A. Van Oss

Name: Stephen A. Van Oss

Title: Senior Vice President and Chief Administrative

Officer

Date: August 21, 2009

EXHIBIT INDEX

(a)(1)(i)	Prospectus, dated August 12, 2009 (incorporated herein by reference to the Company's filing on August 13, 2009, pursuant to Rule 424(b) (3) under the Securities Act of 1933).
(a)(1)(ii)	Form of Letter of Transmittal (incorporated herein by reference to Exhibit 99.1 to the Company's Registration Statement on Form S-4 filed on July 27, 2009).
(a)(1)(iii)	Form of Notice of Guaranteed Delivery (incorporated herein by reference to Exhibit 99.2 to the Company's Registration Statement on Form S-4 filed on July 27, 2009).
(a)(1)(iv)	Form of Notice of Withdrawal (incorporated herein by reference to Exhibit 99.3 to the Company's Registration Statement on Form S-4 filed on July 27, 2009).
(a)(1)(v)	Press Release, dated July 27, 2009 (incorporated herein by reference to Exhibit 99.1 to the Company's Current Report, dated July 27, 2009, pursuant to Rule 425 under the Securities Act of 1933 and deemed filed pursuant to Rule 13e-4(c) under the Securities Exchange Act of 1934).
(a)(1)(vi)	Press Release, dated August 21, 2009 (incorporated herein by reference to Exhibit 99.1 to the Company's Current Report, dated August 21, 2009, pursuant to Rule 425 under the Securities Act of 1933 and deemed filed pursuant to Rule 13e-4(c) under the Securities Exchange Act of 1934).
(a)(4)(i)	Exhibit (a)(1)(i) is incorporated herein by reference.
(a)(4)(ii)	Exhibit (a)(1)(v) is incorporated herein by reference.
(a)(4)(iii)	Text of the website that is being maintained at http://www.gbsc-usa.com/WESCO (previously filed).
(a)(4)(iv)	Investor presentation dated July 28, 2009 (incorporated by reference to Exhibit 99.1 to the Company's Current Report on Form 8-K, dated July 28, 2009).
(a)(4)(v)	Exhibit (a)(5) is incorporated herein by reference.
(a)(4)(vi)	Item 8.01 of the Company's Current Report on Form 8-K, dated August 19, 2009 (incorporated herein by reference to the Company's Current Report on Form 8-K, dated August 19, 2009, pursuant to Rule 425 under the Securities Act of 1933 and deemed filed pursuant to Rule 13e-4(c) under the Securities Exchange Act of 1934).
(a)(4)(vii)	Item 8.01 of the Company's Current Report on Form 8-K, dated August 21, 2009 (incorporated herein by reference to the Company's Current Report on Form 8-K, dated August 21, 2009, pursuant to Rule 425 under the Securities Act of 1933 and deemed filed pursuant to Rule 13e-4(c) under the Securities Exchange Act of 1934).
(a)(4)(viii)	Exhibit (a)(1)(vi) is incorporated herein by reference.
(a)(4)(vix)	Text of the website that is being maintained at http://www.gbsc-usa.com/wesco updated at 4:30 p.m., New York City time, on August 21, 2009 (incorporated by reference to the Company's filing pursuant to Rule 425 under the Securities Act of 1933 and deemed filed pursuant to Rule 13e-4(c) under the Securities Exchange Act of 1934).
(a)(5)	Employee presentation dated July 27, 2009 (incorporated by reference to Exhibit 99.1 to the Company's Current Report on Form 8-K, dated July 29, 2009).
(b)	None.
(d)(i)	Indenture relating to 1.75% Convertible Senior Debentures due 2026, dated as of November 2, 2006, by and among the Company, WESCO Distribution, Inc. and The Bank of New York, as Trustee (incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K, dated November 2, 2006).
(d)(ii)	Indenture relating to 2.625% Convertible Senior Debentures due 2025, dated as of September 27, 2005, by and among the Company, WESCO Distribution, Inc. and The Bank of New York (as successor to J.P. Morgan Trust Company, National Association.), as Trustee (incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K, dated September 21, 2005).
(d)(iii)	Form of Indenture by and among the Company, WESCO Distribution, Inc. and The Bank of New York Mellon, as Trustee, governing 2029 Debentures (incorporated by reference to Exhibit 4.7 to the Company's Registration Statement on Form S-4 filed on July 27, 2009).
(g)	None.
(h)	Tax opinion of K&L Gates LLP (incorporated by reference to Exhibit 8.1 to the Company's Registration Statement on Form S-4 filed on July 27, 2009).