KULICKE & SOFFA INDUSTRIES INC
Form 10-K
November 18, 2015

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-K

ý ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended October 3, 2015
OR
¨ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from to .

Commission File No. 0-121

KULICKE AND SOFFA INDUSTRIES, INC.
(Exact name of registrant as specified in its charter)

PENNSYLVANIA	23-1498399
(State or other jurisdiction of incorporation)	(IRS Employer Identification No.)
23A Serangoon North, Avenue 5, #01-01 K&S Corporate Headquarters, Singapore	554369
(Address of principal executive offices)	(Zip Code)

(215) 784-6000
(Registrants telephone number, including area code)

N/A
(Former name, former address and former fiscal year, if changed since last report)

Securities registered pursuant to Section 12(b) of the Act:
None
Securities registered pursuant to Section 12(g) of the Act:

COMMON STOCK, WITHOUT PAR VALUE
(Title of each class)

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ¨ No ý
Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange Act. Yes ¨ No ý
Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ý No ¨

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ý No ¨

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of the registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ¨

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a smaller reporting company. See definition of “large accelerated filer,” “accelerated filer” and “smaller reporting company” in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer ý	Accelerated filer ¨	Non-accelerated filer ¨ (Do not check if a smaller reporting company)	Smaller reporting company ¨

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ¨ No ý

As of March 27, 2015, the aggregate market value of the registrant's common stock held by non-affiliates of the registrant was approximately $1,283.1 million based on the closing sale price as reported on The NASDAQ Global Market (reference is made to Part II, Item 5 herein for a statement of assumptions upon which this calculation is based).

As of November 16, 2015 there were 70,694,772 shares of the registrant's common stock, without par value, outstanding.

Documents Incorporated by Reference

Portions of the registrant's Proxy Statement for the 2016 Annual Meeting of Shareholders to be filed on or about January 4, 2016 are incorporated by reference into Part II, Item 5 and Part III, Items 10, 11, 12, 13 and 14 herein of this Report. Such Proxy Statement, except for the parts therein which have been specifically incorporated by reference, shall not be deemed “filed” for the purposes of this Report on Form 10-K.

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PART I

Forward-Looking Statements

In addition to historical information, this filing contains statements relating to future events or our future results. These statements are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, 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 subject to the safe harbor provisions created by statute. Such forward-looking statements include, but are not limited to, our future revenue, sustained, increasing, continuing or strengthening, or decreasing or weakening, demand for our products, the continuing transition from gold to copper wire bonding, replacement demand, our research and development efforts, our ability to identify and realize new growth opportunities, our ability to control costs and our operational flexibility as a result of (among other factors):

- projected growth rates in the overall semiconductor industry, the semiconductor assembly equipment market, and the market for semiconductor packaging materials; and
- projected demand for ball, wedge bonder, advanced packaging and surface mount technology equipment and for expendable tools.

Generally, words such as “may,” “will,” “should,” “could,” “anticipate,” “expect,” “intend,” “estimate,” “plan,” “continue,” “g “believe,” or the negative of or other variations on these and other similar expressions identify forward-looking statements. These forward-looking statements are made only as of the date of this filing. We do not undertake to update or revise the forward-looking statements, whether as a result of new information, future events or otherwise. Forward-looking statements are based on current expectations and involve risks and uncertainties. Our future results could differ significantly from those expressed or implied by our forward-looking statements. These risks and uncertainties include, without limitation, those described below and under the heading “Risk Factors” in this Annual Report on Form 10-K for the fiscal year ended October 3, 2015 (the “Annual Report”) and our other reports and registration statements filed from time to time with the Securities and Exchange Commission. This discussion should be read in conjunction with the Consolidated Financial Statements and Notes included in this report, as well as our audited financial statements included in the Annual Report.

We operate in a rapidly changing and competitive environment. New risks emerge from time to time and it is not possible for us to predict all risks that may affect us. Future events and actual results, performance and achievements could differ materially from those set forth in, contemplated by or underlying the forward-looking statements, which speak only as of the date on which they were made. Except as required by law, we assume no obligation to update or revise any forward-looking statement to reflect actual results or changes in, or additions to, the factors affecting such forward-looking statements. Given those risks and uncertainties, investors should not place undue reliance on forward-looking statements as predictions of actual results.

Item 1. BUSINESS

Kulicke and Soffa Industries, Inc. (the "Company" or "K&S") designs, manufactures and sells capital equipment and expendable tools used to assemble semiconductor devices, including integrated circuits (“ICs”), high and low powered discrete devices, light-emitting diodes (“LEDs”), and power modules. We also service, maintain, repair and upgrade our equipment. Our customers primarily consist of semiconductor device manufacturers, outsourced semiconductor assembly and test providers (“OSATs”), other electronics manufacturers and automotive electronics suppliers.

We operate two main business segments, Equipment and Expendable Tools. Our goal is to be the technology leader and the most competitive supplier in terms of cost and performance in each of our major product lines. Accordingly, we invest in research and engineering projects intended to enhance our position at the leading edge of semiconductor assembly technology. We also remain focused on our cost structure through continuous improvement and optimization of operations. Cost reduction efforts remain an important part of our normal ongoing operations and are intended to generate savings without compromising overall product quality and service levels.

K&S was incorporated in Pennsylvania in 1956. Our principal offices are located at 23A Serangoon North Avenue 5, #01-01, Singapore 554369 and our telephone number in the United States is (215) 784-6000. We maintain a website

with the address www.kns.com. We are not including the information contained on our website as a part of, or incorporating it by reference into, this filing. We make available free of charge (other than an investor's own Internet access charges) on or through our website our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and any amendments to these reports, as soon as reasonably practicable after the material is electronically filed with or otherwise furnished to the Securities and Exchange Commission ("SEC"). Our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and

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amendments to those reports are also available on the SEC website at www.sec.gov and at the SEC's Public Reference Room at 100 F Street, NE, Washington, DC 20549 or by calling the SEC at 1-800-SEC-0330.

Our year end for each of fiscal 2015, 2014 and 2013 was October 3, 2015, September 27, 2014, and September 28, 2013, respectively.

Business Environment

The semiconductor business environment is highly volatile, driven by internal dynamics, both cyclical and seasonal, in addition to macroeconomic forces. Over the long term, semiconductor consumption has historically grown, and is forecast to continue to grow. This growth is driven, in part, by regular advances in device performance and by price declines that result from improvements in manufacturing technology. In order to exploit these trends, semiconductor manufacturers, both integrated device manufacturers (“IDMs”) and OSATs, periodically invest aggressively in latest generation capital equipment. This buying pattern often leads to periods of excess supply and reduced capital spending—the so-called semiconductor cycle. Within this broad semiconductor cycle there are also, generally weaker, seasonal effects that are specifically tied to annual, end-consumer purchasing patterns. Typically, semiconductor manufacturers prepare for heightened demand by adding or replacing equipment capacity by the end of the September quarter. Occasionally, this results in subsequent reductions in the December quarter. This annual seasonality can occasionally be overshadowed by effects of the broader semiconductor cycle. Macroeconomic factors also affect the industry, primarily through their effect on business and consumer demand for electronic devices, as well as other products that have significant electronic content such as automobiles, white goods, and telecommunication equipment.

Our Equipment segment is primarily affected by the industry's internal cyclical and seasonal dynamics in addition to broader macroeconomic factors that can positively and negatively affect our financial performance. The sales mix of IDM and OSAT customers in any period also impacts financial performance, as changes in this mix can affect our products' average selling prices and gross margins due to differences in volume purchases and machine configurations required by each customer type.

Our Expendable Tools segment is less volatile than our Equipment segment. Expendable Tools sales are more directly tied to semiconductor unit consumption rather than capacity requirements and production capability improvements.

We continue to position our business to leverage our research and development leadership and innovation and to focus our efforts on mitigating volatility, improving profitability and ensuring longer-term growth. We remain focused on operational excellence, expanding our product offerings and managing our business efficiently throughout the business cycles. Our visibility into future demand is generally limited, forecasting is difficult, and we generally experience typical industry seasonality.

To limit potential adverse cyclical, seasonal and macroeconomic effects on our financial position, we have continued our efforts to maintain a strong balance sheet. As of October 3, 2015, our total cash, cash equivalents and short-term investments were $498.6 million, a $98.5 million decrease from the prior fiscal year end (related primarily to our share repurchase program and our Assembléon acquisition, offset in part by earnings). We believe this strong cash position will allow us to continue to invest in product development and pursue non-organic opportunities.

On August 14, 2014, the Company’s Board of Directors authorized a program (the "Program") to repurchase up to $100 million of the Company’s common stock on or before August 14, 2017. The Company has entered into a written trading plan under Rule 10b5-1 of the Exchange Act to facilitate repurchases under the Program. The Program may be suspended or discontinued at any time and is funded using the Company's available cash. Under the Program, shares may be repurchased through open market and/or privately negotiated transactions at prices deemed appropriate by management. The timing and amount of repurchase transactions under the Program depend on market conditions as well as corporate and regulatory considerations. During the year ended October 3, 2015, the Company repurchased a total of 6.4 million shares of common stock at a cost of $77.9 million under the Program. As of October 3, 2015, our remaining stock repurchase authorization under the Program was approximately $21.5 million.

On January 9, 2015, Kulicke & Soffa Holdings B.V. (“KSH”), the Company's wholly owned subsidiary, acquired Assembléon B.V. (“Assembléon”), a subsidiary of Assembléon Holding B.V. The cash purchase price of approximately $97.4 million (EUR80 million) consisted of $72.5 million for the equity of Assembléon and $24.9 million which was used by Assembléon to settle intercompany loans with its parent company.

Assembléon is a leading technology solutions provider that, together with its subsidiaries, offers assembly equipment, processes and services for the automotive, industrial, and advanced packaging markets. The acquisition has expanded the Company's presence in automotive, industrial and advanced packaging markets.

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Technology Leadership

We compete largely by offering our customers among the most advanced equipment and expendable tools available for the wire and wedge bonding processes. Our equipment is typically the most productive and has the highest levels of process capability, and as a result, we believe it has a lower cost of ownership compared to other equipment in the market. Our expendable tools are designed to optimize the performance of the equipment in which they are used. We believe our technology leadership contributes to the strong market positions of our ball bonder, wedge bonder and expendable tools products. To maintain our competitive advantage, we invest in product development activities designed to produce a stream of improvements to existing products and to deliver next-generation products. These investments often focus as much on improvements in the semiconductor assembly process as on specific pieces of assembly equipment or expendable tools. In order to generate these improvements, we often work in close collaboration with customers, end users, and other industry members. In addition to producing technical advances, these collaborative development efforts strengthen customer relationships and enhance our reputation as a technology leader and solutions provider.

In addition to gold, silver alloy wire and aluminum wire, our leadership in the industry's use of copper wire for the bonding process is an example of the benefits of our collaborative efforts. By working with customers, material suppliers, and other equipment suppliers, we have developed a series of robust, high-yielding production processes, which have made copper wire widely accepted and significantly reduced the cost of assembling an integrated circuit. Our leadership also has allowed us to maintain a competitive position in the latest generations of gold and copper ball bonders, which enables our customers to handle the leading technologies in terms of bond pad pitch, silicon with the latest node and complex wire bonding requirement. We continue to see demand for our large bondable area ("LA") configured machines. This LA option is now available on all of our Power Series ("PS") models and allows our customers to gain added efficiencies and to reduce the cost of packaging.

We also leverage the technology leadership of our equipment by optimizing our bonder platforms, and we deliver variants of our products to serve emerging high-growth markets. For example, we have developed extensions of our main ball bonding platforms to address opportunities in LED assembly, in particular for general lighting. We expect the next wave of growth in the LED market to be high brightness LED for general lighting. We also believe there is an opportunity for growth in wire bonding sales at wafer level using our AT Premier PLUS.

Our leading technology for wedge bonder equipment uses ribbon or heavy wire for different applications such as power electronics, automotive and semiconductor applications. The advanced interconnect capabilities of PowerFusion^{PS} improve the processing of high-density power packages, due to an expanded bondable area, wider leadframe capability, superior indexing accuracy and teach mode. We have also completed the design and development of our next generation hybrid wedge bonder, Asterion, which was launched in March 2015. In all cases, we are making a concerted effort to develop commonality of subsystems and design practices, in order to improve performance and design efficiencies. We believe this will benefit us in maintaining our leadership position in the wedge bonding market and increase synergies between the various engineering product groups. Furthermore, we continually research adjacent market segments where our technologies could be used. Many of these initiatives are in the early stages of development and some have yielded results.

Another example of our developing equipment for high-growth niche markets is our AT Premier PLUS. This machine utilizes a modified wire bonding process to mechanically place bumps on devices in a wafer format, for variants of the flip chip assembly process. Typical applications include complementary metal-oxide semiconductor ("CMOS") image sensors, surface acoustical wave ("SAW") filters and high brightness LEDs. These applications are commonly used in most, if not all, smartphones available today in the market. We also have expanded the use of AT Premier PLUS for wafer level wire bonding for micro-electro-mechanical systems ("MEMS") and other sensors.

Our technology leadership and bonding process know-how have enabled us to develop highly function-specific equipment with best-in-class throughput and accuracy. This forms the foundation for our advanced packaging equipment development. We established a dedicated team to develop and manufacture advanced packaging bonders for the emerging 2.5 dimensional integrated circuit ("2.5D IC") and 3 dimensional integrated circuit ("3D IC") markets. By reducing the interconnect dimensions, 2.5D ICs and 3D ICs are expected to provide form factor, performance and power efficiency enhancements over traditional flip-chip packages in production today. High-performance processing

and memory applications, in addition to mobile devices such as smartphones and tablets, are anticipated to be earlier adopters of this new packaging technology.

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With the acquisition of Assembléon, we broadened our advanced packaging solutions for mass reflow ("APMR") to include flip chip, wafer level packaging ("WLP"), fan-out wafer level packaging ("FOWLP"), advanced package-on-package, embedded die, and System-in-Package ("SiP"). The acquisition has also enabled us to diversify our business into the automotive, medical and industrial markets with advanced surface-mount technology ("SMT") pick and place solutions.

We bring the same technology focus to our expendable tools business, driving tool design and manufacturing technology to optimize the performance and process capability of the equipment in which our tools are used. For all our equipment products, expendable tools are an integral part of their process capability. We believe our unique ability to simultaneously develop both equipment and tools is a core strength supporting our products' technological differentiation.

Products and Services

The Company operates two segments: Equipment and Expendable Tools. The following table reflects net revenue by business segment for fiscal 2015, 2014, and 2013:

	Fiscal 2015		2014		2013	
(dollar amounts in thousands)	Net revenues	% of total net revenue	Net revenues	% of total net revenue	Net revenues	% of total net revenue
Equipment	$472,002	88.0 %	$503,049	88.5 %	$472,567	88.3 %
Expendable Tools	64,469	12.0 %	65,520	11.5 %	62,371	11.7 %
	$536,471	100.0 %	$568,569	100.0 %	$534,938	100.0 %

See Note 14 to our Consolidated Financial Statements included in Item 8 of this report for our financial results by business segment.

Equipment Segment

We manufacture and sell a line of ball bonders, wafer level bonders and heavy wire wedge bonders that are sold to semiconductor device manufacturers, OSATs, other electronics manufacturers and automotive electronics suppliers. Ball bonders are used to connect very fine wires, typically made of gold or copper, between the bond pads of the semiconductor device, or die, and the leads on its package. Wafer level bonders mechanically apply bumps to die, typically while still in the wafer format, for some variants of the flip chip assembly process. Heavy wire wedge bonders use either aluminum wire or ribbon to perform the same function in packages that cannot use gold or copper wire because of either high electrical current requirements or other package reliability issues. We believe our equipment offers competitive advantages by providing customers with high productivity/throughput, superior package quality/process control, and, as a result, a lower cost of ownership.

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Our principal Equipment segment products include:

Business Unit	Product Name (1)	Typical Served Market
Ball bonders	IConn^{PS} PLUS	Advanced and ultra fine pitch applications
	IConn^{PS} PLUS LA	Large area substrate and matrix applications
	IConn^{PS} PLUS ELA	Extended large area substrate and matrix applications
	IConn^{PS} ProCu	High-end copper wire applications demanding advanced process capability and high productivity
	IConn^{PS} ProCu PLUS	