

FORM 6-K

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

For the month of March 2006

TOWER SEMICONDUCTOR LTD.
(Translation of registrant's name into English)

RAMAT GAVRIEL INDUSTRIAL PARK
P.O. BOX 619, MIGDAL HAEMEK, ISRAEL 23105
(Address of principal executive offices)

Indicate by check mark whether the registrant files or will file annual reports under cover Form 20-F or Form 40-F.

Form 20-F Form 40-F

Indicate by check mark whether the registrant by furnishing the information contained in this Form is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934.

Yes No

On March 30, 2006, the Registrant announced that it Achieves ISO 17799 Certification for Security Management. Attached hereto is a copy of the press release.

This Form 6-K is being incorporated by reference into all effective registration statements filed by us under the Securities Act of 1933.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

TOWER SEMICONDUCTOR LTD.

Date: March 30, 2006

By: /S/ Nati Somekh Gilboa

Nati Somekh Gilboa
Corporate Secretary

TOWER SEMICONDUCTOR ACHIEVES ISO 17799 CERTIFICATION
FOR SECURITY MANAGEMENT

TOWER WILL BE GRANTED THE PRESTIGIOUS 'PLATINUM' STATUS

MIGDAL HAEMEK, ISRAEL - March 30, 2006 - Tower Semiconductor, Ltd., a pure-play independent specialty wafer foundry (NASDAQ: TSEM; TASE: TSEM), today announced it has achieved ISO 17799 certification from the Standards Institution of Israel (SII) for the high quality of its security technology and implementations. This security management standard covers deployment of awareness and controls throughout all of Tower's departments and activities. The certification is further evidence of Tower's commitment to safeguard its customers' information and intellectual property in all business and manufacturing processes and work procedures.

Furthermore, since this is Tower's fifth certification in quality standards, Tower will be granted the prestigious 'Platinum' status. The other certifications that Tower has attained are: ISO 9001- 2000 Quality Management System; ISO/TS 16949 Quality System for the Automotive Industry; ISO 14001 Environmental Management Standard and IS 18001 Occupational Health and Safety Management Standard.

The Standard Institution of Israel (SII) thoroughly audited Tower's security systems and work plans. "We are proud to grant Tower with the ISO 17799 certification. The results of our certification audit place Tower among the top organizations that share uncompromising commitment to quality." said Ziva Patir, general manager of SII.

"Our ISO 17799 certification is testimony to Tower's commitment to maintain and continually improve security management and its comprehensive integration in Tower's work procedures to the benefit of all our customers and business partners" said Shimon Dahan, vice president of manufacturing services of Tower Semiconductor. "Achieving it is an important milestone in our strategic roadmap as a trusted partner to our customers."

ABOUT ISO 17799

ISO 17799 is an international standard recognizing excellence in all aspects of information security, including security policy, personnel security, physical and environmental security, computer and network management, system access control, and system development and maintenance

ABOUT TOWER SEMICONDUCTOR LTD.

Tower Semiconductor Ltd. is a pure-play independent specialty foundry established in 1993. The company manufactures integrated circuits with geometries ranging from 1.0 to 0.13 micron; it also provides complementary technical services and design support. In addition to digital CMOS process technology, Tower offers advanced non-volatile memory solutions, mixed-signal, RF-CMOS and CMOS image-sensor technologies. To provide world-class customer service, the company maintains two manufacturing facilities: Fab 1 has process technologies from 1.0 to 0.35-micron and can produce up to 16,000 150mm wafers per month. Fab 2 features 0.18-micron and below standard and specialized process technologies, and has the current capacity of up to 15,000 200mm wafers per month. Tower's Web site is located at www.towersemi.com.

SAFE HARBOR

This press release includes forward-looking statements, which are subject to risks and uncertainties. Actual results may vary from those projected or implied by such forward-looking statements. A complete discussion of risks and uncertainties that may affect the accuracy of forward-looking statements included in this press release or which may otherwise affect our business is included under the heading "Risk Factors" in our most recent filings on Forms 20-F, F-1, F-3 and 6-K, as were filed with the Securities and Exchange Commission and the Israel Securities Authority. We do not intend to update the information contained in this release.

CONTACTS:

Tower Semiconductor USA
Michael Axelrod, 408-330-6871
pr@towersemi.com