

FULL COMFORT



Austria Technologie & Systemtechnik AG (AT&S) is the largest and technologically most advanced producer of printed circuit boards (PCBs) in Europe and the USA. As the central supplier for the entire mobile telecommunications industry with leading companies like Nokia, Siemens, Motorola, and RIM as their customers, AT&S employs over 2700 people and achieved a turnover of 275 million Euro in the fiscal year 2001/02.

At AT&S, there was always an organic loading in the cooling water of 3 cooling towers. The algae in the cooling water inevitably caused the blocking in the cooling towers. Chemical components were frequently added to avoid the formation of algae in order to maintain water quality. This alone costs about \$300,000 Austrian Shilling per year.

Since the installation of Original Grander Technology (OGT), the company has benefited in many ways. First of all, there have been no more algae or scaling in both their holding tanks and the cooling water. Both are now crystal clear.

Secondly, OGT minimized the level of toxicity found in the cooling water discharge and the plant discharge. As both are measured closely by the local municipal water official, just a few months after the installing the OGT, the treatment plant manager visited AT&S and said, "We cannot charge you for your discharge water anymore because there are no toxic chemicals found in the water."



Lastly, OGT was effective in improving cleaning procedures in the production line of the PCBs. Millions of tiny holes are drilled on the PCBs and once these boards are drilled, they have to be washed of all contaminants. At one time, there were problems in achieving effective cleaning between operations in the assembly line. The technicians were not satisfied until the addition of the OGT cleared all of their problems. AT&S was pleased and happy at the results Grander helped them achieve.



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Austria Technologie & Systemtechnik AG (AT&S) 是歐洲及美國最大、科技最先進的印刷電路板(PCB)生產者。她是整個流動電訊工業的重要供應商。在國際間有著領導地位的電訊公司(例如諾基亞、西門子、摩托羅拉及加拿大RIM)都是 AT&S 的

顧客。她僱用了超過二千七百位員工，於 2002 會計年度中達到二億七千五百萬歐元的成交量。

可是，AT&S 的冷卻系統亦遇上一些問題。冷卻系統的三台冷卻塔都經常有有機污染物負荷。冷卻水中的水藻時常阻塞了冷卻塔的管道。因此，需要定期在冷卻水中加入化學劑來防止水藻滋長並維持冷卻水質。使用化學劑的成本大概是每年三十萬先令。

安裝了加能德活水科技(OGT)之後，冷卻水中再沒有水藻及水垢。儲水缸及冷卻塔中的水皆很乾淨，晶瑩剔透。跟據一間獨立的實驗室持續監查，結果顯示水中只含有很少量的核。

由冷卻系統和工場所排出的水會流至當地城市的水處理廠處理。處理廠會跟據所排放的污水的毒性來向污染者收取費用。安裝了 OGT 後數個月，處理廠的經理到訪及查詢 AT&S 的運作；並說 AT&S 的水竟然沒有有毒化學物，所以他們不能向 AT&S 收取費用。("We cannot charge you for your discharge water anymore because there are no toxic chemicals.")

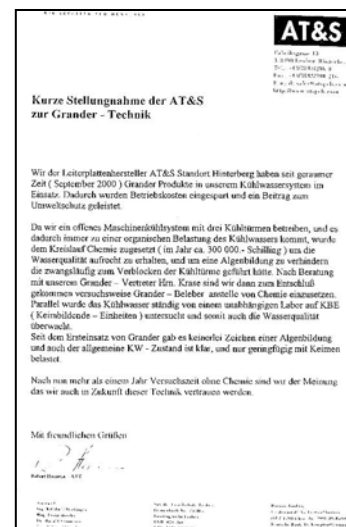
每塊 PCB 上都要鑽幾百萬個很小的孔。每次鑽孔後都要清洗掉板上的污染物。有一次，其中一部機器有故障，影響了工序之間的有效清洗及其相對的組裝線。技工試用了最好的方法亦不能解決問題；直至套用了 OGT，問題就迎刃而解。

AT&S 比他們預期中更滿意 OGT 的效能。



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網頁: www.grandertechnology.com



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