



Environmental Technology and Environmental Solutions

Environmental Solutions Business

The OKI group is engaged in a diversified environment solution business leveraging the environmental technologies accumulated up to now. We aim to broaden and improve our environmental solutions business, proposing technologies and systems that lead to a reduction in environmental impacts to our customers.

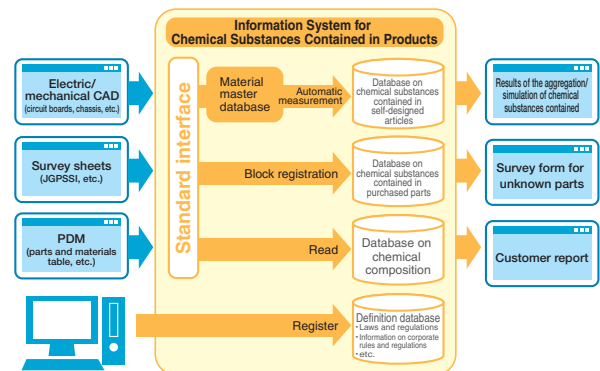
Marketing / Product Planning	<ul style="list-style-type: none"> Environmental ISO consulting 	<ul style="list-style-type: none"> Consulting on creating environmental reports 	<ul style="list-style-type: none"> Creation of environmental education contents
Development / Design	<ul style="list-style-type: none"> Analysis of substances contained 	<ul style="list-style-type: none"> Calculation of quantities of substances contained in products 	<ul style="list-style-type: none"> Heat-dissipation solutions, etc.
Procurement / Manufacturing	<ul style="list-style-type: none"> Water quality control systems Soil research Contract manufacturing of electronic equipment that complies with the RoHS Directive 	<ul style="list-style-type: none"> Bio recycling Soldering with parts cooling 	<ul style="list-style-type: none"> Ozone deodorization / sterilization Soldering school

Information System for Chemical Substances Contained in Products

COINServ-COSMOS is a system for company-internal information built on the basis of the rich experience in the OKI group. It calculates the quantities of chemical substances contained in products, rationalizing management work and green procurement work. The system offers the following functions and features.

- (1) Global support: support for multiple languages, including English and Chinese (under development)
- (2) Rationalization of green procurement surveys
 - ① Batch calculation of not-yet-researched components using the product configuration, and automatic creation of survey forms
 - ② Status management of the survey progress (allows prevention of survey overlaps and establishment of priority ranks)
 - ③ Simple verification of survey data
- (3) Rationalization of user reports
 - ① Automatic creation of report forms (JPGSSI-Ver3 or original user format)
 - ② Management of attached information such as analysis data
- (4) Function to evaluate compliance with laws, regulations and standards
 - ① Judgment on European RoHS Directive
 - ② Judgment on Chinese regulations for chemical substances
 - ③ Judgment on the basis of original standards
- (5) Management information
 - ① JPGSSI-Ver3 format
 - ② Management of evidence material (certificate of non-use, analysis certificate)
 - ③ Management of information related to manufacturing and procurement (solder heat-resistance, timing for the supply of RoHS-compliant components, etc.)
- (6) Information search function
Search is available by each type of information
- (7) Research of impact on product groups
Users can use reverse search for information on product configuration to identify products that are affected by components violating laws and regulations

● Example for a COINServ-COSMOS System Configuration



Contract Manufacturing of Eco-friendly Products

Our production service divisions (Honjo and Tomioka districts) run an "Environmental EMS Business" offering contract manufacturing services for eco-friendly products on the basis of the JGPSSI "Guidelines for the Management of Chemical Substances in Products".

Especially the response to the RoHS Directive requires a thorough system to guarantee the non-containment of the restricted substances. In the acceptance inspection, we perform analysis using an X-ray fluorescence spectrometer, and in the production process using lead-free solder, we have implemented thorough identification and separation starting from the work area, equipment and jigs and reaching as far as to the work gloves.

And our original reflow heating technology enables us to provide highly reliable, high-quality lead-free soldering technology also for large boards and high layer boards.



Analysis using an X-ray fluorescence spectrometer in the acceptance inspection



Identification and separation in the production process