

**Korozo**

# *Support that pays off*



**Impressive savings on three printing machines, significantly shorter set-up times and reduced ink wastage: Korozo, a Turkish packaging specialist, is fully satisfied with the outcome of a project realized by the On-Site-Consulting unit (OSC) of Siegwerk Druckfarben AG & Co. KGaA. Esat Imer, print plant manager at the Korozo Istanbul plant, has nothing but praise for the “ideas and suggestions” put forward by the consultants and is pleased about the measurable process improvements achieved in the parent plant: “This joint project with OSC has brought us a long way forward.”**

The Korozo company has been growing continuously since 1973, and is now a force in the global packaging industry. This family-run company currently operates eight plants in Turkey, with 1500 employees, a turnover of EUR 200 million and an export share of more than 50 per cent, making it the largest packaging manufacturer in Turkey today: it also delivers to many western European customers. Korozo invests a high proportion of turnover in R&D and sees itself as a leader in innovation and quality. For almost 10 years now, Korozo has used Siegwerk inks, produced at the company's Turkish plant in Tuzla. This being the case, the packaging experts did not think twice about using the consulting services offered by its ink supplier: in order to both review its own

processes and take part in an international benchmarking. When Esat Imer, manager of the three Korozo print shops in Istanbul, learned about Siegwerk's OSC services, he decided immediately to make use of the advisory support. Especially since an initial OSC audit had identified that Korozo could cut its costs significantly by installing more modern processes and procedures. Esat Imer: “The costs for the consulting services were a tiny fraction of the potential savings. This meant the project would pay off. We also assumed that we would be able to learn a lot.”

Korozo runs three plants at its Istanbul site: two of the facilities have each eight flexo-print machines, while the third plant has three gravure presses, recently joined by



a fourth. The OSC project focused on two of the flexo-print and one of the gravure presses: the knowledge and the results gained could then, standard operating procedure at OSC, be transferred to the other machines and also possibly to other sites. The first OSC audit at the Istanbul operation indicated above all a major savings potential in machine set-up. The procedures applied



to the units investigated in Istanbul were, according to OSC project manager Michael Steitz, "not bad" compared with other companies, but nonetheless had potential. Steitz: "The objective was to make sure that the right materials are available at the right place at the right time." The OSC experts revised "transport & motion" to the extent that today for example a second set-up trolley is used, and there is always a reserve of toning ink at the machine itself, so that the printers do not waste time walking to the ink store. This is complemented by optimized configuration of the print units, which involves the set-up of the print cylinders according to a precise schedule. During the first months of the project these measures alone were able to cut set-up times by 10 per cent per order, says Esat Imer.

Following the pilot project on one of the flexo-print presses, it proved possible to reduce set-up times by seven per cent. This was achieved by having a second operator work on the machine. Esat Imer considers the pilot project a success. Today, the additional operator is now involved in setting-up two machines, so that the positive effects are now gained on other machines as well. The plan is to implement the concept of an additional part-time operator per machine elsewhere, "because it is ultimately worth it," says the plant manager.

#### Only tested ink at the machine

The optimization analysis of the ink preparation was also successful in Istanbul: whereas in the past KoroZo did its ink corrections mainly at the machines themselves, this step has now been moved upstream in the workflow. Ink preparation now makes use of new ink measurement and proof equipment to decide whether the mixed tone matches customer specifications. This ensures that only tested, i.e. properly prepared, inks are issued to the presses. The ink set-up processes directly on the machine are therefore now shorter, reports Imer. The number of proofs has been halved following introduction of the new process. Having a better ink quality at the machines in the KoroZo plants has also been achieved by introducing design numbers for each individual print image, in line with the recipe number system. By accessing a unique recipe number, orders can always now be reproduced in the same quality. Having design numbers integrated in the recipe number nomenclature also raises the level of safety and quality. "It is now almost impossible to mix up orders and recipes,



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and make a mistake,” says Esat Imer. And because the recipes are no longer transferred manually to the mixing unit but are now transmitted online via the corporate network, directly from the ink laboratory, Koroza now enjoys an additional level of safety.

The OSC project team additionally worked with Koroza staff to attack the issue of return ink. Returns are no longer added to the ink mixing process manually, but are connected to the dosing unit by way of six tanks. Furthermore, on the print machines themselves, the amount of return ink was reduced by using the ink more precisely and in smaller volumes. Imer: “These were all successful individual measures which help us to reduce the quantity of return inks.”

#### KPIs provide feedback

In addition to the new processes, the adoption of the OSC philosophy is also reflected in a comprehensive knowledge and control system. The Siegwerk consultants also introduced their well-proven controlling instruments into the operations of the key Turkish account. These instruments will help Koroza achieve its targets over the long term. In effect, each single order is assessed using clear and unequivocal KPIs to provide feedback on whether the targets were achieved or not. A simple traffic light (red - green) indicates success or failure at each order level. During the 12 month OSC project, regular meetings also took place on the subject of quality organization. Every day there was a production meeting, once a week this meeting was joined by higher level units, for example plate making, in order to discuss status and resolve optimization measures. And

these meetings still happen, they just have been rescheduled to every 14 days.

Esat Imer reports that the employees at the Istanbul plant were open and accepted the ideas from consultants very well. “It was like having a training session for staff, and that is why the changes were warmly welcomed,” reports the print plant manager. His colleagues were also quick to see the advantages of the new procedures, which again meant that acceptance levels were very high. The fact that the entire optimization went so smoothly is also thanks to the “outstanding collaboration” with the OSC specialists, says Imer. The co-operation with the external experts was “very amicable and very constructive”. They fought for every issue, and made sure that everyone learned something from the project.” And the savings assumptions indicated in the initial OSC audit, before the project started, were actually exceeded. The success of the project is also not least due to the robust support given by Koroza management: Albert Nahmiyas, managing partner of Koroza, always gave the project his vigorous support. He is happy with that achieved.

#### Deepened the business relationship

The positive outcome in Istanbul has also not gone unheard at the Koroza plant in Izmir. The new processes adopted in Istanbul have now also been implemented in ink preparation there as well. The On-Site-Consulting team has also helped in the commissioning of a dosing system and optimized its usage. Koroza CEO Albert Nahmiyas says overall that the OSC projects have strengthened the spirit of trust between Koroza and Siegwerk and have substantially deepened the business relationship.

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