

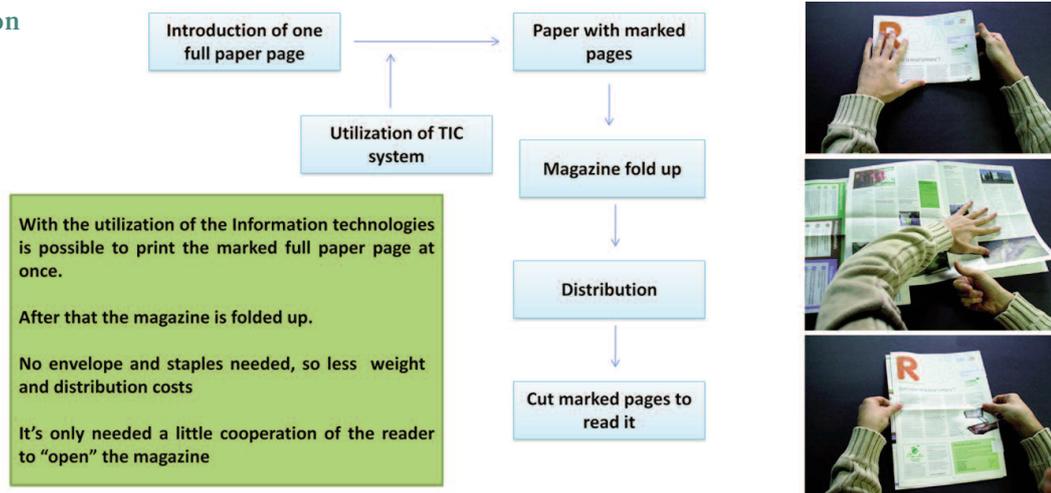
MedClean Propre Limpio


No. 101
Pollution prevention case studies

Reduction of paper waste in a graphic arts company

Company	El Tinter, arts gràfiques, edicions i produccions, SAL
Industrial sector	Graphic arts
Environmental considerations	<p>Waste constitutes the most important part of the graphic arts production environmental impact. It's been constituted by 13 different kind of waste, 6 of them being hazardous.</p> <p>Those wastes are mainly generated at the print area (solvents, empty painting cans, dirty bags, paper, etc.)</p> <p>Obviously, there is a huge amount of paper wasted too. One of the most important goals of the company was the external management of the generated waste.</p> <p>An internal control is implemented to know the evolution of the environmental impacts in volume and quantity related to the paper consumption.</p>
Background	<p>The main motivation to focus in environmental actions was the implementation of an environmental management system. The first step is usually an environmental audit to identify where the impacts are produced. So this brings to a change in some internal habits and conducts at the company.</p> <p>An important change was the reduction of the raw materials consumption. Between them the paper (per production unit) This was a way to improve the productivity of the company because that means fewer raw materials per final product. At same time there is a waste management cost decrease.</p> <p>The actions in this field were: rethinking the print process to produce less paper waste and use the production changes to reduce the distribution costs.</p>
Summary of actions	<p>The main action consists in rethinking the print of the publication to decrease the environmental impact.</p> <p>Redesign of the product that allows maximizing the utilization of the paper and also the reduction of the generated paper waste. Through the introduction at the printer of the full paper page that permit the zero paper waste generation and also other benefits as reduction on the magazine distribution costs.</p>

Diagram of the installation



Balance	(4.000 units)	Old process	New process
Balance of raw materials	Paper (Kg)	270	270
	Printing ink (gr)	487	377
	Binding	fold + staples + envelop	mark + fold
Economic balance	Design and model	2088	2328
	Paper waste management	6	0
	Plate	240	288
	Printing ink	19	14
	Magazine fold	594	652
	Binding	226	0
	Distribution	3752	2922
	Total costs	6925	6204
	Net savings		721
	Average savings		9.89%

All figures Euro

Conclusions

This system allows a bigger quality of images and pictures.

This system does not use staples even glue, so there are a double benefits, for the company costs and for the environment.

The distribution is less expensive due to the non utilization of envelopes, and the probably smaller cost of the stamps (due to the decrease in the weight of the total product).

The company creates a publication about environmental control system to know the impact of printing each publication called "ecological backpack".

