



# pressrelease

## Environmental Guide for Web Offset Printers

**“Environmental Considerations” is the Web Offset Champion Group’s 6<sup>th</sup> best practice guide that looks at the underlying issues of Energy, Economy, Efficiency, Ecology and how to improve business performance from Redesign, Reduce, Reuse and Recycle.**

Equipment, materials and operational effectiveness are the three pillars of productivity that need to work effectively together to optimise manufacturing efficiency. Environmental issues have an increasingly important impact and are related to standard procedures and maintenance.

### Raw materials cost inflation

The costs of industrial raw materials (oil, metals, energy) have increased by 54% in the three years ending 2004 making reduction of waste even more important. Energy prices have further increased and are unlikely to return to previous levels and the cost of water and waste disposal are also climbing. Product quality is a joint environmental and economic necessity as a systematic waste minimisation programme can often cut waste by 25% – this means that if total waste is 12% of turnover, 3 % can be added to company profits through cost savings. Waste is often seen as valueless but its recycling/re-use value can be much higher than the cost of its disposal. It includes all materials and packaging used in the production process and the environment.

Therefore an integrated environmental policy has compelling business advantages – the opportunity to reduce costs, increase competitiveness, become more innovative and enhance staff and customer confidence, whilst avoiding the potentially expensive risks of non-compliance. In many cases, companies may also qualify for funding opportunities, tax incentives and reduced insurance premiums. In addition, environmentally aware printers benefit from an increasingly positive brand value perception, particularly as more and more of their customers are adopting third-party certified Corporate Social Responsibility reporting. Businesses that take only a minimum compliance approach miss all of these opportunities and have a higher risk of fines and remedial costs.

### From “Green wash” to “Hard Green Business”

Environmental legislation began in the US in the late 1960s, followed by Japan, Europe and Australia, and now extends to China, Asia and South America. National leaders at the 30<sup>th</sup> G8 Summit in 2004 reaffirmed their commitment to sustainable development and approved the 3R initiative to

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**MAN Roland Druckmaschinen AG**, Offenbach, is the world’s second largest printing systems manufacturer and the world’s market leader in web offset. MAN Roland operates out of Offenbach, Augsburg and Plauen in Germany. It employs 9,000 staff and has annual sales of EUR 1.7 billion, with an export share of 83%. Web and sheetfed offset are the major product lines for publishing, general commercial and packaging printing. MAN Roland is the only printing press manufacturer to be partner of the WAN (World Association of Newspapers).

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Photos can be downloaded from [www.man-roland.com](http://www.man-roland.com) in the category **Press Service / News**.

encourage reduction of waste, reuse and recycling, and the duty of care regarding all waste. Although this is a global trend, there are at local, national and international levels significant variations in laws, definitions and classifications. This means that there is no single compliance formula for the best, most cost effective sustainable solution for environmental performance. However, an awareness of what is happening elsewhere in the world will help identify practices that can be adapted to improve environmental and business performance.

There is significant scope to reduce the toxicity and volume of chemistry in the offset printing process. This includes alcohol-free fountain solutions, vegetable cleaning agents and inks, and a new generation of virtually process-free plates. Computer hardware and software have already played critical roles in finding non-chemical prepress alternatives. Good maintenance is also environmentally important because it helps reduce energy, waste, cleaning materials, and noise, and facilitates health and safety compliance.

#### **The 4 Rs**

“Environmental Considerations” describes how the 4 Rs can be used to systematically conserve resources:

**Redesign:** How can processes be made more resource and cost efficient? Examples are the elimination of film and processing by CtPlate, direct drives that reduce energy consumption, closed loop colour control and automation to reduce makeready and running waste.

**Reduce:** Less material in and less waste out: improved resource efficiency through continual attention to waste streams and processes to reduce emissions, energy use and waste. A waste reduction plan is an opportunity to improve overall business efficiency by reducing manufacturing and waste disposal costs without compromising quality. Waste is not just solids and liquids that require disposal; it is also wasted time and costs.

**Reuse:** Identify waste materials that can be reused for another purpose to reduce purchase and disposal costs; or find ways of converting waste energy into re-useable energy.

**Recycle:** Waste materials (ink, plates, paper and plastics) transformed into other products typically use less energy and resources than for products made from virgin materials. However, in some cases, the viability of recycling-to-reuse may be an issue if significant additional energy is needed. Resources that cannot be redesigned, reduced, reused or recycled need to be disposed of responsibly.

#### **Free downloads**

Best practices are an important tool that combines the generic expertise of Web Offset Champion Group members, printers, associations and other experts to help improve the efficiency of the production process chain. The

Web Offset Champion Group is a non-profit organisation that promotes generic best practice in the web offset printing industry as a tool to improve productivity, quality and safety. Members include Aylesford Newsprint, Kodak, MacDermid Printing Solutions, MAN Roland, MEGTEC Systems, Müller Martini, Nitto-Permacel, QuadTech, SCA, Sun Chemical.

“Environmental Considerations” is available in five languages (English, German, French, Spanish, Italian) from members and on [www.wocg.info](http://www.wocg.info). The work of the Group has stimulated broad international interest and guides are becoming progressively available in Chinese, Russian and Japanese. Some leading trade magazines also serialise guide content in the US, Russia and Japan. The Group’s web site now includes free membership of the Champion Club that gives discounts on guide purchase, access to downloads and subscription to best practice tip of the month by e-mail. Downloads include an international data base for environmental information and a process analysis check list.

If you are interested in further information on the Web Offset Champion Group please contact: Nigel Wells, Managing Editor Web Offset Champion Group, [vimw@wanadoo.fr](mailto:vimw@wanadoo.fr)

**Captions:**

Web offset production is a complex flow of raw materials in, losses during production and an output of finished jobs, along with liquid and solid waste for disposal. An integrated manufacturing strategy is the optimum approach to improve efficiency. Source WOCG.

The Web Offset Champion Group’s latest guide provides a global view of energy, economy, efficiency and ecology related to web offset printing.

The three pillars of productivity need to work effectively together to optimise manufacturing efficiency. Each pillar incorporates procedures, maintenance and environmental issues that are all inter-related. Source WOCG.