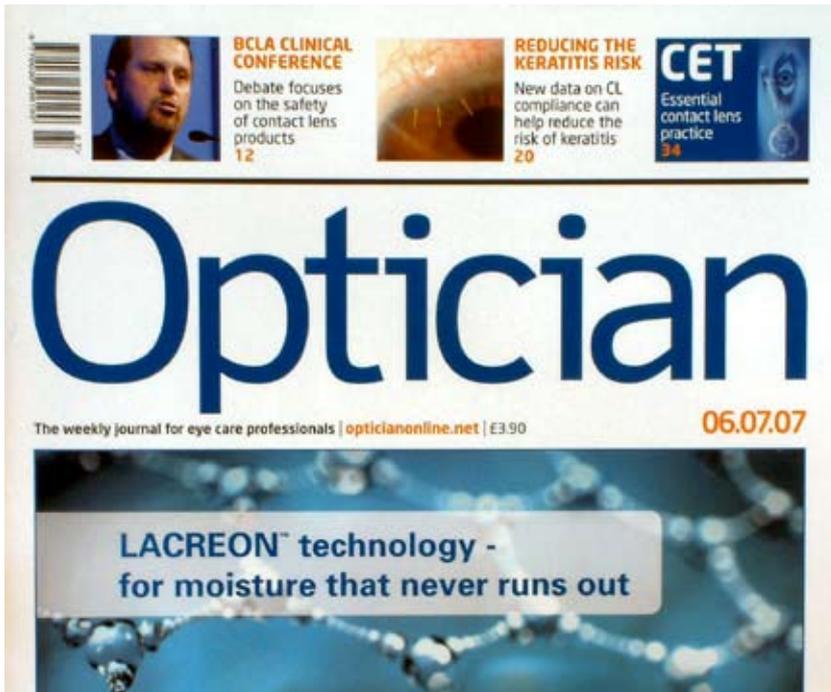


Print Trial: Optician

High-quality magazine printed on 50% recycled paper



Optician is a high-quality business-to-business (B2B) magazine published weekly by Reed Business Information, a major B2B media company. Incorporating colour photographs and a significant number of full-colour adverts, the magazine is specifically designed to look and feel both clean and clinical. It is produced in a portrait format (29.7cm x 21cm) and each issue is usually around 52 pages long, plus a four-page cover.

Using a sheet-fed offset process, Optician is normally printed on 90gsm Art Paper Gloss, a coated paper sold under the brand name Cymbal.

“Many consumers thought the recycled and virgin papers were identical”

Key Facts

- The publisher of Optician authorised a trial print run using 50% recycled-content paper.
- No problems were encountered in the course of printing or finishing.
- A consumer panel rated the sample of Optician printed on recycled paper as a good product, with the paper hard to distinguish from virgin stock.
- While commenting that the virgin stock was slightly superior in some respects, the publisher took the view that there was little discernible difference between the two papers.

Motivation to ‘go recycled’

Reed Business Information is proactively engaged in delivering a comprehensive Corporate Social Responsibility (CSR) agenda. The company is therefore eager to identify and consider opportunities to pursue CSR initiatives within its portfolio of magazine publishing activities, including the reduction of environmental impact through greater use of paper incorporating recovered fibre.

However, the company sees it as essential that any move towards recycled paper should not compromise its publications’ look, feel and quality, or the overall economics of publishing. The B2B magazine sector as a whole is under significant financial pressure, so a key priority for Reed Business Information is the preservation of advertising revenue. This in turn depends on advertisers being completely happy with the quality of the publications they buy space in.

Before proceeding with a trial print run of Optician using recycled-content paper, Reed Business Information therefore emphasised the need to ensure that the paper was as similar as possible to the virgin stock normally used to produce the magazine. Specifically, it needed

“There was hardly any obvious difference between the trial version and the standard edition of the magazine”

Marianne Bushell, Reed Business Information

to be comparable in price and to represent an excellent match in whiteness, gloss and opacity. In addition, it was very important that the recycled paper did not include visible particles. This is because debris of this kind is liable to degrade colour images – and particularly images of faces, which (due to Optician’s subject matter) appear quite frequently in adverts included in the magazine.

The process involved

The paper selected for the trial was 90gsm Revive 50:50 Gloss. This contains 25% pre-consumer waste and 25% post-consumer waste (i.e. 50% recovered fibre in total); the remaining 50% comprises virgin pulp derived from responsibly managed forests certified in accordance with Forest Stewardship Council criteria. The paper’s key characteristics include 94% ISO brightness, 73% TAPPI gloss and 91% ISO opacity. (ISO = International Standards Organisation.)

A wide-ranging suite of tests were undertaken to compare this paper with the 100% virgin paper normally used. These tests assessed the whiteness, brightness and gloss of the two different types of paper, as well as their colour space L*, a* and b* (covering luminance and colour-opponent dimensions). The results indicated very little overall difference between the products, plus comparability in terms of the papers’ gloss. Some minor differences were apparent – namely, the Revive 50:50 Gloss was redder, less blue and slightly less white than the Cymbal paper.

Print contractor Williams Press, based in Maidenhead, undertook the print trial on Reed Business Information’s behalf. The print process used a 10-colour, sheet-fed Heidelberg press, with eight of the units employed. Using standard process-colour quickset inks at normal density settings, the press operated at a speed of 7000 impressions per hour and produced samples of the magazine in 16-page sections.

Production considerations

The recycled paper exhibited good stability and ‘runnability’. No register adjustments were needed. Some minor colour/inking-level adjustments did prove necessary but these were not due to any paper-related issues. Finishing performance did not differ from that of the 100% virgin paper.



“In terms of stability and ‘runnability’, the recycled paper delivered good results”

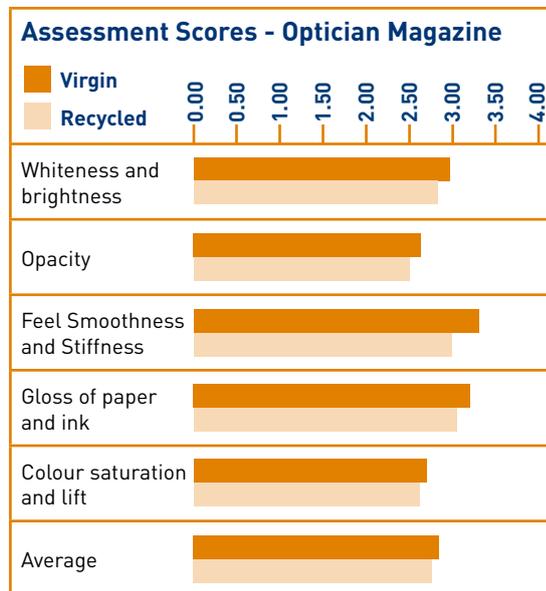
Alan Touchard,
Williams Press

Results and perceptions

The operators of the printing press were impressed with the behaviour of the recycled paper throughout the trial, but thought it seemed less glossy than the virgin paper, with printed images appearing slightly less sharp.

The publishing team were happy with the print trial, noting that overall there was little discernible difference between the trial edition of the magazine produced from 50% recycled paper and standard copies printed on 100% virgin paper. It was felt, however, that pictures did not appear quite as sharp on the recycled stock, that show-through was more marked and that the paper was lighter in feel and slightly less white than the virgin stock.

A panel of consumers, comprised of active magazine purchasers and readers, provided scores out of four for the sample magazine produced by the print trial and compared it with an edition of Optician printed on Cymbal paper. However, they were not told which version was which. The panel gave scores out of four on a range of specific characteristics (whiteness and brightness; opacity; feel, smoothness and stiffness; gloss of paper and ink; and colour saturation and lift – see graph), as well as on the papers’ relative merits.



Many panel members found it difficult to tell the difference between the two products. The recycled paper’s lower opacity attracted very little comment. The often contradictory opinions that were expressed suggested little practical distinction between the two types of paper, as the following examples show:

- “[the recycled paper] is brighter and smoother”;
- “[the virgin paper] is marginally smoother”;
- “[the two papers are] quite similar but you can tell there’s a difference if you look closely”
- “they’re identical”.

The panel was also asked to quantify its overall impression of each paper. Out of a possible ten, they gave the recycled paper a score of 7.6 and the virgin paper a score of 7.7. A score of 7.5 had been defined before the exercise as equivalent to a ‘good overall impression’. So this result indicated that, despite a marginal preference for the virgin paper, the panel considered the recycled paper to be a good product.

Conclusions

The fact that the consumer panel experienced considerable difficulty in distinguishing the 50% recycled paper from the 100% virgin paper demonstrated that the two products have very similar characteristics.

This conclusion was reinforced by the fact that the publisher did not identify any conspicuous difference between the two versions of the magazine, although they did highlight some features of the recycled paper that they considered slightly inferior to those of the virgin paper.

Summary

The marked overall similarity between the 50% recycled-content paper used in this trial and the virgin stock it replaced indicate significant scope for publishers to consider using the recycled paper in appropriate high-quality magazines.

For more information
contact:

Marianne Bushell
Reed Business Information
Quadrant House
The Quadrant
Sutton
Surrey SM2 5AS
Call: 02086 523500

Alan Touchard
Williams Press
Cordwallis Works
Clivemont Road
Maidenhead
Berkshire SL6 7BX
Call: 01628 622345

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**Waste & Resources
Action Programme**

The Old Academy
21 Horse Fair
Banbury, Oxon
OX16 0AH

Tel: 01295 819900
Fax: 01295 819911
E-mail: info@wrap.org.uk

Helpline freephone
0808 1002040

www.wrap.org.uk/manufacturing

