THE BULKY MATH

Four arguments for using a high bulk paper

HOLMEN

IT'S ALL IN THE FRESH FIBRE

Keep the thickness and lose weight. With higher bulk you can get the same thickness from a paper with lower grammage. But how much lower can a paper weigh and still keep its thickness? Let us give you an example and show you how to calculate:

Buy less or use more
Since the paper weighs less, you can buy fewer tonnes, save money and still keep the same thickness as a regular paper. Or, you can add more pages while still buying the same amount of paper. Or, get a thicker end product. On top of that you will have further saving potential in distribution cost. There are incredible benefits with high bulk.

You do the math
In this overview you will find examples to help you calculate the benefits of higher bulk. You can also do your own calculations using our paper calculator.

Scan the code to go to the calculator and see for yourself how much you can save.

GLOSSARY

Grammage
The weight of a paper sheet. Measured in g/m²

Caliper
The thickness of a paper sheet. Measured in microns (µ)

Bulk
The volume per weight ratio of a paper sheet. Measured in cm³/g

$$\frac{\text{Caliper}}{\text{Grammage}} = \text{Bulk}$$

Buy fewer tonnes

Keep the thickness and lose weight. With higher bulk you can get the same thickness from a paper with lower grammage. But how much lower can a paper weigh and still keep its thickness?

Let us give you an example and show you how to calculate:

Standard SC-papers usually have a bulk of 0.9 cm^3/g and Holmen UNIQ has a bulk of 1.1 cm^3/g.

So if you have been using a 56 g paper, an equally thick paper with the bulk 1.1 would be a 46 g paper.

$$\frac{SC\ 56\ g/m^2 \times 0.9\ cm^3/g}{1.1\ cm^3/g} = \mathbf{46\ g/m^2}$$

The closest Holmen alternative would be Holmen UNIQ 47 g/m^2.

$$\frac{47\ g/m^2}{56\ g/m^2} = \mathbf{16\%\ savings\ on\ weight}$$

This means that you save 16% in weight if you use Holmen UNIQ compared to a standard SC-paper.

Now let's see how much money this could save with an example using 5000 tonnes per year (tpy):

5 000 x 0.16 = **800 tonnes** less paper

With Holmen UNIQ, you need 800 tonnes less paper for the same number of copies. With a price of EUR 900 per tonne, the savings are almost 720 000 EUR. And the end product is still just as thick.

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You save 16% in weight if you use Holmen UNIQ

Get more pages or more copies

Get more paper per reel without higher costs. By switching to a high bulk paper you can increase your circulation without paying more than before.

Let's look at an example of a magazine with 56 pages using 5000 tpy:

$$\frac{\text{Number of pages}}{2} \times \text{grammage g/m}^2 \times \text{format in m}^2 = \text{g/copy}$$

Your magazine, printed on standard paper in grammage 56 g/m², weighs 105 g/copy.

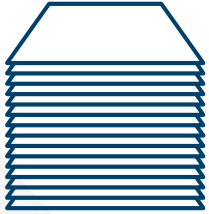
The same magazine printed on Holmen UNIQ 47 g/m², weighs 89 g/copy.

$$\frac{5\,000 \text{ tpy}}{150 \text{ g/copy}} = \textbf{47.3 million copies}$$

$$\frac{5\,000 \text{ tpy}}{89 \text{ g/copy}} = \textbf{56.3 million copies}$$

Regular paper
Less copies

Holmen's paper
More copies



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You get 9 million more copies, at the same cost

Get a thicker product

With high bulk paper you can get a thicker product, without using a higher grammage.

Here is an example:

If you are using a standard paper that weighs 50 g/m² and has a bulk of 0.9 cm³/g, and compare that to Holmen UNIQ 50 g/m² that has a bulk value of 1.1 cm³/g.

SC 50 g/m² has a caliper of 50 x 0.9 cm³/g = 45 µ
UNIQ 50 g/m³ has a caliper of 50 x 1.1 cm³/g = 55 µ

By switching to Holmen UNIQ, your magazine will weigh the same, but be 22 percent thicker.

Switching to Holmen UNIQ gives you:

$$\frac{55\ \mu}{45\ \mu} = \textbf{22\% higher thickness}$$

Regular paper
Thinner product

Holmen's paper
Thicker product

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Switching to Holmen UNIQ gives you: 22% higher thickness

How to compare price

There are more things to consider than the price per ton when you compare paper cost. You also need to consider the yield of the paper. You buy paper in tonnes, but you use square metres of printing surface. A high bulk paper will give you more printing surface per tonne that you buy.

This example shows the difference in yield between two papers. The first one is a standard LWC paper in 65 g/m² with a bulk of 0.9 cm³/g. We compare this to Holmen VIEW which has a bulk of 1.1. The closest grammage in thickness is Holmen VIEW 53 g/m².

$$\frac{\text{LWC 65 g/m}^2 \times 0.9\ \text{cm}^3/\text{g}}{1.1\ \text{cm}^3/\text{g}} = \mathbf{53\ g/m^2}$$

We calculate with a price of 900 EUR/tonne for both products, and compare the print area per tonne to see how much you can save thanks to the higher paper yield.

For the same printed area the customer pays:

$$900 \times \frac{53\ \text{g/m}^2}{65\ \text{g/m}^2} = \mathbf{734\ EUR/ton}$$

So, even though the price per tonne is the same, your actual cost for the same amount of printing surface will be 18 percent lower, since you get more print surface per tonne that you buy.

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A high bulk paper will give you more printing surface


KEEP THE
THICKNESS
AND LOSE
WEIGHT

holmen.com/paper

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