

THE HANGON GREEN EFFECT REPORT 2022

Survey on sustainability in the
coating industry

SUMMARY

A recent survey shows that important issues in the coating industry are related to energy consumption, sustainability and coating line utilization – where hanging density is regarded as the most important factor to improve line utilization and by extension line profitability.

There is an enormous hidden potential to save energy by improving the utilization of coating lines. Studies made by HangOn estimate that the possible energy savings per year in a single coating line would be enough to cover 170 average EU households for a whole year.

In our most recent survey, the importance of sustainability to companies in the coating industry is clear. A majority of respondents also say that issues related to energy consumption will become more important over the next five years.

Most respondents say that increasing coating line utilization is the most efficient way to reduce energy consumption and increase line profitability – most effectively accomplished by increasing hanging density. The results also highlight that reducing energy consumption is seen as the most important factor to improve sustainability.

These findings suggest a high industry awareness of how increasing coating line utilization can reduce energy consumption, which in turn can increase line profitability and improve sustainability. This also points to an awareness of – and a need for – smart solutions to save energy in coating plants across the industry.

About the survey

The online survey was in the field from February 10 to March 16, 2022, and garnered responses from 250 participants in 11 countries, representing a range of regions, company sizes, coating processes and professional roles. 92% of respondents say they have used or are using products by HangOn in their company.

THE IDEA BEHIND HANGON GREEN EFFECT

The effect of filling the line has an enormous hidden potential to reduce energy consumption and increase your profit – a double effect we call HangOn Green Effect.

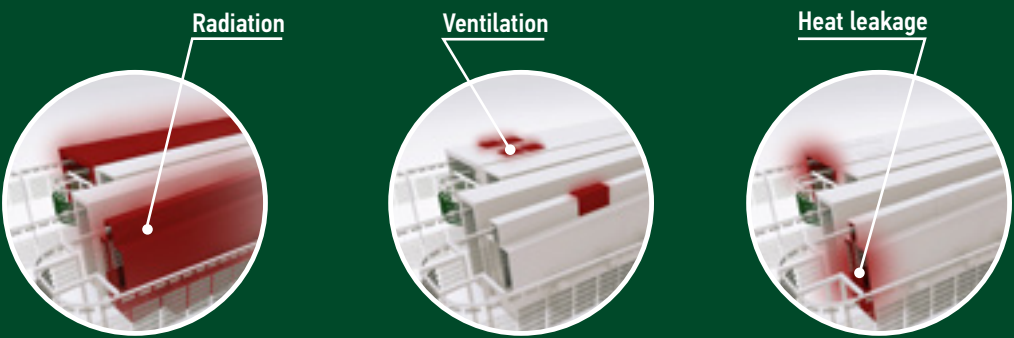
The major part of energy usage in your coating line is constant regardless of the amount of goods coated. This is due to energy losses in radiation through outer surfaces, ventilation and heat leakage through openings. The difference in energy consumption is due to more goods heated up.

The idea behind the project was originally to understand in depth what the energy consumption in a coating line really looks like. To achieve this HangOn conducted a thorough study of the energy consumption in five different standard powder coating line set-ups which is the base for the HangOn Green Effect concept.

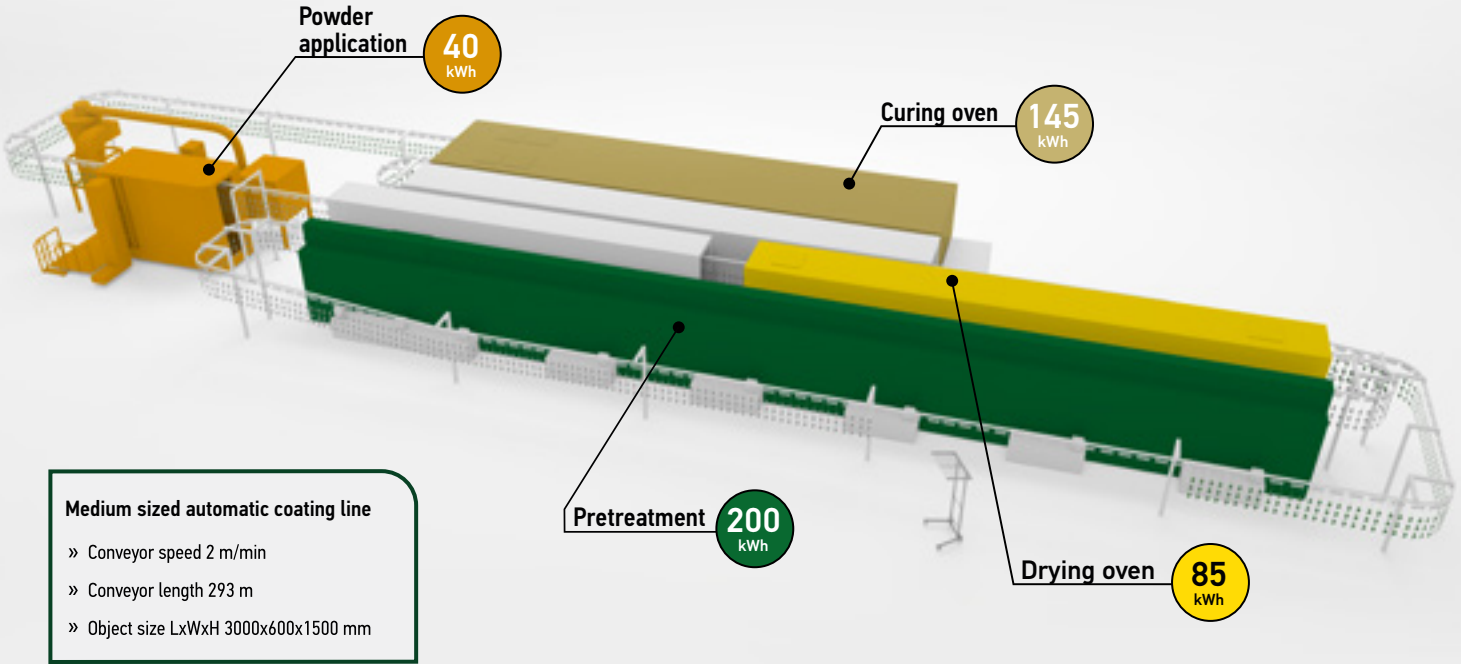
Benefits of HangOn Green Effect:

- » Learn to understand and reduce energy consumption
- » Reduce cost and increase profit
- » Contribute to a greener coating industry

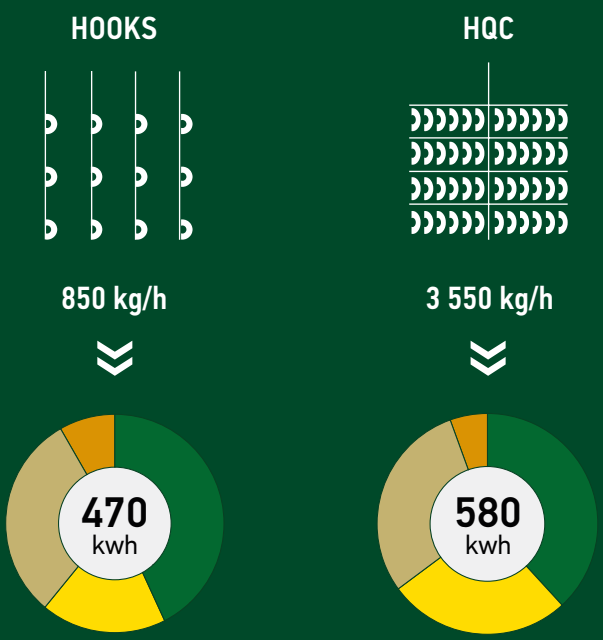
ENERGY LOSSES IN A COATING LINE



ENERGY CONSUMPTION IN A COATING LINE



GOODS FLOW



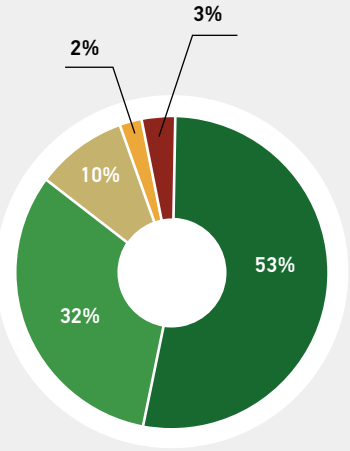
SURVEY RESULTS

Exhibit 1

85 percent say sustainability is important to their company

Replies to the question: How much do you agree with the following statement: Sustainability is important to my company.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree



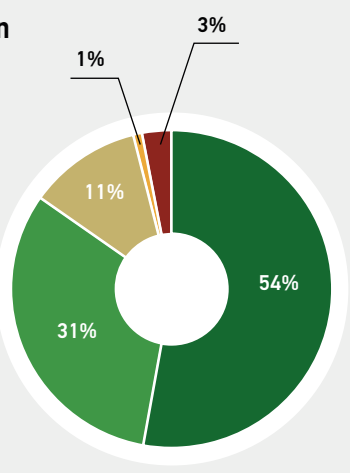
The importance of sustainability in the coating industry is clear, with a majority (85 percent) of respondents saying that sustainability is important to their company. (See Exhibit 1)

Exhibit 2

In the next five years, issues related to energy consumption will become more important in the coating industry

Replies to the question: How much do you agree with the following statement: In the next five years, issues related to energy consumption will become more important in the coating industry.

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

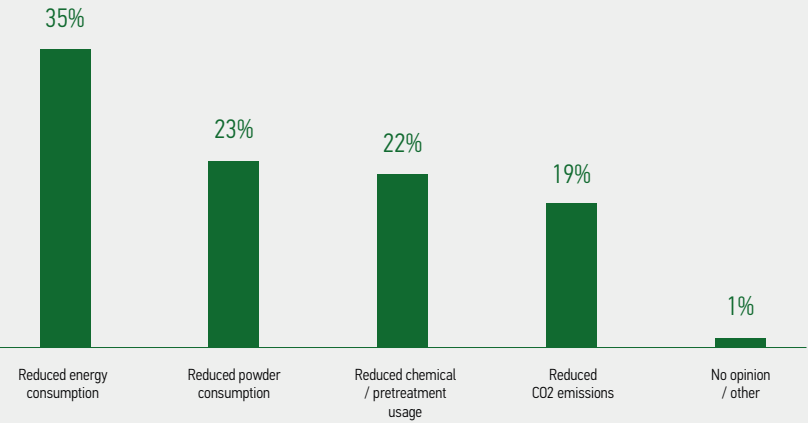


Most respondents (85 percent) say that issues related to energy consumption will become more important over the next five years. (See Exhibit 2)

Exhibit 3

To improve sustainability, reduce energy consumption

Replies to the question: In your opinion, what do you think are the most important factors to improve sustainability within the coating industry? Select the three options that are most important to you.

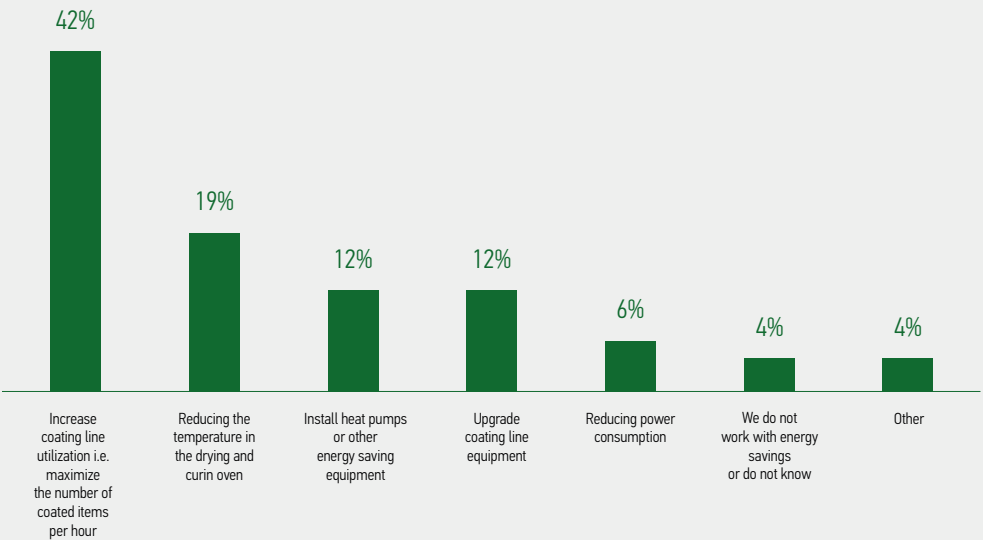


To improve sustainability, reduced energy consumption is deemed as the most important factor (35 percent), followed by reduced powder consumption (23 percent), reduced chemical/pretreatment usage (22 percent) and reduced CO2 emissions (19 percent). (See Exhibit 3)

Exhibit 4

The most efficient way to reduce energy consumption: increasing coating line utilization

Replies to the question: What would be the most efficient way to reduce energy consumption in your coating line? Select the most important option.

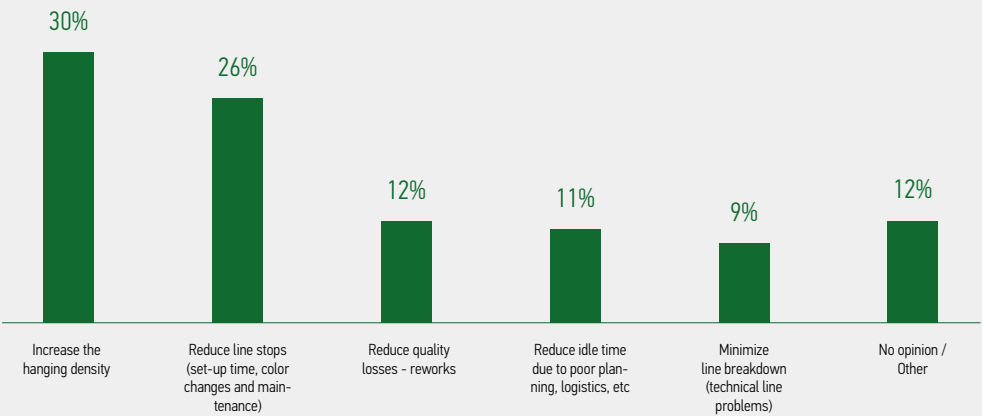


Most respondents (42 percent) say that the most efficient way to reduce energy consumption is by increasing line utilization, such as maximizing the number of coated items per hour. 19 percent say that reducing the temperature in the drying and curing oven would be the most efficient way. (See Exhibit 4 on previous page)

Exhibit 5

Hanging density is the most important factor to improve coating line utilization

Replies to the question: What is the most important factor to improve the utilization of your coating line?

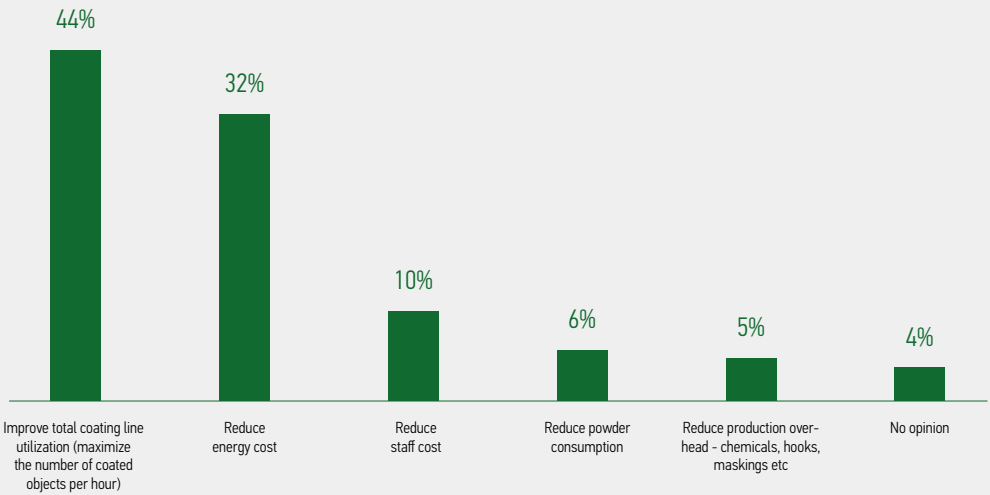


To improve coating line utilization, increasing hanging density is the most important factor according to 30 percent of respondents. 26 percent say reducing line stops is the most important factor to improve coating line utilization. (See Exhibit 5)

Exhibit 6

For improved profitability, line utilization and energy costs are the most prioritized factors

*Replies to the question: Which of the following factors can improve the profitability in your coating line the most?
Select the option that is most prioritized*



To improve the profitability the most in their coating line, 44 percent say that total coating line utilization is the most important factor. This is followed by 32 percent saying that reducing energy cost is the most important factor to improve the profitability the most in their coating line. (See Exhibit 6)

SUSTAINABILITY AT HANGON

For the last 20 years, HangOn has pioneered the development of sustainable solutions in the coating industry.

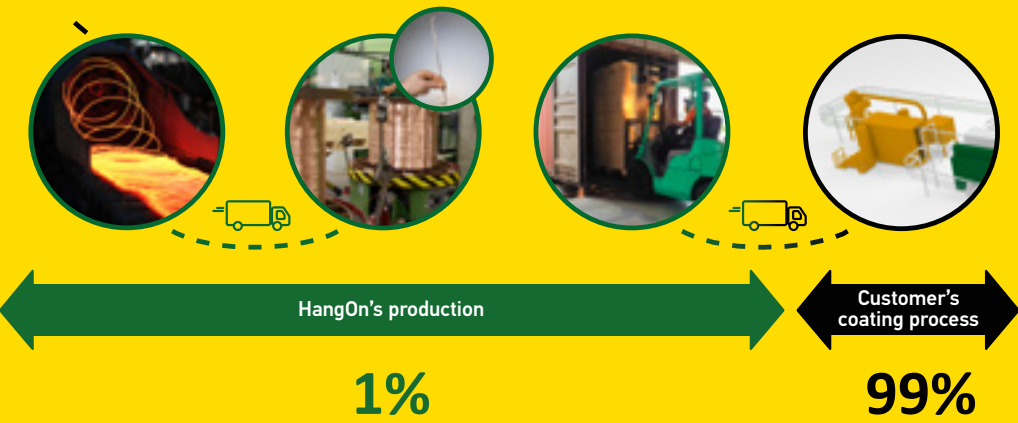
Beginning with a life cycle analysis of seven of our products in Sweden, we have since further developed and refined our analysis of our sustainability impact. We have found that our customers' coating processes accounts for ninety nine percent of the total energy consumption related to our products. Only one percent is due to HangOn's own production including energy consumption for raw material and transports.¹

We constantly work to reduce our own energy consumption - ranging from developing more energy efficient production processes to installing solar cell panels and LED lighting. But improving the efficiency in our customers' coating lines is by far the biggest impact we can make for sustainability. As a byproduct this also has great potential to increase customers' profit.

That is why we devote ourselves to sustainability - both in our own production and in that of our customers.

¹This study was based on production of hooks in the Swedish coating market.

TOTAL ENERGY CONSUMPTION RELATED TO HANGON'S PRODUCT





Many companies face pressure to become more sustainable while still delivering profits – and energy savings is at the center of this challenge.

The survey shows an awareness of important solutions to this challenge: increased hanging density and line utilization to lower energy and increase profits.

Visit hangan.com/green-effect to learn more about how you can reduce energy in your coating plant and contribute to a greener coating industry.

