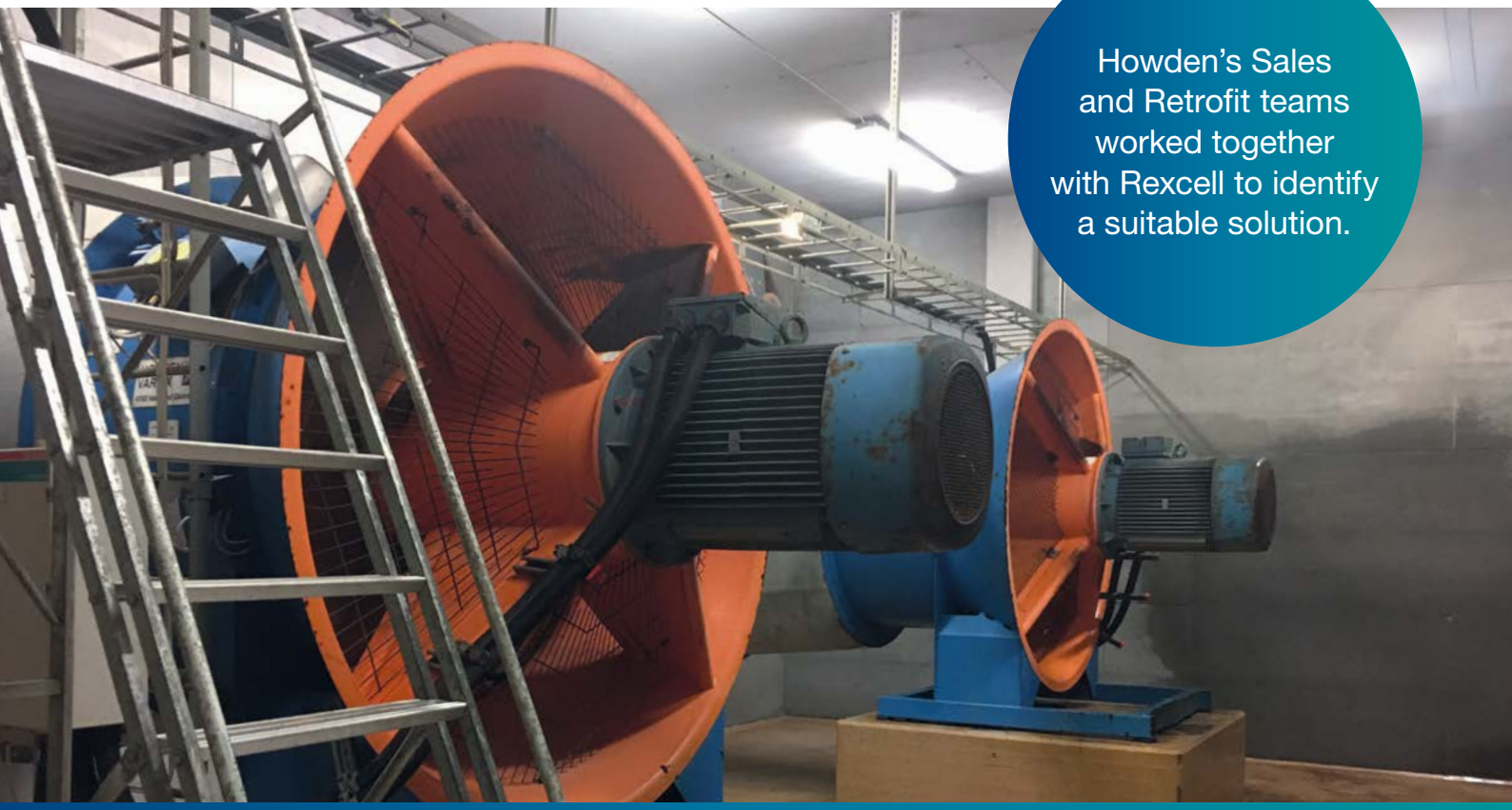
Case Study

Fan upgrade with over 40% power savings

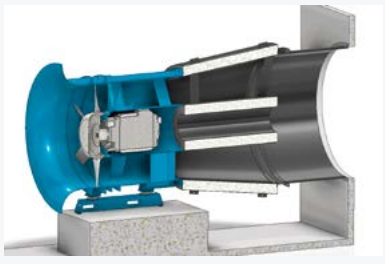
DuniRexcell, Skåpafors, Sweden

Howden
A Chart Industries Company



Howden's Sales and Retrofit teams worked together with Rexcell to identify a suitable solution.

Rexcell, part of the Duni Group, who have a plant in Skåpafors, Sweden are one of the leading creators of sustainable and innovative concepts for the set table and take-away creating environmentally friendly products such as napkins, table covers along with packaging and packaging systems for take-away.



Rexcell are a 'trusted sustainability leader' and recognize the importance of energy savings. At their production facility in Skåpafors, Sweden Rexcell have two Tellus fans in operation that humidifies air in the paper production.

These fans are critical to the overall production process and have been installed for approximately 25 years. The availability and reliability of this equipment is essential to ensure there are no unexpected breakdowns, which could potentially result in production downtime.

The challenge

It was discovered by Howden's Field Service team in Denmark, that the fans had become corroded and at risk of failing this meant that it is likely they would be needing replaced in the near future. The fans are a vital part of the production flow and if they are not operating, production cannot function appropriately. The existing Tellus fans are currently on a maintenance schedule which includes changes of parts every two years.

The solution

Howden's Sales and Retrofit teams worked together with Rexcell to identify a suitable solution. It was identified that the UMAF design would be the best option and would offer a projected 40% saving in power and significantly less maintenance would be required on the new design. The UMAF design only requires the motor bearings to be regreased which can be achieved without any need to dismantle the fans thereby resulting in significant savings on time and costs associated with maintenance.

The old Tellus fans had operated to the full satisfaction of the customer for 25 years and had simply reached their end of life. The customer was happy with Howden's fans, that they requested identical replacement fans. Besides offering identical fans, Howden also suggested an analysis of the performance demands to identify a potential for power savings. The customer provided Howden with the necessary operational data, and Howden found that the UMAF fan was a better match than the existing Tellus fan.

The outcome

By installing UMAF fans instead of the Tellus fans, a power saving of 40% was achieved. Additionally, the selected UMAF fans operate with lower noise levels compared to the existing ones. The power saving of 40% is 51 kW for both fans and the yearly savings in CO_2 emissions are 12t. The fans are in Sweden, which has one the worlds least CO_2 polluting power supply. Had the fans been in Poland, the yearly savings in CO_2 would have been 200t.

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For further information get in touch with our team today:

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