CASE STUDY

TECHNOMELT E-COM IN ACTION

Case Study Reveals Breakthrough in Energy Savings and Production Efficiency Transformation

JANUARY 2024

Henkel

interlock adhesives

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CASE STUDY

TECHNOMELT E-COM IN ACTION

Seamless collaboration between key stakeholders is critical to achieving a sustainable and efficient packaging process. Especially in the e-commerce industry, the pressure to fulfill orders quickly means that all parts of the process must run smoothly, from the machine to the dispensing equipment to the adhesive.

This case study explores the successful synergy between Henkel, Interlock Adhesives, Sealed Air and Nordson. This collaborative approach serves as a testament to the transformative power of cohesive efforts to improve both operational efficiency and environmental sustainability in the packaging industry.

Why should you choose TECHNOMELT E-COM hot melts for your automated e-commerce packaging process?

- **Efficiency:** Use 20 – 30% less adhesive
- **Excellent Adhesion:** Provides added security and tamper evidence
- **Self-Cleaning:** Minimizes char and extends the life of equipment and spare parts
- **Heat Resistance:** Required for when the machine is on but not in use to reduce char
- **Sustainability:** Energy saving options available to reduce costs by 50%
- **Recyclability Statements:** CHI recyclability assessments provided on all grades

TECHNOMELT E-COM × Sealed Air Equipment

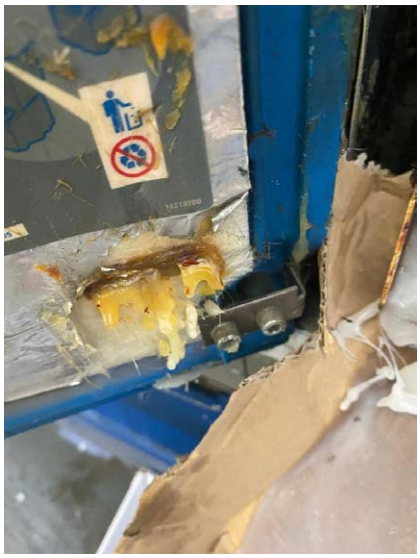
TECHNOMELT E-COM is certified for Sealed Air Equipment including I-Pack®, e-Cube® and Ultipack®, allowing for maximum flexibility and keeping the process simple and easy.

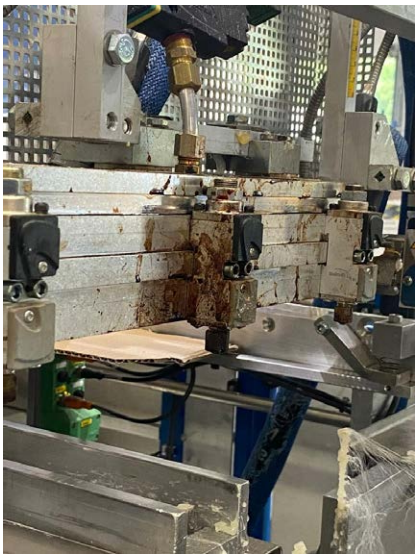
Customer Case Study
Customer: UK-based e-commerce retailer

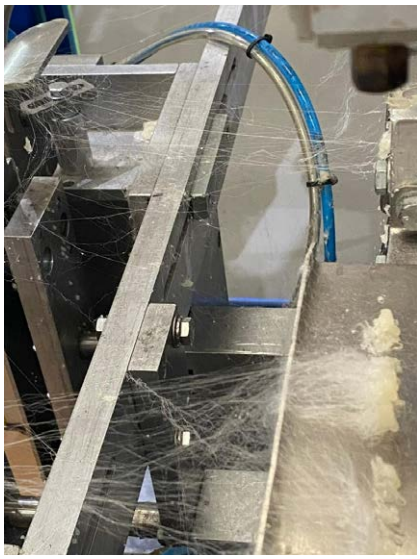
Hardware:
2 Sealed Air case & carton erectors and 1 Sealed Air lidder
3 Nordson Pro Blue melters and multi-module SolidBlue™ S applicators

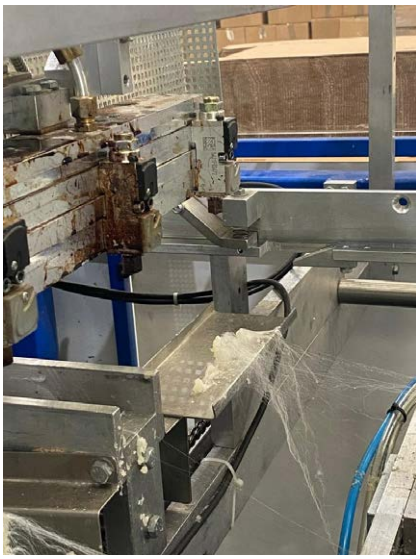
Previous Set-Up:

Technology:	EVA hot melt adhesive
Application Temperature:	180°C
Adhesive Consumption:	120 kg per week
Issues:	Charring causing downtime and increased spare part spend









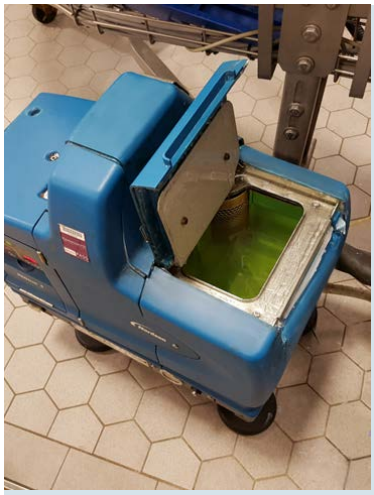
Proposed New Solution

Technology: **Polyolefin based hot melt adhesive (TECHNOMELT E-COM E2 COOL)**

Application temperature: **130°C**

Objectives

- **Reduce application temperature to increase operator safety and achieve energy savings**
- **Reduce adhesive consumption**
- **Reduce downtime significantly by clean running and eliminating stringing**
- **Reduce spare part costs**



Results

42% reduction in energy consumption:

From 1.2 kW/h to 0.7 kW/h per tank

52% reduction in adhesive consumption:

From 120 kg to 62.5 kg per week

Improved processing characteristics:

High adhesion, clean running, low stringing and elimination of char

Extended equipment life for nozzles, hoses, filters, etc.:

Estimated savings: 24,000 €

Improved worker safety:

- All equipment runs at reduced temperatures
- No risk of serious burns
- Less irritating fumes in the work environment
- After weeks of operation with no reported adhesive problems, downtime was significantly reduced

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