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# From Tack Rags to Riches The story of the Teknek Web Clean Machine

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Used widely in flexoprintthey were the ~go-to" tool for contamination removal in narrow web applications

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# INNOVATION IN THE PRINT SECTOR BRINGS NEW DEMANDS AND OPPORTUNITY!

Back in the 1990's as the growth in self-adhesive labels, film substrates and UV flexo accelerated, Glasgow based Teknek was a key part of the movement.

The emerging industry trends brought new demands for the print sector one of which was removing web contamination. An early and rather crude method to deal with the problem was a sticky cloth usually wrapped around a stick, known in the industry as "tack rag". Teknek then came to the rescue with its unique inline contamination removal technology, "Contact Cleaning", after being approached by a US customer who had identified that contamination was causing print defects.

By 1999 Teknek had launched the world's first narrow web cleaner (NWCM) which provided in line cleaning of both sides of the web. The NWCM was installed before the first print station and was primarily designed to prevent repeating defects (Hickeys). The aim was to remove defects to reduce or eliminate overruns.

Quickly the Teknek web cleaner became the industry standard with thousands in operation around the globe today.

Teknek's core technology – engineered elastomers and adhesives - are developed and made at its Glasgow HQ and are the result of decades of research and development, it has the only R&D facility which is dedicated to defect reduction.

As the print industry developed hybrid presses became more common and the value of the web cleaner increased.





The NWCM – Teknek's first narrow web cleaning machine

# **TEKNEK WEB CLEANER BECAME THE INDUSTRY STANDARD, FITTED ON THE LINES OF MAJOR OEMS**



Teknek narrow web cleaning machines installed on Gallus and Bobst print lines

Can you spot our web cleaners on the images to the left?

Now, not only was the cleaner removing contamination to maximise print quality, but it was also helping prevent damage or blockage of the fragile and expensive digital print heads.

With production speeds increasing along with ever more complex print demands, pressure to reduce waste increased. Print runs at higher speeds create waste faster when defects create Hickeys.

Now as the sector moves apace to become more sustainable the drive to eliminate waste has a new dimension and defect elimination is a critical part of that process.

Having led the market for over 35 years, Teknek has embraced sustainability and made it an integral part of its Teknek 2.0 Strategy. Adopting sustainable practices for those that manufacture products has challenges not least because the value adding process consumes resources. Moreover, there are few if any standards or guidelines for those that manufacture. One notable exception is the OECD Sustainable Manufacturing Framework, which Teknek adopted in 2019 and has pivoted its processes to include sustainability.

Teknek's first goal was to reduce the waste created by its facility in Glasgow, and where it could not reduce waste, to ensure that any waste was recyclable. Since starting the program waste has fallen by around 30% and recyclable waste has jumped from around 10% to over 80%. However, the biggest goal is to make the products themselves sustainable, and to do that sustainability has to be a fundamental part of the design process.

At Labelexpo 23, Teknek will unveil another first in web cleaning, its NW3 sustainable web cleaner. A completely new platform, the NW3 is a shining example of how sustainable product design delivers for the business and the planet.

The Tek-NW3 has some impressive statistics not least of which is Sustainable Content. The existing Teknek web cleaning products have around 35% recyclable parts, whereas NW3 has close to 90% recyclable parts with some 85% being Aluminium, one of the most recyclable materials available.

Reducing overall material usage is just as important as good material selection, NW3 uses between 30% and 50% (model dependant) less materials by weight than the existing products. Reliability jumps in part due to the 50% reduction in parts.

And, in an era of escalating costs it launches at a price which is on average 5% less than that of the existing products.

Whilst many may feel uncomfortable, or perhaps anxious about how their business will adapt in this 'new world', many can take hope from what Teknek has achieved. With ambition, imagination and determination products can become more sustainable whilst increasing competitiveness and cost effectiveness. Pivoting to sustainability need not take long. The NW3 project started in January 23 , full production commences in October, a 10-month program including tooling.

A win for the business, people and the planet.

# Tek-NW3 - The first sustainable web cleaner



Tek-NW3 – The first web cleaner designed under OECDs sustainable manufacturing framework

## **Tekkie fact:**

Since starting our waste reducing program, our waste has fallen by around 30% and portion of recyclable waste has jumped from around 10% to over 80%!

# **85%** ALUMINIUM The world's most recyclable material

**OVER 40% LESS PLASTIC** 

# WHO ARE WE?

We solve contamination problems in high-end industrial processes.

Our mission and overarching goal is to help our customers achieve zero defect, resource efficient, smart manufacturing operations, using cleaning technology that solves complex contamination and process challenges in their specific application.

Visit teknek.com

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