

# CN ENGINEERING SERVICES

Turnkey Solutions for the  
Food and Pharmaceutical Industries.

Project Management, Consultancy, Equipment Supply, Refurbishments.



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# About us

CN Engineering Services Ltd is an experienced family run Project Engineering, Management and Consultancy company specialising in Food and Pharmaceutical industries based in West Sussex.

Our aim is not to act as just a consultant but become a trusted partner to your business to support all your capital objectives.

We are experienced in not only automation integration but facilities and utilities too, so we can offer either a full ground to working factory option or supply of contract project resource. We are very proud to be members of Automate PPMA association of companies.

In 2024 CN Engineering has now partnered with 3 equipment suppliers and have UK exclusivity with them. Vegetable and produce washing equipment suppliers DFFM. Vegetable and produce wash water cleaning additive supplier SmartWash Solutions, and a revolutionary product called the Wave Valve that will guarantee to save a minimum 10% of your incoming water from Fluidlytix.



In 2023 we were very pleased to receive an award from the southern enterprise awards for the project management consultancy of the year.

# Project Management



## Turnkey Solutions

Working with you we will develop your user requirements, a full specification design and then a full Turnkey solution to any capital project need from utilities, facilities, process lines automation to full scale factory builds or refurbishments. Our expertise can provide you HSE, BRC and MHRA compliant project process from conception to completion as principal contractor.



## Interim Project Management

Our Project managers can help you on an interim basis, we will manage your project, but you will have full control of costs. This can be either inside or outside of IR35. We will simply integrate into your company as a contractor. This can be on a full contract length or even on a part time basis on number of days a week as agreed with you.



## CDM Management

The construction design and management (CDM) regulations 2015 are a set of rules established in the UK that aim to improve the health and safety in the construction industry. They apply to all building and construction works regardless of size. Projects driven from the Food and Pharmaceutical industry that involve equipment installation and refurbishments also apply to CDM regulations. We can act as principal contractor or CDM Coordinator and make sure your business is fully covered on your project.

# Automation Consultancy

CN Engineering Services Ltd work with you to aid your business in their steps into Automation. If you're a business with high levels of agency labour which help you process or pack your products seasonally or interim, we can work with you to give you a plan into automation.

## Services include:

- Feasibility studies
- Flow control
- 5S and Lean Manufacturing
- Factory layouts with old and new flows
- Time and motion studies
- Warehouse mapping

## Examples of automation projects by us:

- Packing conveyors labour was not reduced however this increased product from between 25% to 60%
- Palatising box's using Polar robot
- Boxing and crate packing trays/pots using Delta robots
- Automated Tray filling Lines
- Optical Sorting
- Warehouse Automated Racking solution
- Flow wrapping manual feed to auto feed vertical bagging
- Label application and verification
- Weigh systems (batch / continuous)
- PUWER regulation assessments and machinery directive audits



# Factory Drawings & Layouts

## 2D DWG Drawings

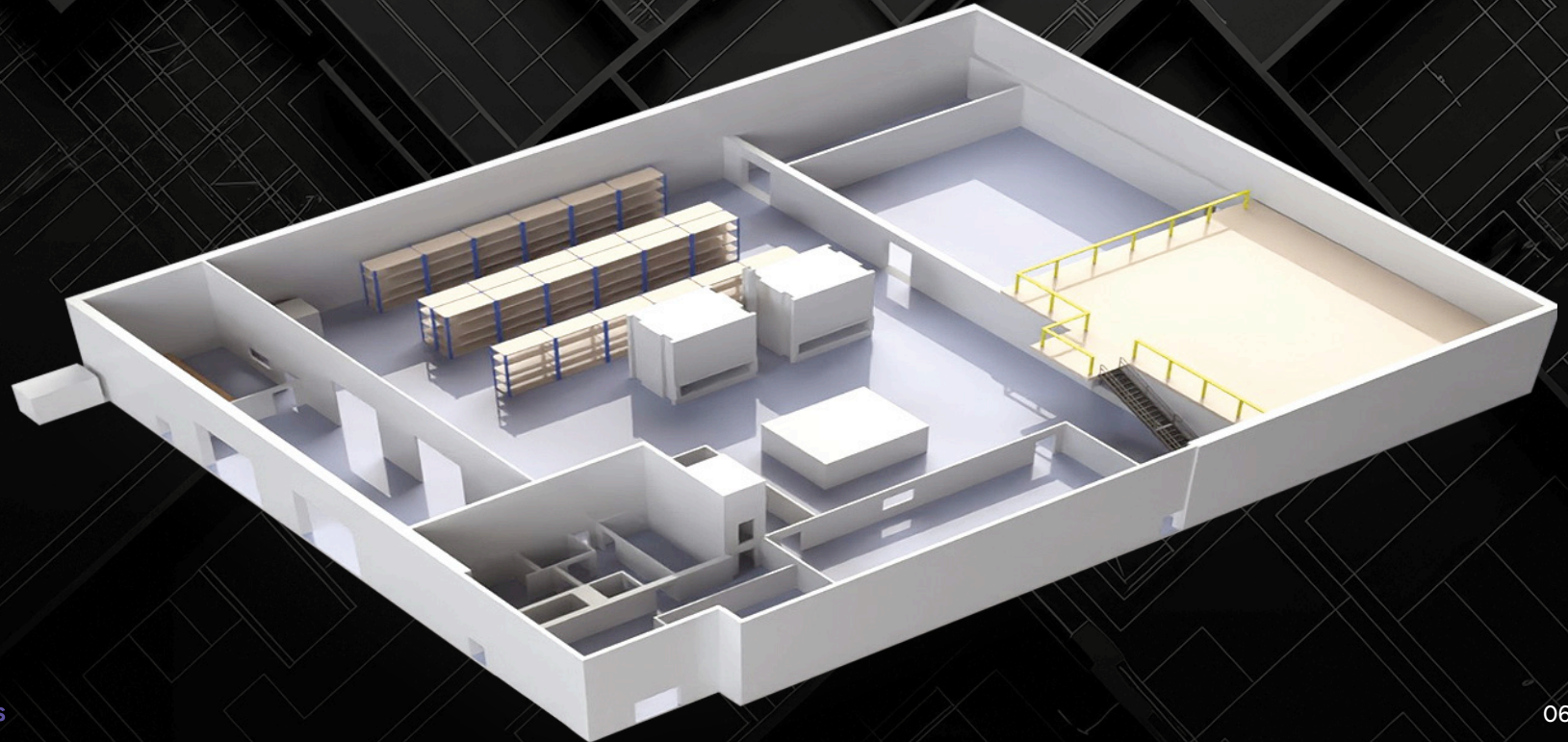
Design and drafting layouts is fundamental to all project we undertake. Our team will always make sure that a full set of drawings will accompany any project.

Our services also include factory surveys, we will do a full survey of your facility and draw up on cad your layouts BRC compliant drawings from fabric, machinery and drainage layouts.

## 3D Layouts

Using Solid Works software a solution design is completed. Utilities planning and equipment placement can be visually checked using VR technology.

OEM equipment 3d integration so process lines can be drawn and checked for transfer point effectiveness and potential risks.



# Cold Store Design Construction and Refits

CN Engineering Services Ltd has extensive experience in cold store design and construction.

## Cold Stores

From ambient, refrigerated and freezers we have the knowledge to design a fit for purpose facility for you. We will work with you on the design and flow of your production or warehouse needs, then produce a 2d and 3d layout. Once the customer has signed off the design a detailed project plan and cashflow forecast will be produced.

With each project comes specific customer requirements, we will make sure that all expectations are met while producing a BRC and customer compliant area.

## Flooring and Drainage

Any cold store area may need specific drains and flooring requirements. Within our design process these will be calculated and fit for intended use. Resin floors, polished concrete are some of our surface finishes we can deliver. Stainless steel drains, pots gullies and grating fitted.

## Kerbing

Stainless steel channel, open kerbing, concrete curbing or over clad can be specified in our projects.

Barriers to doorways, Armco or A Safe barrier protects your investments.



## Equipment Supply

CN Engineering is the exclusive UK partner for the supply and integration of the SmartWash Solutions process control system.

Chlorine wash systems paired with dedicated calibration, rigorous pH monitoring and control, and accurate data management—like the SmartWash Solutions system provides—have been proven by the European Food Safety Authority (EFSA) as the safest, most effective food safety solution. By maximizing chlorine efficiency and giving you full control over your wash process and data, SmartWash Solutions provides the highest level of food safety available to the fresh-cut produce industry.

### Science

SmartWash® food wash enhancers increase the production of HOCl, the most effective form of free chlorine. This minimizes chlorine use and chlorates residues, maximizes pathogen elimination, and prevents outbreaks before they start by mitigating cross-contamination.

### Engineering

Rigorous monitoring and control equipment maximizes throughput and wash line efficiency.

### Technology

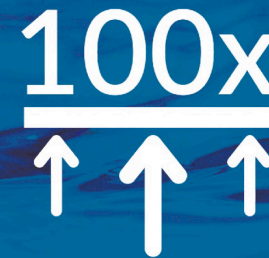
Reliable and precise cloud-based data system drives process improvement and tracks line productivity.

# SmartWashSolutions™

## Pinpoint Process Control.



Proven to eliminate 97% of pathogens

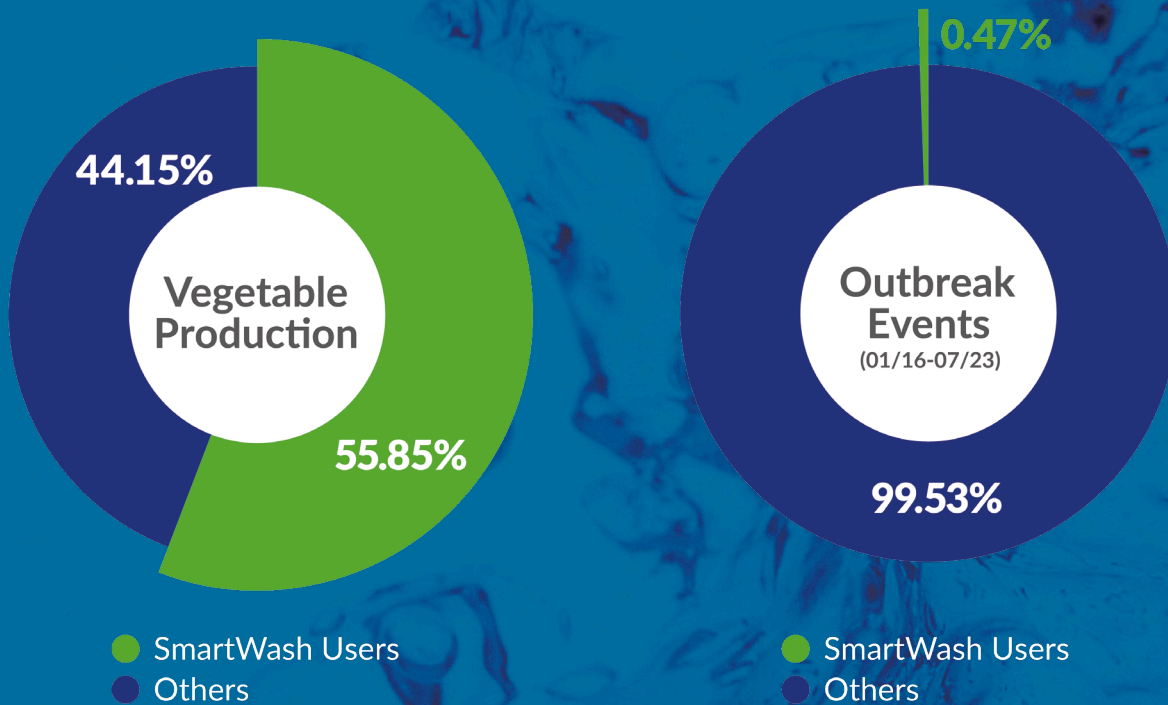


100x more effective at mitigating cross-contamination (OCI- vs HOCl)



Trusted by over 40 sites globally on 250+ wash lines





**Preserve Your Brand Reputation**

**Prevent Recall Costs**

**Protect Consumer Health**

## Negative Pathogen Tests, Positive Business Outcomes

### With SmartWash Solutions

The SmartWash Solutions system has been used in North America for over 15 years, with remarkable results that prove companies using this system have dramatically fewer outbreaks and recall events.

Over a seven-year period, SmartWash customers accounted for 55,85% of all vegetable production in the United States, yet were only associated with 0,47% of all food safety outbreak events—proving SmartWash provides the highest level of food safety in the industry.

Companies using SmartWash see business benefits from brand reputations untarnished by outbreaks, with customers and consumers knowing they can trust the safety of their products. And most importantly, the tragedies associated with food safety outbreaks are able to be avoided.

# Equipment Supply

## Wave Valve

CN Engineering is the UK partner for the supply of the Wave Valve from FluidLytx.

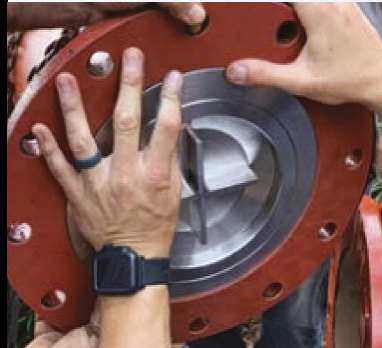
The wave valve compresses the incoming water main by the meter and reduced the impact or air through your water meter. A historic water meter uses a rotary mechanism that spins when water passes to give you a reading on usage, this mechanism cannot distinguish between water and air bubbles. The wave valve reduces the water bubble effect and give you a truer reading on your meter. This will save you a minimum of 10% on your water reading while still using the same amount of water.

## Cause

Pressurised water in the mains supply in the UK has many faults from leaks to under and over pressurisation. This causes water bubbles in the water supply.

## Engineering

Testing on the valve has been extensive and the valve has been rolled out successfully in the USA. Made from medical grade Stainless steel it poses no risk of contamination to the water supply. The valve has been engineered in various sizes and can fit in water mains from 2 inch to 10 inch supplies.



**FLUIDLYTIX**  
Intelligent Water Management

# Conveyor Systems

CN Engineering Services Ltd uses various conveyor specialist builders, we design bespoke conveyors to fit any applications.

Our team will survey your needs then using 3d design software model in your space either replacements or new systems.

Conveyors:- Feed, swan neck, packing conveyors, PU, PVC, Mesh, modular of all belt manufacturers can be specified.

CN Engineering partner with manufacturers for vibratory feed conveyors, from snacks to salad vibratory conveying the easy to the most difficult product in multiple environments.

## Vibratory Feed Conveyors

From easy to move and harder to move products we can deliver vibrators feed conveying systems designed specifically for your needs.



# Equipment Supply

**DFFM**  
DUTCH FRESH FOOD MACHINERY

**WashR**

## DFFM WashR

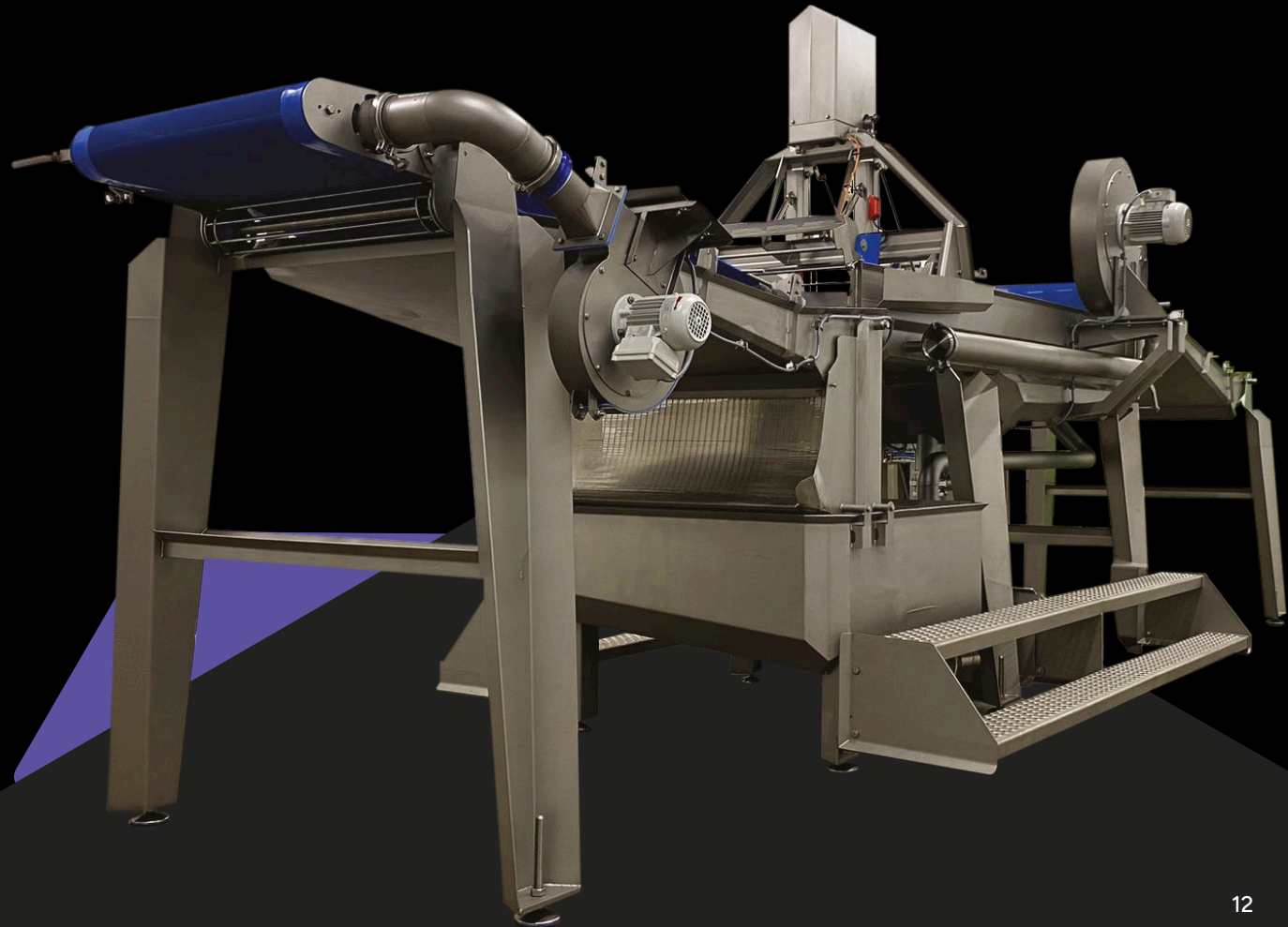
CN Engineering Services Ltd has UK exclusivity with Dutch Fresh Food Machinery BV (DFFM).

Capacity from 400kg to 2000kg of leafy salad fresh fruit or vegetables the DFFM WashR cleans product using less water than a conventional washer. Innovative design means cleaner more hygienic which speeds up changeovers. Fines removal to specification of debris size to suit your specification.

Monitoring software optimises performance, variable speed inverters to all motors so throughput will be maintained, with no overloading occurring (weigh belt infeed option available).

Washer can be used as a solo one stage unit or available as a two stage option.

A compatible washer for the volume will require 3 to 4 m<sup>3</sup> of water the DFFM washer requires as little as 1.5 m<sup>3</sup> of water.



# Equipment Supply



## iBlotr®

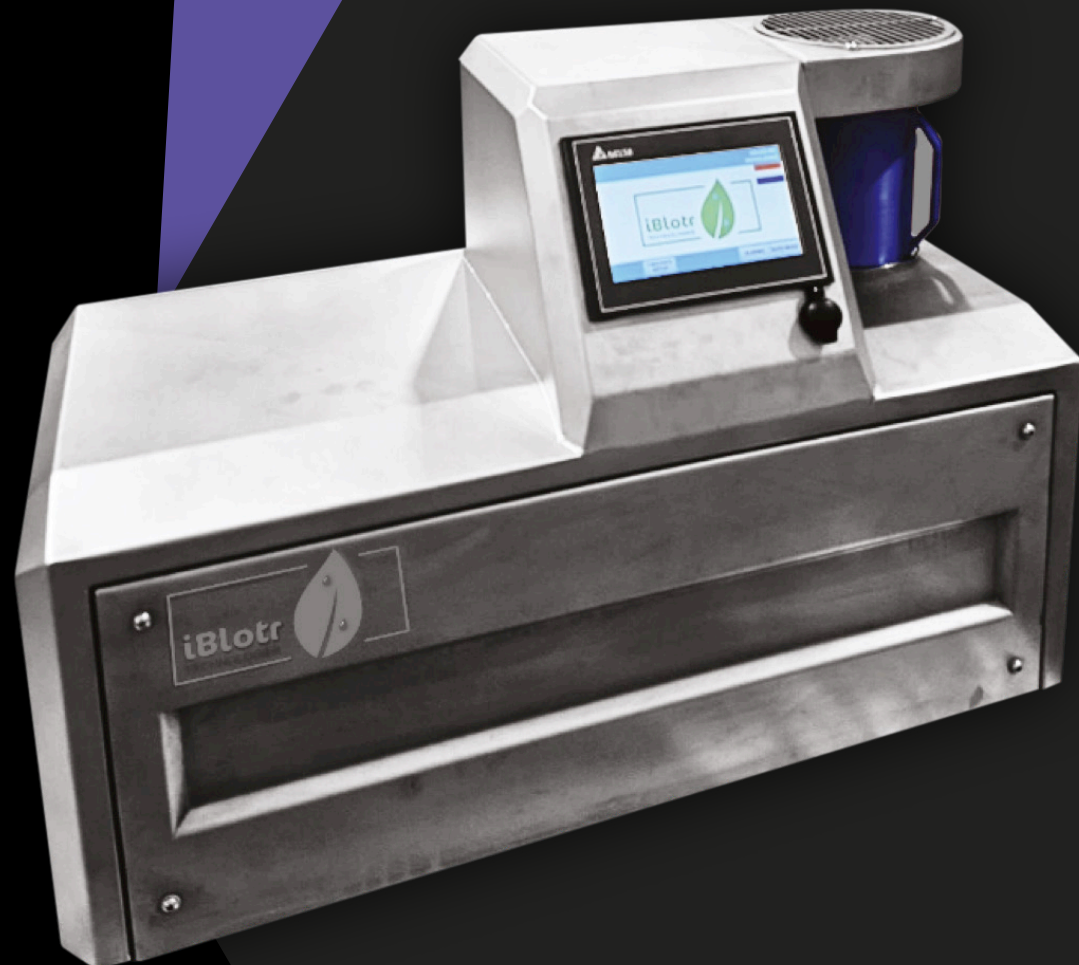
CN Engineering Services Ltd and Imcoteq are pleased to offer the iBlotr® to the UK market.

The iBlotr® gives you an accurate and repeatable outside moisture %.

With a patent pending method the iBlotr® gives you ultimate control over your attached or residual water measuring process and making it faster than before. Warm air is blown through your product. The iBlotr® automatically detects when the produce is free of surface water. And it automatically determines start and end weight.

Designed and built for the chilled and humid conditions in your fresh produce processing facility.

Manually dry and weigh produce is no longer needed; the iBlotr® does the work.



# Sustainability

We are passionate about not only making sustainability and the environmental protection the right thing to do but the cost-effective thing to do.

## Sustainability Projects include:

- Site wide survey of energy consumption by asset type.
- LED light fittings to replace the sodium lamps in a pack house. This reduced the businesses electricity consumption by £500K/yr.
- Water saving using our Wave Valve technology (minimum saving 10%).
- Elevating businesses to meet higher ESG standards through our partner.

We offer a Carbon offset scheme, which we calculate how much Co2 your project will produce. This figure will be then added to the project plan and an offset strategy will be deployed. The costs for this will be in the project scope but this will be through UK only initiatives including planting trees and biowaste initiatives.



# CN ENGINEERING SERVICES



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