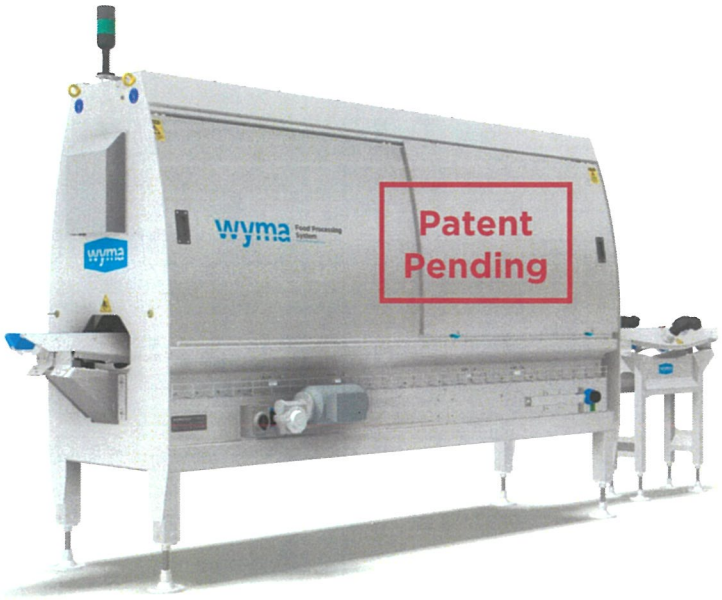
Roto-cut Vegetable Trimmer

Unique, fully automated, optimised cut location, vegetable trimming system to remove foliage, crowns, and tails from vegetable prior to packing or processing

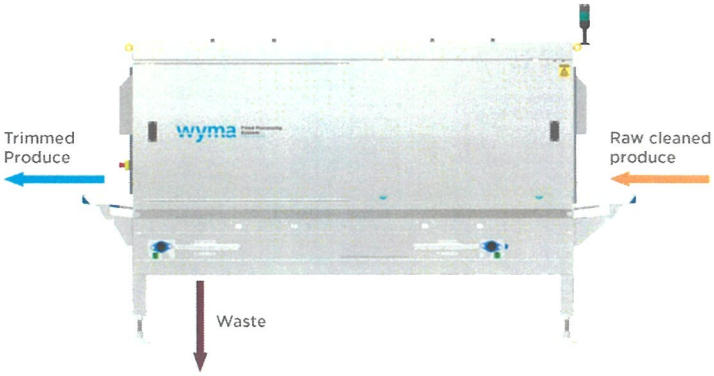
Parsnips • Carrots • Other Longitudinal Vegetables and more



1.7 -2 items a second
(assuming 180g produce equiv)

General information

The Wyma Roto-cut Vegetable Trimmer is a fully automated, high capacity, optimised cut vegetable trimming solution. It automatically cuts produce with a higher degree of accuracy than traditional trimming solutions, uniquely identifying the optimal cut location for each piece of Produce, and thus decreasing overall wastage.



This unique vegetable trimming system, invented by Wyma, and currently in patent assessment phase, is exclusive to Wyma.

Each machine is able to top and tail at approximately 2 items per second (~1-2 T/hr throughput*). *Capacity dependent on average Produce size.

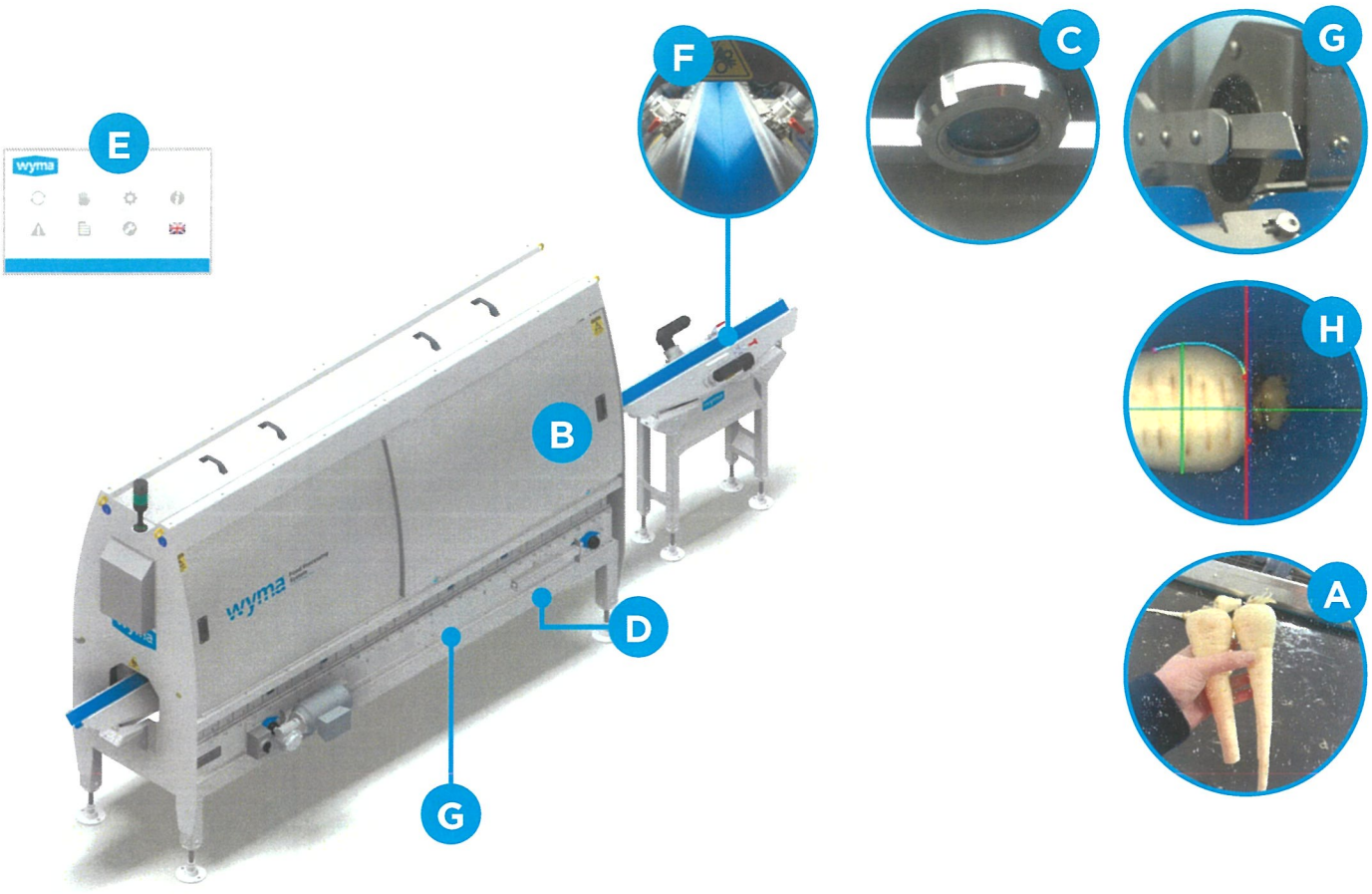
The user is easily able to dynamically customise in real time the parameters determining the cut location and/or the length of Produce as needed.

Raw Produce, cleaned via washing systems such as a Barrel Washer, Vege-Polisher™ are conveyed directly into a Wyma Produce Singulator. Here the Produce is singulated and then fed to the Roto-cut system for trimming. Waste drops out below the system and is collected on a purpose built waste conveying system for disposal.

Conveyors or Flumes can then be used to transport the trimmed Produce and/or Waste to the next stage of the line for either further processing or packaging.

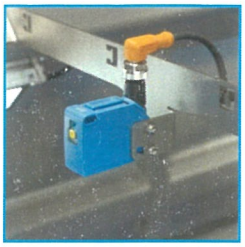
Other features include, auto data collection on Produce characteristics, auto cut location adjustment based on Produce diameter, and Produce tonnage per hour estimates.

Features & benefits



A	Automated Trimming	Fully automated trimming of Produce foliage, crowns, and tails.
	Custom cuttings options	Set different cut lengths or dynamical change cut based on Produce diameter.
B	Easy Access doors	Easy access safety doors ensure customer safety while also allowing for easy cleaning of internal surfaces.
C	Dual Vision Camera System	Two internal cameras capture still images of passing produce, feeding back to our cutting software to determine cut location.
D	Waste collection	Central integrated conveyor which collects all trimmed waste and conveys it to a central drop chute.
E	Standalone Control	Easy to operate via supplied control panel. Fully automated operation with smart blockage detection, blade replacement alerts, damaged blade alerts, and end of day cleaning routines.
F	Infeed V-conveyor	Infeed conveyor for singulated Produce provides stabilisation of the Produce prior to cutting.
G	Cutting blades	Hardened cutting blades for extended blade edge life. Readily accessible blades when replacements are required.
H	Optimised cut	The optimal trim location is uniquely identified for each piece of Produce, decreasing overall wastage.
	Safety	All mechanical pinch points covered and not accessible. No additional safety guarding or fencing required.

Additional features

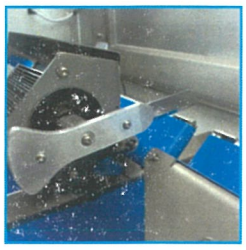


Produce Sensors

- Allows the cameras to precisely position the produce within the frame to determinecut location and timing.
- Detects produce blockage.

Belt Tensioners

- Quick release of belt tension for fast and efficient belt changes or maintenance.



Replaceable Blades

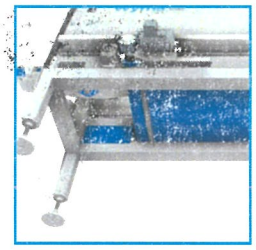
- Blades are easily removed for replacement.
- Spare blades are stocked by Wyma.

Full Stainless Steel

- A full stainless steel construction provides considerable resistance towards corrosion.

Adjustable Feet Height

- Allows for levelling on uneven surfaces.
- Help machine stability.
- Eliminate the need for custom flooring.



Waste Chute

- An additional chute for waste to guide it towards a bin or conveyor.

Technical Information

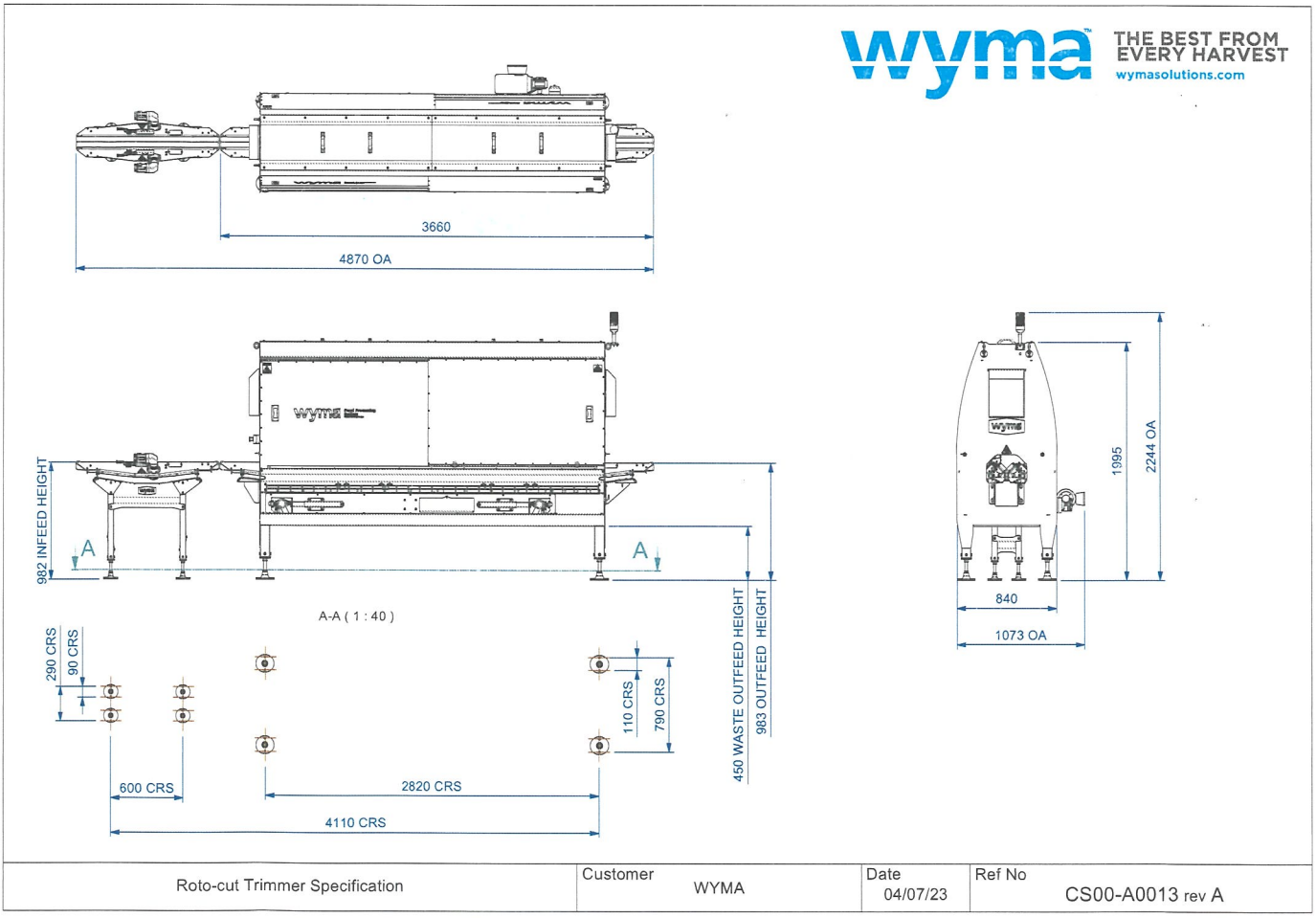
		Roto-cut Vegetable Trimmer (GPT)
Weight		Stand Alone 940kg (2072lbs) Infeed Conveyor 70 kg (155 lbs)
Motor sizes	V-conveyor servo motors	8 x 0.2 kW
	Cutting servo motor	2 x 1.5 kW
	Waste conveyor	1 x 0.55 kW
Noise level		Less than 75 dB (approx.)
Throughput		400 mm of produce/s (approx. 1 Tph)
Produce Diameter		Cuttable range 20-80 mm Ø (Produce head)
Incoming Produce Length		Cuttable range 100 – 400m (Produce body)
Cut specifications		Cut to length - range 50 - 400mm long +/- 10mm in length Cut to tail diameter – range 10-70mm Ø +/- 3mm in Ø
Cut angle		-10° to 10° (fixed)
Construction	**Body**	Stainless steel
	Conveyor Belt	Blue Ropanyl: Food grade
	Blade	Hardened stainless steel

Site Requirements

Floor area	Must be installed with maintenance and cleaning access, cleaning requires compressed air, and hot water hand wash down.		
Integration considerations	Waste drop chute. Produce coming out end at speed a hazard.		
Operator required?	No		
Installation equipment	Overhead crane and lifting chains/strops, or using a forklift		
Power supply requirements (approx.)	**400 V / 50 Hz**	**460 V / 60 Hz**	**230 V / 60 Hz**
	11.0 A	9.3 A	18.5 A

Dimensions

	GPT
Length	4870 mm (15'12")
Width	1073 mm (3'6")
Height	2244 mm (7'4")



Roto-cut Trimmer Specification	Customer WYMA	Date 04/07/23	Ref No CS00-A0013 rev A