

Extreme flexibility in pinbone removal, trimming and portioning

# FleXicut Valka whitefish



- Single or dual stream options
- throughput up to 50 fillets/min for single lane
- Location and removal of 0.2mm bones
- Precision and flexibility in portioning

# FleXicut Valka

Combining x-ray and 3D vision scanning, the FleXicut Valka automatically locates and removes pinbones as small as 0.2mm. Water-jet robot cutting technology further portions whitefish fillets with precision to minimize raw material waste and maximize end-product value.

After cutting, the FleXicut Valka distributes portions to relevant product lines. Pin "grippers" gently move portions onto parallel or perpendicular conveyor belts for packaging or freezing with accuracy and efficiency.

## Extreme precision with water-jet cutting

The tilted D2 and the dynamic D3 water-jet robots give the FleXicut Valka exceptional flexibility in portioning. The water-jet's incredible range of movement enables cutting at any angle or curve.

Cuts are automatically configured for bone removal and portion accuracy, optimizing raw material usage in the highest value cuts.



D2 water-jet robots move perpendicular to the fillet. By tilting to both sides, the D2 water-jet robots adjust angles to increase the proximity of cuts in pinbone removal.



D3 water-jet robots move dynamically in all directions, giving maximum flexibility in portion shapes and sizes.



The robot tracking head assesses individual fillet height. Cut distances are adjusted to ensure the accuracy of end-product quality

# Absolute flexibility

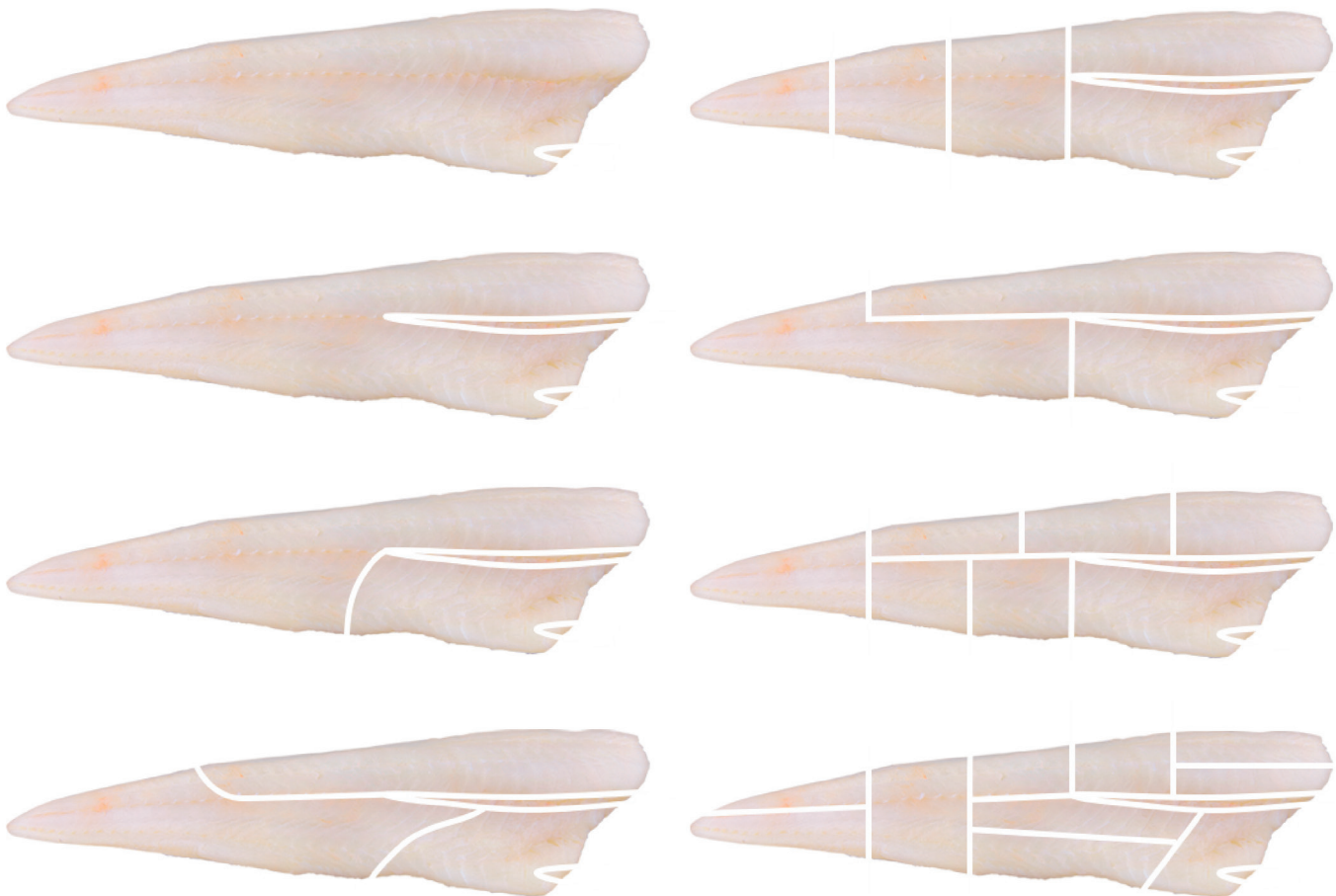
## Accurate portioning

The system analyzes each fillet and cuts highly uniform portions in relation to size, weight and thickness according to your specification. Prices are set for every portion and the system optimizes the value of every fillet.

## No two fillets are alike

From the smallest to the largest fillets, skin-on or skinned, the FleXicut Valka easily adjusts to changing demands for more flexible processing.

### Cutting examples



## Increase yield with advanced bone detection

### High-definition bone detection

Detect and remove bones as small as 0.2mm with accurate location imaging and precision cutting.

A high-speed, high-definition x-ray detects bones from two angles, merging the results to build a 3D image of individual fillets.

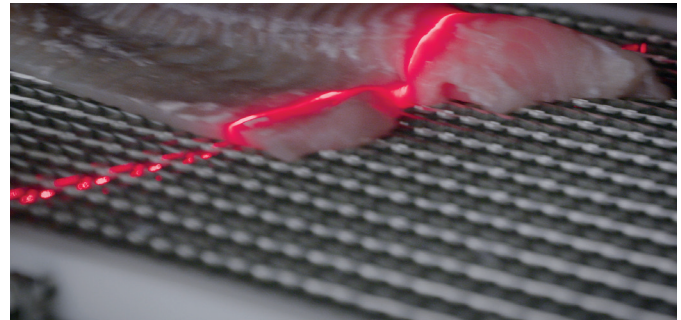
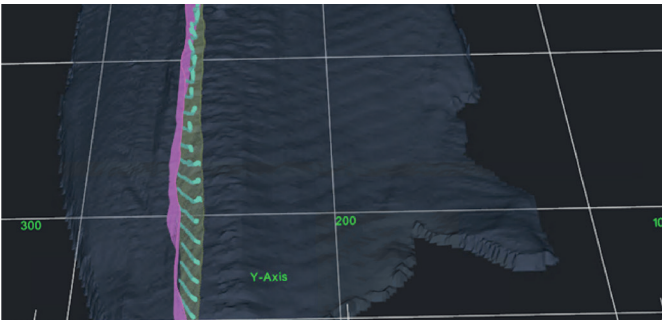
Cut angles are automatically configured for each fillet to maximize yield.

In manual cutting, pinbone removal can result in raw material waste of 4-6% of fillet weight. 3D bone detection technology results in less waste through bone cut-off. Significantly improving yield.

A 3D vision scan of individual fillets records, density, shape and size to ensure accurate portioning and prioritization of high-value cuts.

### Features and benefits

- Dual x-ray camera for accurate bone location
- Minimal raw material cut-off
- 3D vision scan for accurate fixed-weight portioning
- High-value products prioritized
- Increased yield



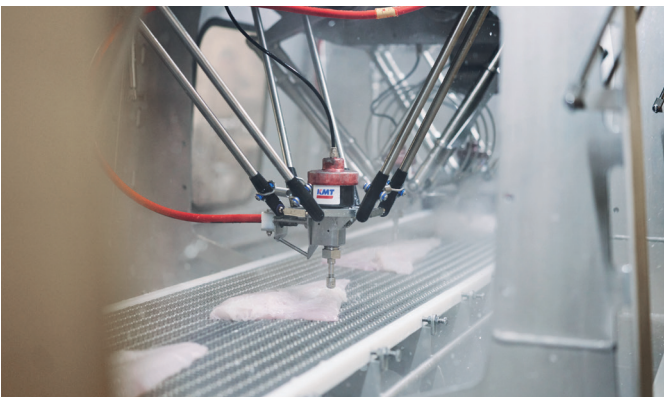
## Single or dual stream options specific to your needs

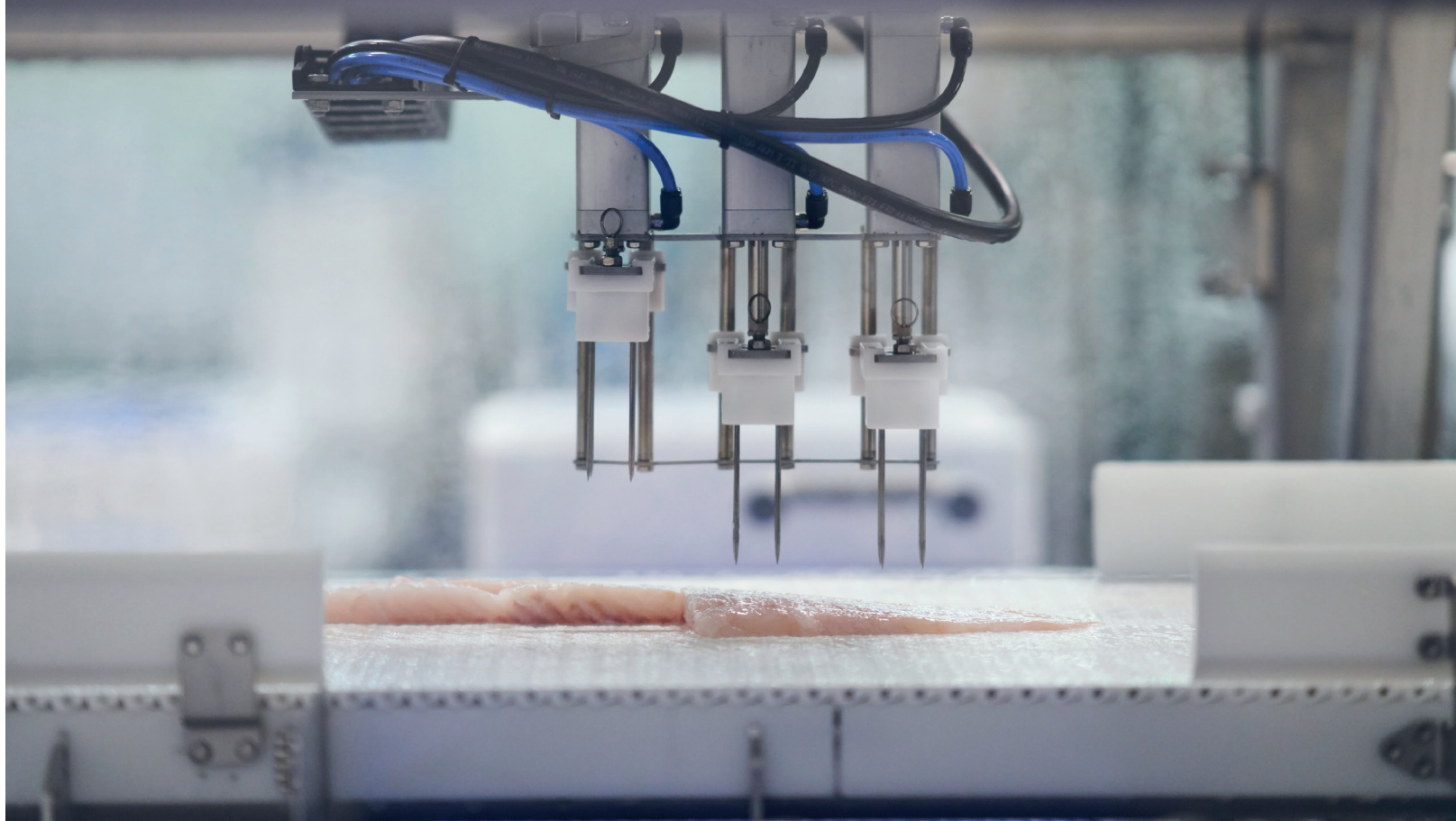
### Single-stream

- The single-stream option can produce high-complexity cutting patterns in fillets larger than 300g, providing whitefish processors with exceptional portioning flexibility.
- The D2 and D3 water-jet robots perform precision head, tail, fin and frill cuts to minimize raw material cut-off, increasing yield in flatfish and flounder processing.

### Dual-stream

Designed to optimize capacity when processing whitefish fillets under 300g. The FleXicut dual-stream has a throughput speed of up to 60 fillets per minute for a single lane, or 120 fillets per minute when utilizing dual lanes.





## FleXisort Valka

The FleXisort Valka integrates with the FleXicut Valka to accurately distribute portioned whitefish fillets into multiple product streams.

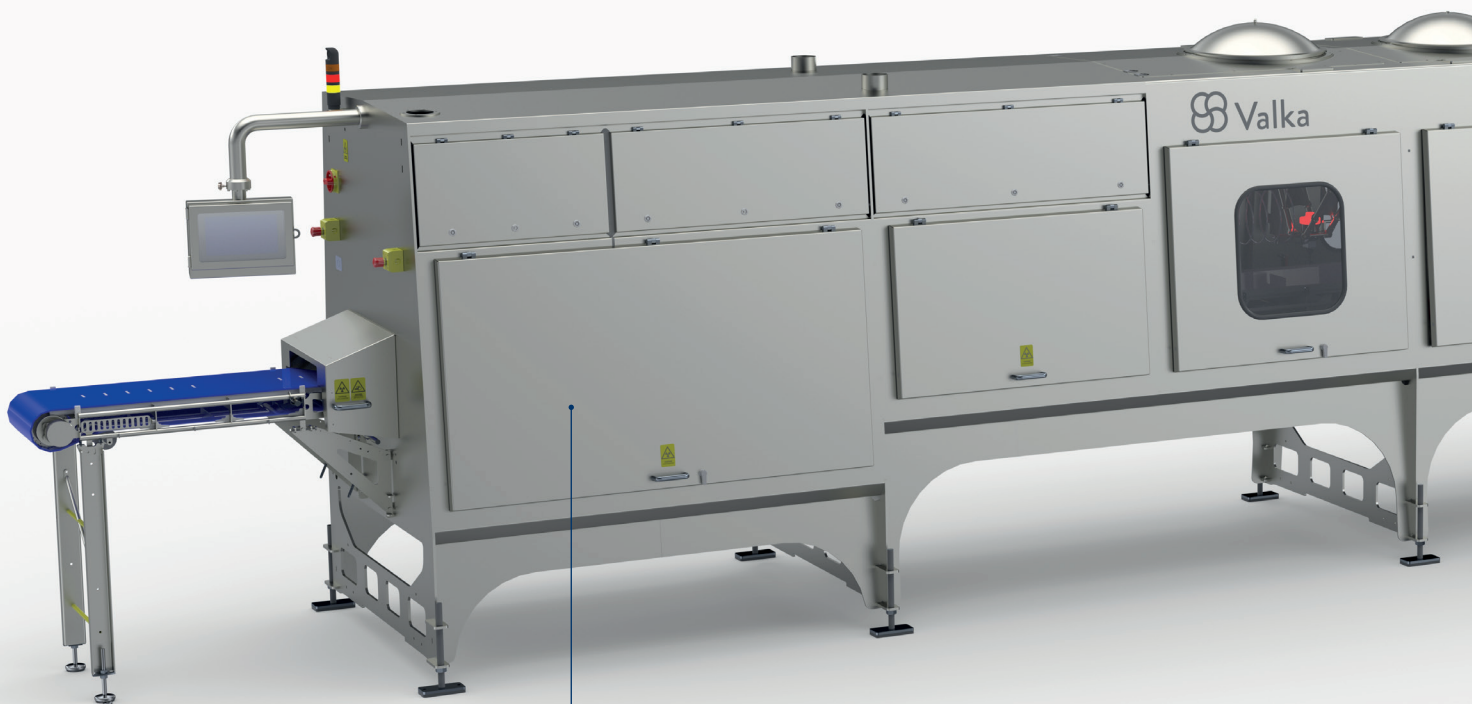
Pin "grippers" select portions by weight, size and cut, gently transferring them to correct product streams via parallel or perpendicular conveyor belts.

The unique parallel conveyor system maintains portion orientation and spacing, reducing labor when packing.



# The advanced technology of the

The advanced technology of the FleXicut Valka improves yield and reduces labor dependency for whitefish processors. With the FleXicut Valka, whitefish processors can control throughput to suit changes in processing. The adjustable belt speed has a maximum of 0.54 meters per second and a throughput of up to 60 fillets of 450mm in length per minute.



### Pre-trimming line

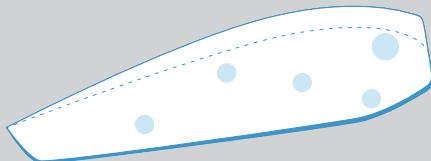
Fillets enter the FleXicut Valka after minimum pre-trimming for natural and filleting defects.

### X-ray vision and 3D scan

A high-contrast x-ray locates bones as small as 0.2mm. 3D scanning measures the shape and density of the fillets for cutting based on weight.

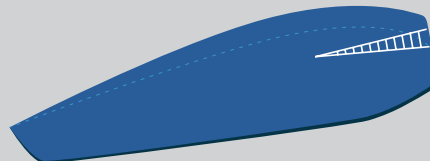
### Pre-trim

Remove fillet defects



### X-ray

Fillets scanned for accurate bone detection



# FleXicut Valka



## Water-jet cutting

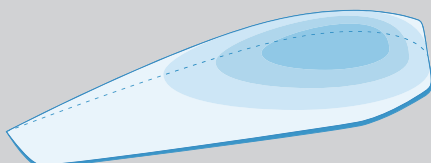
The three water-jet robots cut the fillets according to the specifications based on the X-ray and 3D scanning

## FleXisort Valka automatic product routing

After cutting, pin "grippers" automatically route portions into product streams according to weight, size and shape, gently handling each piece and maintaining correct alignment and product spacing.

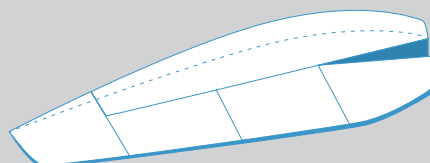
### 3D scan

Each fillet is scanned for shape and density



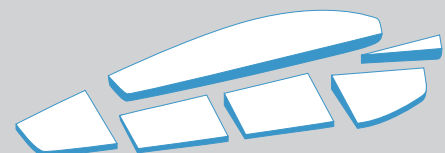
### Cut calibration

Intelligent software analyses x-ray and 3D scans to calculate cuts for optimal portioning



### D2 and D3 water-jet robot cutting

Precision cutting removes bones and portions fillets



TRANSFORMING FOOD PROCESSING

