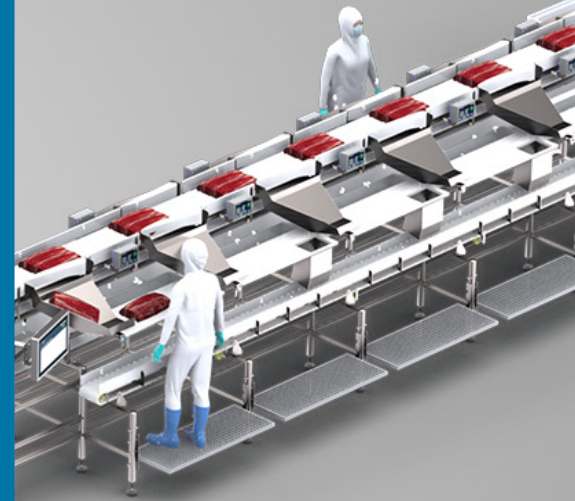# marelec

Trimming line
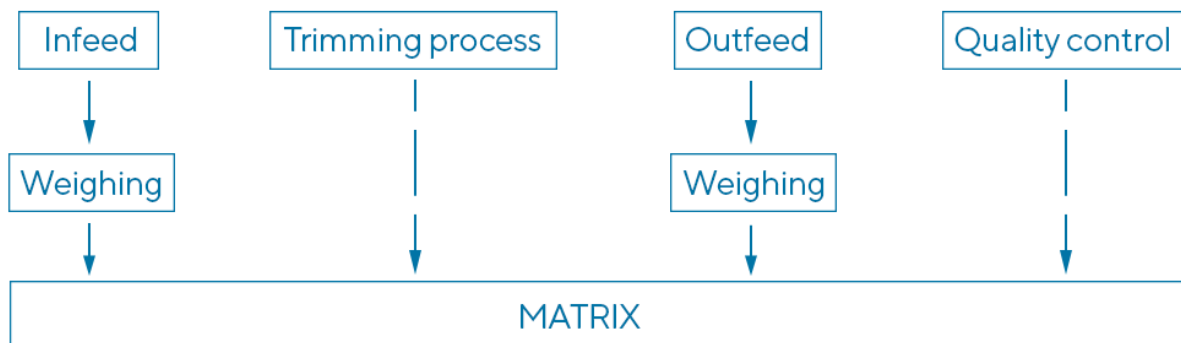### Monitor your yield and capacity

MARELEC trimming lines are systems that help you monitor yield and throughput of a trimming process. Trimming lines are used in many sectors (meat, poultry, fish...). They are typically configured to specific needs, therefore exist in many different shapes. The main concept however, remains the same.

Key Benefits

- Monitoring of yield per operator
- Monitoring of throughput per operator
- Custom made designs
- Ergonomic work environment for the trimming process
- Detailed process control

Incoming material is divided and weighed into sub batches, supplied to an operator, trimmed into different quality products, and transported to the outfeed zone for post weighing.

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 ┌─────────┐   ┌──────────────────┐   ┌─────────┐   ┌─────────────────┐
 │ Infeed  │   │ Trimming process │   │ Outfeed │   │ Quality control │
 └────┬────┘   └────────┬─────────┘   └────┬────┘   └────────┬────────┘
      │                 │                  │                 │
 ┌────┴────┐            │             ┌────┴────┐            │
 │Weighing │            │             │Weighing │            │
 └────┬────┘            │             └────┬────┘            │
      │                 │                  │                 │
 ┌────┴─────────────────┴──────────────────┴─────────────────┴────────┐
 │                               MATRIX                                │
 └────────────────────────────────────────────────────────────────────┘
```

Each of these steps can come in many different ways. The configurations below show some of the most common possibilities.

Configurations

Infeed

- Product may come from one source, or from several.
- This could be a continuous or a discontinuous flow.
- Weighing is done with a flowscale, a hopperweighing system or a dynamical weigher (M1-type) depending on the needs.
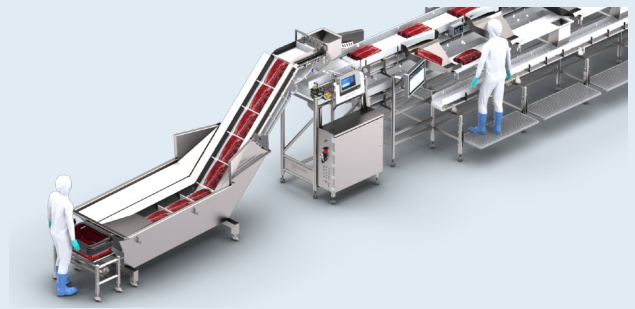
Supply of product to operators

- The pre-weighed batch of product is diverted to an operator.
- Operator receives in some kind of bin, from where he/she will start trimming the product.
- The result will be several types of product; at least the high quality core product and the waist material. In many cases however, the "high quality product" can be more than one product. In those cases the trimming line will monitor all products separately.
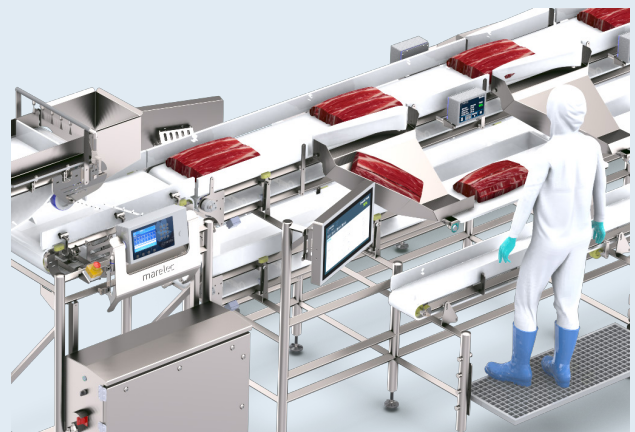
Outfeed

- Finished products are put in a tray, bin or little hopper depending on the application.
- From there they system will bring the product to the end of the line. This may happen on a dedicated conveyor, or on the same conveyor that brought the product to the operator. The latter solution will be more compact and cheaper, however at the cost of capacity.
- Weighing of finished batches is done at the end of the line, or at each operator post.
- A quality inspection table is possible: here the finished batches can be checked on their quality of filleting. This typically done on samples.
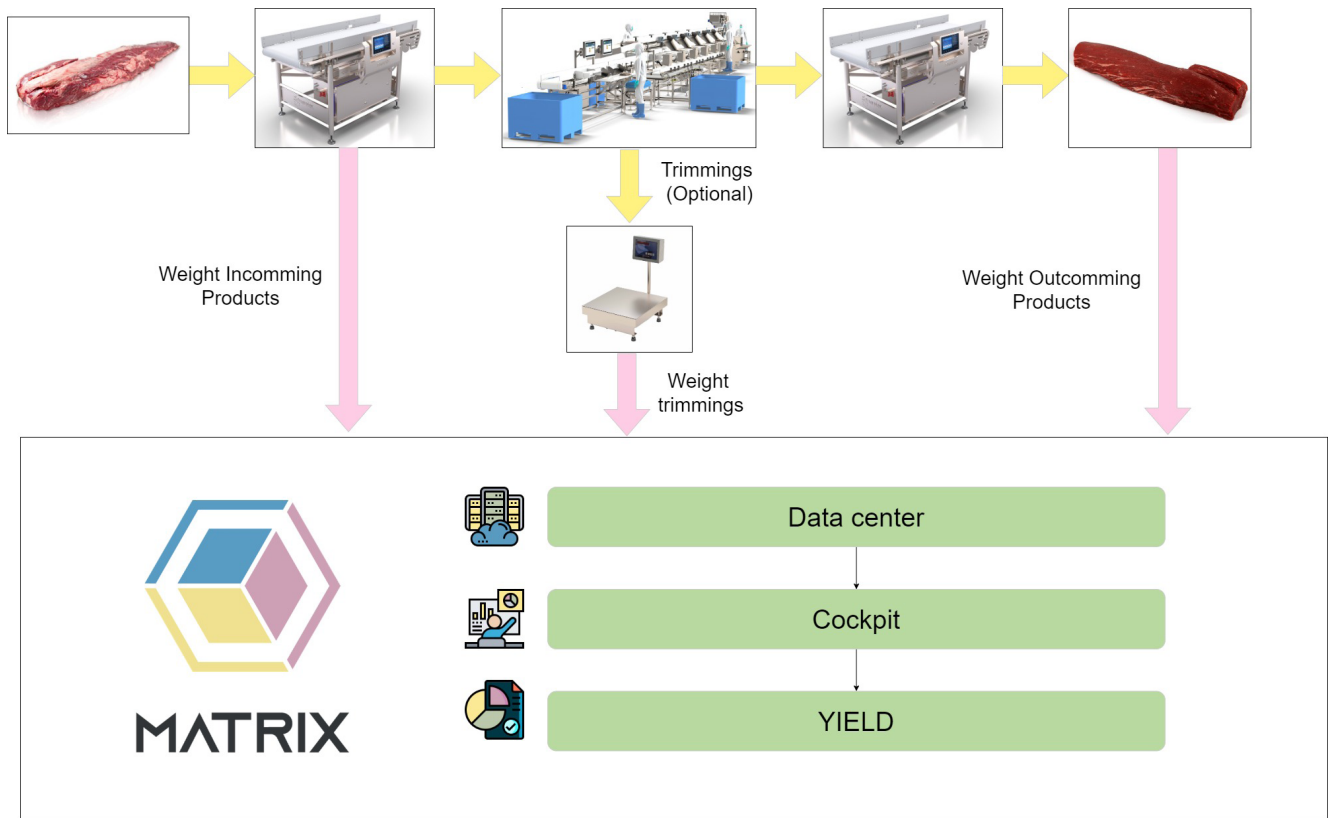
Post process

- Finally, the batches coming out of the system may be sorted into several categories.

MATRIX PRO

All recorded data is captured by MATRIX PRO

Reports can be generated according to your needs:
- per operator
- for the total process
- per day
- etc.