

Experience

The **Inspector** was developed by a team over 15 years of experience in the field of optical sorting, operating under the company name of Concept Engineering. Together with 17 years of experience with machines for the food industry by Murre Technik, we offer you a complete service for the optical sorting technology and guarantee at the same time a good solution for your application.

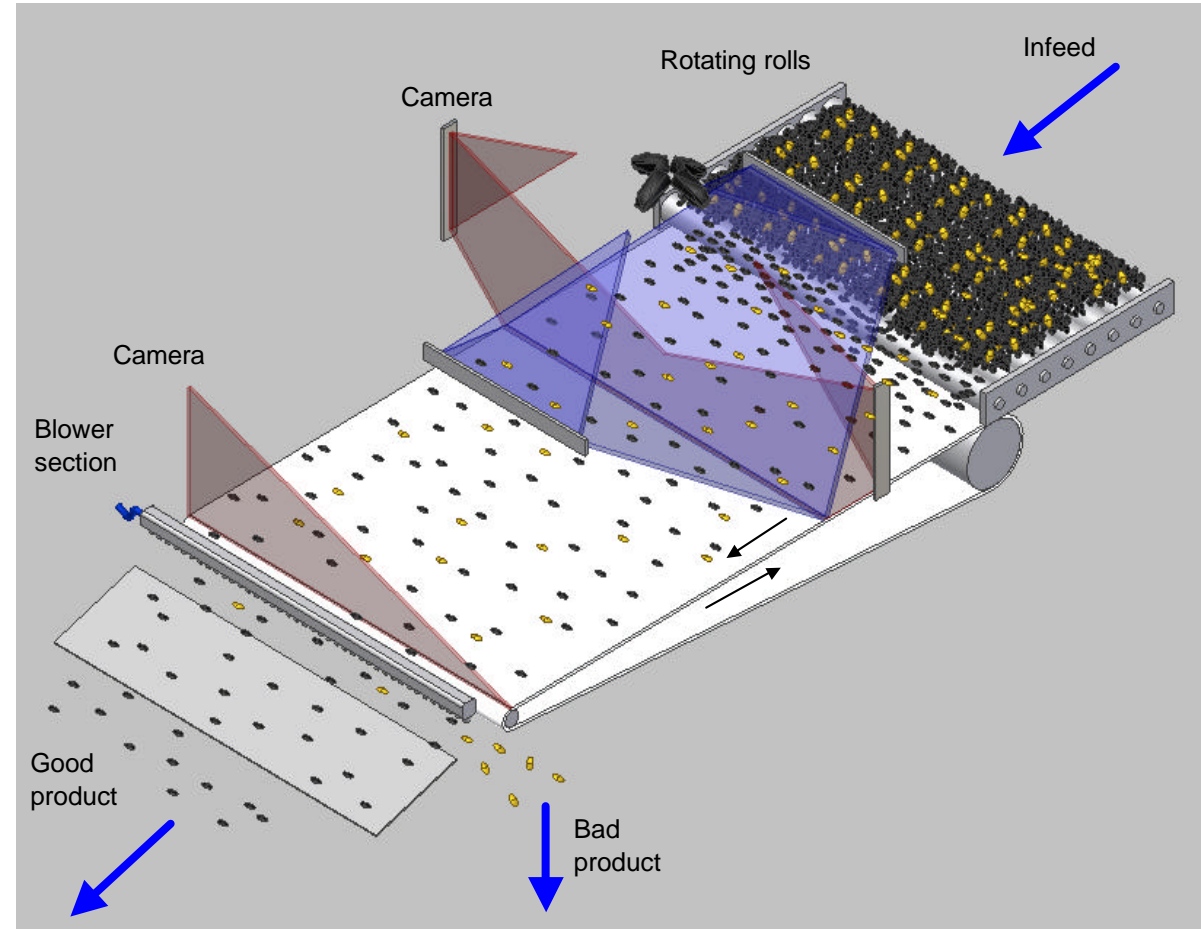


Applications of the machine

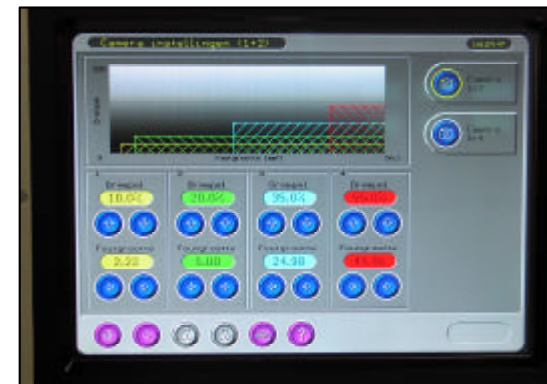
The **Inspector** is a machine specially developed for the optical sorting of products with various optical defects. In a flow of fish or shellfish products discoloration and undesirable components are detected and removed. A boost in quality of the finished product and replacement of the labour-intensive inspection lines are just two of the many advantages of the **Inspector**. In addition the **Inspector** is suitable for many other applications, including sorting potato products, vegetables, fruits, etc.

Operation of the machine

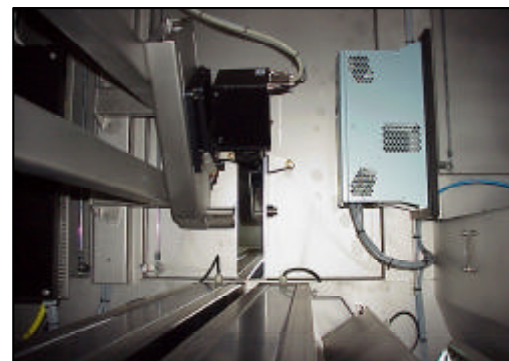
The optical sorting machine comprises a frame in which a high-speed sorting belt is fitted. The product to be processed must be spread evenly over the belt, for instance using a vibrator or a roller conveyor. One or more lighting systems can be used for proper lighting of the product.



Line cameras scan and identify bad spots and foreign components in the product. Computers linked with the cameras control the blower removing the rejected components from the production flow. The approved product will continue on the production line for further processing. If required, the product can be fed into the system again to be submitted to a new sorting round.



Control panel



Placing camera module

Integrating the machine into your production line

The **Inspector** can be integrated into many parts of the production line. Murre Technik can provide the complete engineering of the optical sorting machine for you. This includes delivery of the machine together with a feed system, a defect return and double check system, routing and integration into existing production lines. It goes without saying that we can also provide you with a new production line.

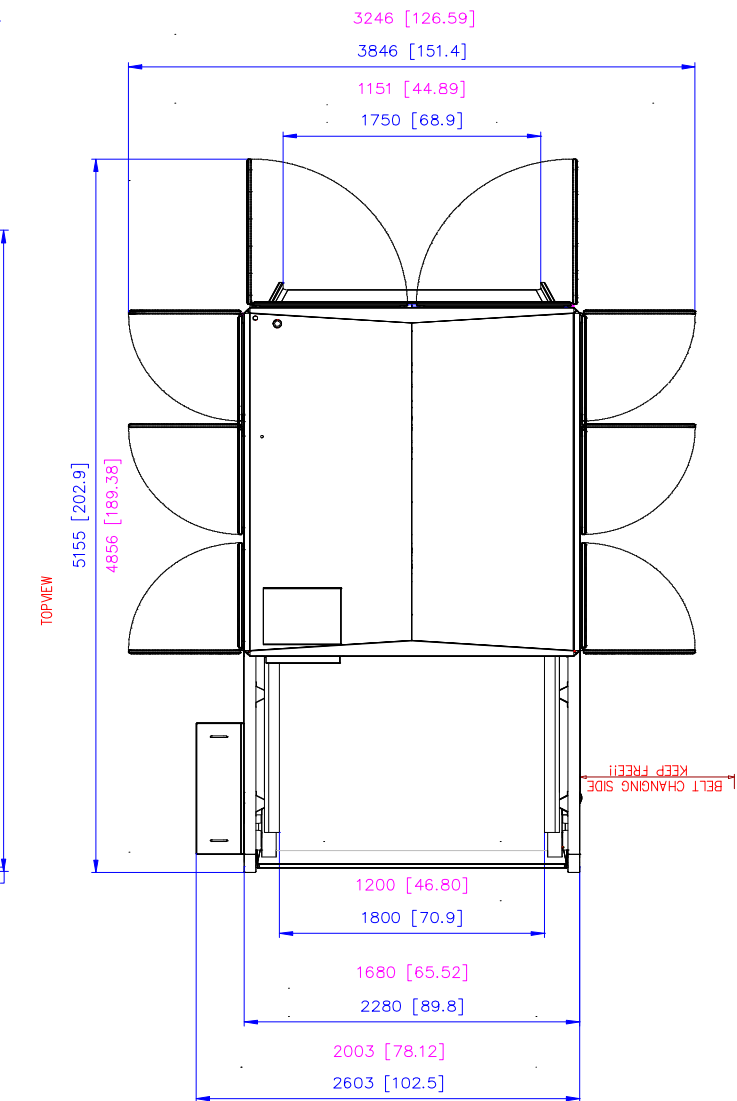
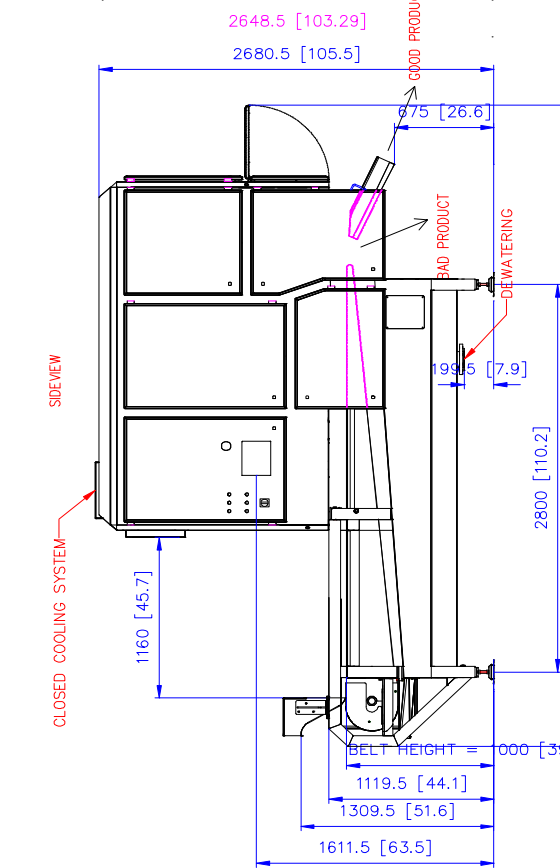
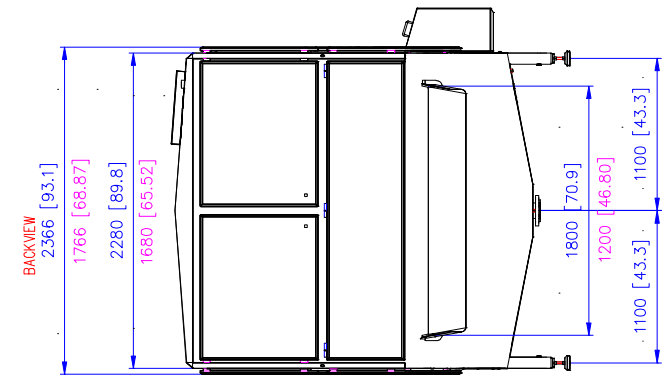
Construction of the machine

There are various detection spots available for colour or black and white cameras (on/off belt). Sorting by means of a laser, UV light and IR light are possible. The **Inspector** manufactured in accordance with applicable CE standards and comprises stainless steel component only.

The advantages

The **Inspector** offers many advantages compared with the current generation of optical sorting machines.

01. The only sorter in the world with a working width of 1.800 mm, so a higher capacity by one machine.
02. Very simple to operate by a coloured touch screen.
03. Suitable for wet, dry and frozen products.
04. Reduced dirt accumulation thanks to low number of dead spots.
05. Lateral product guides along the whole line.
06. Blower and dividing section are easy to adjust.
07. Noise reduction thanks to maximum covering.
08. The sorting belt can be split in various ways, both mechanically and by means of software. The belts can be adjusted separately as to sorting sensitivity.
09. CFC-free air conditioning system.
10. Casing impervious to spraying water; easy cleaning thanks to lack of superfluous appendages.
11. Modular construction.
12. Product sorting belt can be replaced quickly and easily by one person.
13. Sorting settings can be changed by means of product visualisation ("frame grabber").
14. Latest computer and camera technology.
15. Both CCD-cameras and (colour) laser modules can be used as detection sources.
16. Unlimited extension of cameras and laser modules is possible.
17. User-friendly control panel comprising an operator menu and an expert menu. This panel can be mounted on the left-hand side or the right-hand side of the machine.
18. 1 to 4 sorting thresholds per camera can be applied.
19. Extensive form recognition software.



Measurements in mm [inch]

Measurements for a 1800 mm beltwidth

Measurements for a 1200 mm beltwidth