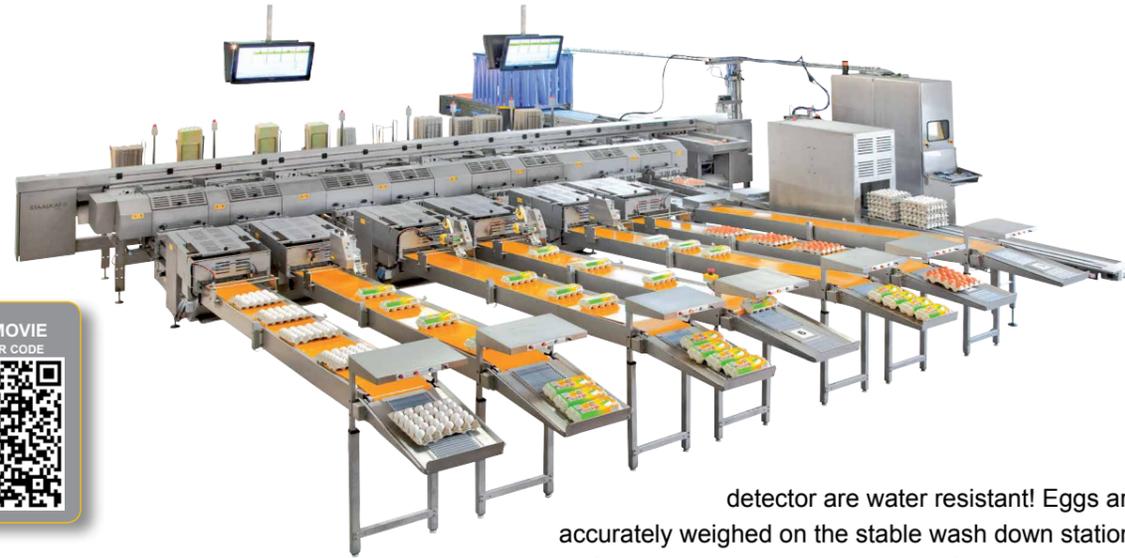


STAALKAT ALPHA GRADER SERIES



Performance you can depend on



The STAALKAT Alpha is a robust and reliable egg grading and packing system designed for egg producers that require no nonsense piece of machinery with all hygienic features nowadays available on the market. Modular in its construction and suitable for the medium size capacity range, the Alpha is ready for the future: offering flexibility for our customers and today's markets.

The flexibility of the Alpha allows the graders to be equipped with an accumulator or a loader in order to create in-line or off-line egg grader. Also combinations of accumulator and loader are possible, even upgrading your Alpha from a 70 to a 100 or 125 model is possible!

The STAALKAT Alpha configuration can include an egg washer and dryer (and oiler) if you need to have your eggs washed. Depending on your needs the Alpha can be equipped with UV disinfection, different types of spool (roller) cleaning systems and of course dirt, leak and crack detection. To make it complete we offer solutions to take out the leaking eggs automatically from the grading process, also before the washer! The Candlingbooth, with or without our IRUS semi-automatic candling system, is naturally available as well: all options are just there so you can configure the machine that suits you the best! All STAALKAT detection systems have eliminated moving parts to minimize wear and tear and operational running costs. The modular design allows easy upgrades with the different quality controls systems also in a later stage, staying flexible is the keyword in today's market.

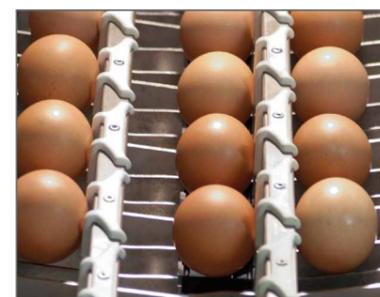
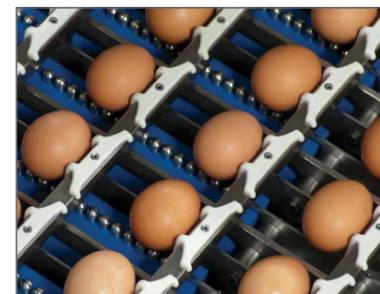
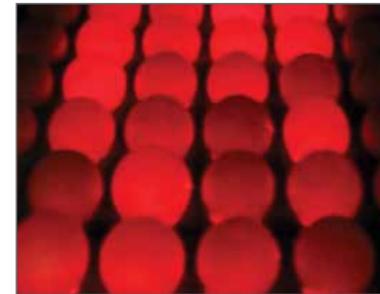
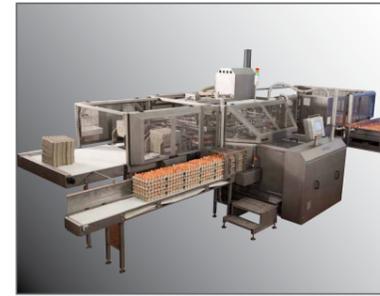
Food safety, hygienic design and user-friendly machines are an absolute must in today's market and the Alpha grader is setting the standard. The open and washable design of the infeed allows you to perform a daily cleaning with water, even the weighing scales and crack

detector are water resistant! Eggs are very accurately weighed on the stable wash down stationary self-calibrating scales. The grading frame is equipped with detachable conveyor belts which can be taken out very easily for a high pressure cleaning outside the machine. For your piece of mind we have included an automatic oiling system standard in the Alpha grading machines to ensure all important driving chains are oiled automatically: less maintenance for you and increased reliability for your machine.

The modular and flexible design gives you the possibilities to set up and configure the packing lanes in ways to match the desired logistic flow. Straight forward or reversed configuration are possible, this design reduces the overall machine foot print and maximizes the packers flexibility and output. The overall low design of the Alpha allows all of the machine operators to see each other maximizing communication, efficiency and minimizing labour requirements. Large overhead monitors give instant information for operators to react upon, therefore maximizing operational production.

The graded eggs are transported gently by egg carriers towards the detachable reservoirs where packers individually orientate and lower gently the egg into egg-packings. Each packer reservoir allows the operator to take a final look at the eggs before packing and carton closing. Egg packing can be automatically denested or by means of a manual denester feeded to the packing lane. Egg-packings can by choice be closed automatically or manual by hand, all depending on your wishes.

The STAALKAT Alpha design is based on the global experience STAALKAT has gained since 1956. The Alpha is a mutual development together with the experience of our sister company SANOVO who has all the expertise in the harsh cleaning requirements of the egg processing industry.



LOADING

The STAALKAT Alpha grader can be equipped with several loaders to match the grader pre performance. Loaders that are able to handle both new and used plastic as pulp tray. The loaders are known for their small footprint and reliability and take care of moving the eggs gently onto the infeed table.

LEAK DETECTION

The leak detector can be installed to reject eggs before the egg washer reducing water contamination and antifoaming chemicals. It can be installed after the washer to reject leakers before traveling under the high velocity air dryer reducing the risk of contaminating clean, first quality eggs or after the drier in tandem with the dirt detector. Rejected leakers will be dropped into a bin. The system is making use of laser light technology placed underneath and away from the egg flow. False rejects are minimized and shiny wet surfaces do not influence the detection rate.

DIRT DETECTION

The high performance dirt detector with adjustable sensitivity makes use of an advanced full color camera vision system that identifies dirt down to 1mm². Detected dirt eggs can be sent back to the egg washer or sent to a packing lane. Beside fully automated system STAALKAT can offer candling booth with or without IRUS system. This system allows the candling operator to classify the egg into 4 categories.

CRACK DETECTION

The advanced washdown STAALKAT crack detector has no moving mechanical or electrical parts. It is not necessary to constantly sense and adjust for the continual variation of egg weights. This robust system converts the digital signals into multiple crack categories. The operator can determine what level of crack should go to various undergrade categories. There are no delicate parts or complicated time consuming cleaning requirements.

WEIGHING

A digital, dynamic, stable egg scale weighs each egg with a readout of 0,1 gram and tests itself for recalibrations between each egg. The STAALKAT egg scale and entire infeed and transfer insert is washdown with an open sanitary design. The scale is mounted under the egg for maximum stability, observation and ease of cleaning. Calibrating the 6 weighing scales can be done within minutes. Fragile moving plastic parts are not part of the STAALKAT design.

BLOOD DETECTION

The system identifies small to large spots of blood. Detected blood eggs can be programmed to be ejected out of the egg carrier chain at the end of the grader or sent to any lane. The whole system is placed at the egg carrier chain in order to make it very accessible and easy cleanable. Intelligent software recognizes the difference between brown or white eggs and adjusts the parameters automatically.

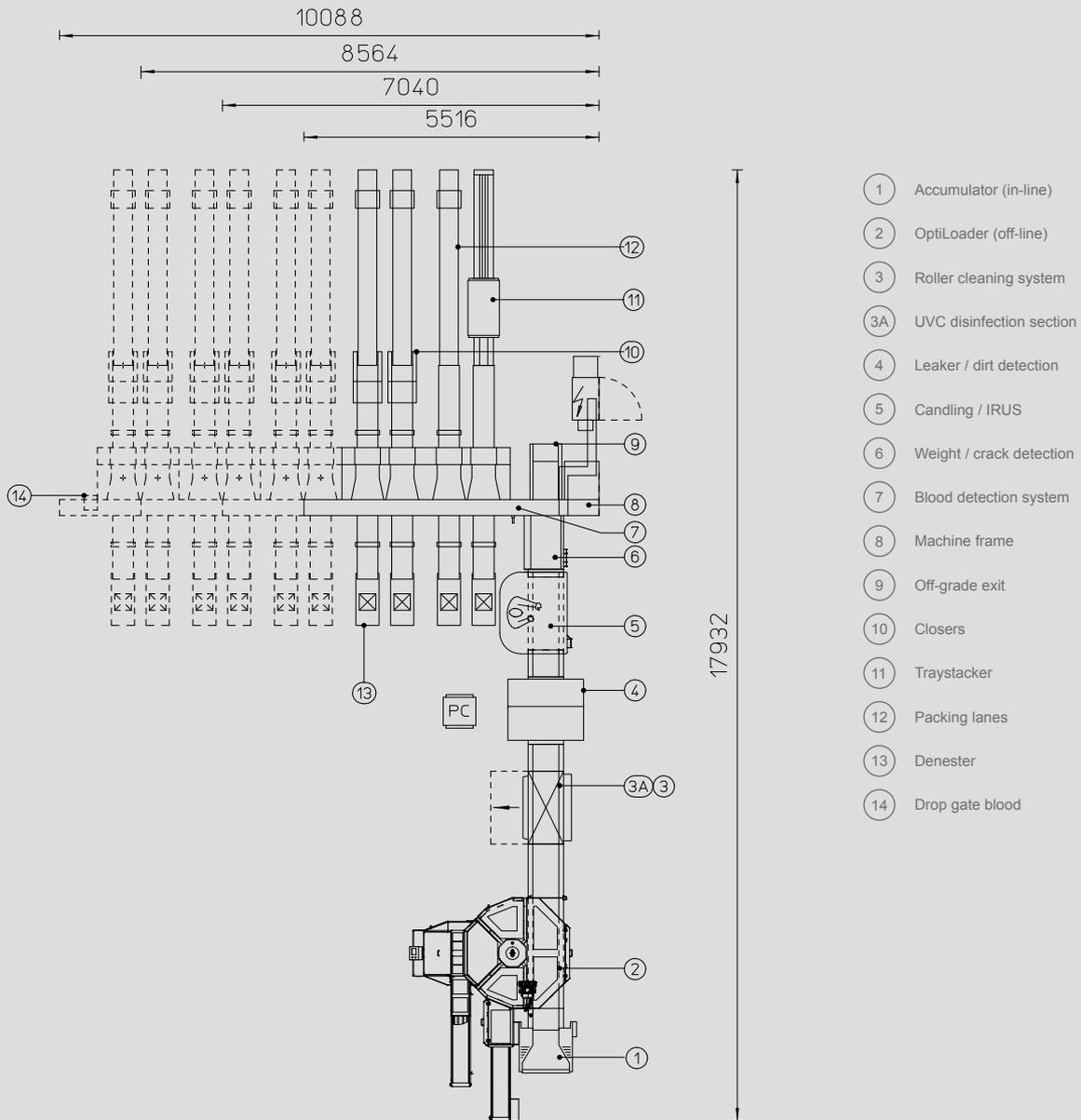
Layout configurations

The following models are available:

ALPHA 70 (4-6 lanes) 25.000 egg / hour

ALPHA 100 (6-8 lanes) 36.000 egg / hour

ALPHA 125 (8-10 lanes) 45.000 egg / hour



www.sanovogroup.com

SANOVO TECHNOLOGY GROUP

SANOVO TECHNOLOGY A/S
5210 Odense - Denmark
TEL +45 66 16 28 32
info@sanovogroup.com

SANOVO TECHNOLOGY NETHERLANDS
7122 MP Aalten - The Netherlands
TEL +31 543 473 868
staalkat@sanovogroup.com

SANOVO TECHNOLOGY USA
MI 48170 Plymouth
TEL +1 248 662 1030
usa@sanovogroup.com

SANOVO TECHNOLOGY JAPAN
Tokyo 166-0003
TEL +81 3 5378 8784
japan@sanovogroup.com

SANOVO TECHNOLOGY VOSTOK
127106 - Moscow
TEL +7 985 991 3230
vostok@sanovogroup.com

SANOVO TECHNOLOGY CHINA
Shanghai 200031
TEL +86 21 5403 9207
china@sanovogroup.com

SANOVO TECHNOLOGY ITALY
36030 Montecchio Precalcino
TEL +39 0445 334505
italy@sanovogroup.com

SANOVO TECHNOLOGY FRANCE
35580 Guichen
TEL +33 296 76 64 15
france@sanovogroup.com

SANOVO TECHNOLOGY BRAZIL
18087-180 Sorocaba SP
TEL +55 (15) 3238 2921
brazil@sanovogroup.com

SANOVO TECHNOLOGY ARGENTINA
C1107AAP, Buenos Aires
TEL +54 11 4314 1032
argentina@sanovogroup.com

SANOVO TECHNOLOGY MEXICO
Santiago Tepatitlan Edo de México
TEL + 52 55 8994 2585
mexico@sanovogroup.com

SANOVO TECHNOLOGY TAIWAN
80145, Kaohsiung City
TEL +886 9333 17710
taiwan@sanovogroup.com

SANOVO TECHNOLOGY MALAYSIA
48000, Kuala Lumpur
TEL +60 12 2556 718
malaysia@sanovogroup.com

SANOVO PROCESS SOLUTION
5210 Odense - Denmark
TEL +45 66 16 28 32
process@sanovogroup.com

RAME-HART INC.
NJ 07869 Randolph - USA
TEL +1 973 335 0560
ramehart@sanovogroup.com

ITALPROJECT srl.
35015 Galliera Veneta - Italy
TEL +39 049 9475211
italproject@sanovogroup.com