

INLINE BULK DENSITY ANALYSIS

DensityMaster™

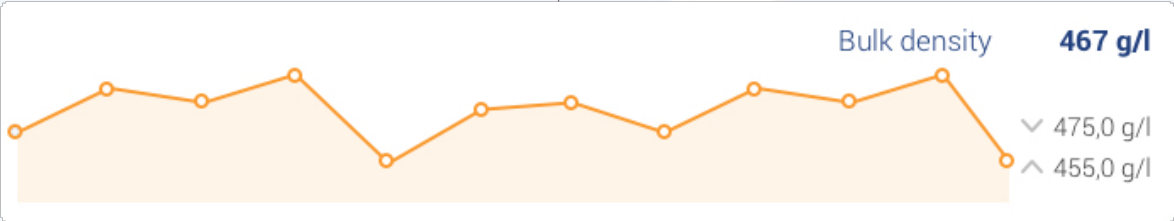


ATLINE 

AUTOMATIC BULK DENSITY CONTROL



The DensityMaster™ controls the set-point bulk density value and triggers an alarm if lower or higher



REPEATABILITY ACCURACY

PET FOOD



Example
Dog food kibble
Accuracy±4.0 g/l

Sample no.	Bulk density analyser g/l	Reference g/l
1	461	463
2	455	466
3	456	455
4	456	459
5	461	459
6	460	463
7	460	467
8	456	467
9	457	465
10	457	462
Standard deviation	2.21	3.74



REPEATABILITY ACCURACY

AQUATIC FEED



Example
High energy salmon feed
Accuracy ± 3.5 g/l

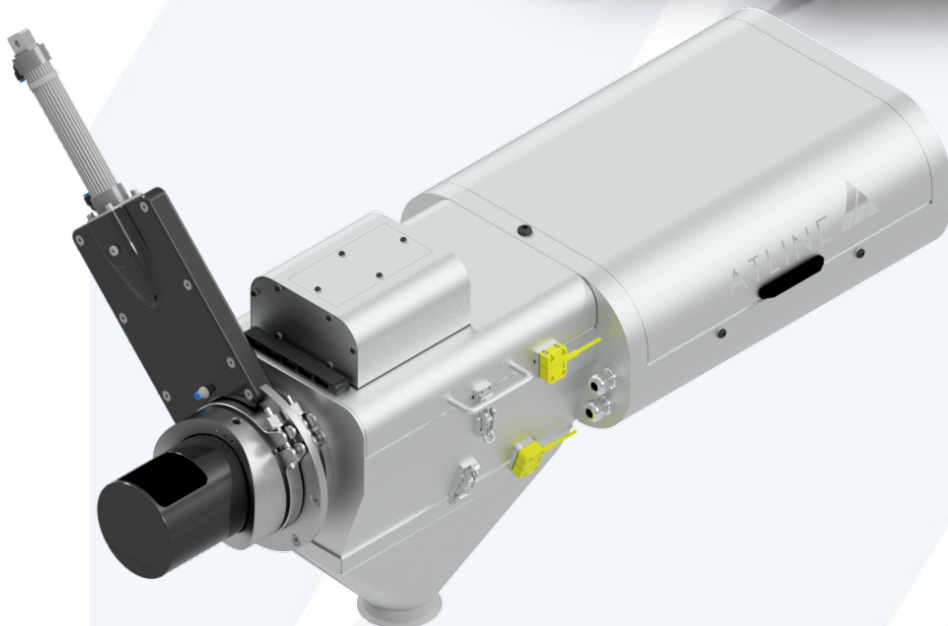
Sample no.	Bulk density analyser g/l	Reference g/l
1	657	662
2	659	654
3	656	655
4	655	654
5	659	661
6	654	660
7	658	658
8	656	654
9	657	653
10	656	659
Standard deviation	1.92	3.19



MINIMISE PRODUCT BREAKAGE AIR KNIFE TECHNOLOGY

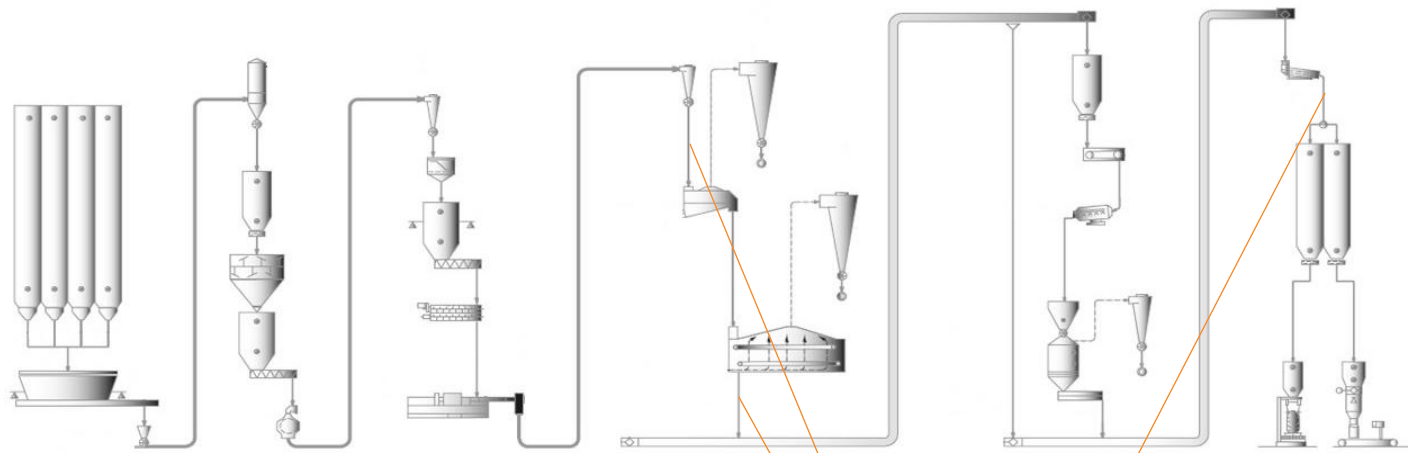


Patented non-product breakage technology

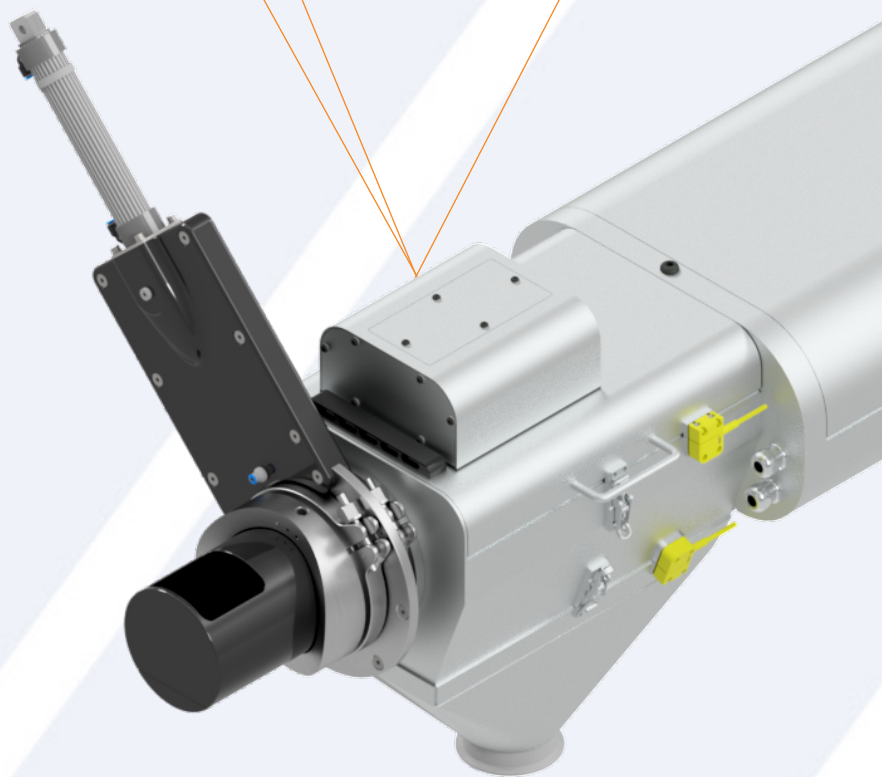


WHERE TO ANALYSE IN THE PROCESS

Install the bulk density analyser after each process step where actual bulk density value can have an influence on the final product quality



Post-extrusion
Post-drying
Post-cooling



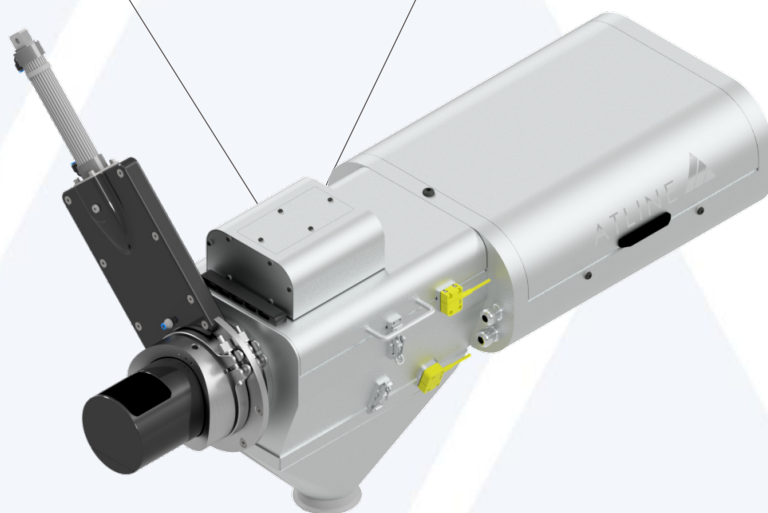
PLUG-AND-PLAY INSTALLATION



HMI



Electrical cabinet



FEATURES AT A GLANCE



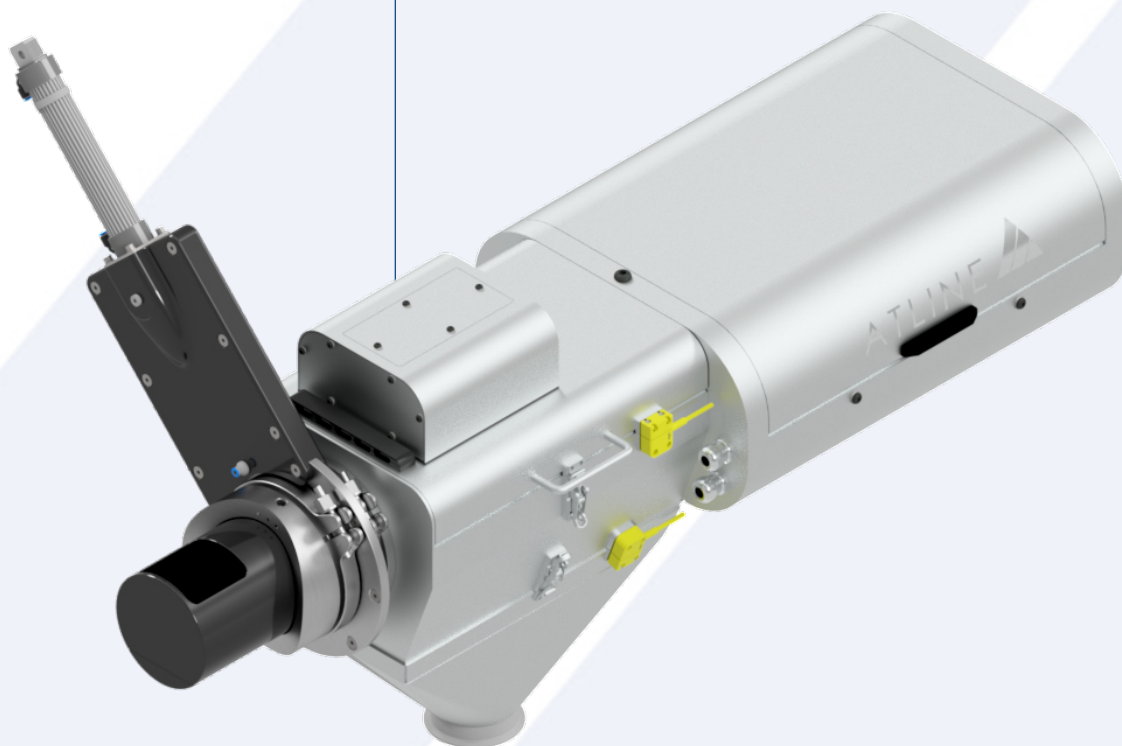
Cup filling sensor



Temperature



Colour HD camera



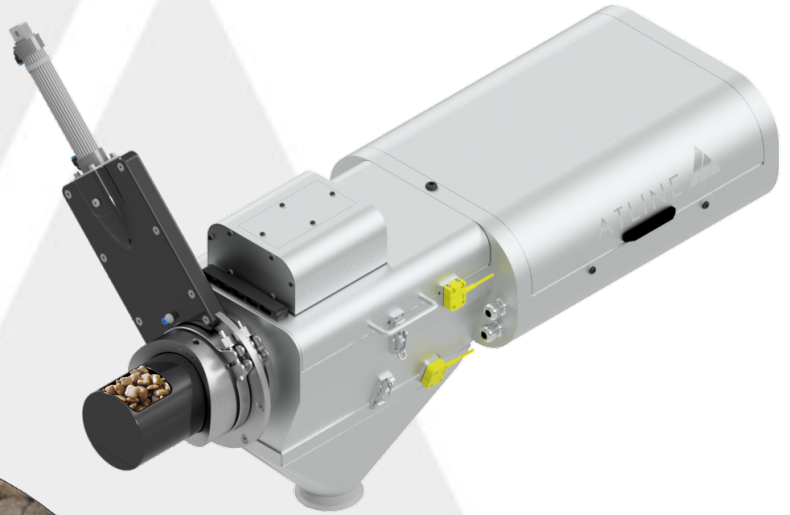
LIVE

IMAGE DURING MANUFACTURING



An image of the product is taken and communicated to the operator during each wet & dry bulk density analysis

GLOSS ANALYSIS (OIL ABSORPTION) DURING MANUFACTURING



Oil absorption is analysed during manufacturing. The control system will generate an alarm in the event of high oil concentration on the product surface

IMPROVE EXTRUDER PERFORMANCE



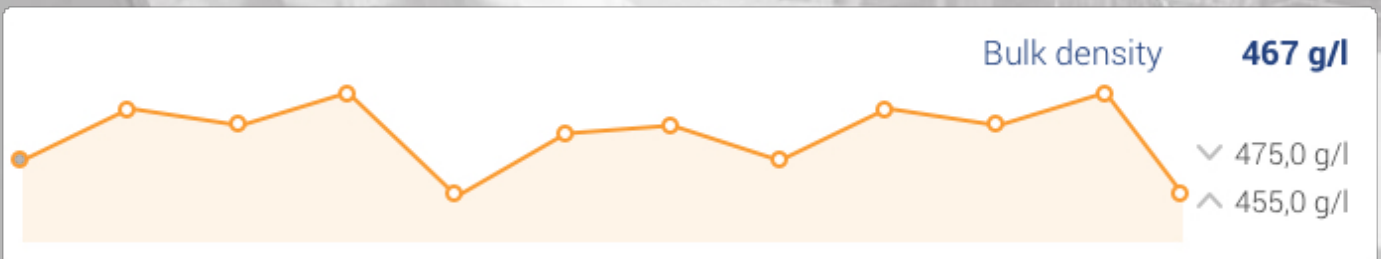
Improve extruder performance
Control shrinkage during drying
Check product prior to packing



CONTINUOUS BULK DENSITY OVERVIEW

The process operators can follow actual bulk density from the control room. An alarm is triggered if the minimum or maximum bulk density limits are exceeded

Bulk density result each 60 seconds



SAVINGS

REDUCE OPERATING COSTS

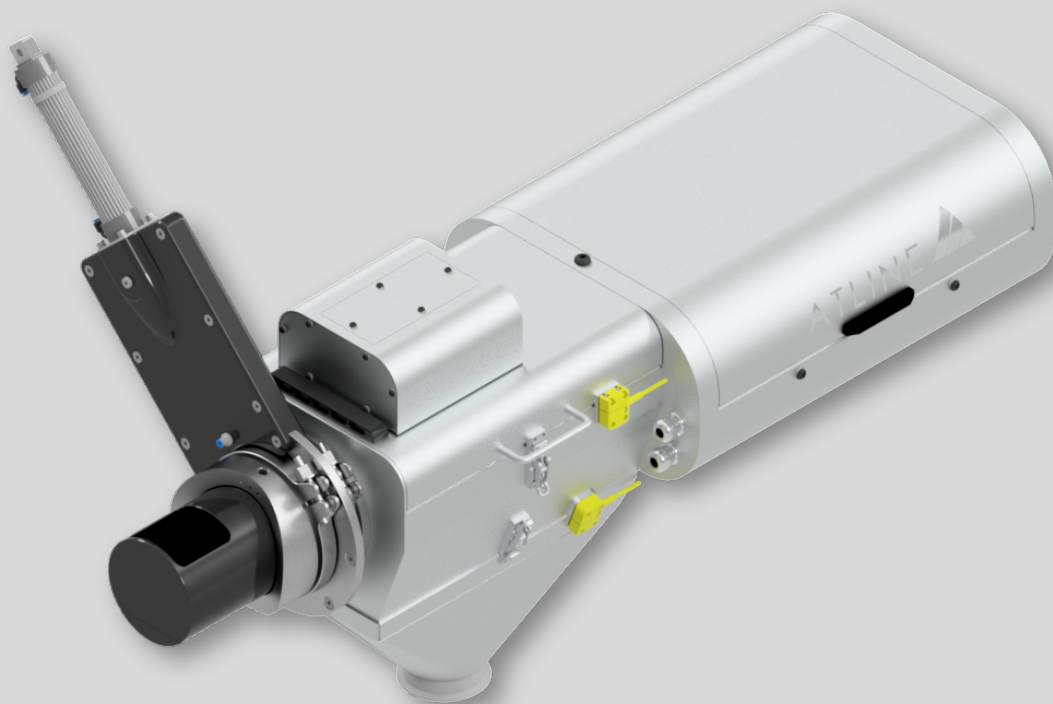
Reduce rework

Reduce claims

Free up operator time



TECHNICAL SPECIFICATIONS



Dimensions (L x W x H):	1232 x 480 x 611 mm (49' x 19' x 24')
Weight:	90 kg (198 lbs.)
Ambient temperature:	<45° (113°F)
Compressed air:	5-8 bar (73-116 PSI)
Data connection:	Ethernet 10/100
Voltage supply:	1 x 110-230 Volt, 50-60Hz

THE PRODUCTS

We offer



CheckMaster™ SINGLE
NIR



CheckMaster™ SINGLE
Physical analysis



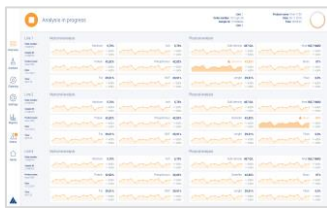
CheckMaster™ TWIN
NIR & Physical analysis



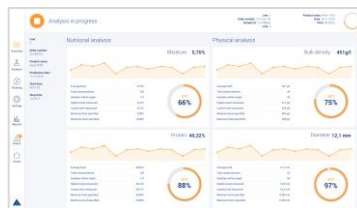
PackMaster™
Packing & labelling of product samples



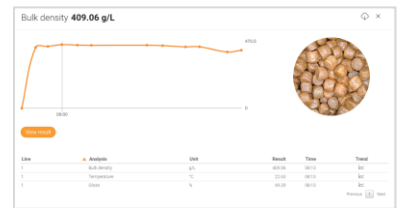
ReferenceMaster™
Sampling & collection of product



Atlytics™ Basic
QA software



Atlytics™ Advanced
QA software



Atlytics™ Inline
Inline QA software



ProductMaster™
Inline product sampling



SampleMaster™
Inline product sampling & analysis



DensityMaster™
Inline bulk density analysis

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