DOLINE

MADE IN FRANCE

AUTOMATIC TRAY LOADING SYSTEM







TRAY LOADING SYSTEM

DOLINE is an automatic **stainless steel** bread-making unit, designed for loading dough into dough trays after kneading.

The dough, introduced either manually or via a selftilting mixer, is **automatically weighed**, **divided and placed in trays**.

The system is **compatible with all types of dough**, with or without fillings, and can be set up to work with **different sizes of dough trays** or **flat trays**.



DOLINE

COMFORT & PRODUCTIVITY



DOLINE is a compact, ergonomic, highperformance dough-loading solution that saves time, respects the product and ensures consistency, while adapting to the requirements of bakers.

Ideal for compensating for staff shortages and optimizing productivity, its automated settings make management simlpe. Only one operator is needed to run Doline.

PRODUCTION CYCLE

With a production cycle of 10 minutes, DOLINE is capable of de-vatting and loading into trays a 200kg batch of dough.

At this rate, up to **15 mixers can be processed in a single working day** (7 hours), **without the need for manual de-vatting**, and with **consistent results**, whatever the operator.

The speed of the process enables bakers to **optimize their working time** and **maximize their yield**.











*depending on the process and flour used.

HOW DOES IT WORK?



With a production rate of **1to 6 trays/min**, Doline can calibrate trays from **1 to 7 kg**.

The dough is poured into a **pressurized hopper**, then **weighed** and **automatically divided** into several pieces (up to 6 pieces). These dough pieces pass under a **heavy bar conveyor belt**, then into a **rolling machine**, to be gathered together (they will be reformed during the proofing stage) until they reach a total weight determined by the operator.

They are then **placed in trays**, ready for proofing.



VOLUMETRIC DIVIDER WITH PRESSURIZED HOPPER, A GUARANTEE OF CONSISTENCY.

With a capacity of 210 kg, the **pressurized hopper** guarantees seamless dough descent and **high consistency from the first to the last tray (+/-2%).**



The volumetric divider, equipped with a 110mm-diameter piston, enables **precise dough division**. The weight of the dough pieces can be adjusted from **400 to 1200 g** from the divider's handwheel.

Doline's **three speeds** can be adjusted depending on the weight and speed required, offering flexibility adapted to the operator's needs.



QUALITY AND HOMOGENEITY, OPTIMAL DOUGH ROUNDING.

Once the dough pieces have been divided, they are **automatically floured** before passing under the bar belt, which gathers them together and facilitates their transport to the **rolling machine**.



The integrated rolling machine ensures **uniformity and gentle shaping**, with true respect for the dough and without excessive degassing.

It imitates manual folds perfectly, guaranteeing a **beautifully developped final dough piece**.

ERGONOMICS & COMFORT

DOLINE considerably improves the ergonomics of a particularly physically demanding workstation, by **automating the manual de-vatting** of the mixer, thus **reducing operator fatigue and unpleasant postures.**

A warning system with tricolour light (green: running, orange: defect, red: fault) provides a quick and intuitive display of the machine's status.

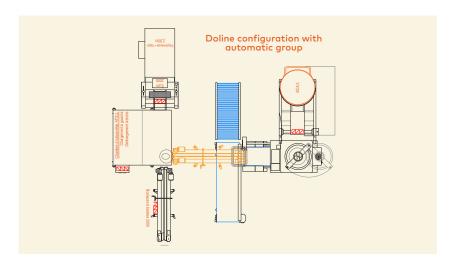


*AG2R La Mondiale study on the quality of life at work and how occupational risks are taken into account, in partnership with the Confédération Nationale de la Boulangerie Pâtisserie Artisanale (2011).

OPTIMIZED HEIGHT FOR STRESS-FREE WORK

The height of the conveyors has been designed for greater working comfort, with **adjustable feet** to adapt the machine to the needs of each user.

This height is in line with average recommendations for outfeed conveyors (between 5-10cm below the operator's elbow*).



FLEXIBLE, OPTIMIZED INTEGRATION

DOLINE can be easily integrated into any type of laboratory, thanks to its compact footprint and modular design.

Its components, mounted on wheels, offer great flexibility, making it easy to move and adapt to site constraints.

The gravity conveyor can be easily reconfigured, aligned with the tray

conveyor or oriented at 90°, to adapt perfectly to the organization and production flow.

DOLINE can also be **combined with an automatic group** (for doughs up to 65% hydration and a minimum doughpieces weight of 200g).

EASY INTEGRATION INTO YOUR PRODUCTION

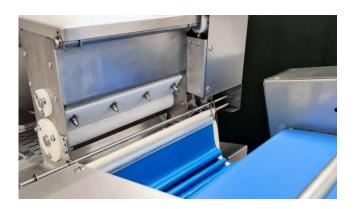
Doline is perfectly suited to our **Divitrad divider-former process** and our complete **Nova Trad delayed proofing process**.

Our tray-loading machine can work with **different sized dough trays**, but also with **flat trays** or even with the dough received directly into a mold.









SIMPLE, SAFE DAY-TO-DAY OPERATION

The intuitive touch-sensitive control system adapts to the operator's needs. It features an **automatic** mode, a manual mode and dedicated cleaning and maintenance modes.

The interface also enables the user experience to be customized, with the option of **changing the language** and creating **up to five saveable recipes**.

Finally, access to **parameters** and **statistics** provides **detailed production monitoring** for optimized management.

Doline incorporates a **teleservice system** for **remote diagnostics**. This technology ensures **efficient monitoring**, **reduces downtime** and offers **greater peace of mind** in day-to-day machine operation.

SIMPLIFIED CLEANING AND MAINTENANCE

Cleaning and maintenance are made easy thanks to **dedicated programs** accessible from the touch control.

Antistatic blue belts, designed to limit the adhesion of residues, are easily vacuumed and cleaned.

Maintenance is optimized with access points for adding flour or dough **without the need for tools**.

An **integrated flour recovery system** contributes to maintaining a clean and efficient working environment.

TECHNICAL DATA







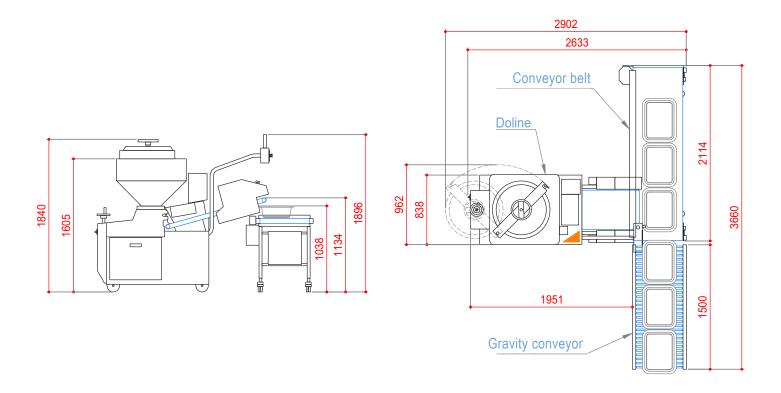
CARGO RANGE

Robust, reliable, regular equipment sized to handle semi-industrial production volumes and rates.



SAFETY

All our equipment is certified by an external, independent body.



Tray-loading system DOLINE	
Tray weight (collected dough pieces)	1 to 7 kg
Output (tray/minute)	1 to 6
Output for 3,5 kg trays	4 trays/minute
Output for 7 kg trays	2,5 trays/minute
Dough pieces weight (g)	400 to 1200 g*
Hopper capacity	210 kg
Hopper pressure	0,6 bars
Piston diameter	110 mm
Dough hydration	up to 75%*
Loading	Manual, self-tilting mixer or bowl-tilter
Empty tray conveyor capacity	up to 4 trays
Gravity conveyor capacity	upt o 3 trays
Electrical supply	400V/TRI+N+T/50Hz
Electrical power	3 kW
Rated current	7,5 A

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NON-CONTRACTUAL DATA

MANY AND MORE, REAL GOODS





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