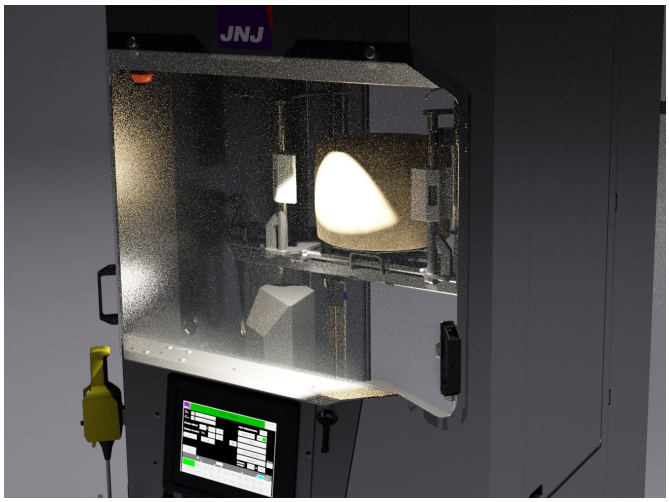
RF16

FULLY AUTOMATED CHEESE TREATMENT ROBOT

SPECIALLY DESIGNED FOR HANDLING
BARREL-SHAPED CHEESE WHEELS



PRESENTATION

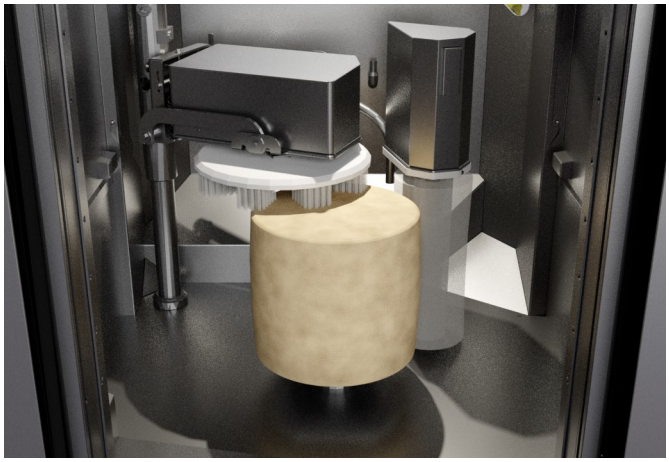
Our RF16 robot is specially designed for handling barrel-shaped cheeses. Its elevated treatment station can process cheeses such as Cheddar, Grana/ Parmesan, Cantal, etc.

Despite its unique design made to accommodate the height of barrel-shaped cheeses, most of its modules are shared with the RF11 and RF13 models.

A NEW GENERATION OF ROBOTS

The RF16 retains all the elements
that made the RF6 such a success.
The most significant evolutions include:

- The cheese turning system has been completely redesigned. Movements are more fluid and the stirrups grab the cheese wheels better.
- An spotlight provides lighting over the treatment area. The chassis includes a temporary storage area on top where cheese can be deposited to create an offset.
- The brine tanks are made of plastic material. Improved hygiene of the pipes, which no longer comprise welds. Increased brine volume in the compact chassis.
- Improved sealing of the chassis and brushing systems. Removal of all hollow bodies and several design optimisations to make the system more hygienic.
- New generation of PLCs with increased memory for more scalability of future fonctions.



CARE

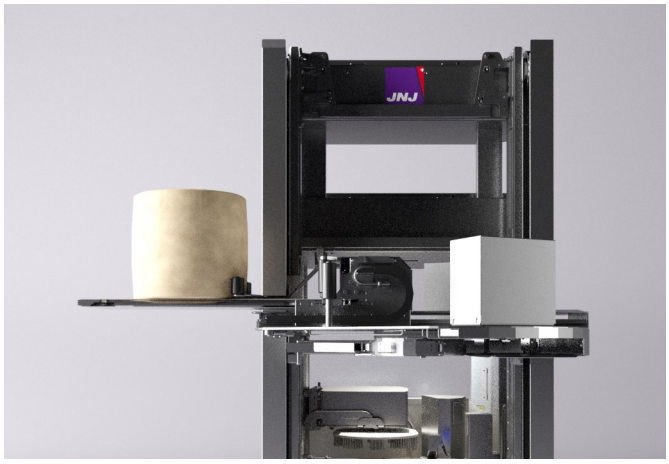
Brushes and plate can be removed without the use of special tools.

Large choice of brushes available.

Brine tank level detection system.

A LED spotlight provides good light. It can be viewed and accessed directly from the dialogue screen.

Remote brine tank selection controls for greater accessibility.



GRAB MODULE

Optimal pick-up of cheese wheels through efficient positional detection of the plate.

Belt can be removed without special tools in less than one minute.

Movement of all moving parts carried out using maintenance-free, non-stretch belts.

Strong plastic lift and table runners, limiting wear and reducing maintenance costs.

GUIDE AND MOVEMENT SYSTEM

The robot's contactless guiding system allows it to move along the aisle, automatically correcting its course as needed.

The robot uses the existing infrastructure and is automatically fixed on the uprights of the shelves.

Comes with a portable remote control to allow operators to position themselves at the best viewing angle. The motorised steering and wider than 180° steering angle allow for accurate and effortless movement.

TURNING

The kinematics of the turning module have been completely redesigned. Movements are now smoother. The cheese is held better in the turner's stirrups.

This new design also compacts the movement and saves space in the chassis.

OFFSET PROGRAMME

An offset function is now available to deposit cheese wheels one behind the other.
The chassis includes an area on top can be used for temporarily storing cheese.
This means the grab module can free space on the rear board of another level.

CONSTRUCTION AND DESIGN

The turning system is specifically sized to handle cheddar without damaging the product.

Chassis made entirely out of mechanically welded stainless steel 1.4301.

Hygienic : treatment station with smooth welding easily accessible.
The sloping surface enable optimum run-off of smear liquid and rising water.

Strong, rugged construction.

STANDARD EQUIPEMENT

- Synthetic brushes
- Three-phased plug type Euro (export : no plug)

OPTIONS

- Pre– or post– treatment salting system (salting-only option also possible).
- Adapter kit for ø 600 - 750mm cheese wheels (Comté).
- Small wheel treatment (from 25 cm) placed one behind the other on shelves.
- Batterie movement system.
- Mobile phone alarm module (SMS).
- Triple mast lift to extend travel in high cellars and/or lower the height of the machine to fit through doors.
- 1.4404 stainless steel brine and smear collection tanks.
- Tracking of treatments and alarms.

TECHNICAL INFORMATION

The values shown below are indicative only and can be adapted to the customers specific needs.

WEIGHT

Approximate mass	1’600 kg

ELECTRICITY

Rated voltage (tolerance ± 5%)	3x400 Vac 3LNPE
Rated current	13 A
Assigned frequency	50 Hz
Maximum power	6 kW
Average consumption (approx.)	1 kWh
Building residual current circuit breaker FI (DDR)	30 mA, type B, HI
Upstream overload cut-off	16 A/C

WORK RATE AND CAPACITY

Number of cheese wheels treated (approx.)	120 / hour
Brine tank capacity (opt.)	90 litres
Capacity of smear collection tank (opt.)	30 litres

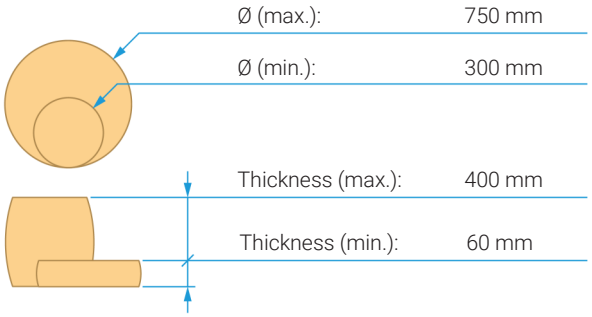
OPERATIONAL FEATURES

Number of operators	One supervisor only

PRODUCTS FEATURES

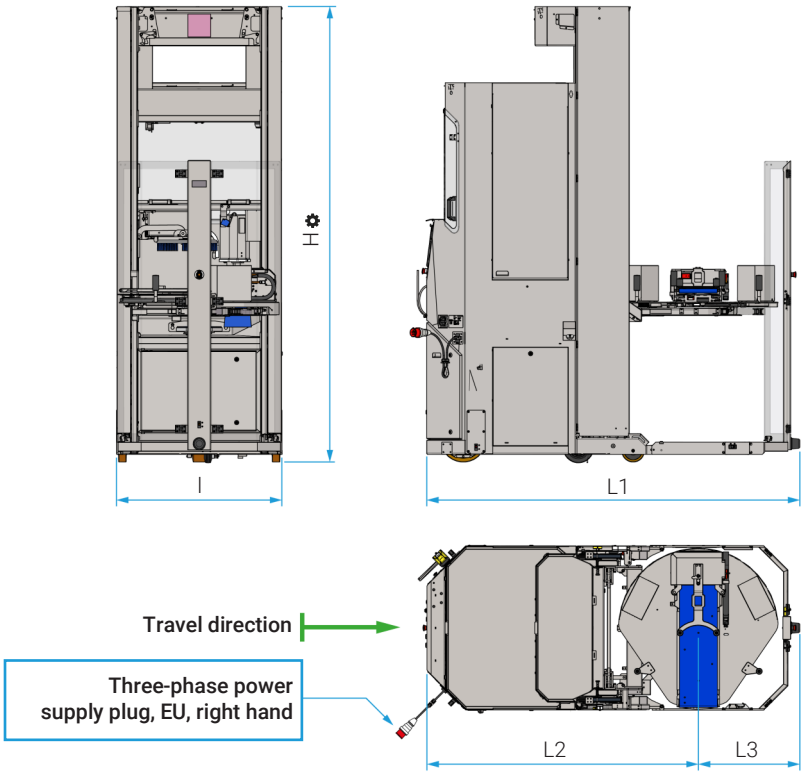
Minimum height of the first cheese wheel	300 mm

Treatable cheese wheel diameter :



DIMENSIONS

Measures in mm



EXTERNAL DIMENSIONS

The robot’s dimensions vary according to the final configuration and depending on needs. The following values correspond to a standard model.

	Value
I	1’080
L1	2’480
L2	1’775
L3	705
H	2’500—3’200

ACTUAL UNITS ARE CUSTOM-MADE BASED ON THE CLIENT’S NEEDS.

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