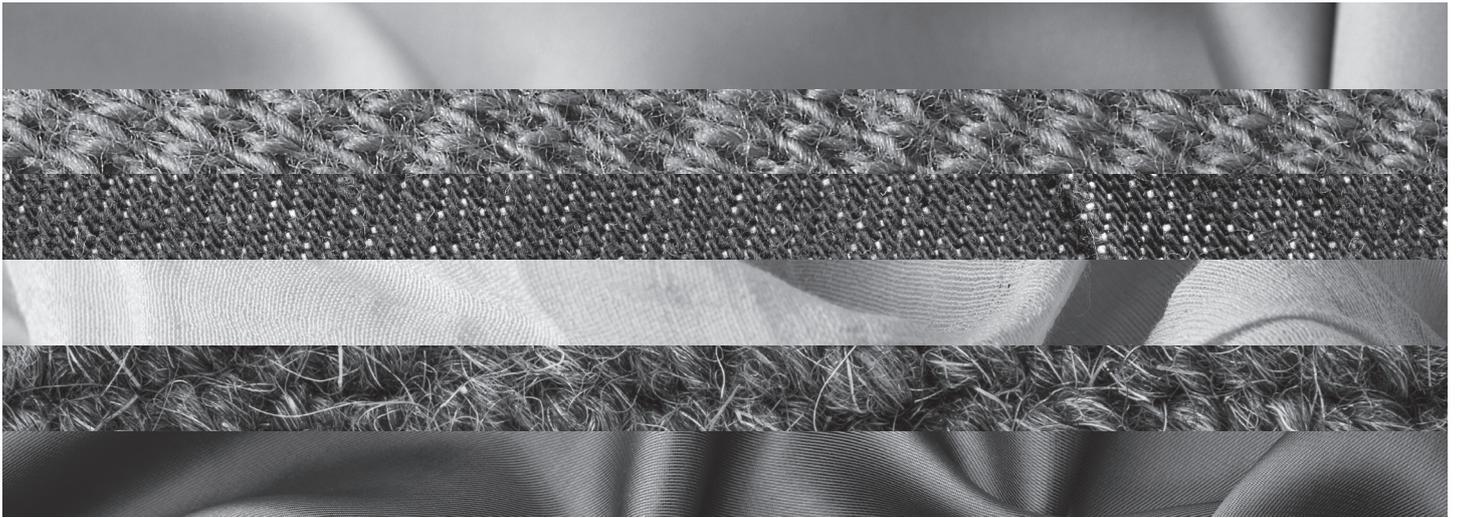




Bienvenidos a la
lavandería industrial

Welcome to the
industrial laundry



USER MANUAL



C-200/50 - C-260/50 - C-330/50

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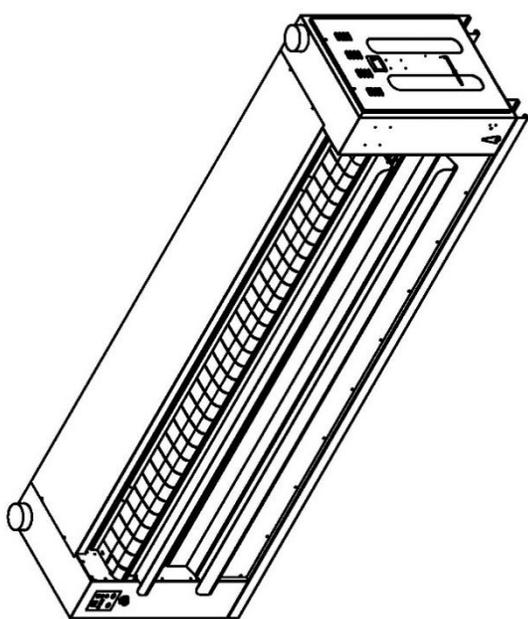
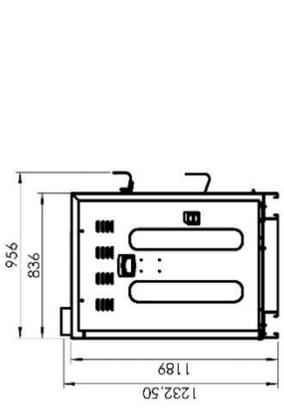
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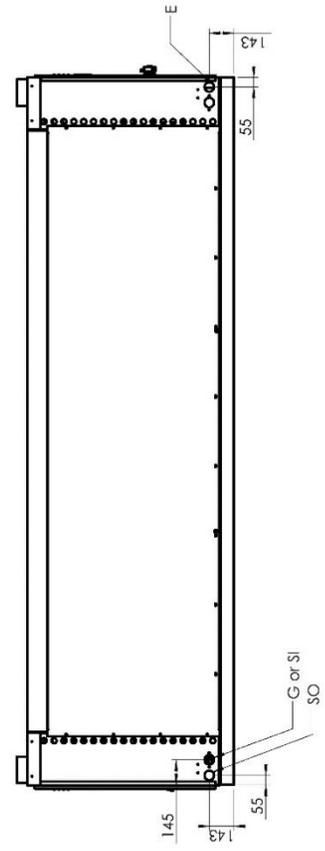
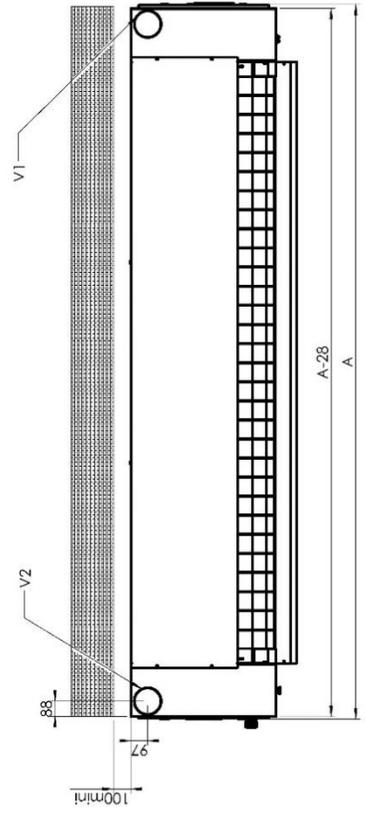
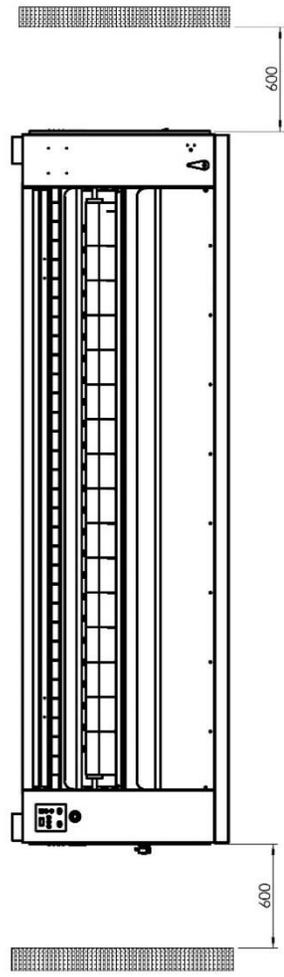
5.4 Every 2000 hours

0. TECHNICAL DATA

TYPE	Ø50/2000	Ø50/2600	Ø50/3300
Usable length (mm)	2000	2600	3300
Ø Cylinder (mm)	500	500	500
HEATING ELECTRIC			
Heating power (kw)	31,5	40,5	54
Motor power (kw)	0,62	0,87	0,87
E=Voltage	400/50/3+N+T-50A 240/50/3+T-100A	400/50/3+N+T-63A 240/50/3+T-125A	400/50/3+N+T-100A 240/50/3+T-160A
GAS HEATING			
Calorific flow (kw)	40	55	69
Natural gas flow (20 mbar) m ³ /hour	4,2	5,8	7,3
LPG gas flow (37 mbar) kg/hour	3,1	4,3	5,6
G= Ø gas input (mm)	22	22	22
Required electrical power	0,87	0,87	0,87
E=Voltage	400/50/3+N+T-2A 240/50/3+T-4A	400/50/3+N+T-2A 240/50/3+T-4A	400/50/3+N+T-2A 240/50/3+T-4A
STEAM HEATING			
Steam pressure (bar)	10	10	10
Hourly consumption kg/h	50	67	85
Motor horse power (kw)	0,62	0,87	0,87
SI= Ø steam input SO= Ø steam output	3/4" 1/2"	3/4" 1/2"	3/4" 1/2"
E=Voltage	400/50/3+N+T-2A 240/50/3+T-2A	400/50/3+N+T-2A 240/50/3+T-4A	400/50/3+N+T-2A 240/50/3+T-4A
Steam Exhaust - Number	1 or 2	2	2
Ø outlet (mm)	153	153	153
Ø flue (mm)	153 or 2*153 in gas	2*153	2*153
Power extraction (m ³ /hour)	600 or 1200	1200	1200
Heating surface (m ²)	3,14	4,082	5,181
Hourly productivity (kg/hour)	50/70	60/80	80/120
Water evaporation (l/hour)	35-49 l/h	42-56 l/h	56-84 l/h
Noise level (Db)	60	65	65
Floor space with trays (mm)	2810*836*1189	3410*836*1189	4110*836*1189
Floor space without trays (mm)	2810*956*1189	3410*956*1189	4110*956*1189
Shipping dimensions	3010*1150*1500	3610*1150*1500	4310*1150*1500
Net weight (kg)	925	1200	1436
Gross weight (kg)	974	1270	1475



Type	2000	2600	3300
A	2810	3410	4110



Ø50-2000/2600/3300

Designer PS
Date 30/12/2014
Plan N° : MAX 0600

1. GENERAL BLUEPRINT

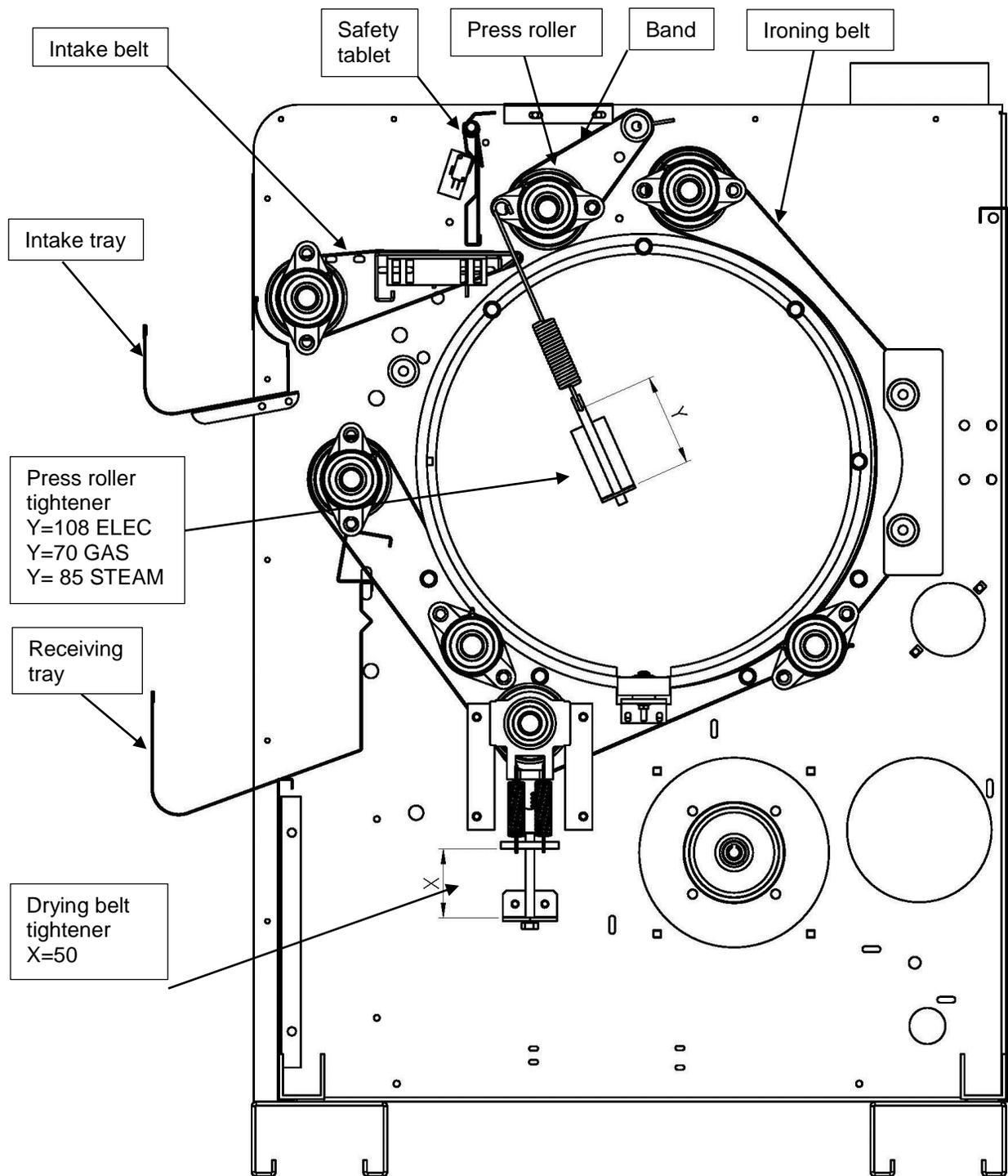
1.1 Description

- Being of compact size, the bare machine without tubs is designed to be easily taken through a door of standard width.
- No special installation is required apart from electricity supply, a feed for the means of heating the machine, and an exhaust flue.
- Simple to use: frict.
- Laundry intake by Nomex-Polyester straps.
- Strips of special 'Nomex' fibres used to iron the laundry (DuPont de Nemours patent).
- Very easy assembly /disassembly of the loading and intake tubs

1.2 Construction

- Flask of stainless steel structure with corrosion protection provided by highly resistant lacquer.
- Bodywork consisting of 2 stainless steel casings.
- Closure of the casings by stainless steel panels with interlocking and blocking screw.
- Housings in stainless steel and galvanised sheet.
- Drying/ironing cylinder in polished steel for very smooth contact with the laundry. Protection of the cylinder by chrome-plating as an option for delicate environments (sea air, very damp places).

1.3 Operating principle: side view



When the laundry is placed flat on the table at the front of the machine, it is automatically taken to the drying and ironing cylinder by means of the nomex-polyester belts.

Then, a first hot press takes place by feeding the laundry through the press roller cover, at constant pressure and self-regulated according to the thickness of the laundry by a compensating spring system.

'Nomex' quality belts and a heating cylinder carry out the drying and ironing.

The tension of the belts is adjustable by means of planetary gear wheel and bearing with guiding rails and tension springs.

Once it is dry and ironed, the laundry is naturally directed towards the receiving tray by means of stainless steel spring strips (very gentle friction and spring quality maintained at +250°C), and these strips are prolonged by teflon plates to avoid any marks on the strips.

So, the laundry comes out dry, ironed and perfectly pressed for immaculate appearance and presentation.

1.4 Safety

1.4.1 User-activated safety

- The operator's safety is assured by a plate situated just after the input table, thus preventing the operator's hands from going too far. Light contact on this safety plate causes the machine to immediately stop. This plate is the main emergency stop of the machine (useable over the entire length).
- A second emergency stop (to the left of the machine) is very close to the operator, thus allowing him to stop the machine at any time.

1.4.2 Safety linked to heating

The electronic temperature regulator assures the temperature regulation of the ironing cylinder (for machines heated by gas and electricity only) below the over-heating limits of the belts (heating cut off at 180° maximum).

A safety thermostat (at 190°) cuts off the heating in the case of breakdown of the electronic regulator.

1.4.3 Safety linked to the gas heating system

If a fault of the gas system assembly appears, this gives rise to the gas supply being cut off and the AL6 alarm appears on the display.

Once the alarm sound has ended, you can then reset the system by pressing + and – at the same time (see alarm section). If the fault persists, one of the follow defects has occurred:

- No gas input: check that the gas input valve is open.
- Deficient lighting electrode: change it.
- Exhaust flue of burned gases closed: check the draught.

1.5 Heating

3 means of heating are available in order to allow us to adapt the machine to your environment:

- Electric heating: provided by a multitude of protected resistors fitted onto an entirely heat-insulated casing.
- Gas heating: a ramp over the entire length of the machine allows homogenous heating from one end to the other. The single, easily interchangeable injector of this ramp makes it possible to use any type of gas (natural, butane, propane).



Lighting is provided by an electronic lighter with 1 pilot light and flame control, thus eliminating any manual intervention and offering total safety. Safety is enhanced by placing a double solenoid valve on the machine at the gas input point.

- Steam heating: by releasing steam pressure in the double cylinder connected by a rotating connection at each end.

2. TECHNICAL NOTICE FOR THE INSTALLER

2.1 Technical characteristics

See chapter entitled “0-technical data”

Information related to the installation of a dryer iron, type Ø50-2000/2600/3300, with gas heating.

Country	Categories	Gas	Pressure (mbar)
Germany (DE)	I2ELL I3P	G20 G25 G31	20 20 50
Austria (AT) Denmark (DK) Finland (FI) Italy (IT) Sweden (SE) Czech Republic (CZ) Norway (NO) Hungary (HU)	I2H	G20	20
SWITZERLAND (CH) Spain (ES) Ireland (IE) Portugal (PT) United Kingdom (GB) Greece (GR) Estonia (EE) Lithuania (LT) Latvia (LV) Slovakia (SK) Slovenia (SL) Rumania (RO) Bulgaria (BU)	I12H3P	G20 G31	20 37
SWITZERLAND (CH) Spain (ES)	I12H3P	G20 G31	20 50
Belgium (BE)	I2E+	G20/G25	20/25
Poland (PL)	I2E	G20	20
Belgium (BE) Cyprus (CY) Malta (MT) Hungary (HU) Poland (PL)	I3P	G31	37
France (FR)	I12Esi3P	G20/G25 G31	20/25 37 and 50
Luxembourg (LU)	I12E3P	G20 G31	20 50
Netherlands (NL)	I12L3P	G25 G31	25 50

Rates calorie output: in KW

Type 2000	type 2600	type 3300
40	55	69

The marking plate of this apparatus is situated at the top of the electricity cupboard to the left of the machine.

2.2 Installation



Attention: the machine must be installed, regulated and started up only by a team of technicians or retailers authorised by our company.

Likewise, the presence of the client is strongly recommended, particularly for positioning the machine and the first tests.

The apparatus must be installed in accordance with currently applicable regulations and in well ventilated premises.

In order to achieve the machine's optimal performance levels, you must ensure that fresh air penetrates from outside the room, as close as possible to it.

The section of the fresh air intake must be at least 4 times that of the section of the output pipe. Please note: the section of fresh air intake is equivalent to the section through which the air can flow without resistance due to the grille installed at the entrance itself. Remember that the bars of the grille often occupy a large part of the section of the grille.

The flow of new air required in cubic metres per hour for the combustion air supply is as follows:

TYPE	2000	2600	3300
FLOW (cubic metres/hour)	80	110	138

2.2.1 Handling and unpacking



Upon delivery, the machine must be in a perfect state, and the packaging must be complete with no signs of wear. Observe the indications shown on the packaging (for example fragile, this way up, keep dry etc.). As the machine is large and quite heavy (see below), appropriate hoisting and handling equipment must be provided to ensure safe operation.

The machine must be handled with the aid of a fork-lift truck of sufficient capacity, with forks as far apart as possible to avoid tipping.

It is essential to take the machine from the centre (centre of gravity in the axis).

Do not overturn or cause the machine to fall, for example during unloading.

Note: if slings are used (not provided) the machine will be handled entirely at the unpacker's risk of deforming the machine).

2.2.2 Characteristics of the premises

A door 90 cm wide is required to enter the machine, the tubs having been previously taken out.



The machine must be installed in well ventilated premises (particularly in the case of gas heating) with correct lighting and ambient temperature not in excess of -10 to +40°C (temperature limit for the electronic frequency variator of the drive motor). Sufficient space must be allowed around the machine to ensure its satisfactory operation:

- Minimum 5 to 10 cm to the rear for ventilation (ideally 60 cm to facilitate maintenance).
- 60 to 80 cm on each side for servicing and maintenance.
- Sufficient space to the front must be left free to allow the operator to work correctly and safely.



The levelling must be carried out correctly on a hard and stable floor, capable of withstanding the relatively considerable weight of the machine (700 to 1300 kg over 2 to 3.4 m²). A minimum floor resistance of 500 kg/mm is required for setting such a machine in place.

2.2.3 Connections

- *Electrical connection*: ensure that the characteristics of the electricity supply correspond to those of your machine, indicated on the identification plate on its left panel, and that the section of the cable or other accessories of the line can provide the required power.

To connect the machine, remove the left panel and connect each of the wires of the feed cable L1, L2, L3, and Neutral at the terminals of the general switch and the earth wire on the earth terminal. **It must be perfectly correctly earthed in order to guarantee user safety and satisfactory functioning.**

The electrical connection on the site must comply with currently applicable regulations, and it is obligatory to insert a magneto-thermal circuit breaker and a differential (not supplied) between the connection and the mains. The sensitivity of the differential must be 300mA. A higher degree of sensitivity, 30 mA for example, as habitually used in domestic appliances, may give rise to malfunctioning of the machine.

Section of the input electricity cable (mm²):

TYPE	2000	2000	2600	2600	3300	3300
Heating	Electric	Gas/steam	Electric	Gas/steam	Electric	Gas/steam
230V-1P-T	-		-		-	
230V-3P-T	4*25	4*2.5	4*35	4*2.5	4*35	4*2.5
400V-3P-N+T	5*10	5*2.5	5*16	5*2.5	5*25	5*2.5

- Gas connection: for machines that use this means of heating: connect the apparatus to the existing gas piping by means of a vapour lock, that makes it possible to isolate the apparatus from the rest of the installation (for example, DTU 61.1 for France).

Currently applicable regulations and standards in the country in question must be observed.

The size of the gas supply piping will be designed to minimise losses of charge: its diameter will be determined in accordance with its path (length, number of elbows etc.) and the power of the apparatus.

Very important!

Check that the settings of the apparatus correspond to the nature and pressure of the gas distributed in the installation.

To check the gas supply pressure, it is sufficient to connect a pressure gauge on the pressure socket situated on the solenoid valve unit when the burner is on.

The gas pressure thus measured must be equal to that indicated on the identification plate of the apparatus for the gas used (+ or – 10% maximum). A pressure reducer (not provided) corresponding to the nature and output of the used gas (see technical data sheet) must be installed on the piping close to the machine.

- Steam connection: steam heated machines are connected at the rear of the machine.

The steam input is to the right in a pipe of 20-27 (3/4").

The steam output is to the right in a pipe of 15-21 (1/2").

A small connection at the outlet is to be provided by means of a hose with interior diameter of approximately 10 mm.

Vapor and fumes exhaust

Vapor (and the removal of burned gases for gas-heated machines) must be taken outside by means of a pipe connection with a net diameter corresponding to the diameter of the demister outlets, situated at the top of the machine. The evacuated air must be taken away from the workplace and must never be linked to other flues already being used to extract smoke from other fuels.

The siting of these conduits must be within the limits established in environmental thermal legislation. The pipe used must resist temperatures up to 150°C, and must never come too close to inflammable materials or those likely to be deformed due to excessive temperature.

The inside of the pipe must be smooth. It is important for there to be no elements that could disturb the trajectory of the air or on which fluff or small items can accumulate (screws, rivets etc.); inspection systems and periodical cleaning of the conduits must be arranged.

It is recommended for the output piping to be as short as possible. It should not exceed 4 metres, with more than 2 elbows at 90°, and should have a slope of 2% outwards in the horizontal sections in order to prevent the flow of condensate towards the machine.

Please note: for plants with more than 8 linear metres of piping and/or more than one elbow, it is recommended to increase the diameter of the pipe and/or fit a draught accelerator on the plant (extra aspirator).

Finally, it is recommended for each machine to have its own demister outlet. If this is not possible:

- It is obligatory to install a check valve system for each of the machines before reaching the header manifold.
- The connections must be Y-shaped; never T-shaped.
- Increase the section before connection so that the final section is the sum of the two previous ones.

2.2.4 Assembly and installation process

In order to be able to take the machine through a door of 0.90 metres, the tubs must be taken out. In order to do this, proceed as follows:

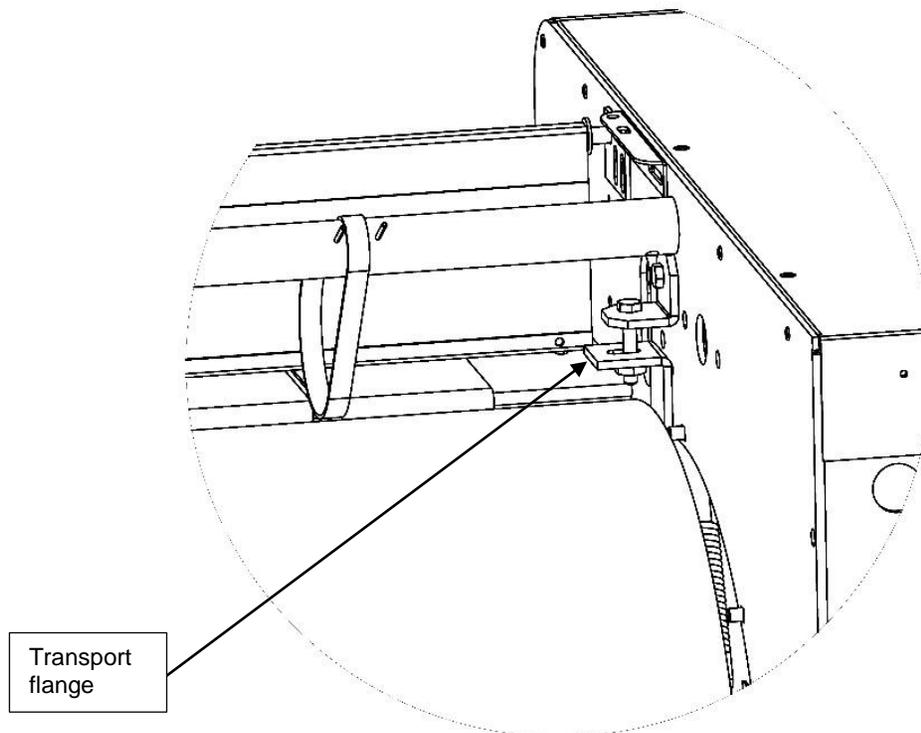
- Unscrew the 4 screws located inside the tub. Remove the tub.

Simply take out the input tub by removing it from its casing (pay attention to the guiding springs fixed at the top).

Attention: take care not to let go of the handle on the panel to the right.

- Level the machine correctly.
- Remove the top panel, loosen and then take out the screws and the red U-shaped flanges used to wedge the cylinder.

Note: keep the screws and flanges for subsequent servicing.



2.2.5 First start-up



- At the first start-up, ensure that the machine is stable and level.
- Check that all the connections and exhausts are appropriately completed.
- Check the satisfactory earthing of the machine.
- Turn the lockable selector on the left panel to position 1 and check that the start light of the micro-processor is on.
- Press the START button.
- Check the rotation and correct direction of the demister extraction ventilators (arrow on the motor).
- Check the rotation and correct direction of the belts (rotation towards the inside of the machine).

Attention: take care not to touch or approach a moving part.

- Re-assemble all the housings on the machine.
- Check the temperature settings of the unit.
- Adjust the temperature setting (or steam input pressure) according to the laundry to be ironed.
- Proceed with the ironing tests; the laundry must come out dry and perfectly pressed. If not, increase the temperature or slow down the ironing speed.

Attention: as the cylinder is paraffined as it leaves the factory, carry out a first ironing test with old laundry.

2.3 Adaptation of the apparatus if another gas is used

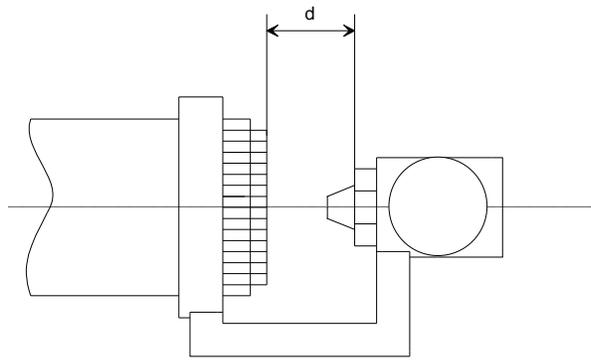
2.3.1 Operations to be carried out

The injector must be changed, and the air ring adjusted, for this operation.

- Remove the left panel to access the machine's air-gas mixer.
- Remove the main injector with a key, and put back the injector appropriate for the kind of gas that you have.
- Adjust the air ring according to the type of gas.

AIR ADJUSTMENT

Air adjustment diagram with dimension "d"



2.3.2 Table of adjustments and flows

Kind of gas	G20			G25			G25		
Supply pressure (mbar)	20			20			25		
Type of machine	2000	2600	3300	2000	2600	3300	2000	2600	3300
Injector marker	4.7	5.5	6.2	5.1	6.2	6.9	4.9	5.8	6.5
Air adjustment 'd' (mm)	18	18	18	0	0	0	0	0	0
Burner flow (m ³ /hour)	4.2	5.8	7.3	4.9	6.8	8.5	4.9	6.8	8.5
Calorie flow (kw)	40	55	69	40	55	69	40	55	69

Kind of gas	G31			G31		
Supply pressure (mbar)	37			50		
Type of machine	2000	2600	3300	2000	2600	3300
Injector marker	3.2	3.7	4.1	3	3.4	3.8
Air adjustment 'd' (mm)	18	18	18	18	18	18
Burner flow	3.1	4.3	5.6	3.1	4.3	5.6
Calorie flow (kw)	40	55	69	40	55	69

- * G20: natural gas type H (lacq)
- * G25: natural gas type L (Groningue)
- * G31: propane

3. TECHNICAL NOTICE FOR THE USER

Important note:

All apparatus of type Ø50-2000, 2600 and 3300 is for use by professionals, and must only be used by qualified staff.

The apparatus must be installed in accordance with currently applicable regulations and standards, in well ventilated premises and by a qualified installer.

An identification plate attached to the top of the left panel provides information on the following:

- The type of apparatus.
- Its manufacture number.
- Its power supply and electrical power.
- Pressure and flow in the case of steam heating.
- Pressure, gas power, flow, type of gas, type of connection, country of destination, apparatus performance, category, in the case of gas heating.

If the apparatus is to be used with a gas other than that for which it was designed, a qualified installer must be addressed to carry out the necessary modifications.

3.1 Daily use (see CHAPTER 4: use of EASY CONTROL)



- Turn the lockable selector to position 1.
- Press the START button.
- Check the rotation of the belts.
- Choose an ironing speed from 1 to 7 (0 to use the “SMART SYSTEM” option). Note: the chosen speed is only relevant beyond 130°C.
- Set the temperature in accordance with the humidity and type of laundry to be ironed (in the case of steam heated machines, no temperature regulation is possible, as the temperature depends directly on the steam pressure -10bars=180°C).



Important: the operating temperature varies in accordance with the fabric to be ironed, but it must never continuously exceed 180°C. A previously adjusted safety thermostat situated inside the machine serves to palliate any fault in the regulation system.

- To start the work, it is essential to wait for the cylinder of the machine to reach a temperature close to the desired temperature (the heating light goes off as soon as the temperature is reached).
- For ironing small laundry items, it is essential to work successively over the entire ironing length, in order to do a good job and lengthen the life of the ironing belts which would otherwise risk becoming quickly worn out.
- In order to ensure perfect drying and hot pressing of the laundry, the speed of use and the temperature must be adjusted according to the nature and humidity of the laundry to be ironed.

Important: at the end of the job, press STOP and the machine will automatically stop as soon as the indicated temperature is below the programmed stoppage temperature (80°C by default).

Imperative: never stop the machine if the temperature is equal to or in excess of 80°C (risk of wear of the belts).

Lastly, isolate the ironing belts from the cylinder by placing a thick dry cloth inside it (or a dry sheet folded into two) which you will iron at the top and bottom.

Do not leave damp laundry in the machine as this would lead to corrosion of the cylinder.

3.2 Procedure to be followed in the case of breakdown or poor functioning



Power cut: attention in the case of power cut (stoppage of the machine with the cylinder hot) it is essential to immediately isolate the ironing belts from the cylinder. In order to do this, enter a thick and very damp cloth (only just rinsed) into the machine by manoeuvring it with the aid of the handle provided for the purpose. Engage the handle into the orifice situated in the right panel of the machine or at the front to the right.



Other breakdowns

- If the machine won't start (cylinder not rotating) or if the machine has stopped suddenly, check that no emergency stop has been engaged including the safety tablet just above the intake belts) as well as the presence of the butterfly nut of the safety handle. After having unlocked the emergency stops, restart the machine by pressing the START button.
- If the intake safety tablet (tablet above the intake belts) is activated while the machine is in operation, the machine stops and you must then immediately restart the machine by pressing the START button (to avoid wear on the belts).

If other breakdowns or unusual noises appear (rubbing, knocking etc.) stop working and contact your retailer, precisely describing the anomaly.

3.3 In the case of prolonged stoppage (more than one week)

To prevent cylinder corrosion, particularly in the case of prolonged stoppage, it is necessary to coat with cylinder with a layer of paraffin; in order to do this, proceed as follows:

- With the machine off and the cylinder warm (110°C in cooling phase).
- Remove the top panel.
- Turn the cylinder at reduced speed.
- Coat with surface of the cylinder with several coats of paraffin so as to coat the entire surface of the cylinder.

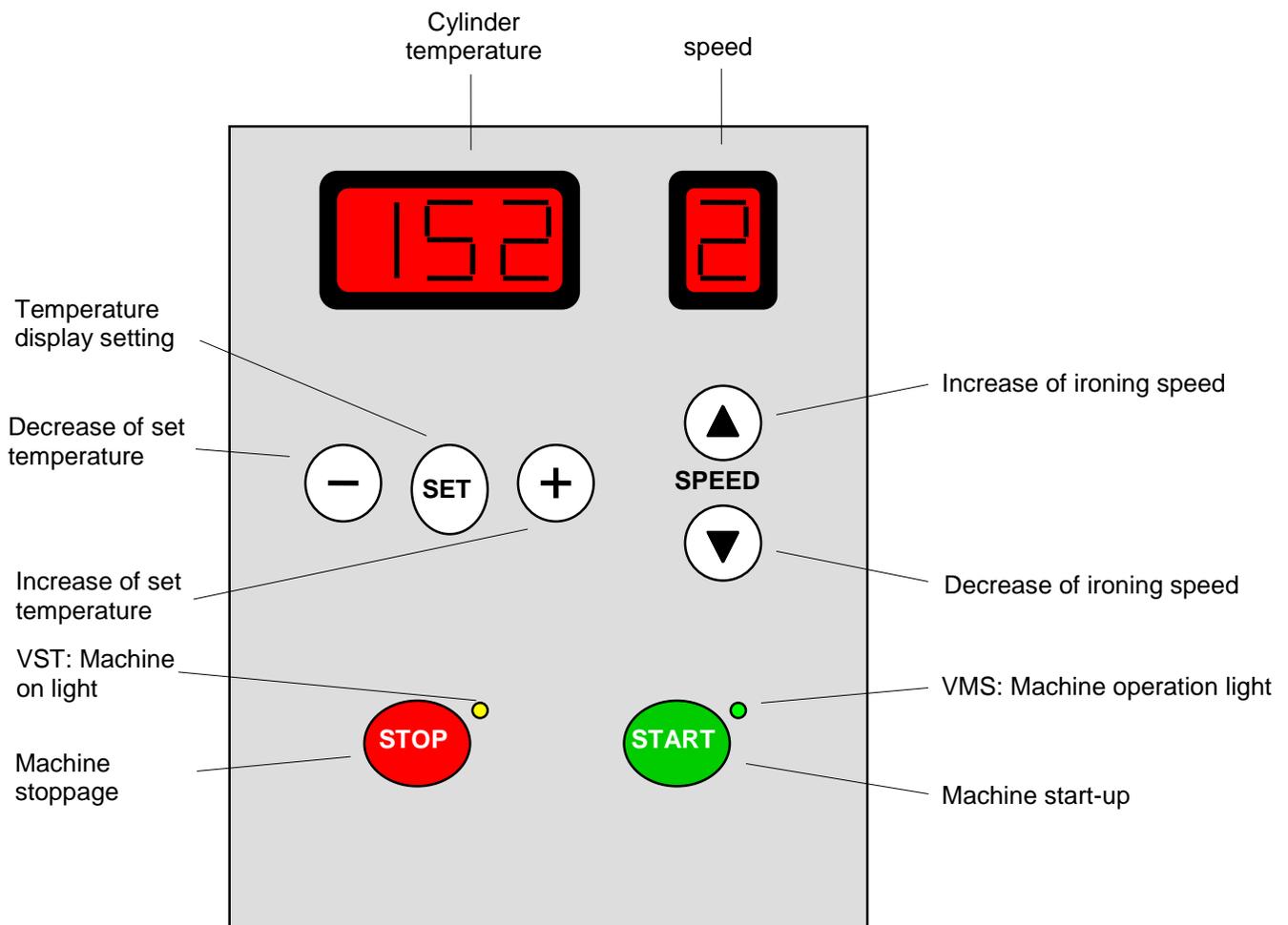
4. DESCRIPTION OF THE 'EASY CONTROL' MICROPROCESSOR

4.1 General

This microprocessor manages the functioning of dryer irons.

The same card can control the functioning of the different models as regards the cylinder diameter or means of heating (electric, gas or steam).

4.2 User interface



4.3 Use of the machine

start-up

Press the START button to start up the machine:



- the displays light up showing the current temperature and programmed speed (see chapter entitled "Cylinder rotation control")
- the VMS light comes on (VST always on)
- the ventilator starts up
- the rotation of the cylinder is activated
- after 15 seconds, heating is authorised

stoppage procedure

Press the STOP button to turn the machine off.



The stoppage procedure is in accordance with the detected temperature.

- if the temperature is \leq Automatic stoppage temperature TA (80°C by default), the machine goes off.
- if the temperature is $>$ TA temperature, only the heating is cut off. When the temperature falls to the TA temperature, the machine will stop completely.

The temperature display and the VMS light flash throughout this period.

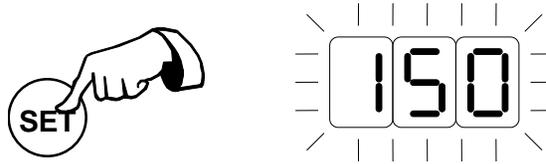
The TA value may be programmed in the factory or during installation (see "Programming of parameters").

Programming of the operating temperature

The regulation temperature may be programmed with the machine on, as follows:

- Press the SET button

The latest programmed value flashes on the display.



- Use the + and - buttons to adjust the setting. By continuing to press the button, the figure quickly goes up or down.



After 3 seconds of release of + or -, the indicated value is stored and the display returns to the detected temperature.

Programmable interval: 0...Tmax °C (32...Tmax °F)
Resolution: 1°C

The maximum value programmable by the user (Tmax) is established in the factory or during installation by a particular procedure. See "Programming of parameters".

In the heating version by a unit of resistors, in order to limit the inertia of the system a special device makes it possible to obtain a regulation around the indication point of above or below 5°C.

This turns the heating contactor repeatedly on and off upon approaching the set temperature. It is therefore normal, with this type of heating, to repeatedly extend the engagement of this contactor without adversely affecting its satisfactory operation.

4.4 Cylinder rotation control

The cylinder motor is provided with a speed variator.

7 different factory-set speeds may be selected, and speed 0 will be used for the SMART SYSTEM (patent: regulation in accordance with humidity).

- The speed may be regulated by the user with the machine ON by pressing on the 'up' and 'down' arrows. This appears on the speed display.



The latest selected value is stored even if the electricity is cut off.

Upon starting up the machine, if the established speed is other than 0, the cylinder will turn at speed 1 provided the detected temperature is below the operating temperature TF (130°C by default); once this value is reached, the programmed speed is activated.

If the temperature falls below the operating temperature while the machine is in use, the speed will adjust accordingly.

If the chosen system is 0, the cylinder will turn at speed 0 (speed defined by the sensor of the SMART SYSTEM), regardless of temperature.

4.5 Heating

heating by electrical resistors

According to the type of machine, heating by electrical resistor takes place by modulating the lighting of one or two units of resistors, controlled by the heating contactors.

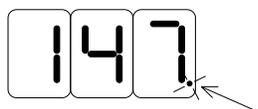
The choice of 1 or 2 resistors is made by programming a parameter (see "Programming of parameters").

Heating by a single unit of resistors

If the machine is configured with a single unit of resistors, there will be a special command procedure (engagement and release of the heating relay around the setting point) in order to reach and correctly maintain the decided temperature and avoid thermal inertia due to this type of heating.

It is therefore normal to extend the heating contactor and frequently engage with this type of regulation.

In order to indicate that the heating is active, the decimal point of the temperature units is lit up.



Heating by two units of resistors

If the machine is configured with two units of resistors, the regulation takes place by modulating the command of the 1st unit of resistor as in the case of a single unit, while the 2nd unit of resistor remains in operation if the temperature is lower than the one programmed, and it goes off upon reaching it. The 2nd unit of resistor engages again after a hysteresis which may be chosen (see "Programming of parameters").

In order to indicate that the heating is active, when the two heating units are in operation the decimal point of the units of temperature is on and fixed, while when a single unit is in operation, the decimal point flashes.

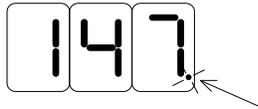


heating by gas burner

If the heating takes place by a gas burner, the machine is equipped with a special electronic device that controls the lighting and the burner control. The microprocessor directly controls the gas lighter when the temperature is lower than the one programmed.

The reset of the gas device is described on the alarms pages.

In order to indicate that the heating is active, the decimal point of the temperature units is lit.



The section entitled "Alarm procedures" describes the procedure to be adopted if there is no flame.

Heating by indirect steam

If the heating takes place by indirect steam, no regulation is carried out by the machine (the temperature is directly in proportion to the steam supply pressure of the machine).

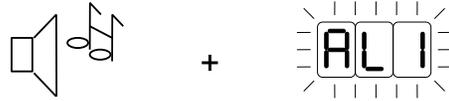
The microprocessor simply indicates the cylinder temperature but is not able to act on the heating.

4.6 Alarm message

INEFFICIENT SUCTION (AL1)

The alarm is only controlled if the card is configured with gas heating.

If the contact of the flue pressure gauge is open for 2 seconds, the buzzer is activated for 1 minute and the display shows "AL1".



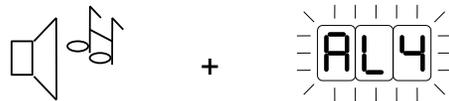
The heating is then off. You must then check the direction of rotation of the ventilators (arrows on the motor) if this is a start-up, or check your exhaust system (if the alarm disappears when you disconnect the demister outlet pipe above the machine, there is a strong possibility that your piping is too narrow or obstructed).

The alarm is not checked for the first 10 seconds of operating of the ventilator, in order to allow the air flow to normalise.

The alarm is automatically annulled when the contact of the pressure gauge returns to its position or when the machine is turned off.

THERMAL VENTILATOR (AL4)

In the case of intervention of the thermal relay of the ventilator, the buzzer is activated for 1 minute and "AL4" appears above the display:



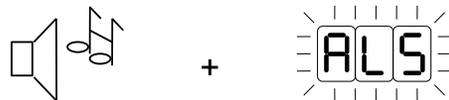
The ventilator and the heating are deactivated, and the machine stays on.

The alarm goes off automatically upon the resumption of normal conditions (contact of the thermal relay closed) or upon turning the machine off.

The causes of this alarm are generally a soiled ventilator.

VARIATOR ALARM (AL5)

In the case of intervention of the variator alarm, the buzzer is activated for 1 minute and "AL5" appears above the display:



The machine goes off automatically.

The alarm may be eliminated by re-lighting the machine or turning the power supply off and on.

This fault may arise from a surcharge of the cylinder motor due to jamming in the machine or if the cylinder motor is soiled.

NO FLAME (AL6)

The alarm is controlled only if the card is configured with gas heating.

When the burner is on or in the ignition phase, if the gas device activates its no-flame setting, the buzzer is activated for 1 minute and "**AL6**" appears on the display.



The burner ignition command remains active and the machine stays on.

In order to attempt to re-ignite the burner, press the + and – buttons simultaneously after the end of the sound signal.



When the gas device annuls the anomaly indication, the alarm is erased. If this reset is not successful, the alarm comes on again and one of the following fault conditions occurs:

- No gas supply: check if the manual valve of the gas feed is open
- Insufficient gas pressure or incorrect type of gas (see chapter entitled 'installation')
- Defective ignition electrode: change it

To cancel the alarm without re-igniting the burner, stop the machine by pressing STOP.

OVERHEATING OR SENSOR NOT CONNECTED (AL7)

If the temperature sensor is not connected or defective, or if a temperature is detected in excess of 210°C for 2 continuous seconds, the buzzer is activated for 1 minute and the display shows "**AL7**".



The machine may function and the alarm may be eliminated by turning it off.

5. PERIODICAL SERVICING



Note: all servicing must take place with the machine off, cold cylinder and selector in 0 position.

5.1 Every day, before start-up (machine cold and cylinder stopped)

- Check the contact of the sensor with the cylinder and visually check that there is no foreign body between the two.
In order to do this, exercise pressure on the sensor with your hand.
- In the case of a steam-heated machine, after having very slowly opened the pressure, it is necessary to drain the condensates of the circuit by opening the drain valve situated on the steam return piping.

5.2 Once a week, before start-up.

- Clean the inside of the sensor by rocking the sensor for a quarter turn, and remove by hand the fibres and fluff that have settled under the sensor. Return the sensor to its initial position.
- Remove the top panel (fixed with 2 screws, 6-sided male key of 5 mm) and check for the presence of bands between the pressing roller and the band guide.
If a band is missing, it must be imperatively replaced by a band of the same grade (special high temperature band).

Note: the bands are deliberately slack; when replacing them, take particular care not to stretch them as this will cause them to break prematurely.

5.3 Every 200 hours

Cleaning:

- Check the cleanliness of the sensor by making it rock 90 degrees and then put it back in place and ensure that it is correctly resting on the cylinder.
- Clean the demister turbines without forgetting the ventilation cage and the exhaust pipes (especially the elbows).
- Clean the ventilation grids of the ventilation and drive motors.
- Clean the blades used to release the laundry from the cylinder at the level of the intake tub.
- Clean the cylinder as soon as a layer of lime or washing powder deposit appears (generally white).

In the case of steam heating:

- Check the cleanliness of the filter situated on the steam input piping.
- Check the state of the rotating steam input and output casing: the circuit must be perfectly watertight (no leakage of steam or water). If a leakage appears, it is imperative to replace the defective casing. **Take care**, because when in operation the casing and steam piping are very hot!

Lubrication:

- Lubricate the bearings of the satellites with high temperature lubricant (all machine models) and cylinder bearings (on steam-heated machines only).
- Also lubricate the drive chains and pinions, not forgetting the drive chain of the presser roller of the machine.

Settings:

- Check the correct tension of the belts, which must be slightly taut and turn without sliding around the drive satellite.
- In order to re-tighten these belts, loosen the screws at the ends of the intake tablet and then slide in the tablet.
- Check the tension of the ironing belts. In fact, particularly during the first few times of operation, the belts tend to lengthen slightly.
- In order to re-tighten them, it is sufficient to use the two tensioners situated on either side of the machine, remove the side panels and then adjust the tensioners so that the ironing belts have sufficient contact with the cylinder to correctly drive it without jerking, even with the laundry.

Attention: carry out an identical tension on each of the 2 tensioners, in order to check the symmetry of this adjustment; adjust the dimension between the bracket and the belt tension nut, and this dimension must be identical on either side of the machine. On Ø32 and 20, count the number of holes on the tension cog, as this number must be identical on either side of the machine.

Take care not to stretch the belts too much, because they would run the risk of wearing very quickly.

- Check the support of the pressing roller which must not compress the cylinder too much, but be well above in order to give good ironing quality, its role being the finishing of the laundry.

Attention: perform an identical tension on each of the 2 tension springs, in order to check the symmetry of this adjustment; check the dimension between the bracket and the hooking hole of the spring on the threaded rod, and this dimension must be identical on either side of the machine.

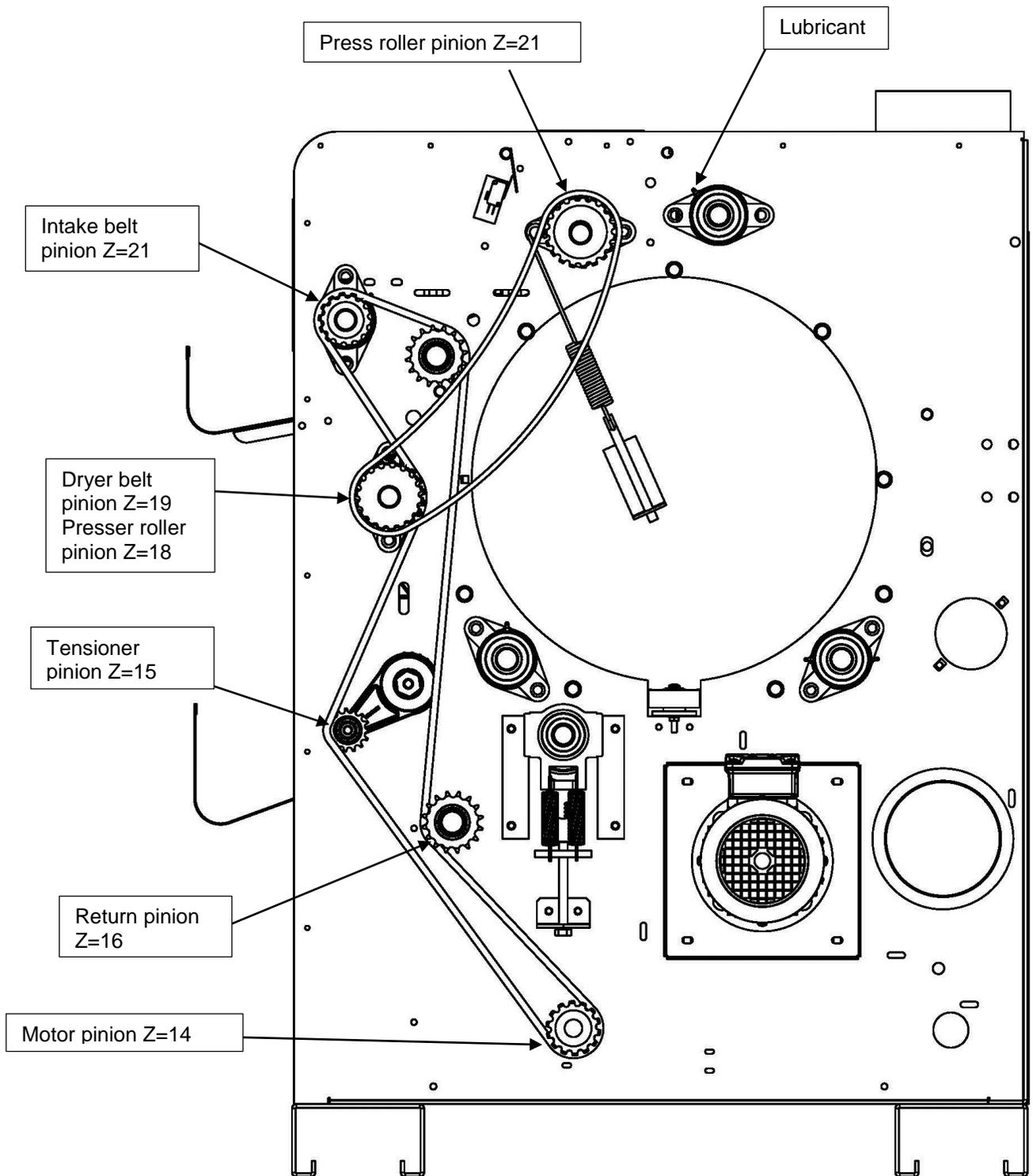
On Ø32 and 20, count the number of holes on the tension cog, as this number must be identical on either side of the machine.

Check the tension of the drive chain (right side of the machine); the chain must not "beat" because it would risk jumping. In order to retension the chain, move the adjustable pinion along its light.

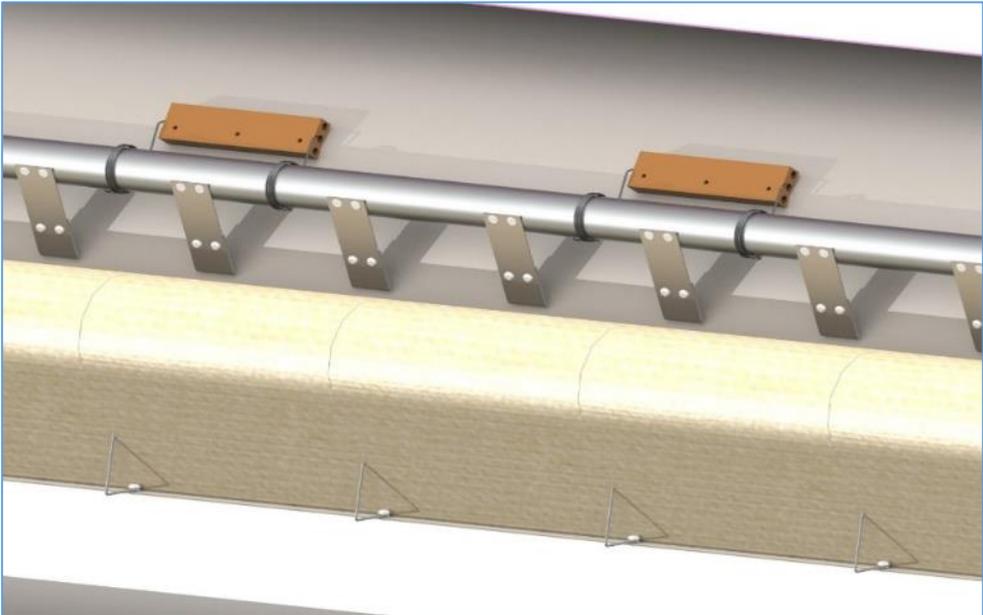
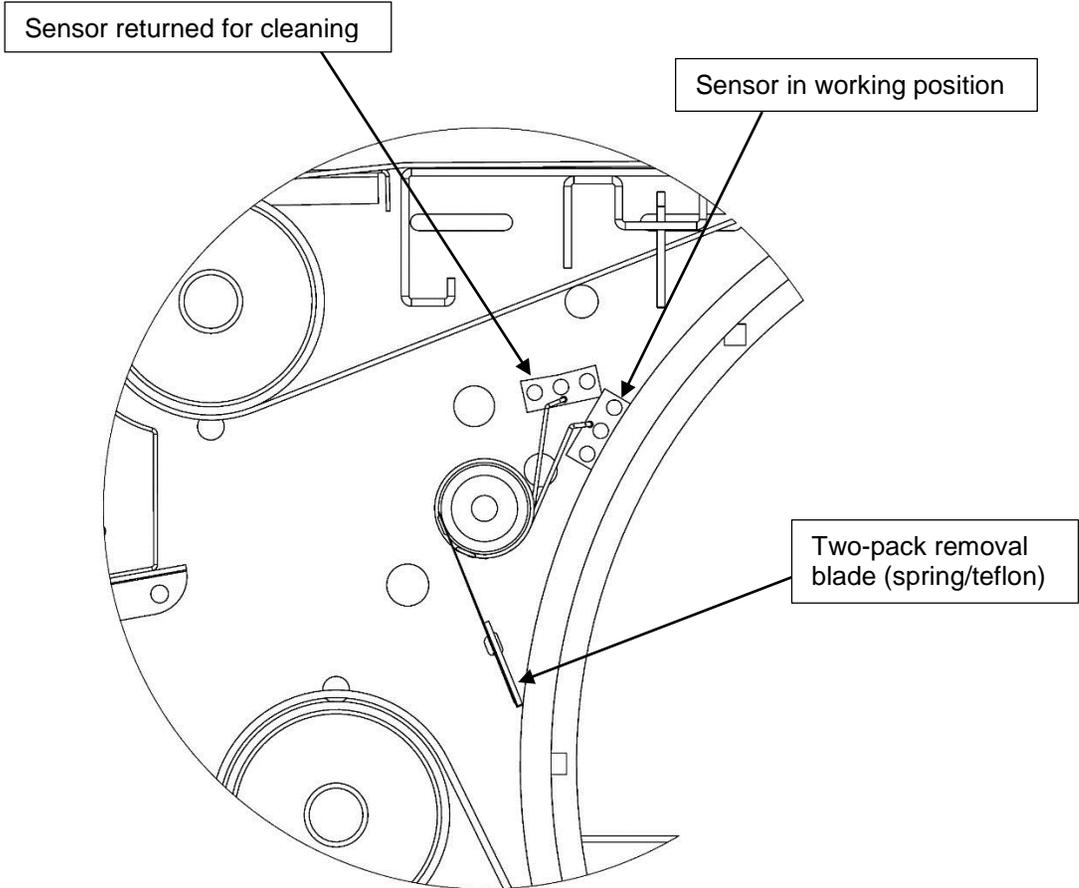
5.4 Every 2000 hours

- In the case of gas heating, check the burned gas exhaust pipes, and arrange to sweep them if necessary. Clean the gas ramp (burner), the injector and the air regulation cone.
- In the case of electrical or steam heating, check that your demister pipe is not partially obstructed and arrange for it to be cleaned if necessary.

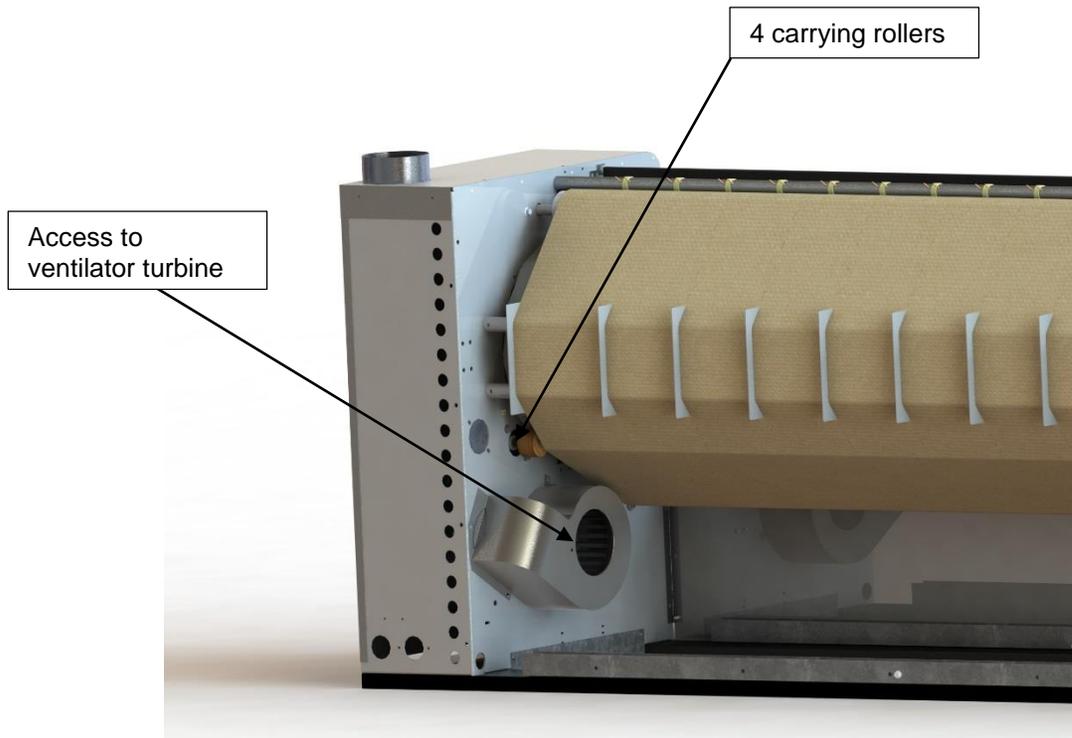
Right side view: Drive



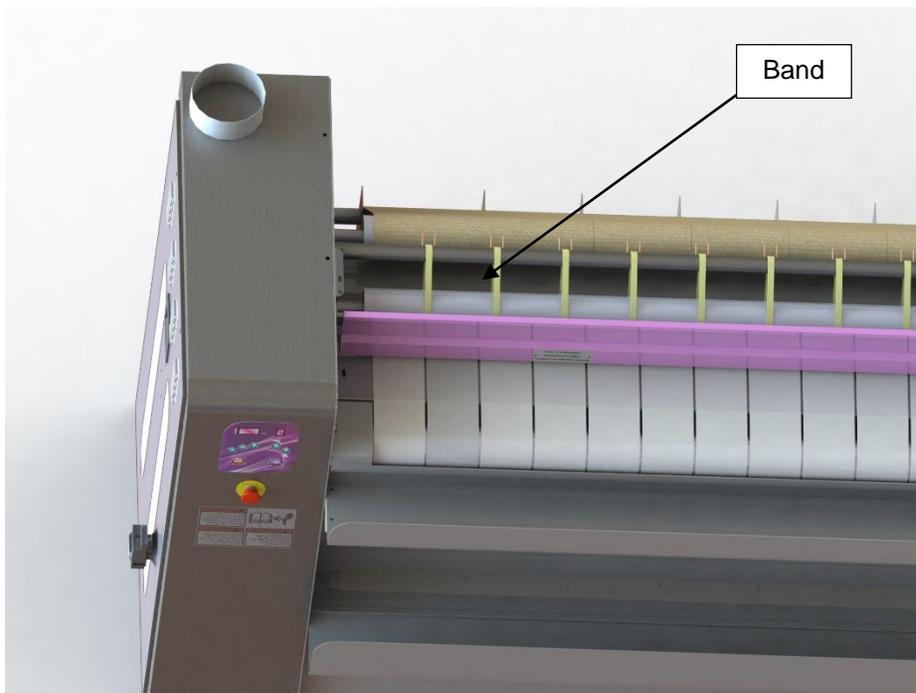
Cleaning of the temperature sensors and detaching blades



Cleaning of ventilators and check of carrying tensioners



Check for the presence of bands





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MACHINES FOR THE INDUSTRIAL LAUNDRY
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C/Comerç, 6-12 -08504 Sant Julià de Vilatorca (BARCELONA-SPAIN)
Web www.primer.es

SERVICIO COMERCIAL - SALES – COMMERCIALE – SERVIZIO POST VENDITA

Tel. +34 938 122 770 / Tel. Mob. : 608 351 407 Fax +34 938 122 771 e-mail info@primer.es

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Tel. +34 938 122 775 Fax +34 938 122 727 e-mail parts@primer.es / parts@primerlaundry.com

Asistencia Técnica – Technical Service - Assistenza Technique – Assistenza tecnica

Tel. +34 938 122 732 Fax +34 938 122 727 e-mail sat@primer.es / sat@primerlaundry.com