



WASHER EXTRACTORS

15/10/2018



Together we evolve

www.fagorindustrial.com



INDEX

- 1.- Product Range - Overview
- 2.- Classification
- 3.- Main Features
- 4.- Accessories and Options
- 5.- Self service – Payment Systems (N/A USA)
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A SOLUTION FOR EVERY CUSTOMER



High spin (LA)

FWH G-Factor 350 - 450



Fast spin (LR)

FWR G-Factor 300



Normal spin (LN)

FWS G-Factor 150-200



1.- PRODUCT RANGE - OVERVIEW



CENTRIFUGADO ALTO / HIGH SPIN (G-FACTOR 450/350)

TIPO CONTROL / CONTROL TYPE	CALENTAMIENTO / HEATING	CAPACIDAD / CAPACITY							
		25 lb	30 lb	40 lb	60 lb	80 lb	100 lb	135 lb	275 lb
Control programable Touch Plus TP2 / Touch Plus programmable Control TP2	Eléctrico, agua caliente y vapor Electric, hot water and steam	FWH-25 TP2	FWH-30 TP2	FWH-40 TP2	FWH-60 TP2	FWH-80 TP2	FWH-100 TP2	FWH-135 TP2	FWH-275 TP2
Control Touch Plus Autoservicio TP2 / Self-Service Touch Plus control TP2	Eléctrico y agua caliente Electric and hot water	N/A	N/A	N/A	N/A	N/A	N/A-	N/A-	N/A-

CENTRIFUGADO MEDIO / FAST SPIN (G-FACTOR 300)

TIPO CONTROL / CONTROL TYPE	CALENTAMIENTO / HEATING	CAPACIDAD / CAPACITY				
		25 lb	30 lb	40 lb	60 lb	80 lb
Control programable Touch Plus TP2 / Touch Plus programmable Control TP2	Eléctrico, agua caliente y vapor Electric, hot water and steam	FWR-25 TP2	FWR-30 TP2	FWR-40 TP2	FWR-60 TP2	FWR-80 TP2 NEW
Control Touch Plus Autoservicio TP2 / Self-Service Touch Plus control TP2	Eléctrico y agua caliente Electric and hot water	N/A	N/A	N/A	N/A	

CENTRIFUGADO BAJO / NORMAL SPIN (G-FACTOR 200) / (150 G-FACTOR LN-60)

TIPO CONTROL / CONTROL TYPE	CALENTAMIENTO / HEATING	CAPACIDAD / CAPACITY					
		25 lb	30 lb	40 lb	60 lb	80 lb	135 lb
Control programable Touch Plus TP2 / Touch Plus programmable Control TP2	Eléctrico, agua caliente y vapor Electric, hot water and steam	FWS-25 TP2	FWS-30 TP2	FWS-40 TP2	FWS-60 TP2	FWS-135 TP2	FWS-135 TP2
Control Touch Plus Autoservicio TP2 / Self-Service Touch Plus control TP2	Eléctrico y agua caliente Electric and hot water	N/A	N/A	N/A	N/A	N/A	N/A





1.- PRODUCT RANGE - OVERVIEW

HIGH SPIN RANGE – “H” Range

- **Soft mounted** washers, free standing.
- **High G-factor: 450-350**
- **R.P.M. between 760 – 1245**
- **Easy to install**, no needs of fixation to the floor, no extra costs.
- **Savings** due to high straction of water
(40-45% residual humidity).



FAST SPIN RANGE – “R” Range

- **Hard mounted** washers.
- **Anchoring to floor with anchoring base.**
- **High G-factor: 300**
- **R.P.M. between 700 -820**
- **Savings** due to high straction of water
(55-65% residual humidity).



NORMAL SPIN RANGE – “S” Range

- **Hard mounted** washers.
- **Anchoring to floor with anchoring base.**
- **G-factor: 200**
- **R.P.M. between 538 -458**
- **Residual humidity: 60-70%**



ONE WASHER - 2 POSSIBLE USES ANYTIME

ON PREMISE LAUNDRY

SELF-SERVICE LAUNDRY





1.- PRODUCT RANGE - OVERVIEW

Similar aesthetic for all the range of washers (2 Front panels)



H Models



R & S Models





2.- CLASSIFICATION

Heating:

- Electric (E) – Heating elements.
- Hot water (HW) – Hot water inlet, reduced operating cost if hot water is available.
- Steam (S) – By means of steam injectors, lower operating cost, investment in boiler required if not available

Size models H: 25,30 ,40 ,60 ,80, 100, 135 and 275 LB.

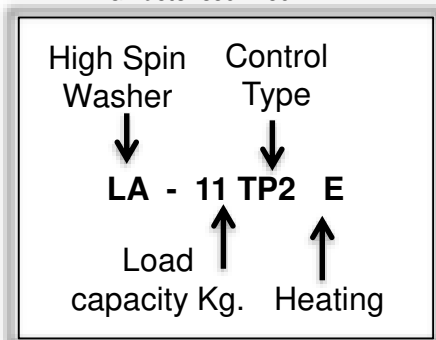
Size models R: 25, 30, 40, 60 and **NEW 80 LB.**

Size models S : 25, 30, 40, 60, 80 and 135 LB.

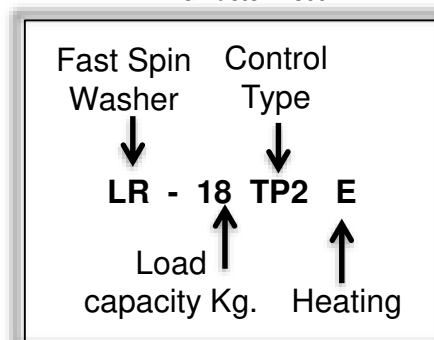
Self-service: E and HW versions (Tokens, coins and central payment)

Controls: TP2 – Touch Plus Control 2nd generation (OPL and Self-service)

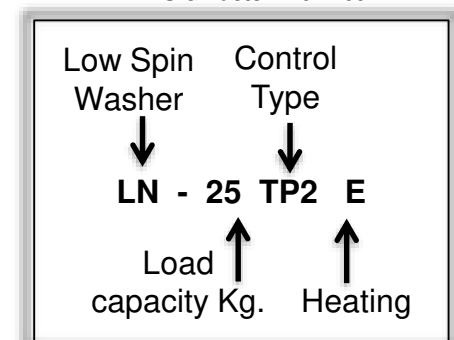
FWH G-Factor 350 - 450



FWR G-Factor - 300



FWS G-Factor 140 - 200





3.- MAIN FEATURES

3.1. – **NEW** TOUCH PLUS CONTROL

- 7” Touch Screen
- 37 available languages
- **USB port** for washer’s software updates and other applications
- **Same Touch Plus Control** for **OPL** washers and **coin** washers





3.- MAIN FEATURES

3.2a.-INTELLIGENT WEIGHING SYSTEM

Automatic adjustment of water and soap consumptions as well as energy savings, according to the estimated load which is measured electronically by the washer.

3.2b.-OPTIMAL LOADING

It is also possible to indicate manually, loaded weight.

ADVANTAGES

Energy savings

Water savings

Chemical savings

3.3.-AUTOWEIGHT:

OPTION on feet.





3.- MAIN FEATURES

3.4. – **NEW** BIG ALUMINIUM DOOR

All models offer a big door for loading and unloading

- **Door Diameter Models 25 to 30 LB**
From 11.50 inches to 14.70 inches
- **Door Diameter Models 40 to 60 LB**
From 14.70 inches to 18.25 inches



ADVANTAGES

Easy loading and unloading

Ergonomics

Washer Capacity (lb)	FAGOR 2014	FAGOR 2018
25	Ø 290	Ø 373
30	Ø 373	Ø 373
40	Ø 373	Ø 460
60	Ø 373	Ø 460
80	Ø 560	Ø 560
100	Ø 560	Ø 560
135	Ø 560	Ø 560
275	Ø 700	Ø 700





3.- MAIN FEATURES

3.5. – NEW OUTER CASING

All models offer panels in skinplate, stainless steel look.

ADVANTAGES

Reinforced stamped front and sides panels

Elegant look

Easy to clean

No fingerprints





3.- MAIN FEATURES

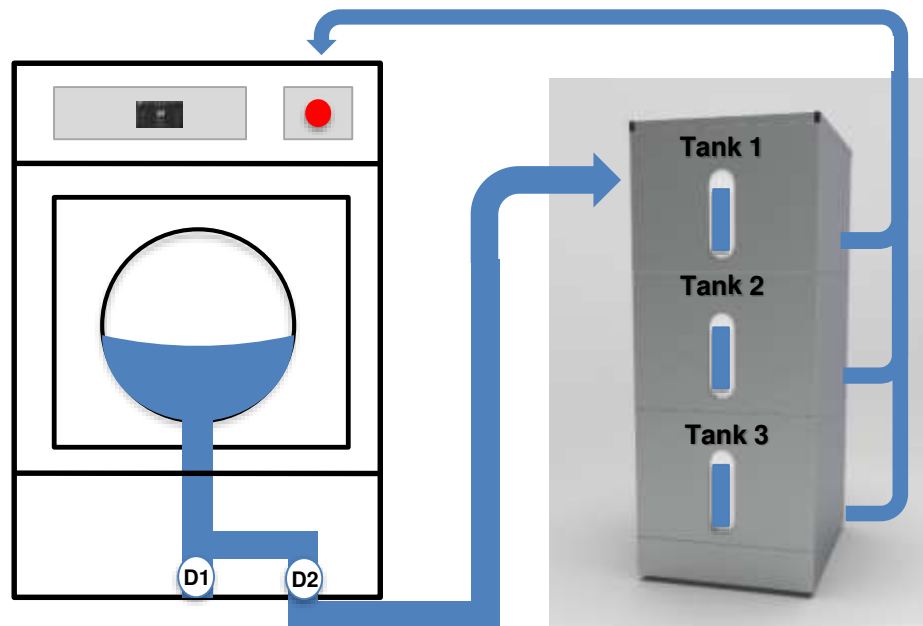
3.6.- NEW WATER RECOVERY READY

All washers are ready to control Fagor recycled water recovery tanks

ADVANTAGES

Energy-water savings

Reduced operation cost



Tanks (Models)	Tank capacity (liters)
WRT-80-1	80 Liters x 1 Tank
WRT-80-2	80 Liters x 2 Tanks
WRT-80-3	80 Liters x 3 Tanks
WRT-150-1	150 Liters x 1 Tank
WRT-150-2	150 Liters x 2 Tanks
WRT-150-3	150 Liters x 3 Tanks

WATER CONSUMPTION 75% TOWELS (LITERS)

PROGRAM	FWH-60-TP2
	ENERGE-60°C
PREWASH	60,6
WASH	40
RINSE 1	40,7
RINSE 2	34,9
RINSE 3	72,4
TOTAL liters	248,6

SAVINGS with rinses: **60%**
SAVINGS wash + rinses: **Up to 70%**

D1 – Drainage valve 1 (standard)
 D2 – Drainage valve 2 (optional). Required

Tank 1 – Water from rinses – white garments
 Tank 2 – Water from rinses - coloured garments
 Tank 3 – Soft water



3.- MAIN FEATURES

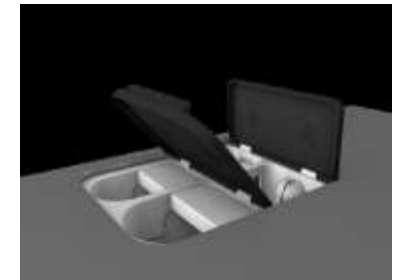
3.7.- SOAP DOSING SYSTEM

- Water ducts, as well as easy detergent connection complies with the WRAS certification
- Detergent dispenser drawer with 4 sections (5 sections for FWH-100 to FWH-275)
- Rear connections for automatic liquid dosing. **Up to 8 dosing signals** (Option 6 extra signals)

ADVANTAGES

Accurate dosing (time and delay)

Up to 14 dosing signal as maximum





3.- MAIN FEATURES

3.8. - 3RD WATER INLET AS STANDARD

All washers are equipped with a third water inlet, used for soft water (**Save filling time**) or recycled water

ADVANTAGES

Energy savings

Reduced Washing Time



LA - Small-Medium capacity	FAGOR 2019	Primus	Girbau	Electrolux
3rd water inlet	Std.	\$ Opt	\$ Opt Inteli control	\$ Opt
LA- High capacity	FAGOR 2019	Primus	Girbau	Electrolux
3rd water inlet	Std.	Std.	\$ Opt.	\$ Opt

LR & LN - Small-Medium capacity	FAGOR 2019	Primus	Girbau	Electrolux
3rd water inlet	Std.	\$ Opt.	No	\$ Opt.





3.- MAIN FEATURES

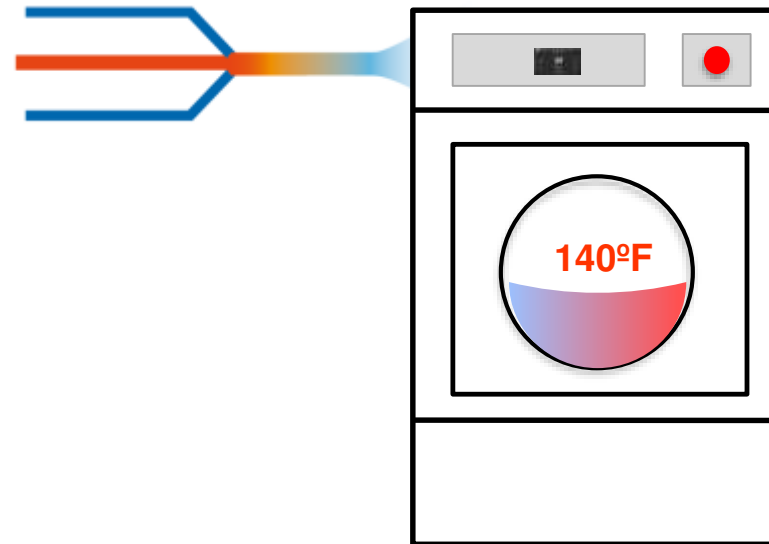
3.9. - AUTOMATIC WATER MIXER

Precise mixing of different water temperatures, thanks to accurate temperature sensor on the drum.

ADVANTAGES

Energy savings

Reduced Washing Time





3.- MAIN FEATURES

3.10.- WET CLEANING

Equipped with all features to use WET CLEANING programs

- Fully programable control
- Accurate control of temperatures and levels of water
- Washing speed adjustable very low (15 rpm)
- Rhythm on/off of 1sec/1sec
- Manual control of each dosing signals





3.- MAIN FEATURES

3.11.- SMALL PERFORATIONS IN THE RIBS OF THE DRUM

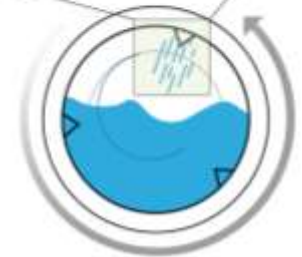
Water has a cascade effect on the load thanks to perforated ribs

ADVANTAGES

Maximizes the washing quality with the shortest cycle time possible

Increases considerably the mechanical action inside the drum

Reduces the need of water



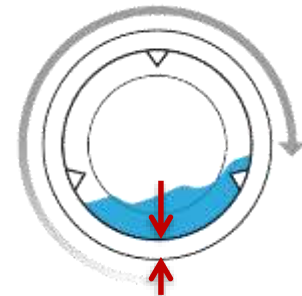
3.12.- DRUM AND TUB'S EFFICIENT DESIGN

A narrow gap between them, as well as the overuse of chemicals and water

ADVANTAGES

Reduces the energetic consumption to heat up the water

Increases considerably mechanical action inside the drum





3.- MAIN FEATURES

3.13.- BALANCE SYSTEM

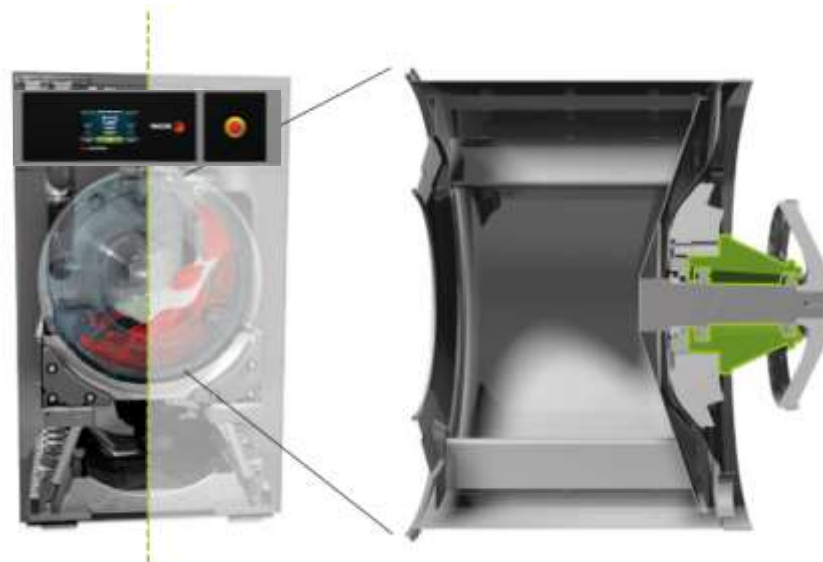
Thanks to an advanced technological development, and by means of the inverter, the washers detect the imbalance at an early stage

ADVANTAGES

Operation is much smoother, making components long-lasting

Reduced Washing Time

Energy savings





3.- MAIN FEATURES

3.14.-TRACEABILITY

All washing process (Temperatures, water levels) **is stored** in the washer and can be downloaded from USB port or with FagoRemote.

ADVANTAGES

- Maintain customer trust and confidence
- Data for liability claim protection
- Data integrity
- Respond quickly in case any malfunction





3.- MAIN FEATURES

3.15.- TECHNICAL MENU

- **Complete technical menus**

- Failure self-diagnosis systems (Auto-test)
- Alarms
- Saving of information (cycles, time working, spinnings, alarms, etc...)
- Restricted Access areas



3.16.- HINGED PANEL

Ergonomic access to control panel parts





3.- MAIN FEATURES

3.17.- DIMENSIONS

Dimensions for High spin **H models**

- **25 lb washers** extractors with dimensions **narrower than 28.50 inches**
- **30 lb washers** extractors with dimensions **narrower than 31.50 inches**
- **40 lb washers** extractors with dimensions **narrower than 35.45 inches**

Dimensions for fast spin **R models** & normal spin **S models**

- **25, 30 and 40 lb. washers** extractors with dimensions **narrower than 31.50 inches**
- **60 lb. washers** extractors with dimensions **narrower than 35.45 inches**

ADVANTAGES

Washers pass through main doors dimensions





3.- MAIN FEATURES

3.18.- TOP QUALITY AND REPUTED BRANDS

- Ball bearings: NSK
- Radial Seals : V-RING seals (external Viton)
- Radial Seals from 100 to 275 lb. washer: V-RING seals (Viton)
- **Inverter: Delta**
- Contactors: Siemens / ABB

3.19.- VOLTAGE

- **Electric heated models** 25, 30 and 40 lb are as standard **3 phase** but **can be connected to single phase net**
- **Hot water and steam heated** 25, 30, 40, 60 and 80 lb are **single phase**. (Except FWH-80 model)
- **All washers are 50/60Hz**





3.- MAIN FEATURES

3.20.- SAFETY LATCH ON DOOR





ADVANTAGES

Safe and robust door lock design

Easy to close and open



3.21.- CERTIFICATES AND HOMOLOGATIONS

- WRAS approvals (UK). 
- ETL certificate (USA and Canada) 
- CE. 
- EAC. 





4.- ACCESSORIES AND OPTIONS

OPTIONS FOR “H” MODELS, “R” MODELS & “S” MODELS

- **Double drain kit**

Allow the recovery of the water, with important savings

- **Drain pump kit (25 and 30 lb).**

Helps to drain water when drainage is in an upper position from the floor or other...

- **“NC” Normally closed Drain**

In case of any electric failure water will be hold inside the drum





4.- ACCESSORIES AND OPTIONS

OPTIONS FOR “H” MODELS, “R” MODELS & “S” MODELS

- **Ship Voltage (380-400V/III/50-60 Hz/no neutral)**

Most of washer models ready to install on a vessel or oil rigs

- **6 extra signals for liquid dosing**

Up to 14 dosing signal

- **Silicone gasket on door**

Ideal for oil stains (Example : Massage table linens and towels, Beauty salon and haidressing towels, ...)





4.- ACCESSORIES AND OPTIONS

OPTIONS FOR “H” MODELS, “R” MODELS & “S” MODELS

- **Reverse door**

Allow to adjust the opening sense to desired or needed

- **Automatic unlock device**

Allow to open washer door in case of electric failure

- **Stainless steel AISI-304 case**

Elegant look





4.- ACCESSORIES AND OPTIONS

OPTIONS FOR “H” MODELS, “R” MODELS & “S” MODELS

- **Printer**

Traceability. Washing cycles data printed on a paper



- **Connectivity ready as standard**

Optional WIFI module. Wireless communication with washer for management (input / output data)





4.- ACCESSORIES AND OPTIONS

OPTIONS FOR “H” MODELS

- Feet (for models 25 to 80)



- Plinths for 25, 30, 40, 60 and 60 lb. models

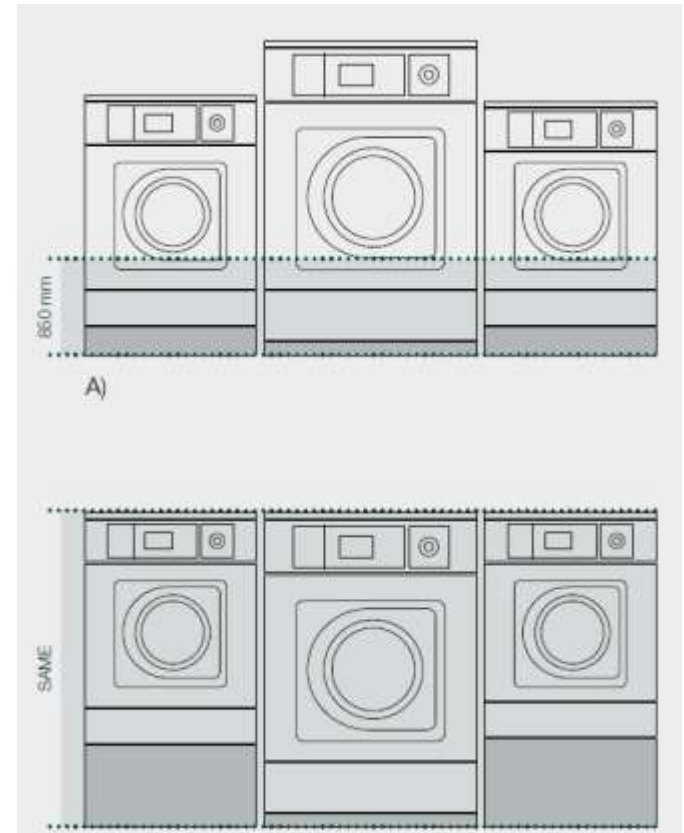
Same level of the loading door = 33.50 inches

Ergonomics

- Plinths for 25, 30, 40, 60 and 80 lb. models
(Self service laundries)

Same “washer + plinth” height for all

Aesthetic





4.- ACCESSORIES AND OPTIONS

OPTIONS FOR “H” MODELS

- Automatic weighing system.

Automatic adjustment of water and soap consumptions as well as energy savings, according to the load which is measured by the washer.

4 weighing sensors, one per each foot of washer

Efficiency: Up to 30% savings





4.- ACCESSORIES AND OPTIONS

OPTIONS FOR “H” MODELS

- **Double heating electric-steam kit (for electric heated models H-100 and H-135)**

Energy savings – operational costs

Option of electric heating in case steam generator failure

- **Bottom cover for 100, 135 and 275lb washers.**

- **Tilting System*** – both forwards and backwards for an easy loading/unloading in H-100, H-135 and H-275 models. **Weighing system is not compatible with tilting system*

Ergonomics

Reduced operation costs



4.- ACCESSORIES AND OPTIONS

OPTIONS FOR FAST SPIN “R” MODELS & NORMAL SPIN “S” MODELS

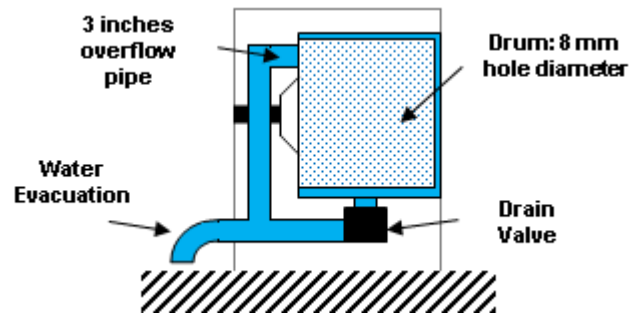
- Anchorage base

OPTIONS FOR NORMAL SPIN “S” MODELS

- 8 mm diameter holes drum. SLUICE washers

Washer extractors frequently used by medical and social care centers.

Essential for washing sheets and other... containing solid contamination such as faecal remains or vomit.



- Double heating electric - steam kit (model S-135 Electric)

Energy savings – operational costs

Option of electric heating in case steam generator failure



5.- SELF SERVICE - PAYMENT SYSTEMS

SELF-SERVICE WASHER

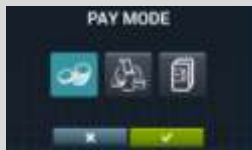


“TP2” TOUCH PLUS CONTROL
SELF SERVICE

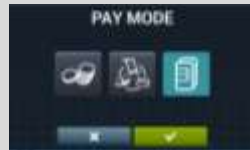
FAGOR PAYMENT SYSTEMS



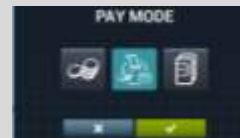
Coin / Token



Central Payment



Remote payment
IOT SOFTWARE

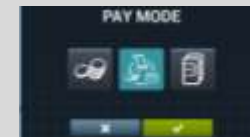


Fagoreremote

ALL CAN BE CONNECTED TOGETHER – Only first selected System will work during selected cycle



OTHER PAYMENT SYSTEMS



OTHER SUPPLIERS PAYMENT SYSTEMS COMPATIBLE WITH FAGOR

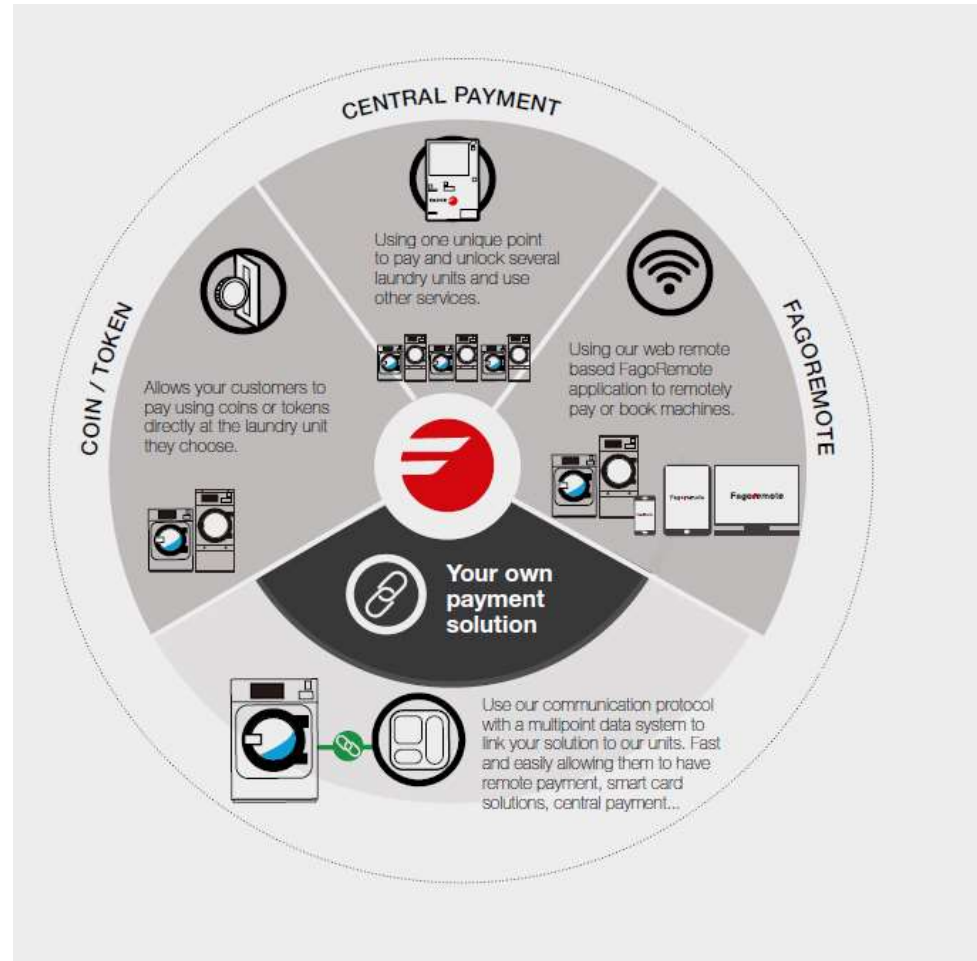


5.- SELF SERVICE - PAYMENT SYSTEMS –

SELF-SERVICE WASHER



“TP2” TOUCH PLUS CONTROL
SELF SERVICE





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7.- SALES ARGUMENTS

INNOVATION TO YOUR DISPOSAL

kare GENERATION

01

CONTROL

The brain of your machine, under your control.

02

BUILT FOR YOU

Designed for your well being and comfort.

03

CONNECTIVITY

A remote communication so you know what happens.

04

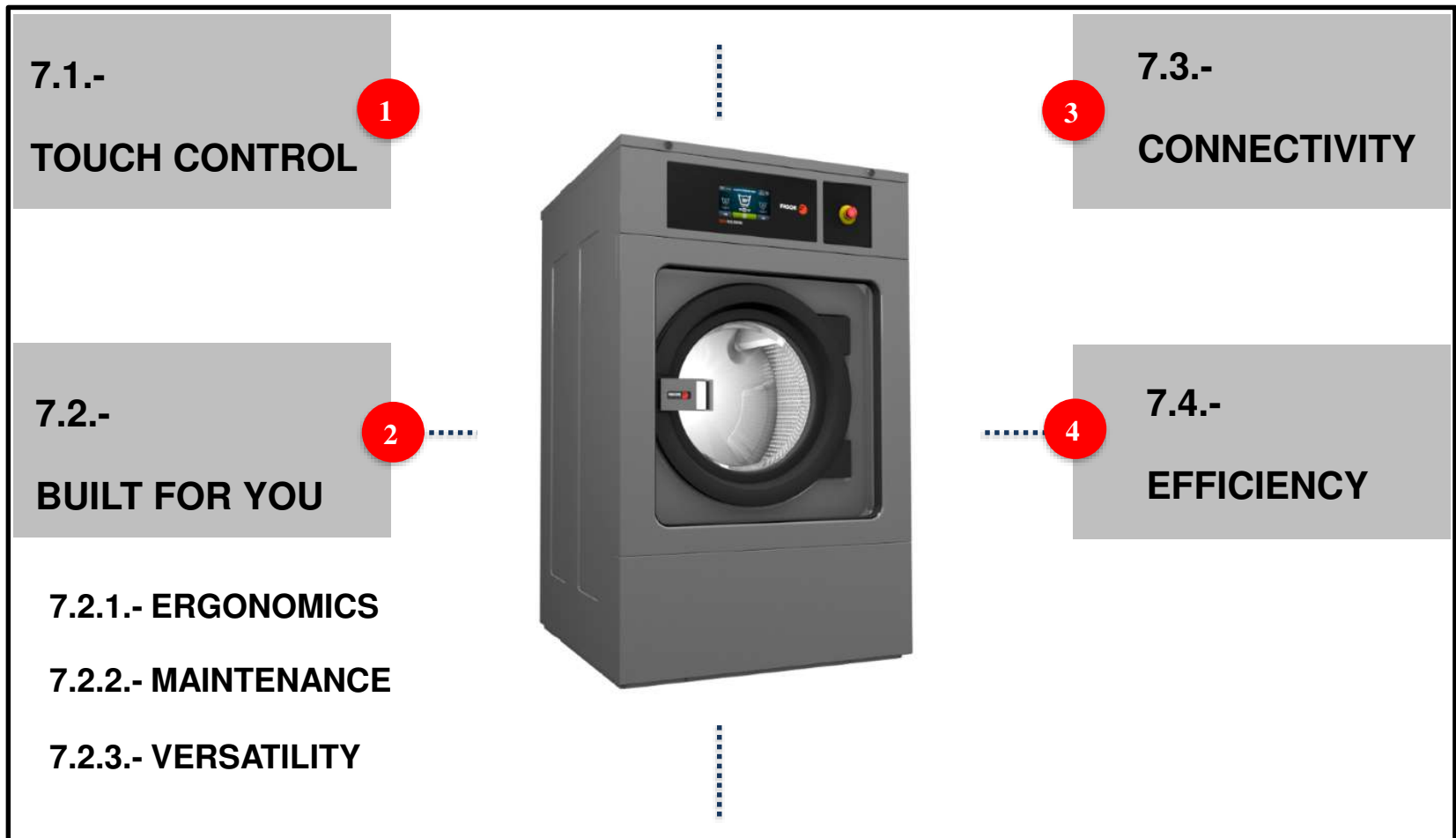
EFFICIENCY

Technological advances for a more sustainable machine.





7.- SALES ARGUMENTS





7.- SALES ARGUMENTS

7.1.- TOUCH CONTROL



User friendly and totally programmable **7” Touch Plus Control**

USB Connection. PC software free of charge for programing, traceability, data analyses....

Advertisements shown on display (very useful for Self-service)

37 languages

8 dosing signals as standard + optional 6 extra dosing signals



Features	FAGOR 2019	Primus	Girbau	Electrolux
Touch control	Std.	No	No	No
Fully programable Control Medium & Low spin washers	Std.	\$ Opt. XControl +	\$ Opt.	\$ Opt.
Traceability	Std.	\$ Opt.	\$ Opt	\$ Opt





7.- SALES ARGUMENTS

7.2.1.- ERGONOMICS

2

Biggest door diameters in the market

Helpfull, mainly for big capacity washers, for loading and unloading



Washer Capacity (lb)	FAGOR 2014	FAGOR 2019	Primus	Girbau	Electrolux
25	Ø 290	Ø 373	Ø 410		Ø 365
30	Ø 373	Ø 373	Ø 410	Ø 327	Ø 395
40	Ø 373	Ø 460	Ø 460	Ø 426	Ø 435
60	Ø 373	Ø 460	Ø 460	Ø 400	Ø 435
80	Ø 560	Ø 560	Ø 540	Ø 426	Ø 435
100	Ø 560	Ø 560	Ø 540	Ø 558	Ø 535
135	Ø 560	Ø 560	Ø 540	Ø 558	Ø 535
275	Ø 700	Ø 700	Ø 530-650	Ø 684	Ø 700





7.- SALES ARGUMENTS

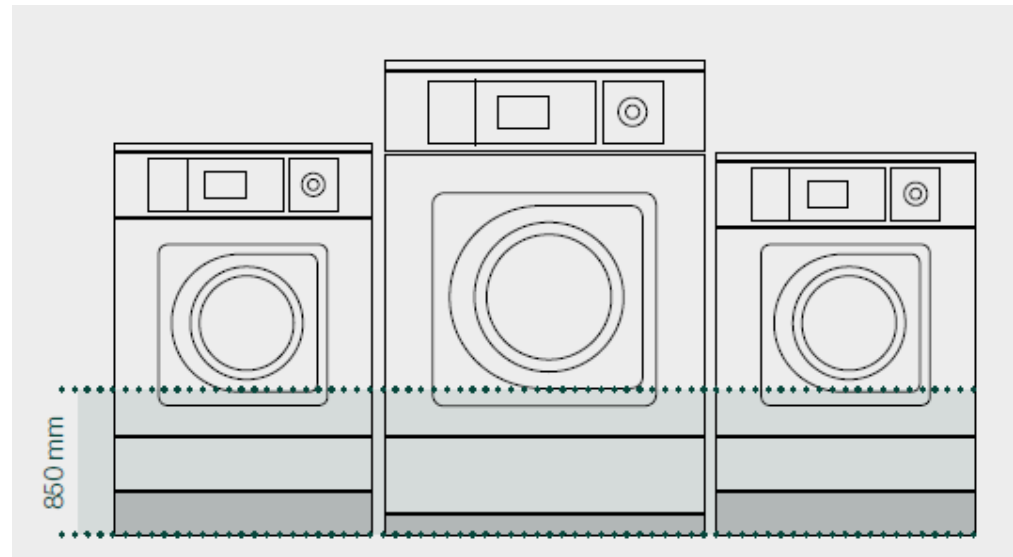
7.2.1.- ERGONOMICS

2

Easy opening/closing system for door lock

Plinths for 25, 30, 40, 60 and 80 lb. models

Same level of the loading door = 33.50 in.





7.- SALES ARGUMENTS

7.2.2.- EASY MAINTENANCE & REPAIR 2

Hinged panel

Easy and ergonomic access to control panel parts

Same parts

More of the critical parts are same for all models (contactors, electronic devices, gear ...)

Easy Access to parts for reparability

Washers are design to make easier maintenance and reparability





7.- SALES ARGUMENTS

7.2.3. - VERSATILITY

2

MAKE TO ORDER.

New possibility to customize the machines from factory with the available options

OPL < -- > COIN

Standard model easily transformable

ELECTRIC -- > HOT WATER

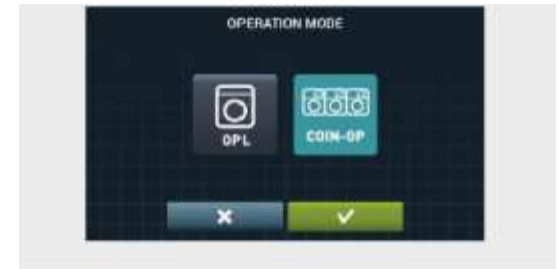
Standard Electric model easily transformable to Hot Water model

DRAIN VALVE -- > PUMP

Standard model easily transformable . Easy access and service

WET CLEANING

All washers have all features to use WET CLEANING programs





7.- SALES ARGUMENTS

7.3.- CONNECTIVITY

3

Connectivity ready as standard.

All the models are ready to be connected through WiFi module.

FagoRemote: Fagor IoT for:

- **Dealers: Statistics, technical service, groups of machines**

- **Management of laundries:**

- OPL laundries
- Hospitals
- Self-service laundries

- **Self-service laundries users:**

remote payment systems, booking of machines, loyalty programs





7.- SALES ARGUMENTS

7.4.- EFFICIENCY



Optimal loading

Water Recovery tanks ready

Low water consumption

Standard washing program consumes less than 10 liter of water per kg. and cycle. **Intelligent Weighing System / Automatic weighing system**

Possibility of configuring three levels of savings

LA - Small-Medium capacity	FAGOR 2019	Primus	Girbau	Electrolux
Intelligent weighing system	Std.	-	-	Std.
Automatic Weighing system	\$ Opt	\$ Opt Mod.18 a 23	\$ Opt HS6024 Inteli	\$ Opt

LA- High capacity	FAGOR 2019	Primus	Girbau	Electrolux
Intelligent weighing system	Std.	-	-	Std.
Automatic Weighing system	\$ Opt	\$ Opt.	\$ Opt.	\$ Opt





7.- SALES ARGUMENTS

7.4.- EFFICIENCY - G-FACTOR

High G-FACTOR for all range of washers comparing with competitors

- **G-FACTOR 450** for High spin washers
- **G-FACTOR 300** for Medium spin washers
- **G-FACTOR 100** for Low spin washers

HIGH G-FACTOR - > REDUCED RESIDUAL MOISTURE - > REDUCED DRYING TIME

Fagor Washer	G- FACTOR							
Type / Capacity (lb)	25	30	40	60	60	100	135	275
High Spin "H"	450	450	450	450	450	450	450	350
Medium Spin "R"	300	300	300	300	300	X	X	X
Low Spin "S"	200	200	200	200	200	X	150	X

Fagor Washer	FAGOR 2019	Primus	Girbau	Electrolux
R models (G-Factor)	300	200	200	200
S models (G-Factor)	200	100	100	100





7.- SALES ARGUMENTS

7.4.- EFFICIENCY - G-FACTOR

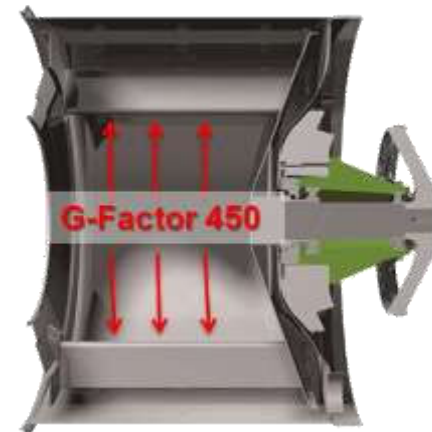
“” Washer models **G-FACTOR 450**

Highest G-Factor in the Market

Reduced linen water retention

Reduced drying times

Reduced operation costs – Energy Savings

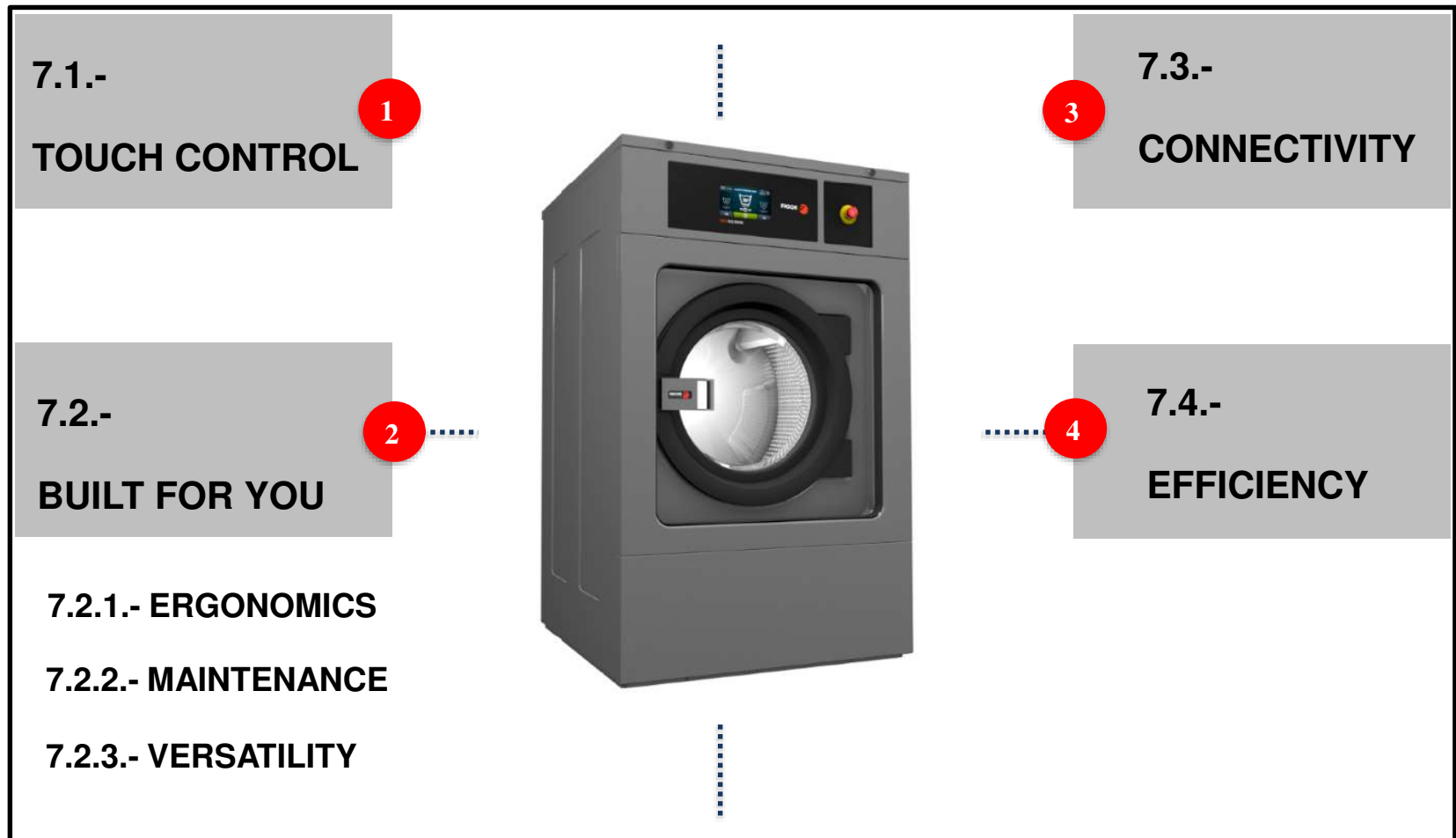


Washer Capacity (lb)	FAGOR 2019	Primus	Girbau	Electrolux
25	450	400	-	450
30	450	400	351	450
40	450	400	354	450
60	450	400	400	450
80	450	360	400	400
100	450	360	381	350
135	450	360	387	350
275	350	350	386	300





6.- SALES ARGUMENTS





ONNERA GROUP



Together we evolve

www.fagorindustrial.com

