

# CONCRETE BATCHING PLANT MODULMIX 2000



MODULMIX range is based in a modular concept as a complete solution to easy transport and quick assembly by combining heaviness, reliability and high production capacity. The plant is divided in two different areas, the aggregates dosage and storage module and on the other hand the mixing area, with different options depending on the production requirements.

The main features of Modulmix batching plants are:

- Modular set of hoppers including metallic walls for feeding ramp. The structure is completely folded during transport.
- Mixing area with different options depending on requested production capacity.
- Fully pre-installed at our premises to allow a fast assembly.
- A control cabin may be proposed as an optional to install our information system.
- Combine heaviness, reliability and versatility.

## MAIN CHARACTERISTICS

- Wet way batching plant.
- 2 m<sup>3</sup> per batch.
- Twin shaft mixer FTS 3000/2000.
- Aggregates group compact modular design. Total capacity 60-120 m<sup>3</sup>.
- Dosage of aggregates by weighing conveyor 2 m<sup>3</sup>.
- 1,000 kg cement scale.
- 500 lts water scale.
- Water feeding system through 1.5" batching-counting unit.
- Water feeding system through 5.5 kw pump + pressure control -as an option.
- Pneumatic system equipped with 7.5 kw compressor.
- Control cabin with air conditioning system –as an option.
- Power and control system included.
- Required area for installation 400 m<sup>2</sup>.



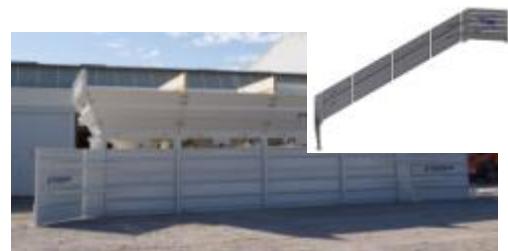
#### SET OF 4 MODULAR HOPPERS IN A LINE

- Total capacity of set 60-120 m<sup>3</sup>.
- Made of 5 mm steel plate.
- Dimensions of set 12,000 x 3,800 mm.
- Support structure made of steel structural profiles.
- Aggregate discharge through 10 gates operated by pneumatic cylinders.
- Set equipped with two electric vibrators in sand compartments.
- Ready for installation of humidity measurement.



#### SUPPORT WALLS FOR LOAD RAMPS FOR ACCES TO HOPPERS SET

- Placed to feed aggregates group through one or both sides (only for 60 and 80 m<sup>3</sup> models).
- Made of 5 mm steel plate.



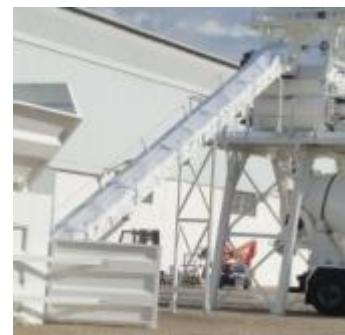
#### AGGREGATES WEIGHING SYSTEM

- Weighing hopper with load capacity per cycle of 2 m<sup>3</sup>.
- Made of 5 mm steel plate.
- Weighing system fitted with 6 stainless steel load cells of 3,000 kg.
- Belt structure fabricated in 6 mm folded steel plate.
- SIEMENS Simogear 11 kw geared motor.



#### AGGREGATES LIFTING SYSTEM

- Aggregates lifting belt to mixer 800 mm ribbed belt.
- Belt structure made of 5 mm steel plate.
- SIEMENS Simogear 15 kw geared motor.
- Emergency stop switch.
- Anti-return bearing.



#### SUPPORT STRUCTURE FOR MIXING AREA

- Made of steel laminated profiles.
- Support structure for cement and water scales.
- Inspection walkways for scales structure with access ladder.
- Access stair from ground level to main platform.



### CEMENT AND WATER DOSING AND WEIGHING SYSTEM

- Cement weighing scale with load capacity of 1,000 kg.
- Made of 3 mm steel plate.
- Weighing system fitted with 3 stainless steel load cells of 750 kg.
- Equipped with pneumatic vibrator.
- Cement discharge through Ø250 mm butterfly valve with pneumatic actuator.
- Concrete mixer connection with flexible hose.
- Water weighing scale with load capacity 500 liters.
- Made of 3 mm stainless steel plate.
- Weighing system fitted with 3 stainless steel load cells of 300 kg.
- Water discharge through 6" pneumatic butterfly valve.
- Additional water feed system through batching-counting unit, 1.5" programmable operation, opening / closing through pneumatic valves.
- Water feeding system with 5.5 Kw pump + pressure control adjustment system.



### MIXING SET

- Horizontal twin shaft mixer FTS 3000/2000.
- Omega-shaped tank clad with cast iron plates.
- Discharge system centred on tank base.
- Gate fitted with non-drip rubber seals.
- 1.5 kw hydraulic unit. Manual auxiliary pump for emergencies. 24 V electrovalve.
- 6 mixing arms and 2 scraping arms per axle.
- NY-HARD cast iron panel linings.
- Side cladding in CR-321 steel.
- Mixing paddles in NY-HARD cast iron.
- Centralized grease lubrication equipment for seals.
- Maintenance gate with electrical safety system.
- 2 x 37 kw SIEMENS mixing motors.
- 380 V electrical installation with junction box.
- Mixer discharge cone equipped with electric vibrator



## COMPRESSED AIR INSTALLATION

- 10 HP compressor with air receiver of 500 litres.
- Sealed cabinets for pneumatic electro valves.
- Maintenance access from main structure.
- Pneumatic system equipped with filtration and lubrication.
- Refrigerated dryer as an option.



## POWER AND CONTROL PANEL

- Sealed cabinet located in dosing shed.
- Control display by touch panel on cabinet doors.
- Automatic and manual operation.
- Equipped with SIEMENS electric mechanisms.
- Electrical unit pre-installation and required assembly materials.



## K2 SYSTEM FOR AUTOMATION AND MANAGEMENT OF CONCRETE BATCHING PLANTS

- Load control via wet path.
- K2 controller with 48 outputs/24 inputs
- Four analogue/digital channels.
- Four quick counters.
- Two 24-relay 8A cards.
- "K2" Automation and management program.

### System components:

- PC + TFT monitor.
- Keyboard, optical mouse and printer.
- DVD recorder.
- UPS.



### Features of « K2 » system:

- Dynamic control of production flows.
- Automatic activation of vibrators and fluidisers.
- Weight safety control in scales.
- Dynamic corrections in cycles.
- Recording of manual actions in the console.
- Quick batching of products for consignment.
- Modification of recipes and primary keys.
- Generation of orders and printing of dispatch notes.
- Control of movements in the warehouse. Data logger system.
- Smart analysis system.



## OPTIONAL ACCESORIES

### SILOS FOR CEMENT STORAGE

#### Frumecar standard models

- Fixed silos for container transport. Capacities of 23, 43 and 55 Tm.
- Bolted silos for container transport. Capacities of 50, 70, 90, 112, 135, 150 and 175 Tm. Additional options up to 1000 Tm.
- Telescopic bolted silos. Transport by truck (two silos for truck). Capacity of 55 Tm.
- Fixed silos Ø 2,500 – 3,500. Capacities between 30 and 150 Tm.



#### Frumecar cement silos characteristics

- Vertical access ladder in two sections with intermediate landing platform.
- Safety barrier on upper part.
- Manual butterfly opening/closing system.
- Filing pipe 3.5" diameter.
- Filing curve 4" diameter cast steel with bolted flanges.
- Set of 4 fluidisers and electro valve on the bottom part of silo.
- Safety valve on the upper part of the silo.

### CARTRIDGE-TYPE FILTER FOR CEMENT

- WAM Silotop filter WAM (Italy).
- Cartridge-type filter in aluminium and polystyrene with cartridges in corrugated synthetic material to obtain a highly filtering surface with minimum dimensions.
- Pneumatic cleaning system that uses timed pulses of compressed air.
- Filtering surface area: 24.5 m<sup>2</sup>
- Electronic control panel.
- Voltage: 220/380 V.
- Working pressure: 6-7 bar.
- Support frame for installation on silo.



### SCREW CONVEYOR FOR CEMENT

- Brand WAM (Italy). Optimized to Frumecar.
- Diameter: 273 mm.
- Length: 13,200 mm.
- Manufactured with steel spiral and tube.
- 18.5 kw, 290 rpm geared motor, directly connected to axle.
- SIEMENS electric motor.
- Production capacity: 90 Tm/h.
- Intermediate supports with bearing.
- Sleeve and clamps for the discharge.



### FILLING SYSTEM FOR CEMENT SILOS

- Cement receiving hopper 300-1,500 kg capacity. Fabricated in steel plate. Equipped with breaking-bags system.
- Horizontal screw conveyor for cement extraction Ø193 mm. Manufactured with steel spiral and tube. 4 kW geared motor. Production capacity 17 Tm/h.
- Vertical screw conveyor for elevation to silos Ø193 mm. Manufactured with steel spiral and tube. 9.2 kW geared motor. Production capacity 17 Tm/h.
- SIEMENS electric motors.



#### AUTOMATIC FEEDING SYSTEM FOR AGGREGATES

- Aggregate receiving hopper 4.5 m<sup>3</sup> capacity, made of steel plate.  
Equipped with an electric vibrator.
- Lifting belt to aggregates hoppers rubber belt, equipped with 7.5 Kw SIEMENS geared motor.
- Electric rotating distributor for aggregates.
- Electric control panel.



#### AGGREGATES MOISTURE HIDRONIX SENSOR

- Ready for installation in aggregates hoppers.
- Hydro-probe sensor type.
- Connection cable 4 meters length.
- Support and washer fixation.



#### MIXER MOISTURE HIDRONIX SENSOR

- Ready for installation in mixer.
- Hydro-mix VIII sensor type.
- Connection cable 4 meters length.
- Support and washer fixation.



#### ADMIXTURES DOSING SYSTEM

- Box for two ½" pneumatic pumps.
- Counter M-25 3/4.
- Terminal block for electric connections.
- Air inlet regulation filter.
- Electro valve for pump activation.
- ¾" sampling tap.
- Check valve with ¾" key.



#### ADMIXTURES WEIGHING SYSTEM

- Filling pneumatic pumps of 1/2".
- Electric junction boxes with terminal block.
- Air inlet regulation filter.
- Electro valve for pump activation.
- ¾" sampling tap.
- Metallic box for admixtures scales.
- 24 litres plexiglas containers (other sizes available).
- 50 kg loading cells.
- Pneumatic pumps for admixtures dosing to mixer.



## TECHNICAL DATA

Capacity per batch	2 m <sup>3</sup>
Production capacity	80 m <sup>3</sup> /h
Number of aggregates hoppers	4-5
Aggregates capacity	60-120 m <sup>3</sup>
Number of cement silos	4
Cement scale	1,000 kg
Water scale	500 lts
Water batching counter	1.5"
Installed power (2 silos)	149 kw
Simultaneous power	129 kw
Mixer type	Twin shaft mixer

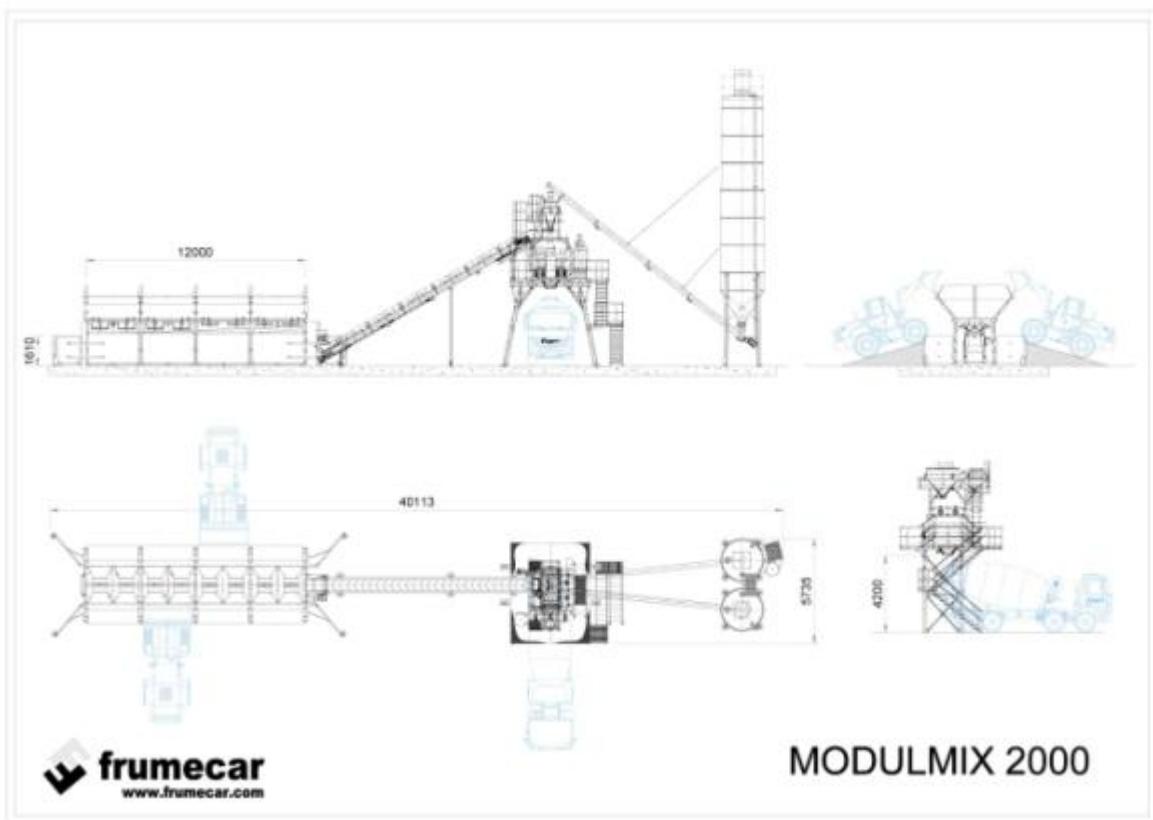
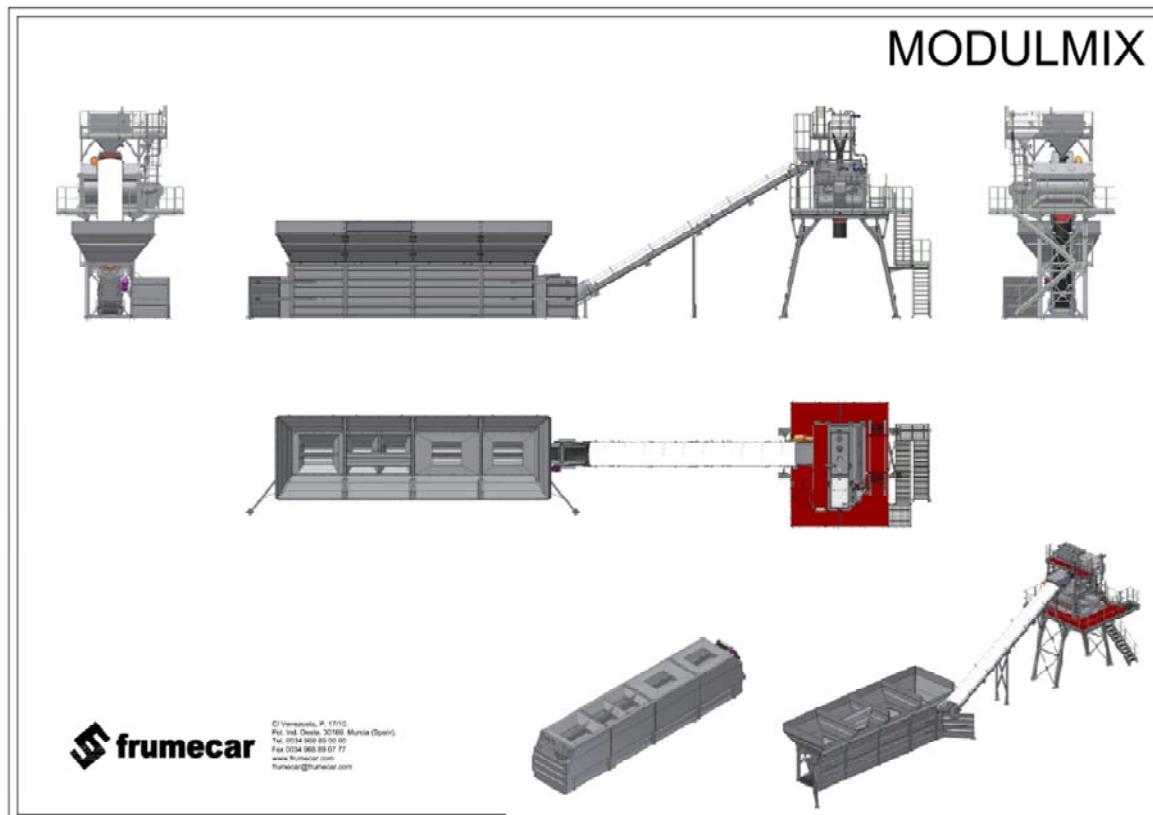
## INSTALLED POWER

COMPONENT	QUANTITY	UNITARY (HP)	UNITARY (KW)	INSTALLED (KW)	FACTOR	SIMULTANEOUS (KW)
Aggregates vibrator	2	1.00	0.75	1.50	0	0.00
Weighing belt	1	15.00	11.00	11.00	1	11.00
Weighing belt vibrator	2	0.24	0.18	0.36	1	0.36
Lifting belt	1	20.00	15.00	15.00	1	15.00
Loading screw conveyor	2	25.00	18.50	37.00	0.5	18.50
Mixer FTS 3000/2000	2	50.00	37.50	75.00	1	75.00
Mixer hydraulic system	1	2.00	1.50	1.50	1	1.50
Mixer cone vibrator	1	0.24	0.18	0.18	1	0.18
Compressor	1	10.00	7.50	7.50	1	7.50

## LOGISTIC REQUIREMENTS

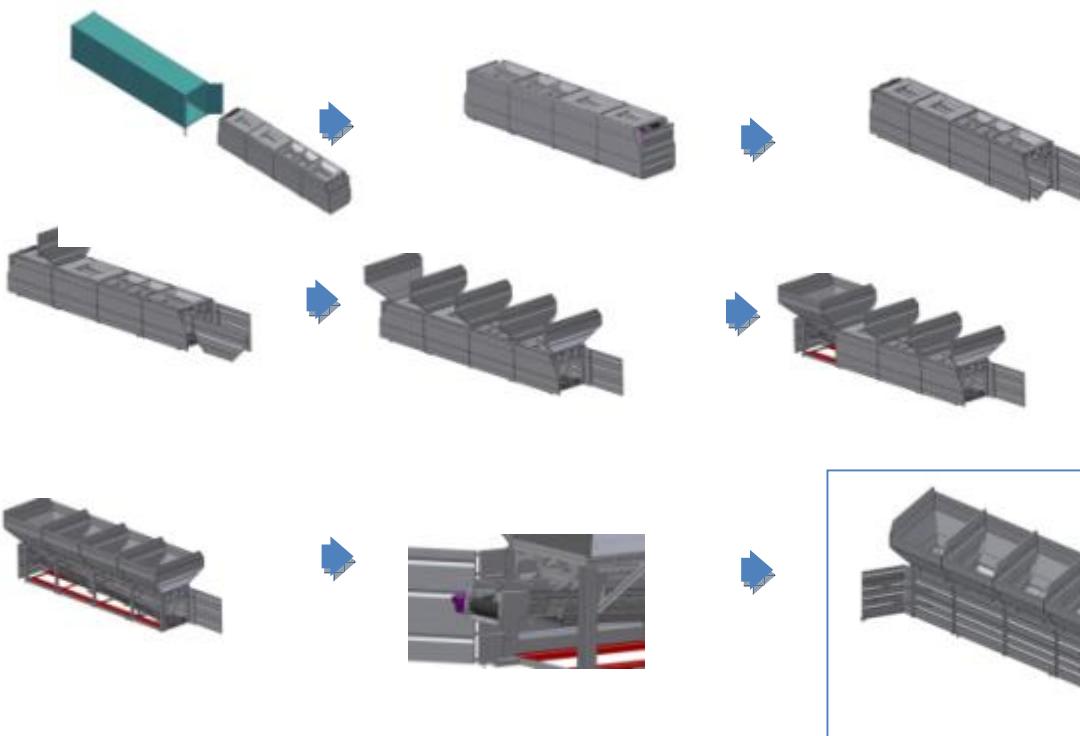
Transport type	Nº	Type	Content	Dimensions (mm)	Weight (Tm)	Volume (m <sup>3</sup> )
Road	3	Truck	C 1. Aggregates group C 2-3. Mixing area	Length= 13,000 Height= 2,550 Width= 2,550	1x18 2x20	3x84
Maritime	3	Container 40' high-cube	C 1. Aggregates group C 2-3. Mixing area	Length= 12,000 Height= 2,550 Width= 2,550	1x18 2x20	3x71

## DRAWINGS SET

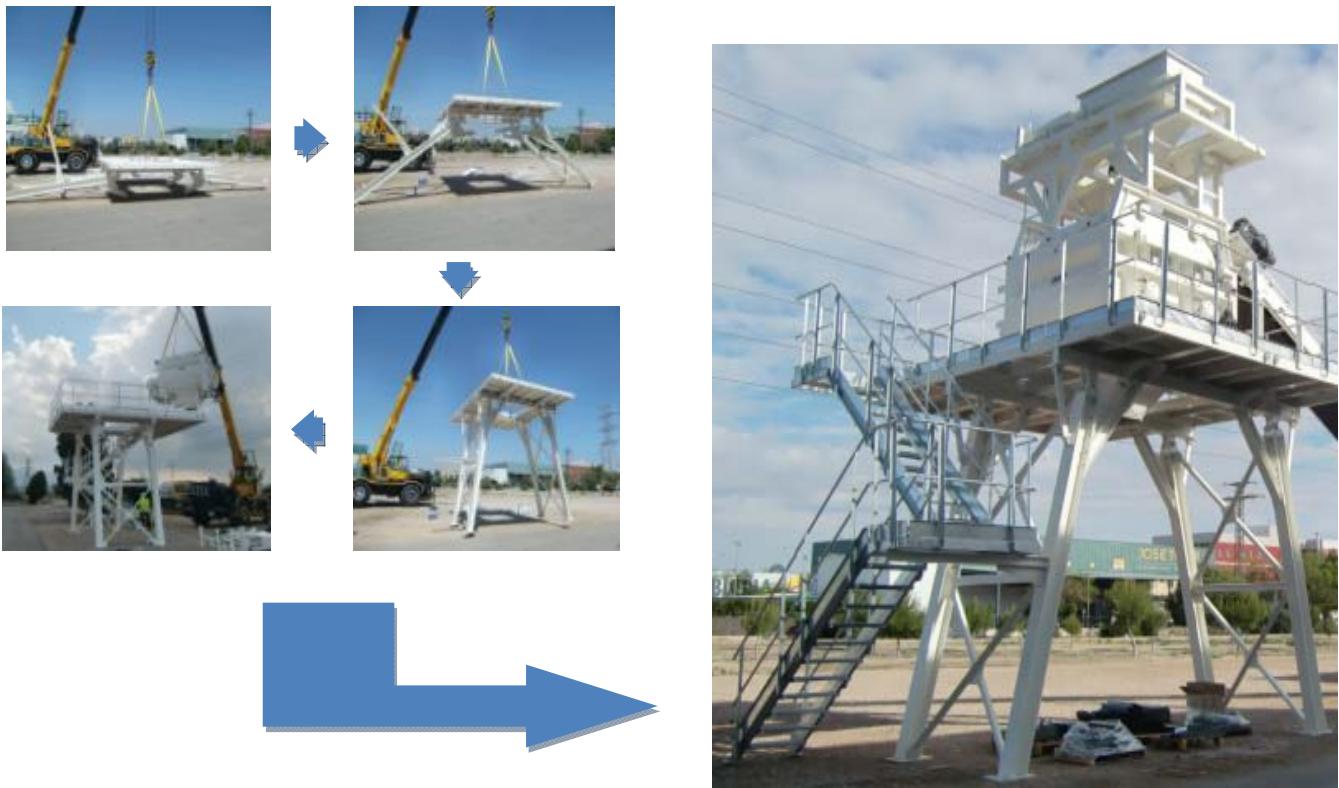


## LOGISTIC AND INSTALLATION

### AGGREGATES GROUP



### MIXING AREA



## COMMITTED TO QUALITY

### RAW MATERIAL



#### USE OF STAMPED AND BLASTED PROFILES

Metal profile sheets and shaped are used to manufacture structural components, have received a blasted and stamped treatment to getting rid of the possibilities of the appearing of superficial corrosion phenomenon.

### SUPERFICIAL TREATMENT

#### TREATMENT OF STEEL SHOT

The treatment of steel shot eliminates impurities from metal surfaces, giving in favor a perfect adherence of the successive finished's layers.



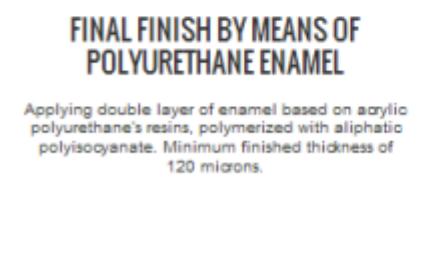
#### SEALED JOINTS

Sealed joints by means of silicone previous to the application of superficial finished layers.



#### APPLICATION OF EPOXI PRIMING

Applying double layer of Epoxy priming polyamide with zinc phosphate on every piece and component of the machine.



#### FINAL FINISH BY MEANS OF POLYURETHANE ENAMEL

Applying double layer of enamel based on acrylic polyurethane's resins, polymerized with aliphatic polyisocyanate. Minimum finished thickness of 120 microns.

## HOT GALVANIZED FOR SOME STRUCTURAL ELEMENTS

Finished by means of hot galvanized for elements in transit such as stairs and railing, or for friction and scratch elements.



## SUPERFICIAL TREATMENT



### UNITARY PARTS PROCESSED PRIOR TO ASSEMBLY

Each piece of the machine, from the smallest to the biggest dimensions, are treated in same way independently, by means of processes of steel shot, priming and painting previous to final assembly.



### FINAL ASSEMBLY FROM COMPONENTS PREVIOUSLY PAINTED

The final assembly of the machine is performed from pieces and components previously treated and painted, assuring the resistance to rust process and improving the machine's durability.



### IDENTIFICATION THROUGH COLOR CODE OF ANCHORAGE OF SHIPMENT

Each anchorage element needed for carrying modules of the central are identified through colors in order to be easily located.

## USE OF DACROMET SCREWS

Dacromet is a metal non-electrolytic coating in grey aluminum, to protect steel pieces from rust, fusion and others ferrous materials, complying with automobile industry specifications for rust protection of metal pieces.



## QUALITY IN PRODUCT FINISHING



### USE OF REJIBAND® GALVANIZED AS CABLE GUIDE

Usage of grating galvanizes to conduct electrical wiring and pneumatic installations.

### PLACING PRESSES FOR WIRING USAGE

Usages of presses for wiring zones with the objective of avoid damage in cables and possible short circuit.



### USE OF FAST CONNECTORS AND CONNECTION CENTRALIZED

Use of fast connectors and connection centralized boxes prior the assembly in manufacturing and reduce assembly times on site.



### USE OF A CHAIN AS WIRING GUIDE

In order to allow the prewired of mobile elements, a chain is used for the electrical conductions.

## TECHNOLOGICAL PARTNERS

### FIRST COMPONENT BRANDS

To maximize the final quality of our products, frumecar is committed to use first-tier suppliers.

## FRUMECAR, THE STRENGTH OF A GREAT COMPANY

### MISION

Our main mission is to supply machinery and technology to the concrete industry, provide technical services with added value and market spare parts. We are a company aimed at fully satisfying the needs and expectations of our customers, that counts on a skilled team of staff that is involved with our mission and with the most up-to-date and efficient technological resources.



### VISION

In FRUMECAR, our vision is to become the leading partner in the design and manufacture of machinery and technology for the concrete industry to face the global challenges of tomorrow.

This vision guides all our activities and practices, as well as our organization. It is our compass, ensuring that what really add value to our company and our partners worldwide.

### VALUES

We conduct our company with responsibility taking our values as a permanent reference:

- Zero faults.
- Full satisfaction of our customers and their needs.
- On-going innovation in products, services and processes.
- Capacity for adapting to new situations easily and successfully.
- Teamwork.
- Respect for our surroundings and the environment.
- Safeguarding of the health and safety of our staff.

***Every one of our staff members contribute their individual commitment and professionalism to our MISSION a reality every day, participating in the realization of our VISION of the company.***

### BRIEF HISTORY REVIEW

<b>1970</b>	Foundation of the original small family workshop
<b>1979</b>	Transformation in the current corporation
<b>1997</b>	Moved to its current location in the "P.I. Oeste" Murcia
<b>1999</b>	Award FREMM "METAL 98" in the category of manufacturing
<b>2000</b>	Obtain quality certification ISO 9001:2001 by AENOR
<b>2002</b>	FRUMECAR successfully enters the market for concrete mixers
<b>2004</b>	Award "Desarrollo empresarial 2003" of the Cámara de Comercio de Murcia
<b>2008</b>	FRUMECAR optimizes its product range to conquer the international market

## FRUMECAR AROUND THE WORLD

With a presence in over 50 countries and more than 3000 plants, FRUMECAR is visible in the world.



FRUMECAR commercial and distribution network



## QUALITY CERTIFICATE

Certificado ES11/10452



El sistema de gestión de

### FRUMECAR, S.L.

Pol. Ind. Oeste  
C/ Venezuela, parcela 17/10  
30169 Alcantarilla (Murcia)

ha sido evaluado y certificado en cuanto al cumplimiento de los requisitos de

**ISO 9001:2008**



Para las siguientes actividades

Diseño, fabricación, montaje, reparación, venta y servicio postventa de: maquinaria industrial para la fabricación de hormigón. Diseño y gestión de la producción de cuadros eléctricos para maquinaria industrial para la fabricación de hormigón.

en los siguientes emplazamientos

Pol. Ind. Oeste, C/ Venezuela, parcela 17/10 - 30169 Alcantarilla (Murcia)

Este certificado es válido desde  
24 de junio de 2015 hasta 24 de junio de 2018.  
Edición 3. Certificado desde julio de 2000.



Autorizado por

Dirección de Certificación

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## GUARANTEE CERTIFICATE



(MAQUINARIA INDUSTRIAL – C.I.F.: B-30034573) C/ Venezuela, Parcela 17/10 del Polígono Industrial Oeste, 30169 (MURCIA)

### CERTIFICADO DE GARANTÍA/CERTIFICAT DE GARANTIE/GUARANTEE CERTIFICATE CERTIFICADO DE GARANTIA/CERTIFICAT DE GARANTIE/СЕРТИФИКАТ ГАРАНТИИ

**FRUMECAR S.L.,**

Consecuente con el compromiso de proporcionar la más alta calidad en el diseño, fabricación y asistencia de todos sus productos, extiende el presente Certificado de Garantía, durante 2 años, desde la fecha de puesta en marcha, siempre y cuando el periodo entre la fecha de la carga y la puesta en marcha no supere los 6 meses, descontándose cada mes que excede de éstos del período de 24, según proceda, a favor de:

Consequant de son compromis afin d'offrir la plus haute qualité dans le design, la fabrication et l'assistance de tous ses produits, émit le présent Certificat de garantie, durant 2 ans à partir de la date de la mise en marche ; pourvu que la période comprise entre la date de charge et la date de la mise en marche ne dépasse pas les six mois, chaque mois dépassé de ces-là sera déduit de ces 24 mois, le cas échéant ; en faveur de:

Acting in line with its commitment to supply the highest quality in design, manufacturing and assistance in all of its products, issues this certificate of guarantee available for the period of 2 years from the date of starting up; provided that the period between the date of shipment and starting up does not exceed six months, discounting each month in excess of those 6 from the period of 24 months, as it proceeds, in favour of:

Consciente com o compromisso de proporcionar a mais alta qualidade no projeto, fabricação e assistência técnica de todos seus produtos, lhe proporciona o presente Certificado de Garantia, com o prazo de 2 anos, contados desde a data de posta em marcha, sempre e quando, o periodo entre a liberação para embarque do equipamento na fábrica e o de posta em marcha, não supere os 6 meses. Serão descontados do período de garantia (2 anos), os meses que excederem este período de 6 meses, em favor de:

În conformitate cu angajamentul de a furniza cea mai bună calitate în proiectare, fabricare și asistență referitoare la toate produsele sale, emite prezentul certificat de garanție pentru perioada de 2 ani de la data de punere în funcțiune; cu condiția ca perioada cuprinsă între data de încărcare și punerea în funcțiune nu depășească sase luni, actualizarea (scontarea) lunară în plus față de cele 6 din perioada de 24 de luni se face în favoarea:

В соответствии с политикой компании, в основе которой лежит предоставление клиенту высочайшего качества в проектировании, изготовлении и послепродажного сервиса для всей продукции, выдаётся данный Сертификат гарантии сроком на 2 года, гарантия начинает действовать в момент окончания ввода в эксплуатацию оборудования. Если период времени с погрузки оборудования до его ввода в эксплуатацию составляет более 6-ти месяцев, в таком случае превышенный срок времени будет вычен из общей гарантии сроком 24 месяца.

Titular/Titulaire/Owner/

Titular/Titular/Держатель:

Domicilio/Domicile/Address/

Endereço/Sediul/Адрес:

Equipos/Equipements/Equipments/

Equipamento/Echipamente/Оборудование:

Nº de fabricación/Nº de fabrication/Mfg Project Nº/

Nº de Fabricação/Nº fabricație/Серийный номер:

Fecha de garantía/Date de garantie/ Guarantee date/

Data de Garantia/Data garantiei/Дата начала гарантии:

**2** YEARS OF  
**WARRANTY**



**CONDICIONES GENERALES**

FRUMECAR ofrece servicio de garantía en los equipos descritos que cubren las averías por rotura de piezas o mal funcionamiento, que se produzcan por defecto de fabricación o defecto de instalación según las siguientes condiciones:

- Para incidencias producidas por averías de materiales de fácil reposición, FRUMECAR se compromete a suministrar el material necesario para la reparación, no estando incluido el transporte al lugar de destino ni salvo que dicho transporte esté cubierto por el distribuidor local. En el caso de que el cliente requiere que la reparación fuese efectuada por personal de FRUMECAR, no estará incluido el desplazamiento y dietas del personal desplazado.
- Para incidencias de mayor complejidad producidas por averías debidas a errores de fabricación o mal funcionamiento, FRUMECAR asumirá la totalidad de los gastos de reparación.
- Los componentes que requieren del suministro eléctrico para su funcionamiento dispondrán de una garantía de 1 año contra defectos de materiales o fabricación.

Quedan excluidas del servicio de garantía las siguientes contingencias:

- Piezas sometidas a desgaste: brazos y palos de amasado, horcas, mangústas, goma anti-desgaste, rodillos, ruedas anti-retorno, rodamientos puente y corredora, válvulas (sus gomas), cilindros neumáticos, etc.
- Averías provocadas por una incorrecta utilización, manipulación, calibración, mantenimiento, reparación, ampliación de nuevos equipos, y configuración de hardware y/o software, por parte del usuario final o personas ajena a FRUMECAR.
- Averías producidas por causa de fuerza mayor, como: accidentes, tormentas, inundaciones, desastres naturales, huelgas, etc.
- Mecanismos: la máquina goza de una garantía de 36 (treinta y seis) meses para los grupos de amasado (reductores y cojinetes de ejes). En lo que se refiere a todas las demás partes mecánicas, la garantía es de 24 (veinticuatro) meses a partir del inicio de la producción. El período de garantía se entiende para solo un turno de producción de 8 horas al día.

**CONDITIONS GÉNÉRALES**

FRUMECAR offre un service de garantie pour les équipements décrits qui couvrent les pannes par nature des pièces ou le mauvais fonctionnement, qui se produit par défaut de fabrication ou par une installation défectueuse selon les conditions suivantes.

- Pour les incidents produits par pannes du matériel de remplacement facile, FRUMECAR se compromet à fournir le matériel nécessaire pour la réparation, tout ce ne comprenant le transport jusqu'à la destination, sauf si ce transport est couvert par le distributeur local. Dans le cas où le client souhaiterait que la réparation soit effectuée par le personnel de FRUMECAR, il sera à la charge du client les coûts des heures du personnel déplacé, ainsi que le kilométrage et les frais de逗游物語.
- Pour des incidents de plus grandes envergures produites par des pannes dues à des erreurs de fabrication ou à un mauvais fonctionnement, FRUMECAR assumera la totalité des coûts de réparation.
- Les matériaux qui ont besoin de l'énergie électrique pour leur fonctionnement ont une garantie d'un an pour défaut de composants ou fabrication.

Restent exclues du service de garantie les suivantes contingences :

- Pièces soumises à l'usure : bras et hélices du malamenter, tiges d'usure, manches, durties, caoutchouc anti-usure, rouleaux, roue anti-retour, roulements pont et courroie, vannes (ses gomas), vérins pneumatique, etc.
- Pannes provoquées par une utilisation incorrecte, manipulation, calibration, maintenance, réparation, ampliation de nouveaux équipements, et configuration de hardware y/o software, par l'utilisateur final ou d'autres personnes que le personnel de FRUMECAR.
- Pannes produites par cause de force majeur, comme : accidents, tempêtes, inondations, catastrophes naturelles, grèves, etc.
- Mécanisme : la machine est garantie pendant une période de 36 (trente-six) mois pour les groupes de malaxage (réducteurs et roulements des axes). En ce qui concerne tous les autres organes mécaniques, la garantie est de 24 (vingt-quatre) mois à partir du début de la production. La période de garantie n'est applicable qu'avec un seul poste de 8 heures de travail quotidien.

**GENERAL CONDITIONS**

FRUMECAR offers a guarantee service for mentioned equipments which covers all faults caused by breakages of components or bad working produced by a manufacturing defect or inadequate installation subject to the following conditions:

- For failures caused by faults in quick repairing components, FRUMECAR commits to supply all the necessary components for the repair; not including delivery charges at the place of commissioning, unless such delivery is covered by the local distributor. In case the customer requires the presence of the FRUMECAR staff, the cost of travel, time, accommodation and per diem charges will be at the customer's expense.
- For more complicated failures caused by faults arisen from manufacturing defects or bad working, the total of the cost of the repair will be at FRUMECAR's expenses.
- Parts which require electric power for their operating will have a one year guarantee against defects in material or manufacturing.

All the following points are excluded from the guarantee service:

- Wearing components: mixing arms and paddles, wearing linings, sleeves, wearing rubber, bearings, rolls, non-return wheel, bridge and-sil bearing, valves (their rubbers), pneumatic cylinder, auger screws, etc.
- Faults caused by a bad operating, handling, calibration, maintenance, repairs, new equipment enlargements, hardware and/or software configuration made by the final user or other unrelated personnel to FRUMECAR.
- Force majeure faults such as accidents, storms, floods, natural disasters, strikes, etc.
- Major : the machine is guaranteed for a period of 36 (thirty-six) months for the mixing groups (reducers and bearing axes). Regarding all the other mechanical parts, the guarantee is 24 months starting from the beginning of production. The guarantee period applies to a single shift (8 hours) per working day.

**CONDICIONES GÉRAS.**

FRUMECAR oferece um serviço de garantia para o equipamento em questão, que cobre as averias por quebra de peças ou mau funcionamento, que sejam decorrentes de defeito de fabricação ou montagem deficiente durante a fabricação, conforme as seguintes condições:

- Para falhas causadas por faltas em peças de rápida reparação, FRUMECAR se compromete a fornecer o material necessário para a reparação, não estando incluso o frete ao largo de destino. Neste caso, as despesas de deslocamento, transporte, hotel e refeições da técnica que eventualmente faça a reparação no campo, não fazem parte desta Garantia.
- Para incidências produzidas por márias de materiais de reposição de maior porte, devidos por defeito de fabricação ou mau funcionamento, FRUMECAR assumirá o total dos gastos desta reparação.
- Os componentes eléctricos terão garantia de 12 meses contra defeito de material ou fabricação.

A Garantia não será válida, portanto será excluída, para as seguintes situações:

- Quando se tratarrem de peças de desgaste, tais como: braços e pás do misturador, revestimentos, mangueiras, bactas de desgaste, roletes, tambores contra retorno, rolamentos, juntas de bombas das válvulas e cilindros pneumáticos, etc.
- Averias provocadas por utilização errada do equipamento, tal como: manipulação, calibração, manutenção mal feitas, introdução de equipamentos que não tenham sido originalmente fornecidos e instalados pela FRUMECAR, configurações de software ou hardware por pessoa não autorizada oficialmente pela FRUMECAR.
- Averias produzidas por Força Maior, tais como: acidentes, tempestades, inundações, desastres naturais, greves, etc.
- Misturadoras: Garantia especial de 36 meses para os redutores e buchas do eixo. Para as demais partes mecânicas, a Garantia é de 24 meses, a partir da data em marcha, observando-se, porém que esta Garantia é válida desde que a Jornada de trabalho seja de 8 horas/dia.

**CONDITIIONI GENERALE**

FRUMECAR oferă serviciul de garanție pentru echipamentele descrise, acest serviciu acoperind defecțiunile cauzate de funcționarea prea slabă sau necorespunzătoare, produse din cauza unui defect de fabricație sau instalație defectă, în următoarele condiții:

- Pentru echipamente produse doarăți defectări materialelor ușor înlocuibile, FRUMECAR se angajează să furnizeze materialele necesare reparării, inclusiv transportul la destinație, cu condiția ca acesta să fie localizat pe teritoriul național. În cazul în care clientul solicită că se repară și se efectuează de către personalul FRUMECAR, clientul va suporta costul oricărui lucru pentru personalul desplasat la situl locului, precum și transportul și dienile diferite.
- În cazul incidentelor de avergări, doarăți defectări care au drept cauza vicii de fabricație sau proiectă functionare, FRUMECAR va încerca să toată chefulicele ce se repară.
- Componente care necesită alimentare cu energie pentru funcționare sunt înălțătoare cu o garanție de 1 an împotriva defectelor de material sau de fabricație.

Sunt exluse din serviciul de pareri următoarele situații:

- Pieze supuse uzurii: brazi și palete de mîsere, garniture, suporturi, suporturi anti-retur, valvule (gumăturile lor), cilindru pneumatic, etc.
- Defecțiuni cauzate de o utilizare incorrectă , manipulare, calibrare, întreținere, reparare, extindere cu noi echipamente și configurație de hardware și / sau software, de către utilizatorul final sau persoane neangajate de FRUMECAR.
- Defecțiuni produse în caz de forță majoră, cum ar fi: accidente, furturi, inundații, dezastru natural, greve, etc.
- Mașină: utilizaj este garantat pentru o perioadă de 36 (treizeci și șase) luni, pentru grupurile de amestecare (reductor și axa rotației). În ceea ce privește toate celelalte părți mecanice, garanția este de 24 luni începând de la începuta producției. Perioada de garanție este valabilă pentru un singur schimb (0 ore) pe zi lucrătoare.

**ОБЩИЕ УСЛОВИЯ**

FRUMECAR предоставляет гарантию на описанное оборудование, гарантия распространяется на поломки и изнурение в функционировании деталей, которые возникли по вине производителя, или в последствии такого вида в эксплуатации, ниже указаны характеристики, согласно которым действует гарантия:

- В случае небольшой поломки, которая может быть устранена заменой детали, FRUMECAR гарантирует новую запасную часть, транспорт до места расположения установки не входит, кроме случаев когда местный дистрибутор берет расходы за доставку необязательной детали. Если для устранения поломки будет необходим специалист консультанты FRUMECAR, клиент должен будет оплатить перелет и питание специалиста.
- В случае других неизправностей по вине производителя, компания FRUMECAR берет на себя все расходы на ремонтные работы.
- Все агрегатные компоненты обладают гарантией сроком на 1 год на defective детали.

Гарантия не распространяется на поломки и ненеклассифицированные случаи:

- Быстроизнашивющиеся детали: пальцы и броневые сектора, резиновые прокладки, ролики, клапаны, гидравлические цилиндры и т.д.
- Когда азбет были произведены и результатом неправильной работы, обслуживания или ремонта оборудования, в таком и случае неразрешимой заводом производителем FRUMECAR замены или модификации конструкционной системы установки.
- Ненадлежащее производование в последние члены этого обстоятельства, например: борьба, недоводение, излишнее или, забастовка и т.д.
- Секторы: имеет гарантию сроком на 36 (тридцать шесть) месяцев на правах (изделий) которых. Вот что касается оставшихся механизмических элементов, гарантия - 24 (двадцать четыре) месяца с начала производства бетона. Гарантийный период подразумевает 8-часовой рабочий день при работе в одну смену.

## CE CONFORMITY DECLARATION



[MAQUINARIA INDUSTRIAL – C.I.F.: B-30034573]  
C/ Venezuela, Polígono 17/10 del Polígono Industrial Oeste, 30169 (MURCIA)

### DECLARACIÓN DE CONFORMIDAD DECLARATION DE CONFORMITÉ CONFORMITY DECLARATION DECLARAÇÃO DE CONFORMIDADE DECLARAȚIE DE CONFORMITATE ДЕКЛАРАЦИЯ СООТВЕТСТВИЯ

#### FRUMECAR S.L.

Como fabricante y propietario de la documentación técnica, declaro bajo su única responsabilidad que la máquina:  
En tant que fabricant et détenteur de la documentation technique, déclare sous sa seule responsabilité que la machine;  
As o manufacturer and the owner of the technical publications declares under its entire responsibility that the machine;  
Como um fabricante e proprietário da documentação técnica, declara sob inteira responsabilidade, que a máquina;  
In calitate de producător și titular al documentației tehnice, declară pe propria răspundere că utilajul/echipamentul:  
Как производитель и владелец всей технической документации, декларирую оставая за собой ответственность, что оборудование:

Denominación genérica – Dénomination générique – Generic Denomination – Denominação genérica – Denominazione generica – Общее название

Función – Function – Fonction – Função – Funktion – Функция

Modelo – Modèle – Model – Modelo – Model – Модель

Nº de fabricación – Nº de fabrication – N° de Project N° – Nº de fabricação – № fabricatie – Серийный номер

Año de fabricación – Année de fabrication – Year of manufacturing – Ano de fabricação – Anul de fabricatie – Год производства

Cumple todas las disposiciones aplicables de la Directiva 2004/42/CE

Accomplit toutes les dispositions applicables de la Directive 2004/42/CE

Compiles with all applicable dispositions of the 2004/42/CE Directive

Atende a todos os dispositivos aplicáveis da Directiva 2004/42/CE

Respecă toate dispozitivele aplicabile ale Directivel 2004/42/CE

Соответствует всем нормам, указанным в Директиве 2004/42/CE

La máquina es conforme con las siguientes normas armonizadas:

La machine est conforme avec les normes harmonisées suivantes:

The machine is in compliance with the next harmonized rules:

A máquina está em conformidade com as seguintes normas harmonizadas:

Apparatu este conform cu următoarele standarde armonizate:

Оборудование отвечает требованиям следующих нормативов:

EN 249:1993+A1:2008	EN 814-2:1997+A1:2008	EN 1093-1:2008	EN ISO 7731:2008	EN 12385-2:2004+A1:2008	EN ISO 14738:2008
EN 347-1:1993+A1:2008	EN 814-3:2000+A1:2008	EN 1093-2:2004+A1:2008	EN ISO 9114-1:2008	EN 12385-6:2002+A1:2008	EN 40324-1:2008
EN 347-2:1993+A1:2008	EN 814-4:2010	EN 1093-3:2004+A1:2008	EN ISO 9114-2:2009	ENI 2385- D:2003+A1:2008	EN 41310-1:2008
EN 347-3:1993+A1:2008	EN 903:1997+A1:2008	EN 1093-4:2004+A1:2008	EN ISO 11161:2007	EN 12882:2008	EN 41310-2:2008
EN 374:1996+A1:2008	EN 901:1994+A1:2008	EN 1093-5:2004+A1:2008	EN ISO 17300:2009	EN 13476:2001+A1:2008	EN 41310-3:2008
EN 414-1:2001+A1:2008	EN 902:1994+A1:2008	EN 1093-7:2004+A1:2008	EN ISO 11202:2010	EN ISO 13484-1:2008	EN 41805-5:2008
EN 414-2:2003+A1:2008	EN 903:1994+A1:2008	EN 1093-8:2004+A1:2008	EN ISO 11203:2009	EN ISO 13484-2:2008	EN 42041:2008
EN 424-1:1994+A1:2008	EN 1005-1:2001+A1:2008	EN 1093-9:2004+A1:2008	EN ISO 11204:2010	EN ISO 13880:2008	
EN 424-2:1994+A1:2008	EN 1005-2:2003+A1:2008	EN 11211-1:2008+A1:2008	EN ISO 11205:2009	EN ISO 13887:2008	
EN 424-3:1994+A1:2008	EN 1005-3:2003+A1:2008	EN 12791:1997+A1:2008	EN 12801-2003+A1:2009	EN ISO 14131-1:2008	
EN 814-1:1997+A1:2008	EN 1005-4:2004+A1:2008	EN 14171:1997+A1:2008	EN ISO 13160-1:2003	EN ISO 14133-1:2008	
	EN 1032:2003+A1:2008	EN ISO 3744:2007	EN ISO 13160-2:2003	EN ISO 14132-2:2008	
	EN 1037:1995+A1:2008	EN ISO 2747:2009	EN 13385-1:2002+A1:2008	EN ISO 14132-3:2008	
	EN 1088:1993+A1:2008	EN ISO 4271:2009	EN 13385-3:2002+A1:2008	EN ISO 14187:2008	

En virtud de lo cual se emite la presente declaración de conformidad.

En vertu duquel on émet la présente déclaration de conformité.

By virtue of which this conformity declaration is issued.

Pelo qual emitemos a presente Declaração de Conformidade.

Drept pentru care se eliberaea prezenta Declarație de Conformitate.

В результате чего выдается данной декларации соответствия.

Murcia.....



Operations manager

\* Important note: This dossier is informative and not binding in contract. Frumecar S.L. reserves the right to change the technical characteristics here contained without prior notice.

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