

FOOD INDUSTRY

ACEITES CARBONELL

- 1 welded silo Ø 4 x 7 m for **bleaching earth**, with decompressing filter FS3.10.8, security valve and cutback cone. Place: Alcolea (Córdoba) - Spain

ACEPROSA

- **Soya flour** handling plant of a 40 t/h for sunflower peel storage in silo type LIPP of 2.200 m³ of reception capacity and soya pellets storage in a silo type LIPP of 400 m³. Place: Sevilla - Spain
- Mechanisation of a 50 t/h full-fat of soya plant and belt conveyor with weighing scale of soya bean. Place: Valencia - Spain

ACOR

- Mechanisation of a 70.000 t sugar storage silo. Loading and unloading capacity: 150 t/h. Air conditioned system for injection to the silo. Sieving and loading, 150 m³ expedition hopper to trucks. Weighbridge for weighing trucks. Bagging hoppers. Boilers and heating system. Air compressed installation. Electrical and automation installation. Legalization of installation
- Big-bag loading station for sugar with weighing system incorporated and feeding system to bagging installation. Circuit scale 110 t/h capacity for weighing in continuous in expedition of sugar

Place: Olmedo (Valladolid) - Spain

AMYLUM IBERICA

- Silo of corn of 100 t, 2 chain conveyors to transport corn of a 70 t/h, one centrifugal siever for corn starch. Securities installation in existing elevators and magnet in hoppers of inlet to elevators and mills of gluten feed. Substitution of 2 gluten feed silos and existing PARCEY extractors by 2 new silos with sheet panels screwed and planetary extractors. Unit capacity: 650 m³. Substitution of 6 existed belt conveyors of loading and unloading of storage silos of corn by 6 new chain conveyors of low sound level. Place: Zaragoza - Spain
- Engineering and supplying equipments of handling and storage of corn starch in 3 silos and equipments to the pneumatic transport. Place: Casablanca (Morocco)

ANDALUZA DE CEREALES

- Handling of buildings and trucks reception. Cereals pre-cleaning equipment. Loading wagons plant. Capacity: 150 t/h. Storage capacity: 30.000 t. Place: Brenes (Sevilla) - Spain

AYDASA

Cereals storage plant - 5 silos type LIPP of 5.000 t. Handling: 150 t/h. Place: Lérida - Spain

AZUCARERA EBRO

Mechanisation of a 60.000 t sugar storage silo. Loading and unloading capacity: 100 t/h. Air conditioned system for injection to the silo. Centralised cleaning system for unloading area. Sieving and loading, 150 m³ expedition hopper to truck. Electrical facilities

Place: Miranda de Ebro (Burgos) - Spain

- Buckets elevator and pellets project. Place: Toro (Zamora) - Spain

AZUCARERAS REUNIDAS DE JAEN

- Dust removal of **sugar** bagging scale for centralised collecting filter and sieving line and feeding to bagger of lump sugar of a 20 t/h capacity. *Place: Linares (Jaén) - Spain*

CERESTAR IBÉRICA (CARGILL GROUP)

- Cleaning installation for **corn** and separation of germ to produce grits for the brewing industry including milling equipments, vibrating table, etc.
- Corn cleaning installation 2 HELIOS 1200, 180 t/h of capacity

Place:Martorell (Barcelona) - Spain

CAMARA AGRARIA DE ECIJA

- **Cereals** storage complete plant with 10 silos type LIPP of capacity total: 15.000 t and cereal cleaning equipment HELIOS-1200 at 80 t/h. *Place : Ecija (Sevilla) - Spain*

CARGILL ESPAÑA

- Seeds flour handling plant at 40 t/h of capacity. Place: Sevilla Spain
- 2 ROTOGRAINS installation and planetary extractor for silo. Place: Tarragona Spain

CEREOL IBERICA

- Handling and storage various plants with silos type LIPP, mechanisation and cooling of silos for KOIPE.
 Place: Andújar (Jaén) Spain
- Flour and soya bean handling plant of a 40 t/h capacity for OESA. Place: Barcelona Spain

CERESTAR IBERICA (CARGILL GROUP)

- Reception installation by trucks and wagons with dust collecting system. Reception capacity: 120 t/h (based on corn)
- 2 vibratory unloaders under dextrose silos
- Mechanization of cleaning tower: bucket elevator and cleaning machine of 90 t/h of capacity based on corn
- 1 chain conveyor type Z and a screw conveyor to transport acid humid corn feed

Place: Martorell (Barcelona) - Spain

CERVEZAS SAN MIGUEL

- Pneumatic conveyor and storage plant in silos type LIPP of **corn starch**, **malt** milling and pneumatic conveyor of a 10-20 t/h capacity. *Place: Burgos Spain*
- Starch and malt storage silo realisation and the corresponding pneumatic conveyors. Place: Málaga Spain
- 2 storage malt silos type LIPP of 500 m³ with pneumatic conveyor. Spain

COMPAÑÍA CANARIA DE PIENSOS - CAPISA

- Cleaning and reparation of 12 dosing cells of 4 x 4 m and height 24 m composed of the replacement of the internal rigging. *Place: Canarias - Spain*

COOP. NRTA. SRA. DE ARACELI

- 3 silos type LIPP, diameter 8, height 12 m with PARCEY extractor for **olive press-cake** and **extracted flour**. Capacity: 1.500 t. *Place: El Tejar (Córdoba) - Spain*

COOP. TERA-ESLA-ORBIGO

- **Cereals** storage of 45.000 t. **Corn** reception, drying and storage plant. Reception capacity: 150 t/h. Drying capacity: 45 t/h and handling of 2 new buildings with temperature control and ventilation system. *Place: Benavente (Zamora) - Spain*

COPAM

- 1 welded silo at the planetary extractor on the base for gluten feed + 1 welded silo at the handling and pneumatic conveyor for corn germ and 2 bellow feeders for trucks loading, one for starch and another for corn germ
- 1 silo with electro-welded foot-bridges for **corn gluten** storage. Unloading by screw conveyor and 1 electro-welded vents silo for trucks loading. **Gluten** and planetary extractor: 40 t/h

Place:San Joao da Talha (Portugal)

COREN (ORENSE)

- 1 complete heat treatment line for animal feeding flours of 15 t/h. Place: Spain

DAPSA

- Starch handling with stainless steel screw conveyor and butterfly valve for **starch** and starch pneumatic conveyor installation of 15 t/h. *Place: Amposta (Tarragona) - Spain*

DESMET ESPAÑA

- RCCS cooler with incorporated filters for **sunflower flour** for DELFIN DUCH. *Place: Reus (Tarragona) Spain*
- Screw conveyor, elevators and sievers for a palm plant. Capacity: 50 t/h for EMPACADORA DEL ATLÁNTICO (Honduras)
- 1 modular filter with inferior hopper of dust collection and screw conveyor for sunflower flour for KOIPE. Place: Andújar (Jaén) - Spain
- Bleaching earth pneumatic conveyor installation. Place: Argentina
- Dust removal installation with 2 CFPR bags filter in a peppermicronised plant. Place:Zambia
- 2 cutback silos for **bleaching earth** storage. *Place: San Jerónimo (Sevilla) Spain*

DIMARGRASA

- Meat flour storage silos type LIPP plant of 150 m³. Screw conveyor of 10 t/h. *Place: Arganda del Rey* (Madrid) - Spain

DOUX PIENSOS

- 2 RCCS coolers with a chain conveyor of 50 t/h capacity. Place: Lérida - Spain

EYPROSA

- Corn cleaning complete plant of a 15 t/h with handling equipments and dust removal. Place: Philippines

GERICO FRANCE

- Deposit from must belt conveyors, strata structure, **pulp** belt conveyors, screw conveyor. Capacity: 150 t/h for DAI. *Portugal*
- Sugar silo of 50.000 t. Handling equipments of a 60 t/h for sugar new silo of 50.000 t with dust removal installation and internal conditioned silo and dust removal of screws and vibrating sieves for AZUCARERAS REUNIDAS DE JAEN. Place: Linares (Jaén) Spain
- Sugar silo of 50.000 t. Handling equipments of a 60 t/h for sugar new silo of 50.000 t with dust removal installation and internal conditioned silo for EBRO AGRÍCOLAS. *Place: La Rinconada (Sevilla) Spain*
- 1 sugar silo of 60.000 t, handling at 100 t/h air conditioned equipment of the silo and ROTODOME extraction equipment for EBRO AGRICOLAS. *Place: Peñafiel (Valladolid) Spain*

GUFERSA (FERRUZZI)

- Ginned cotton storage plant in a silo diameter 5 x 10 m. Capacity: 203 m³ with planetary extractor of 13 t/h. Loading handling: 25 t/h. Unloading handling: 15 t/h. *Place: Jedula (Cadiz) – Spain*

GUYOMARCH (EXTRASA)

- STOLZ/MILLMATIC RM-16 mill of 100 CV for **composed feeding** plant. *Place: Guadiana del Caudillo* (Badajoz) - Spain

HARICARSA

- 5 bone and meat meal storage. Handling: 15/40 t/h. Place: Ballobar (Huesca) - Spain

KOIPE

- Technical study by thickness studies the situation of 8 silos of 20.000 m³ and reinforcement of these. Place:Andújar (Jaén) - Spain

LEONESA-ASTUR DE PIENSOS

- **Cereals** storage of 35.000 t. Reception plant by train and trucks and storage in cereals buildings with cleaning. Capacity: 200 t/h. *Place: El BurgoRanero (León) - Spain*

MALTISA

- Barley and malt conveyor installation, capacities 20 t/h and 80 t/h. Place: Albacete Spain
- Barley, green and roasted malt conveyor installation, capacities 400 m³/h, 30 t/h, 150 t/h and 200 t/h, 2 water storage electro-welded storehouses, 1 enzymes dosing plant (Betaglutanase) for malt, 1 barley reception plant of 150 t/h with broken granules line of 40 t/h. Malt conveyor equipment (elevators, chain conveyors, screw conveyors, extractors), 100/40 t/h. Handling installation of the silo 3. Malt capacity: 100 t/h, malt separation circuit. Capacity: 40 t/h
- Complete malthouse of a 96.000 t/year. Brewing barley calibrating circuits and malt expedition composed of conveyors, elevators and cleaning and calibrating machines. Calibrating capacity: 40 t/h. Expedition capacity: 150 t/h and 2 special chain conveyors for malt expedition

Place: Villaverde (Madrid) - Spain

METALO-NICHO

- Almond hull milling plant composed of RM16 mill, bags filter type STP 8.16.40 and fan type FP62. Capacity: 6 t/h. *Place: Arraiolos (Portugal)*

METRANSA

- Handling for unloading silo with **sugar** and automatic bellow feeder electrical installation of trucks loading, foundations. *Place: Breda (Gerona) - Spain*

NUTECAL

- Second milling line with STOLZ mill type RMP 18. Capacity: 15 t/h. Mill power: 132 KW. *Place: Benavente (Zamora) - Spain*

PROD. AGROPE. FABRA

- Line mechanization of a pelletizing line in a **composed feeds** plant. Capacity: 30 t/h. *Place: Tortosa* (*Tarragona*)- *Spain*

SALMANTINA DE FORRAJES

- 1 STOLZ ALLIANCE 8025 press for pelletizing lucerne. Capacity: 9 t/h based on pellets Ø 7 mm. Installed power: 315 KW. 1 conditioner-feeder on press with water addition upgrade. *Place: Zaragoza - Spain*

PURAC BIOQUÍMICA

- Industrial **sugar** silos of 1.500 m³. 2 welded silos on support structure with weighing system and vibrating unloader Ø 2.200 mm for sugar storage. *Place: Montmeló (Barcelona) - Spain*

ROQUETTE LAISA ESPAÑA

- Concrete silos for **corn** storage, capacity: 17.000 m³
- Reception, storage, cleaning installation of corn and connection with factory
- Reception capacity: 200 t/h
- 1 dust collecting silo with planetary extractor: 15 t/h
- 2 milling groups
- Dust removal in gluten meal expedition to trucks
- Chain conveyors for **corn pulp** and bulk elevators.
- 2 chain conveyors for **dry pulp** at the outlet of dryers. Special construction in AISI 316L stainless steel. Unit capacity: 30 t/h. Special chain conveyors for the re-circulation of the dryer. Capacity: 30 t/h based on humid hot corn pulp.

Place: Benifayó (Valencia) - Spain

SEBERIAS BILBAINAS

- Meat flour storage in 2 silos type LIPP. Total capacity: 100 m³. Place: Bilbao- Spain

SEMILLAS FITO

- Selected ear corn belt conveyors. Capacity: 30 t/h. Place: Don Benito (Badajoz) - Spain

SEMILLAS MONZON

- Handling plant for the selection of fodder seed of 15 t/h. Dust removal system with turbo cyclone. *Place:*Monzón (Huesca) - Spain

SEMILLAS PIONEER

- **Corn** handling equipment of 40 t/h for a seed selection plant – **Corn** cleaning equipment type EMR-1001 of 100 t/h. *Place: La Rinconada (Sevilla) - Spain*

SESOSTRIS

- Silos and dryers handling shed plant, storage capacity: 45.000 t. Handling: 200 t/h. *Place: Don Benito* (Badajoz) Spain
- Mechanization extension plant, dryer reform, building and new dryer mechanization. Capacity: 60.000 t. Handling: 150 t/h. *Place: Seygra (Albacete) Spain*
- Silos and shed handling plant; unloading wagons installation. Capacity: 200 t/h. Storage capacity: 20.000 t. Silos building handling plant. Capacity: 40.000 t. Corn dryer: 20 t/h. Mechanization of 200 t/h. Brewing barley calibrating plant of 20 t. Sunflower seeds pre-cleaning and transport with a capacity of 40 t/h. *Place: Venta de Baños (Palencia) Spain*

SILOS CANARIOS

- Cleaning complete station type SNEA-14B with aspiration equipment. Dust removal installation in silo and handling equipments. *Place: Las Palmas de Gran Canaria - Spain*

STOLZ GERICO ITALIA

Equipments and engineering for a cereals dust storage plant. Include: 1 bellow feeder type S300
 MSYU/10 for loading trucks and pick-up trucks + 3 screw conveyors + buffer hopper, pipes and valves.
 Place: Italy

SYRAL IBERIA

- Cleaning installation for corn. HELIOS1200 equipment. Capacity: 90 t/h
- Storage and handling installation of **gluten feed** in silos type LIPP. Capacity: 80 t/h fitted with PARCEY extractors. Storage capacity: 850 t
- Dust removal system in reception hopper. Silos mechanization of 200 t/h and isolation of equipments
- 4 silos type LIPP for storage of gluten meal and corn germ. Capacity: 200 m³
- New reception installation of **corn**, including four silos of 600 t each, handling equipments at 200 t/h and cleaning tower at 100 t/h
- 3 storage silos for **starch** of 150 t each (elevated for truck expedition). Unloading of the silos by fluidization system. Include: weighing system, metal detectors and bellow feeders for truck loading
- 3 storage silos of native starch, 1 of 100 m³ and 2 of 250 m³ each. Construction in stainless steel elevated for truck expedition and bellow feeders for trucks loading. Construction project included
- Replacement of 2 existing gluten meal silos by 2 new silos of 425 m³ each and substitution of existing PARCEY extractors by new hydraulic planetary extractors. Thermal isolation of silos included

Place: Zaragoza – Spain

TAGOL

- 2 silos type LIPP for storage of **soya flour**, 11 m of diameter and 17,2 m of height. Storage capacity: 3.300 m³ unloading by planetary extractors at 180 t/h
- Storage silos type LIPP and handling of **soya bean**. Handling capacity: 600 t/h. Storage capacity: 18.000 m³

- Storage installation in 8 silos type LIPP. Total capacity: 25.000 t
- Installation of 5 silos for soya flour and planetary extractors for unloading. Total capacity: 30.400 m³

Place: Lisbon (Portugal).

TROUW ESPAÑA

- Composed feeds plant for trout plant of 10 t/h. Place: Cojobar (Burgos) - Spain

FEED MILL PLANTS

AGROVILARDELL

- Composed feeds plant for bovine of 4 t/h. Place: Barcelona - Spain

AN SOCIEDAD COOPERATIVA (PIENSOS CACECO)

- Extension reception and expedition zone plant of existing **composed feeds** of 100 t/h. Handling equipments, siever and granules crumbling machine. *Place: Pamplona (Navarra) - Spain*

AVICU

- Storage plant for the raw material of composed feeds in 8 silos type LIPP of 13.200 m³, 3 spiral conveyors of 100 t/h of soya flour and manioc, 2 spiral conveyors for existing silos feeding, screw conveyor for dosing in the composed feeds plant and transport of final composed feeds with capacity of 70 t/h
- Complete plant of **composed feeds** mixforpoultry. Mixer of 10.000 litres with tilting bottom and blade mixer for chicken premix.

Place: Guadalajara - Spain

NUTECAL

- **Feed** mill Plant, capacity = 15 t/h raw materials reception, dosing, mixing, milling, granulation and final product expedition. Automatic bagging completely automatized with stocks control system

Place:Benavente (Zamora) - Spain

PORT FACILITIES

ALMACENES TRANSITOS Y REEXPEDICIONES

- 1 chain conveyor for loading vessels at 300 t/h cereals. Place: Port of Santander - Spain

BERGE Y CIA

- Rotary mesh ship of wagon loading of distance 30 m. Handling capacity: 250 t/h. *Place: Port of Gijón - Spain*

MUÑOZ CHAPULI (SEVILLA-PUERTO)

- Storage port facilities of 12.000 t in silos type LIPP. Handling of a 600 t/h on 2 lines. Continuous weighing installation, temperature automatic control. Control of plant by micro-processor and 2 ships of pneumatic vessels unloading. Capacity: 150 t/h each. *Place: Port of Sevilla - Spain*

SILOS CANARIOS

- 1 ship pneumatic unloaders, capacity: 280 t/h and connection conveyors to the existing installation
- Enlargement of existing silo composed of 24 cells, total capacity 9.724 m³. Metallic construction with prefabricated zig-zag panels. Loading by 2 chain conveyors of 150 t/h each. Construction project included

Place:Port of Las Palmas de Gran Canaria – Spain

SILOS DE TARRAGONA

- Dust removal complete plant of ship silo with automatic reverse sleeves filter and ship silo handling. Capacity: 800 t/h2 lines. Storage capacity: 42.000 t. *Place: Port of Tarragona - Spain*

ISOLUX WAT (S.G.S) - PORT OF VALENCIA

- Handling for horizontal silo of 120.000 t of storage capacity. Circuit scale. Loading and weighing, capacity: 1.000 t/h

Place: Port of Valencia - Spain

TAGOL (LISBOA - PORTUGAL)

- Storage installation in silos type LIPP and bean soya handling. Capacity: 600 t/h. Storage capacity: 18.000 m³
- Storage ship installation in 8 silos type LIPP. Total capacity: 25.000 t. Flow rate: 1.200 t/h

UTE ABENER INABENSA PAISES BAJOS (ABENGOA BIOENERGY NETHERLANDS)

Port facilities for bioethanol factory. Include: ecological mobile hopper for grain reception, connection belts for cereals and DDGS transport, circuit scales for grain reception (600 t/h) and DDGS expedition (400 t/h), sampler with carrousel. 2 loading arms to ships Capacity: 600 t/h for cereals unloading and 400 t/h for DDGS loading

Place: Port of Rotterdam (The Netherlands)

CHIMICAL INDUSTRY

AKER KVAERNER (MINAS DE AGUAS TEÑIDAS)

- 1 **crushed limestone** storage silo of 200 t and 1 **calcium carbonate** storage silo **of** 180 t with structure, vibrating bottom, weighing systems and feeder screw under silo. *Place: Huelva - Spain*

ANCLA

- **Bentonite** storage plant in 2 silos diameter 5 x 6 m. Capacity: 260 m³. Handling capacity: 15 t/h. *Place: Málaga - Spain*

CERAMICA SUGRAÑES

- 2 **dry clay** reception and storage silos. Load and unload conveyors and union with existing plant. *Place:* Cerdanyola (Barcelona) - Spain

EPYSA

- 4 special slide conveyors for cutback stucco
- Storage and gypsum transport plant with capacity of 40 t/h

Place: Valdemoro (Madrid) - Spain

FELGUERA FLUIDOS

1 bucket elevators and 2 screw conveyors for powder limestone (highly abrasive product). Place: Gijón
 (Asturias) - Spain

GENERAL MOTORS

- Polyethylene grit storage plant in 8 silos STOLZ type LIPP completely constructed in aluminium. Total capacity: 1.200 m³. *Place: Logroño - Spain*

INACSA

- 1 electro-welded vent silo for **cellulose acetate** storage. Extraction by vibrating bottom. *Place: La Batloria (Barcelona) - Spain*

INTRAME

- 2 bucket elevators type CELA-150. Capacity: 12 t/h fines, 4 bucket elevators. Capacities: 22 and 37 t/h of fines, 2 bucket elevators. Capacity: 82 t/h of cement and ash, 4 bucket elevators for fines and cement and 1 electro-welded vent silo Ø 6 x 11,5 m for cellulose acetate storage. Extraction by vibrating bottom. Place: Valladolid – Spain

LEONESA-ASTUR-DE PIENSOS

Fertiliser storage of 15.000 t. Reception plant by train and fertiliser storage in building. Capacity: 150 t/h. Place: El BurgoRanero (León) - Spain

PAPEL ARALAR

- Powder talc pneumatic transport and storage installation. 1 silo of 120 t and 1 electro-welded vent silo with cutback cone for talc storage. *Place: El Aralar (Guipuzcoa) - Spain*

PAPELERA PENINSULAR

- 1 big-bag unloading station and feeding screw to mix storage. Place: Madrid - Spain

REPSOL QUIMICA

- 2 screw conveyors. Place: Alcalá de Henares (Madrid) – Spain

RIBAWOOD

- Powder polypropylene storage plant in silos type LIPP of 150 m³–Pneumatic transport. *Place: Zaragoza - Spain*

SMURFIT

- 1 electro-welded vent silo for **starch** storage. Unloading by vibrating bottom for SMURFIT. *Place:*Durango (Bilbao)- Spain
- **Starch** silos with unloading by vibrating bottom and loading by pneumatic transport for SMURFIT. *Place: Menjibar (Jaén) Spain*
- 1 electro-welded vent silo for **starch** storage. Unloading by vibrating bottom for SMURFIT. *Place:* Valladolid- Spain
- Starch storage plant of 50 t. Place: Valladolid Spain
- Starch storage plant of 40 t. Place: Durango (Bilbao) Spain

SINAE

- **Dry slurry of pork** pelletizing plant. Product expedition silo of 220 m³ to trucks. Unit pelletizing capacity: 1.500 Kg./h. Expedition: 50 t/h. *Place: Lorca (Murcia) Spain*
- **Dry slurry** pelletizing line. Dry product storage and expedition. Pelletizing capacity: 3.500 Kg./h. Expedition: 50 t/h. *Place: Agreda (Soria) Spain*
- **Dry slurry** pelletizing line. Product expedition silo of 220 m³ to trucks. Pelletizing capacity: 1.500 Kg./h. Expedition: 50 t/h. *Place: Los Rábanos (Soria) Spain*

TAQSA

- **Powder talc** storage plant with pneumatic transport line and cutback unloading. Capacity: 160 m³.

Tarragona - Spain

TOLSA (LEBRIJA-SEVILLA)

- 3 silos type LIPP for "Atapulgite" storage. Capacity: 1.000 m³. Place: Lebrija (Sevilla) - Spain

YESOCENTRO (SAN MARTIN DE LA VEGA- MADRID)

Plaster transport plant, capacity: 30 t/h (special chain elevator), 3 spiral conveyors. Capacity: 30 t/h heated gypsum, 2 spiral conveyors. Capacity: 40 t/h gypsum, 2 spiral conveyors. Capacity: 20 t/h gypsumand 2 spiral conveyors. Capacities: 20 and 30 t/h gypsum. Place: San Martin de la Vega (Madrid) - Spain

YESOS SAN MARTIN

- 1 tubular screw conveyor inclined 42º. Capacity: 30 t/h gypsumat 110º C. Place: San Martin de la Vega (Madrid) - Spain

BIOFUELS AND BIOMASS

BIOETHANOL FROM RAW MATERIAL 1st GENERATION

ABENER ENERGIA (GROUPE ABENGOA) ECOCARBURANTES ESPAÑOLES (ABENGOA GROUP)

- Reception hoppers from wagons (300 t/h) and trucks (150 t/h) with dust removal
- Storage CAPACITY:
 - Grain: 75.000 t
 - DDGS: 10.000 t
- o Expedition pots of trucks and wagons. Cereals cleaning installation at 150 t/h. Cleaning building

Place: Cartagena (Murcia) - Spain

BIOETANOL GALICIA

DDGS granulation facilities: building and machinery: 2 pellet mills of 400 KW each. Pneumatic transport system of flours from dryers to granulation building. Mechanization of storage building for DDGS pellets and flours. DDGS expedition post to trucks with elevated hoppers of 200 m³

Place: Curtis, ACoruña (Galicia) - Spain

ABENGOA BIOENERGIE FRANCE (ABF)

- Reception installation of cereals from trucks and wagons and storage in 6 silos of 65.000 ton. Precleaning and cleaning of cereals at 300 t/h. Cereals milling composed of 4 lines of 27 t/h each. 2 dairy silos of 525 m³ each and process feeding. Pelletizing installation of DDGS flour composed of pneumatic transport of flours from the inlet of dryer to granulation building, 3 lines of pelletizing of 16,5 t/h each, sieving of pellets and loading of storage hangar of flours. Expedition of DDGS pellets to wagons. *Place:* Lacq (France)

BIOCARBURANTES DE CASTILLA Y LEON

- Reception installation of cereals to trucks and wagons and storage in 6 silos of 65.000 ton. Pre-cleaning and cleaning of cereals at 300 t/h. Cereals milling composed of 4 lines of 27 t/h each. 2 dairy silos of 525 m³ each and process feeding Pelletizing installation of DDGS flour composed of pneumatic transport of flours at the inlet of dryer, 3 lines of pelletizing of 16,5 t/h each, sieving of pellets and loading of storage hangar of flours – Mechanization of DDGS storage hangar by loading chain conveyor of 30 t/h capacity and screw of union and integration of weighing program of trucks and wagons with BAAN system of the factory.

Place: Babilafuente (Salamanca) – Spain

ABENGOA BIOENERGY NETHERLANDS (ABN)

Design, supply "turn-key" and start-up of reception, cleaning, storage and grain milling unit, composed of: reception capacity: 600 t/h by vessel, truck or wagon + cleaning capacity: 600 t/h + storage capacity: 8 silos of 76.824 m³ total capacity + milling capacity: 140 t/h, based on wheat.

Pelletizing unit, mechanization of storage silo and expedition to trucks or wagons train; pelletizing capacity: 60 t/h + DDGS expedition capacity: 400 t/h

Place: Rotterdam (The Netherlands)

ABENGOA BIOENERGY

- General and detailed engineering for reception, cleaning, storage and grain milling and DDGS pelletizing units for bio-ethanol factory.

Place: Inminghan (United Kingdom)

ABENGOA BIOENERGY

- General and detailed engineering for reception, cleaning, storage and grain milling and DDGS pelletizing units for bio-ethanol factory. *Place: Rostock (Germany)*

TSK - INGEMAS (TO GREEN SOURCE POLAND) - ASTURIAS - SPAIN

- General and detailed engineering for reception, cleaning, storage and grain milling unit and DDGS pelletizing unit for bio-ethanol factory. *Place: Kostzrin - Poland*

BIOETHANOL FROM RAW MATERIAL 2nd GENERATION

BIOCARBURANTES DE CASTILLA Y LEON (ABENGOA GROUP)

 Pre-treatment installation for Straw to produce bio-alcohol. Installation composed of: feeding belts for Straw bales, weighing belt for bales, automatic D-stringer for Straw bales, Straw bales milling, finishing mill, pneumatic transport systems, storage buffer silo with planetary extractor and humidifier conveyor to process. Milling capacity: 4.000 Kg./h

Place: Babilafuente (Salamanca) - Spain

BIODIESEL

ACOR (OLMEDO - VALLADOLID)

- Complete engineering and construction of the reception, pre-cleaning, drying, cleaning and grain storage installation for a biodiesel production factory of 65.000 t/year. Reception capacity = 500 t/h. Cleaning capacity = 500 t/h. Drying capacity = 100 t/h. Storage capacity = 160.000 ton in 16 silos of 10.000 ton each based on rape seed. Capacity of storage hangar: 12.500 t based on all capacities of rape seed flour. Loading hangar capacity = 30 t/h. Expedition flours capacity = 100 t/h.

Place: Olmedo (Valladolid) - Spain

- 1 silo of 60 m³ for bleaching earth used in biodisel refinery

INFINITA RENOVABLES

- 1 silo of 100 m³ for **bleaching earth** used in biodiesel refinery. *Place: Ferrol (A Coruña) - Spain*

UTE ISOLUX

- 2 silos of 100 m³ for **bleaching earth** used in biodiesel refinery. *Place: Port of Castellón - Spain*

AZUCARERAS REUNIDAS DE JAEN

- 1 silo of 60 m³ for **bleaching earth** used in biodiesel refinery for ARJSA. *Place: Linares (Jaén) - Spain*

DE SMET

- 1 silo of 60 m³ for **bleaching earth** used in biodiesel refinery. *Place: RamalhalOeste (Portugal)*
- 1 silo of 100 m³ for bleaching earth used in biodiesel refinery. *Place: Palos de la Frontera (Huelva) Spain*

SARAS ENERGIA

- 1 silo of 60 m³ for **bleaching earth** used in biodiesel refinery. *Place: Cartagena (Murcia) – Spain*