



Silo and Plant Construction

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How it all began ...

In civil status documents and the North Rhine-Westphalian State Archives of Detmold, the name Ruhberg/Ruberg has been associated with mill construction since 1785. Originally the trade was carried out in situ. Master craftsmen and journeymen built mill wheels and milling gears directly in the mill buildings.

Later on technology and infrastructure advanced and enabled a commercial production in Nieheim, from which today's mill and plant construction developed.

On June 16, 1856, Mr. Christian Ruberg was granted the title Master Millwright by the Royal Government of Minden.

What once started as a mill construction enterprise, gradually developed into a metal construction company, following a re-establishment in 1949. Christian's successor, Franz Ruberg, who ran the business until 1954, gave his name to the company.

Subsequently his son Hermann Ruberg took over the business. Following the many mill closures in the 60's, he mainly focused on grain reception and grain processing in smaller grain silos.

Small and medium-sized silo plants were manufactured and sold throughout Germany. In 1981, Hermann's son, Alfred Ruberg assumed management responsibility. Under his management operations were successfully expanded, so that today the company has a workforce of about 70 people. Grain facilities, cleaning and silo plants using state-of-the-art conveying technology and latest standards are designed and installed throughout Europe.

Furthermore cereal storage facilities, ship loading and unloading plants, bio mass power stations or plants for the recycling of timber and the processing of waste timber are manufactured. The design and planning is carried out by in-house engineers and all plants are supplied to the customer turnkey.

Turning Ideas into Solutions

For more than 150 years we have been engaged in the mill, plant and silo construction. Our core competency and performance strength lies mainly in the field of mechanical materials handling technology. But we also provide individual, innovative and creative solutions in many other areas, putting a great emphasis on a close customer dialogue. Because it is according to your specific needs and requirements we manufacture sturdy and reliable plants.

Customer satisfaction is our goal

Highest quality – that is the central key success factor of Franz Ruberg & Co. GmbH. Our highly qualified and motivated technicians, engineers and fitters are always striving to work for the benefit of our customers, are oriented towards current developments and employ the latest technologies. In close dialogue with our customers we develop concepts and strategies for the varying requirements in mill, plant and silo construction. By using state-of-the-art CAD-technology in the design and planning phase and mostly CNC-controlled machines in the production process, we can guarantee the highest level of precision and quality.

New Construction of a Silo Plant

intake, conveying and cleaning technology,
drying facility
total capacity 67500 t
intake capacity 2 x 200 t/h





We offer you everything from a single source – design, planning, construction, production, installation, after-sales service and repair service (also including third-party components).

You can depend on us to provide a smooth and on-schedule installation of machinery and plants.

Whether individual machine, custom-made production or turnkey industrial plant – we offer you a broad spectrum of possibilities.

No matter what your plans are in the field of mill, plant and silo engineering – we realize them!



Our Scope of Supply

We design, build and supply systems and mechanical equipment for various industrial branches. Our services also include the complete installation and maintenance works.

Conveying, storing and processing – Franz Ruberg & Co. GmbH offer a comprehensive range – from stand-alone components to the complete plant. We design and build high-performance plants with cost-effective, efficient and long-lasting technology, naturally designed to meet the specific wishes and requirements of our customers and geared towards the demands of the future.



Grain industry



Feed industry



Food industry



Bioethanol plants



Rapeseed oil plants



Biomass power stations

Conveying technology

- Elevators
- Trough chain conveyors
- Conveyor belt systems
- Screw conveyors
- Chain conveyors
- Scraper conveyors

Processing technology

- Cleaning machines
- Pre-cleaning machines
- Drum sifters
- Disc screens
- Destoners
- Sorters

Milling technology

- Mills

Storage technology

- Automated flat storage systems
- Silos
- Silo installations

Conservation technology

- Chillers
- Drying technology

Dedusting technology

- Filters
- Fans

Slide gates / discharge systems

- Discharge machines

Intake technology

- Pit intake systems
- Loading systems
- Weighing systems
- Tilting platforms

Measuring and control technology

- Dosing systems
- Mixing systems
- Plant control systems

Bins

- Hoppers and bins

Flap boxes and pipe systems

- Square pipes
- Round pipes



Design, Planning and Production

To develop profitable, effective and value adding concepts based on individual requirements is the challenge of our time. Our 3D CAD systems open up new opportunities for continual process improvements and as a result significant reductions in time needed.

The automation of varied production processes warrants an economical and high-quality production. An optimal interaction between departments, i.e. design, planning, production, sales, financial and materials management, makes our products competitive and financially attractive to our customers.





Installation and Servicing

The installation service is an important service segment of Franz Ruberg & Co. GmbH and a field in which we can draw on many decades of experience. Qualified project managers and senior fitters draw up installation concepts and set up an optimal timeline.

Naturally our fitters are furnished with adequate equipment, e.g. containers for office and sanitary facilities and tool storage. Auxiliary tools and devices such as winches, hoists, fork lifts etc. are part of the standard equipment.

We offer a full range of services comprising installation works, modifications, upgrades, extensions, optimisations and repairs on our own products, but also on any third-party components.

Our customers comprise milling plants, feed plants, agricultural enterprises, bio mass power stations, bioethanol plants, rapeseed oil plants, chipboard factories, furniture industry, automotive industry, concrete factories and waste wood recycling facilities (wooden pellets).

It goes without saying that our service does not end with project completion. We provide an extensive follow-up support including all service and repair works. Installation works can either be executed on basis of a service contract or an employee lease agreement. Depending on the predictability of costs, either fixed prices or hourly rates may be agreed.



Our Strength: Conveying Systems and Plant Construction

Our core competency are turnkey plants for various fields of application in mechanical materials handling, including in particular plants for the transport, processing and storage of cereals, mill products and feed components.

In addition, we also focus on projects in the areas of bio mass power stations and biofuels, where we can draw on our wide spectrum of core products, such as trough chain conveyors, elevators, screw conveyors, conveyor belts, silos, bins etc.

A comprehensive range of the most diverse individual machines is also available: mixing screws, pellet coolers, high capacity separators, segment conveyors, loading, dosing and discharge systems.

Subject to the current standards and regulations (Atex) our products are individually adapted to their operational purpose. Customised parts can be designed and manufactured according to your specific needs in a short period of time.

We are also happy to develop solutions in completely new areas – challenge us!

Robust and dependable plant technology tailored to your specific requirements! Talk to us about your plans.



Conveyor Technology made by Franz Ruberg

Wherever raw materials, bulk goods, auxiliary and operating materials are to be transported across longer distances, conveying technology by Franz Ruberg & Co. GmbH comes into use in many branches of industry around the world.

Especially sought after are complete solutions and turnkey plants, custom-made products, but also efficient individual components, such as

- **elevators**
- **conveyor belts**
- **trough chain conveyors**
- **screw conveyors**
- **segment conveyors**
- **chain conveyors**

Reliability, safety and cost-effectiveness are decisive factors when it comes to the use of conveying technology and are a matter of course for Franz Ruberg & Co. GmbH: Extensive know-how, latest technologies from the design and planning all the way through to production and installation (CAD-systems, automated assembly facilities, CNC-controlled precision machines etc.), and the use of durable, abrasion and wear-resistant materials.

Complex conveying systems require experience in the realisation of customer-specific wishes and requirements. They mostly constitute unique and individual items. And yet they have to ensure an efficient and economical operation, and at the same time be affordable. With this in mind and together with 150 years of experience, we are geared to meet your challenges.

Ship Loading and Unloading Plant

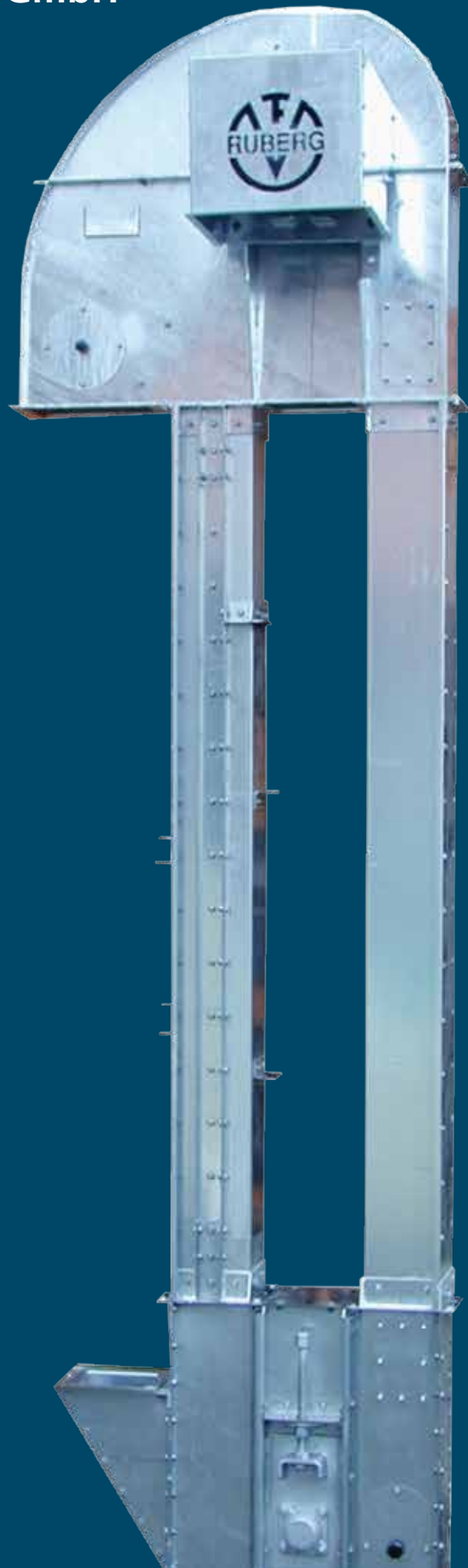


Rising High ... Elevators made by Franz Ruberg & Co. GmbH

Wherever bulk goods are to be transported vertically, so-called bucket elevators in various executions come into action. They can bridge considerable heights of more than 100 meters and cover a performance range of up to 1,000 t/h.

Advantages of Franz Ruberg & Co. GmbH elevators at a glance:

- fully enclosed design for a dust-free product transport
- the wire drum built into the elevator leg ensures a gentle product infeed
- varying conveying speeds and various bucket shapes allow for the transport of a wide variety of materials
- high performance capacity with optimised safety and compact design









Trough Chain Conveyors

Trough chain conveyors are available in a wide range of executions. They offer broad application possibilities from goods reception all the way through to discharging. Conveying distances of more than 100 meters can be bridged, covering a performance range of up to 1,000 t/h. Trough chain conveyors are used in plant designs for almost all horizontal conveying purposes.

Advantages of Franz Ruberg & Co. GmbH trough chain conveyors at a glance:

- enclosed design
- clean and hygienic
- low conveying speed
- extremely gentle on the product
- low energy requirement
- environment-friendly
- minimum wear
- easy maintenance
- comprehensive range of accessories

Production is carried out on CNC-controlled precision machines, solely using high-grade steels, sturdy bearings and drive components, which are adapted to the specific requirements of the individual machine.





Miscellaneous Conveying Equipment

Conveyor Belts

Conveyor belts are ideally suited for the horizontal and inclined transport of goods over longer distances. Due to their light construction and the possibility of a continuous product discharge over the entire belt length, they are often used for the filling of storage halls. To be highlighted are their minimum wear and low energy requirement. The open design enables easy and trouble-free maintenance.

Segment Conveyors

Segment conveyors transport products gently and residue-free. They are used for both horizontal and inclined transport and are particularly suited for the transfer of pellets, feedstuff and seeds. Conveying distances of more than 100 meters can be covered with a performance range of up to 250 m³/h.



Screw Conveyors

Screw conveyors transport products horizontally, vertically or inclined. From liquid products, to granular and floury raw materials, through to dough- and chocolate mass – screw conveyors can handle virtually any type of product. Screw conveyors find frequent use in inclined conveying, where larger heights are to be bridged at shortest distances. In addition, screw conveyors are used for the discharging of silo bins and in the wetting, mixing and dosing process.







Solutions for the Grain Reception

Once the fields have been harvested in autumn, the valuable grain has to be stored and processed very carefully, in order to optimally maintain its quality.

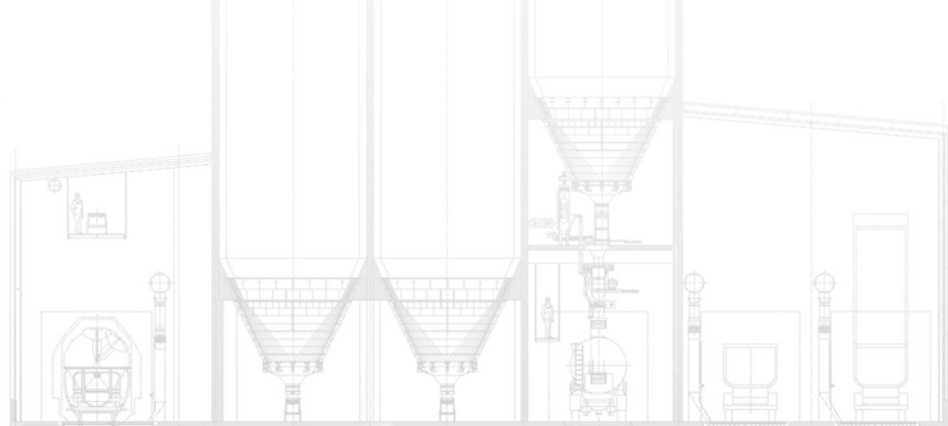
Franz Ruberg & Co. GmbH supplies numerous machines for the quality control and self-monitoring.

The first step to a gentle storage is the grain reception:

- rail unloading and loading
- truck unloading and loading
- machine buildings fully equipped with intake technology (pit intake, tilting platforms, dosing, mixing and weighing systems)
- processing systems
- dedusting systems
- storage systems

Each plant has to be individually and exactly adapted to suit the specific local preconditions. Operators of large facilities transfer the grain into the silo plant by rail or truck, and from the silos onto cargo vessels and vice versa. Whereas in smaller facilities the grain is unloaded directly from the tractor trailer of the local farmer into the mill.

Franz Ruberg & Co. GmbH offers sturdy and reliable plant systems – tailored to your individual needs and requirements!



Aspiration, Sorting and Cleaning

High-performance cleaning machines by Franz Ruberg & Co. GmbH are used for the reception and cleaning of various bulk goods: grain, maize, oil seeds, malt, coffee, rice, soybeans and the like. During coarse cleaning, directly following the goods intake, any foreign matter like wooden pieces or stones are separated, as they may damage any downstream machines, such as conveyors.

By a thorough yet gentle cleaning process, the quality of the final product is maintained and optimum storage properties are ensured. Thus also preventing the development of toxic fungi and any other harmful substances.

In combination with our fan, filter and dedusting components, we comply with current safety and environmental regulations and guarantee an effective and trouble-free use of Franz Ruberg & Co. GmbH cleaning machines.



Wheat



Oats



Rice



Rapeseed



Beans



Sunflower seed



Maize



Coffee



Soybeans

Coarse Cleaning / Dedusting



RASRA 41-2400



Drum screen



Drum screen



Round air classifier

RASRA – Pre- and Main Cleaning in Top Quality

RASRA by Franz Ruberg & Co. GmbH is the ideal machine series for the pre- and main cleaning.

Franz Ruberg & Co. GmbH cleaning machines ensure a high throughput capacity and an optimum cleaning result. Based on our long-standing experience in the field of grain processing, we were able to develop a machine type that combines two cleaning functions: aspiration and sieve cleaning.

Due to the double aspiration, dust and other low-density particles are removed. Any coarse particles are separated by means of the screen decks. Additionally the grain is sorted into a 1st grade final product as well as small grains and brokens.

The advantages at a glance:

- high throughput capacity
- economical and environment-friendly cleaning with air separation
- minimal and easy maintenance
- easy screen change
- separate outfeed of a 1st grade final product





Complex Round Silo Plants

Plants for the storage and further processing of grain or other bulk goods are in use worldwide and sought after all around the globe.

Franz Ruberg & Co. GmbH designs, plans, develops and installs your high performance plant together with the necessary intake and processing facilities.





Grain handling plant Regensburg/Germany

complete machinery and storage
technology for loading and unloading
as well as machinery and equipment
for the grain processing and drying.

total capacity 12 x 3500 t + 4 x 800 t

intake capacity 2 x 220 t/h
unloading capacity 2 x 220 t/h
ship loading capacity 400 t/h

Reference Plants



Port Terminal

complete machine and storage technology
for loading and unloading
total capacity 6 x 1800 t + 9 x 7500 t

intake capacity 3 x 300 t/h
unloading capacity 300 t/h
ship loading capacity 600 t/h



Bimodal Agro Terminal Heidenau/Germany

complete machine and storage technology
for loading and unloading
with rail intake and loading lane
total capacity 50000 t

intake capacity 4 x 300 t/h
discharge capacity rail 450 t/h
discharge capacity truck 300 t/h



Agrobusiness Hohenlohe/Germany

machine house with intake,
conveyor and cleaning technology
storage silos with conveyor technology
drying plant

total capacity 9000 t

intake capacity 150 t/h
unloading capacity 150 t/h

Further Reference Plants:

- AGRAVIS Münster and Brake/Germany
- BAYWA Munich/Germany
- HABEMA HH Heidenau/Germany
- MÜHLE Rünigen/Germany
- BEISELEN Magdeburg and Rostock/Germany
- RWA Raiffeisen Austria Vienna/Austria
- HAGE Kiel/Germany
- RWG Steinheim/Germany
- Gebr. Engelke Hasede/Germany
- Gebr. Weiterer Algermissen/Germany



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