



PLANTS APPARATUS ERECTION

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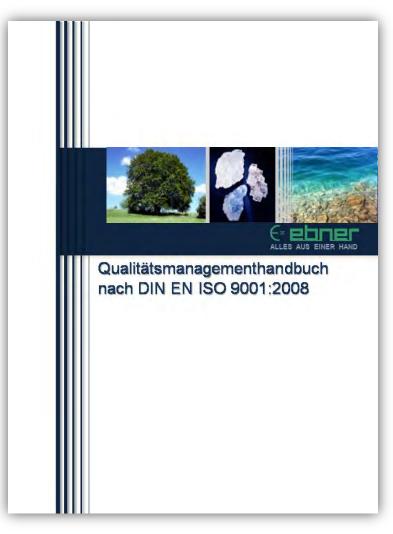


The following certifications and licenses are available in our company:





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ISO 9001





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U-STAMP



- > Company founded in 1965 by Mr. Karl Ebner
- Managing Directors:

Stefan Ebner

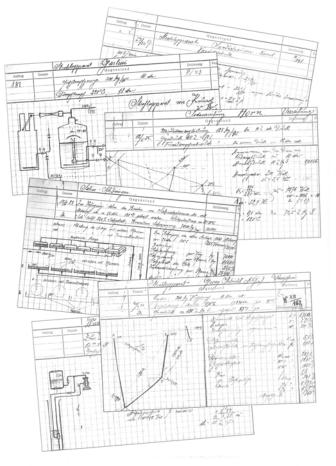
> The company is divided in 2 profit centers:

- Plant Construction

- Manufacturing of apparatus/erection

≻Our offer to you:

- Customer Support
- Services
- Engineering
- Laboratory and Pilot plant
- Calculation
- Planning
- Design
- Manufacturing
- Erection / Start-up / After-sales service



## E= Ebner engineering | manufacturing | establishing

#### **General Information**

Contact person



Stefan Ebner Managing Partner Sales Plant Technology E-Mail: <u>stefan.ebner@ebner-co.de</u> Tel: +49 6171 9282-0 Fax: +49 6171 9282-11



Rasit Özis Authorized Officer Head of Plant Technology Division E-Mail: <u>rasit.oezis @ebner-co.de</u> Tel: +49 6672 890-180 Fax: +49 6672 890-198



Josef Rübsam Authorized Officer Factory Manager E-Mail: josef.ruebsam@ebner-co.de Tel: +49 6672 890-119 Fax: +49 6672 890-133



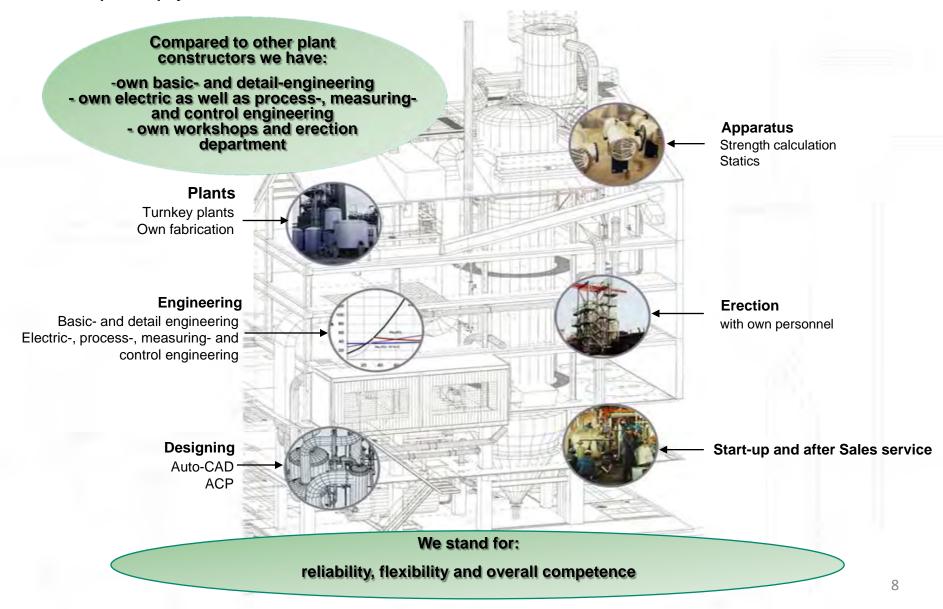
Abel Markus Authorized Officer Commercial Manager E-Mail: markus.abel@ebner-co.de Tel: +49 6672 890-161 Fax: + 49 6672 890-139



Harald Schäg Sales Manager Apparatus E-Mail: <u>harald.schaeg@ebner-co.de</u> Tel: +49 6672 890-106 Fax: +49 6672 890-151



EBNER's philosophy: Just one source.

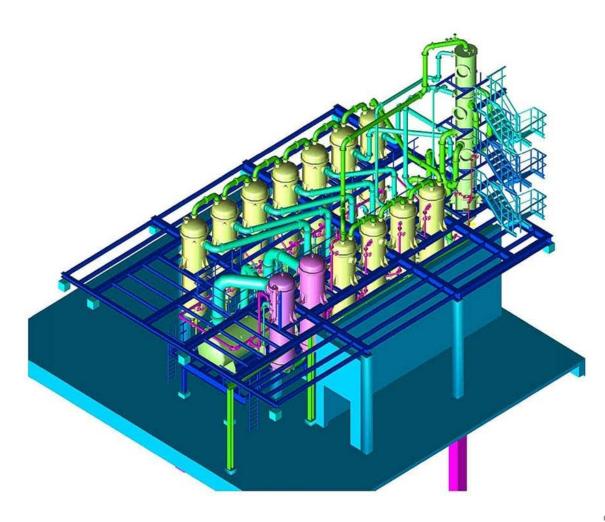




#### **Company Profile**

#### **Design Systems:**

- > Auto-CAD 2011
- > Auto-CAD P&ID
- > Auto-CAD Plant 3D
- ≻ E-Plan 5.7
- > E-Plan P8





#### Workshop equipment

- CNC-drilling machine
- CNC-milling machine
- > Saws
- > Grinding machine (e.g. belt grinding machine)
- > Sheet processing machine (e.g. nut beveling machine, plate shear)
- Sheet roller
- > Presses
- Machine tools (e.g. turning lathes, milling machines)
- > Work-holding and welding devices (e.g. welding trestle, roller blocks)
- > Crane and handling devices (e.g. indoor crane, fork lift)
- Electric welding
- Metal protective gas welding (MAG)
- > Protective gas welding (WIG)
- > Plasma needle hole welding machine
- > Tube welding machines (WIG, MAG)
- > Automatic welding skid for circular weld seams
- > Other welding devices (e.g. exhaust systems)







#### **Our Clients**

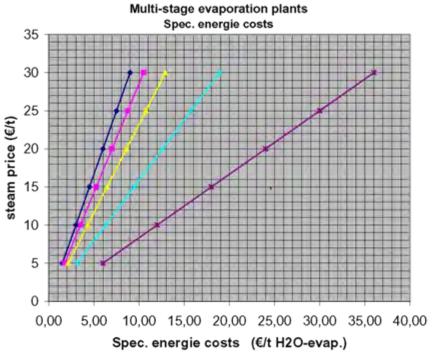
Companies of different branches of industries worldwide belong to our clients:

- > Chemical Industry
   > Galvanic Industry
   > Refuse Incineration
   > Plant Construction
   > Pharma Industry
   > Engineering Companies
   > Potassium Industry
   > Viscose Fibre Industry
- > Power Plants



#### **Engineering and Designing**

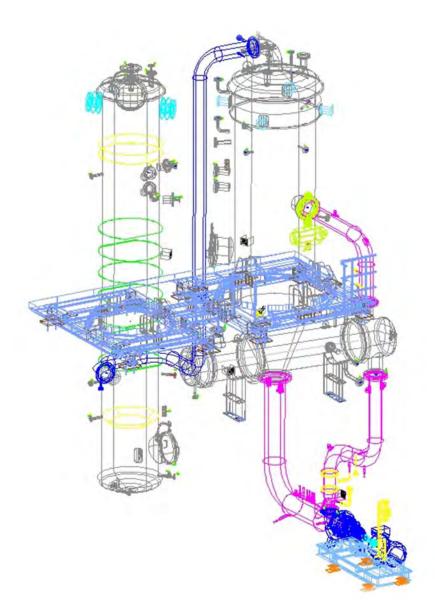
Basic Engineering such as:



- > feasibility studies
- optimization studies
- > process technical calculation of apparatus and plants
- ➤ preparation of process flow sheets
- > preparation of mass- and energy balances
- >electrical-,measuring- and control systems
- > preparation of installation plans



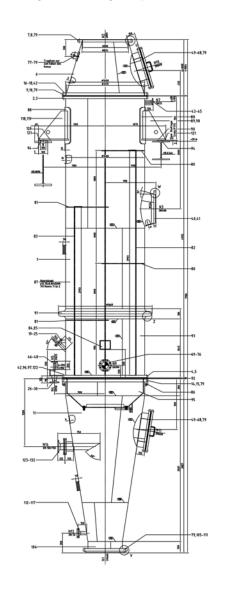
#### **Detail-Engineering**



- > preparation of P & I diagrams
- > preparation of equipment lists
- > preparation of pipeline lists
- > preparation of lists of fittings and valves
- > preparation of list of measuring- and control systems as well electric systems
- > measuring- and control engineering for complete plants
- > preparation of specifications for machinery
- process- and mechanical properties and design of apparatus
- preparation of detail installation plans and determination of loads
- > preparation of building drawings and steel structure drawings
- > pipeline planning including isometric drawings



According to the slogan "individual service, best quality and reliability"



EBNER manufactures apparatus, heat exchangers as well as other components for different industries.

Our production area of approx. 6000 m<sup>2</sup> being equipped with all necessary machinery.

#### We treat all standard stainless steel such as:

AISI 304 / AISI 321 / AISI 316 TI / AISI 316 L / NO8904 / NO8926 / S31254 / ANSI 318 LN / NO8031 / AISI 314 and much more

#### as well as special materials

Hastelloy / Monel / Titanium / Graphite / Aluminium bronce

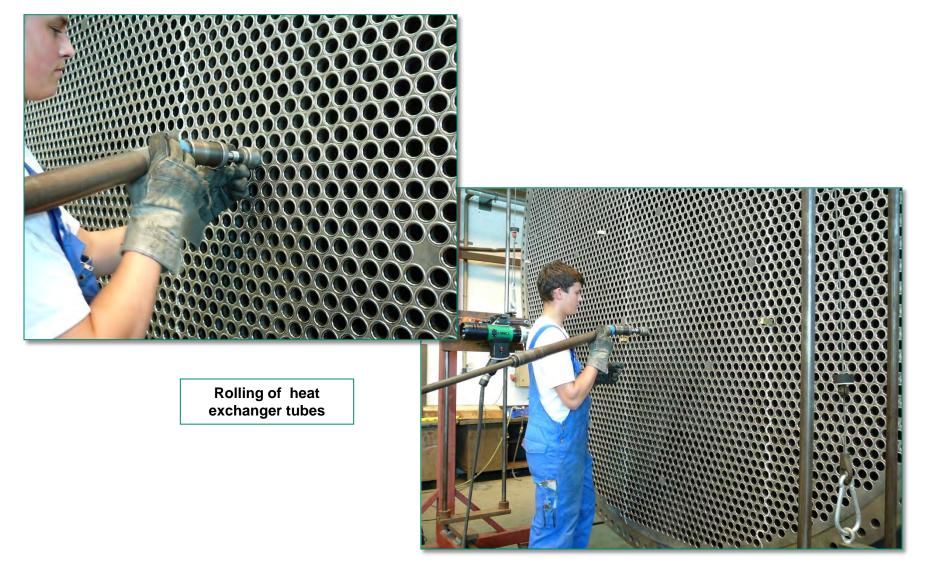
















Diameter: 3.532 mm











Heat exchanger in various materials such as Monel, Titanium, Graphite













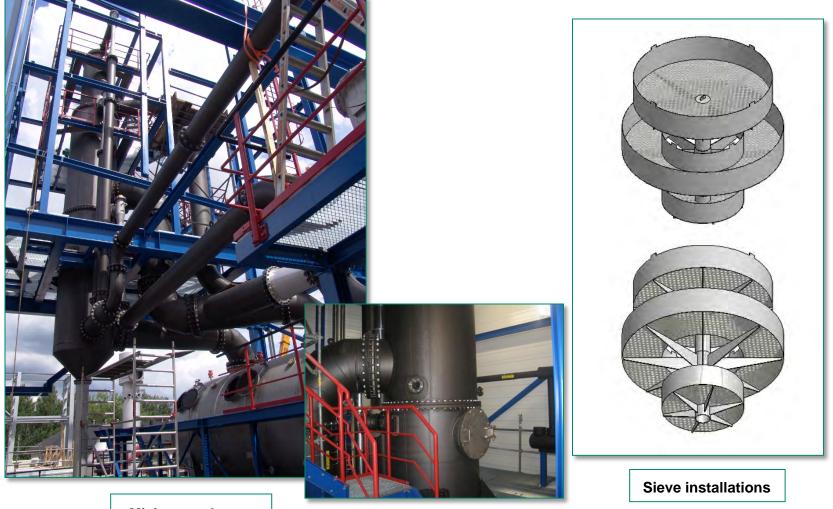












Mixing condenser



EBNER plans, manufactures, supplies and installs turn-key plants for the treatment of hydrous solutions by thermal processing and plants for the conversion of raw materials for the purpose of gaining salts.

The conception of the plants is based on the continuous technical and economic development by setting highest priority on energy saving and pollution control.



**Plants for** 

- degassing

- vaporizing

- crystallizing

- heat recovering

- heat exchanging

- condensing

- vacuum producing

Complete plant systems which may be a combination of the above mentioned plants such as:

- > salt recycling from process waste waters
- > salt recycling from waste waters of flue gas desulphurization plants
- > salt recycling from spinbaths
- > extraction of salts from raw materials
- > evaporation and crystallization of environmentally hazardous substances
- flaring of gases
- > regeneration of pickling baths
- > Mannheimer furnace (reaction crystallization)
- > plants for glycerine concentration



Birth and building of a plant





The concrete work in progress







Pressure vessel fabrication





Installation of core equipment





Progress of the steel structure



Installation is nearly finished

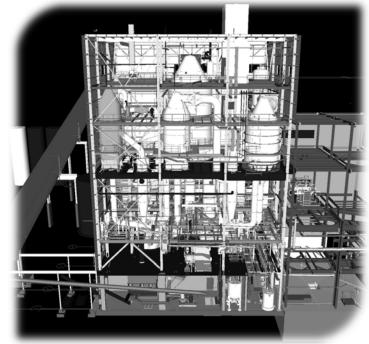


Difficult conditions for the erection due to frosty weather



Total view of the salt plant

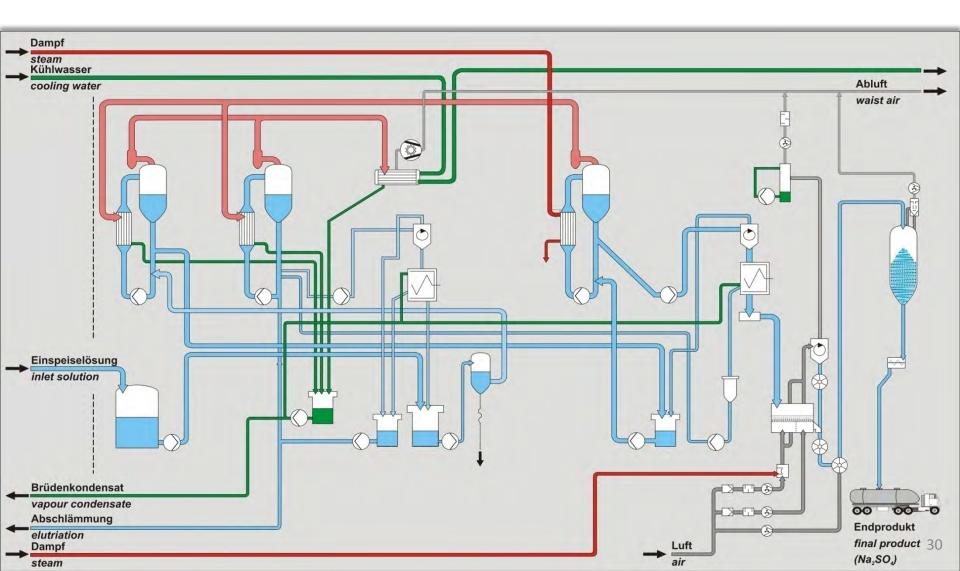




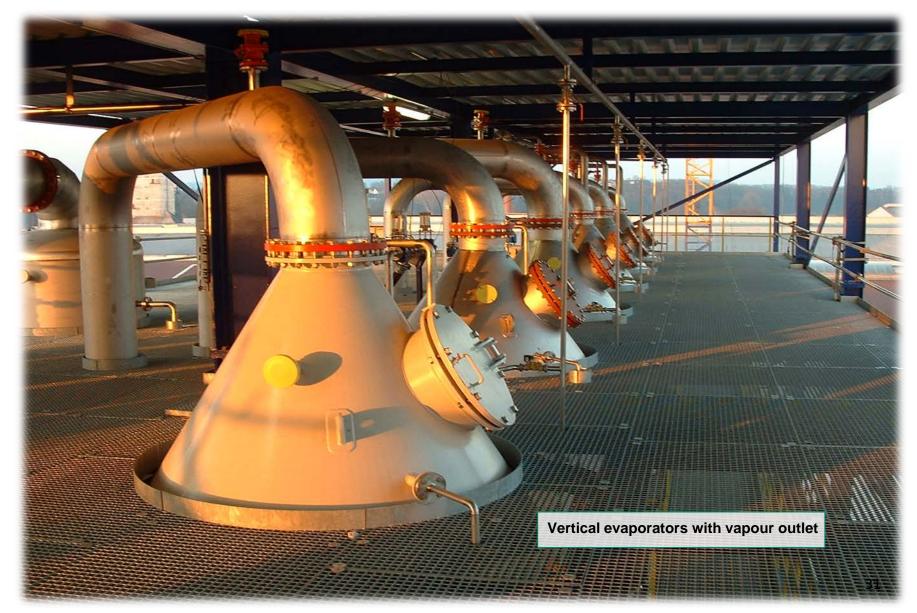




Process Flow Sheet - 3-stage salt recycling plant









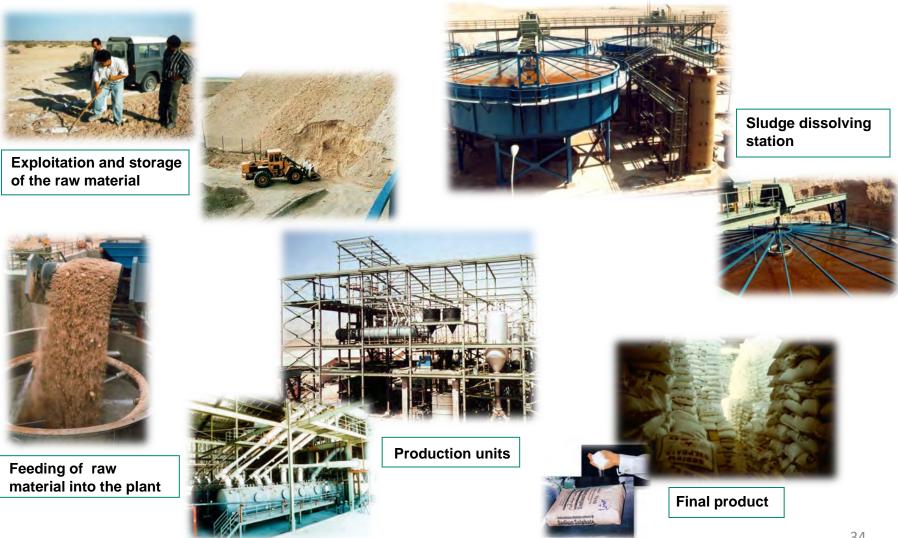






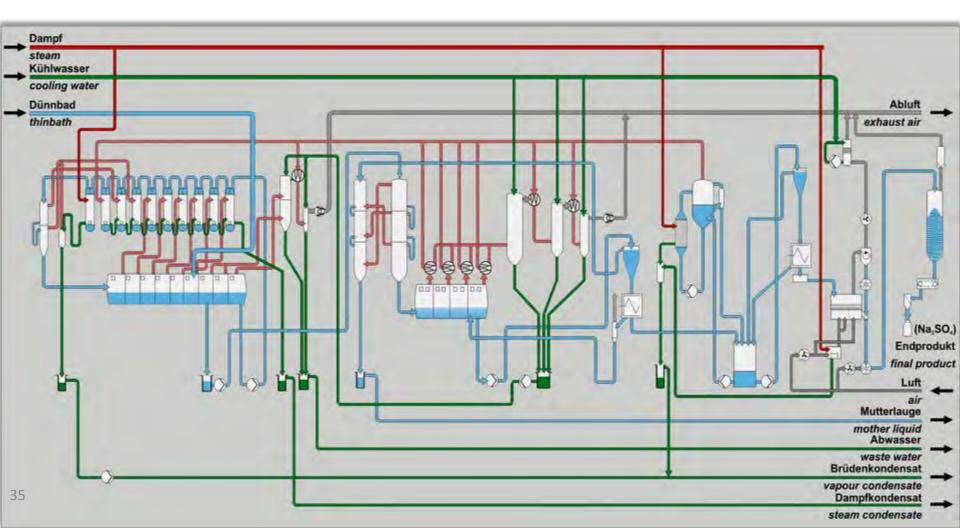


From desert sand to salt





Process Flow Sheet - Spinbath regeneration





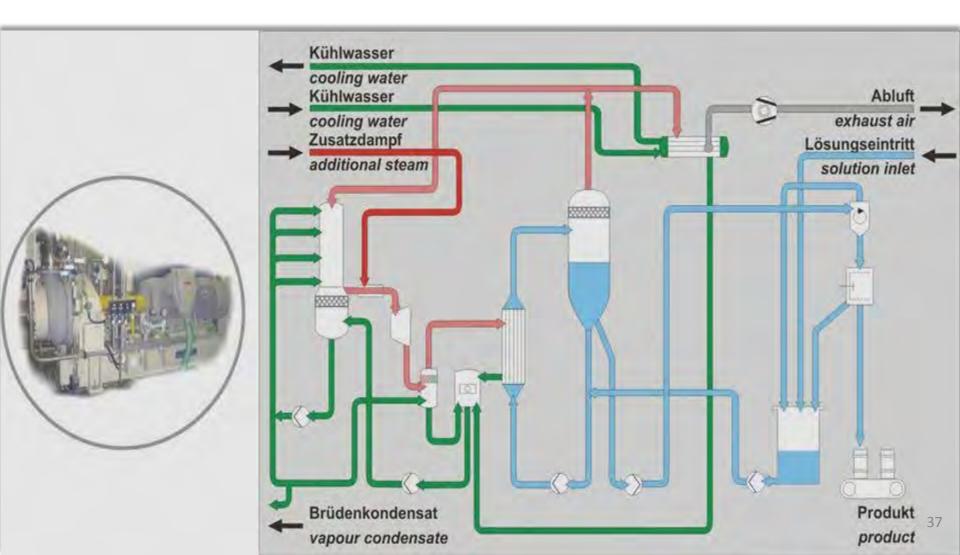




**Crystallization plant** 



Process Flow Sheet - Evaporation plant with mechanical vapour compression







**Evaporation plant** 





#### Erection

- > For own plants
- > For plants of competitors
- > For related industrial enterprises



# OUR ERECTION TEAM IS INTEGRATED IN OUR PRODUCTION SECTION AND BEING SELECTED DUE TO CUSTOMER NEEDS.



#### Erection

Various erection sites















#### Start-up and after-sales-service

Our start-up team not only puts our own plants into production but also makes this know-how available to other companies.



#### References

Degassed substances:
≻ Air
≻ H <sub>2</sub> S
≻ CS <sub>2</sub>
≻ CO <sub>2</sub>
≻ SO <sub>2</sub>

# Evaporated substances: > Aluminate liquor > Aluminum sulphate solution > Ammonium sulphate solution > Ammonium rhodanide solution > Black liquor > Calcium chloride solution

- Caprolactam
- > Cellophane bath
- > Filament fiber spinbath
- Glycerin-water mixture
- Iron sulphate solution
- Kerosene-oil mixture
- Mixed bath
- Normal fiber spinbath
- ➢ Oil mixtures

- Pickling baths
- Polynosic fiber spinbath
- Caustic potash
- Potash magnesia solution
- > Radioactive contaminated waste water

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- Saline waste water
- Sodium carbonate solution
- Sodium chloride solution
- Sodium sulphate solution
- Sodium sulfite solution
- > Special fiber spinbath
- > Titanium dioxide solution
- ➤ Waste water
- Wolframate solution
- > Zinc chloride solution



#### References

#### **Crystallized substances:**

- > Ammonium chloride
- > Ammonium sulphate
- > Carnalite
- Glaubers'salt
- Glaserite
- > Hexamethylentetramin
- Iron sulfate heptahydrate
- Magnesium sulphate
- > Magnesium sulphate hepthahydrate
- ➤ Metal salt
- Mixed salt
- > Nickel sulphate

- Nickel sulphate hexahydrate
- > Organic salts
- Potassium chloride
- > Potassium sulphate
- Sodium carbonate
- Sodium chloride
- > Sodium rhodanide
- > Sodium sulphate
- Sodium sulfite
- Sodium thiocyanate
- > Strontium nitrate
- > Thiourea

- Wolframate salt
- Zinc sulphate heytahydrate



#### References

Countries we deliver to:



Australia Austria Belgium Brazil Bulgaria China, P.R. Colombia Czech Repuplic Egypt Finland France Germany Great Britain Greece India Indonesia Iran Ireland Italy Malaysia Mexico Netherlands Nigeria Norway Pakistan Poland Portugal Romania Russia South Africa South Korea Spain Sweden Switzerland Syria Taiwan Thailand Ukraine USA Yugoslavia



#### Just one source.



#### contact

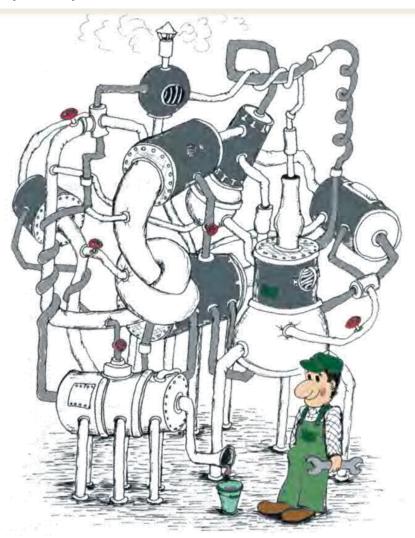
We would be pleased you contact us

#### Ebner GmbH & Co. KG Plants and apparatus

Karl-Ebner-Straße 8 D-36132 Eiterfeld Phone: +49 (0)6672 890 0 Telefax: +49 (0)6672 890 133 E-Mail: info@ebner-co.de Internet: www.ebner-co.de



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