

AVA[®]

FOR TURBULENT ACTION

At a glance:

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- AVA. Advantages.
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- AVA. In operation.

The AVA Know-how and experiences.

Applications in the environmental technology are a particular strength of AVA. With more than 20 years of expertise in mixing, drying, evaporating and process technology, AVA is an innovation leader for numerous applications. For the environmental industry, heavy-duty designs and associated long-life cycle are the outstanding properties of the AVA equipment. Under the slogan 'Diversity without limits' the delivery range covers mixers, dryers and installations: batch and continuous, horizontal and vertical, from 1 to 60,000 litres, for products from A (active coal) to Z (zeolites).

A strong team with a high level of knowledge, close cooperation and commitment to performance is the secret behind the success of AVA.



A powerful team.

ENVIRONMENTALS



Advanced environmental technology

AVA. Mixers. Dryers. Evaporators.

The whole environmental industry is looking for reliable and cost effective solutions: AVA is able to deliver them.

Mixers, dryers, evaporators and entire systems are part of energy and environmental installations, fossil and nuclear power plants, fermentation and green waste facilities, recycling plants and raw material re-processing.

Providing an individual solution to your particular application is our top priority. With the special strength in process know-how and through a process-oriented choice of variables nearly every customer-specific design is realizable. As a full-service company, AVA offers a complete range of services: starting from basic engineering, testing, calculation and 3D modelling, right through to commissioning, training and on-site service.

No application is too complicated, no challenge too tough !



AVA. Advantages.

- High efficiency compared to screw mixers and double shaft mixers
- Mixing and granulation in one machine with excellent granulation properties
- Heavy-Duty, wear-resistant design
- High-temperature applications up to 700°C
- Pyrolysis-treatment processes
- Evaporation of high-boiling or temperature-sensitive products under vacuum
- Product-specific design options like agitators, discharge systems and choppers
- Dust- and explosion-proof machine designs acc. to ATEX
- Mobile and semi-mobile designs
- High energy efficiency
- Economical due to low operating costs and high availability



AVA. Scope.

- Mixers and dryers for continuous processes with a throughput from 0.5 m³ / h to 1,500 m³ / h
- Horizontal and vertical mixers and dryers for batch processes with capacities from 60 to 60,000 litres
- Laboratory and pilot plant mixers and dryers with a capacity from 2 to 200 litres
- Vacuum and pressure-proof mixers with heating or cooling jacket
- Specialties such as mixing reactors, trough mixers, pan mixers etc.
- Complete installations around mixing and drying for automatic production processes including control systems

AVA. Environmental Applications.

- Conditioning of ashes and dust
 - Production of secondary combustibles
 - Homogenizing of hazardous waste: Shredding, Mixing, Pumping
 - Sterilizing of biological waste, hospital waste and excrements on ships
 - Sanitizing of slaughterhouse waste
 - Thermal desorption of contaminated powders, soils and sludges
 - Evaporation of radioactive substances from contaminated residues
 - Solvents recovery
 - Conditioning of bio mass in the production of bio fuels
 - Homogenous mixing for shortening of composting processes
 - Conditioning of mining backfill materials
- and many more special applications in the environmental and recycling industries...

Test the best

We can demonstrate the efficiency of AVA process technology with mobile pilot plants at your site or in our laboratory. AVA is one of the few suppliers – if not the only – that offers both horizontal and vertical systems. The trial results alone decide on the optimal solution.



AVA. In operation.

Refuse Derived Fuels (RDF)

Extremely differing substances have to be treated in such a way that they can be loaded into conventional furnaces. Special designs of AVA horizontal mixers, e.g. for the mashing of high-caloric, liquid and solid waste as well as Atex-conform conveying and dosing of the pumpable suspensions into the combustion chamber, are part of the system solutions of AVA.

Moistening / Granulation of dust and ashes

Dust and ashes from the filters of combustion, dust-removal and drying plants are leached, wetted or stabilized. The results: final products for dumpsites and re-usable valuable substances e.g. for road construction. Hundreds of horizontal continuous AVA mixers are operating worldwide in power and incineration plants.

Technology for nuclear power plants

For nuclear power plants in operation, AVA delivers specially designed evaporators for the concentration of filter material from the fuel elements waste water. For the deconstruction of nuclear power plants the drying of borat sludge is a typical application for the AVA technology.

High-temperature applications for the elimination of contaminations

The efficient recovery of raw materials from waste, soils, slags and other substances is an application with increasing importance, eg. as a pre-stage within the recycling of rare earths. Numerous batch type mixers and vacuum dryers – horizontal and vertical in different sizes - are operating most efficiently to our customers full satisfaction.

Solvent recovery

AVA supplies thermal vertical evaporation plants in order to reduce disposal costs and to salvage the solvents contained in the sludge. Benefit: Drying to a residual humidity content of <0.5% without prior mechanical liquid / solid separation.



AVA is a founder member of 'Recycling Technologies Bavaria'. This network offers its clients a full range of innovative systems and services for various recycling applications.

On the right please find an extract of the countless products from the environment sector that have been processed with AVA mixers and dryers. You don't find yours? Give us a call and we'll find your individual solution!

Active coal
Aluminium monohydrate
Ashes from incineration
Back fill materials
Basalt powder
Battery pastes
Blasting material
Boiler slag
Borate
Calcium fluoride sludge
Carbon black
Casthouse dust
Coal dust
Coal sludge with water
Coal with oil residues and tar sludge
Compost
Contaminated soils and sludge
Copper-bearing sludge
Cork dust
Drilling sludge
Dust
Faeces sterilization
Filter ashes
Filter cake
Filter sludge
Fish waste
Fly ash
Grinding sludge
Gypsum filter cake
Hard coal dust
Hospital waste
Hot sand
Hydrocarbon contaminated sludge
Ion exchanger sludge
Lignite
Lime
Mercury
Metal hydroxide sludge with sulphuric acid
Methanol recycling
Mill scale
Modification of wood
Molybdate
Municipal waste
Nodular resin
Oil slurry
Organic waste
Oxide scale
Paint sludge
Paper sludge
Peat
Pesticide
Plastics
Potash
Potassium sulphate
Pre-stage of Bioethanol production
PVC sludge
Quarry sand with resins
Recycling of polycarbonates
Refuse from power plant and brown coal
Resins
Salt concrete
Salt grit
Sand bed recycling
Saw dust
Sediment sludge
Selenium filter cake
Sewage sludge with brown coal
Sewage sludge with lime
Silicon carbide
Silver sludge
Sinter dust
Slaughterhouse waste
Sodium borate
Soil conditioning
Solvents
Soot agglomeration
Steelwork dust and slag
Tank cleaning sludge
Tar and oil sludge
Uranium for submarines
Uranium sludge
Zinc sulphate

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