REMEMBER...

- BEMA can supply any kind of spiral or screw flight, including conical ones.
- We also supply all types of screw shafts, and we're one of the leaders in screw conveyors manufactured for all purposes.
- We deliver everything according to customer specifications. We manufacture items to order, providing full customer satisfaction, and we always have reserve parts in stock.
- We stand ready to assist you if you experience operating difficulties. Contact us, and we'll tackle the job with our highly flexible approach.
- BEMA has its own design and fabrication departments, and we handle every stage of the production process in house. You will find us a highly competent partner.

All of which ensures that we can solve any transport need that involves screw conveyors – from idea to final result.

Our development and production facilities are located in Haderslev. That means that you'll find us close at hand, which is an advantage when you need a custom solution - especially if it's urgent!



Contact BEMA on mail: info@bema.as or

phone: +45 74 52 16 21

Our dedicated colleagues are ready to assist you with help, consulting and specification of your transport solution, which fit to your needs.



BFMA A/S Bredholm 3, 6100 Haderslev, Denmark T: +45 7452 1621 F: +45 7452 6050

NEWSLETTER

APRIL 2016



NEWS FROM BEMA

A screw is not just a screw but an effective technological solution, carefully designed to solve certain and specific related transportation requirements. We believe our innovative solutions are both exciting and challenging and we would like to share our knowledge based solutions with you. BEMA prides itself on flexibility, adaptation to your needs, accurate deliveries and reliable after service

Since our last newsletter we have received our first order of shaftless screws for the water waste industry and we are looking forward to expanding our solutions to that sector.

The new shaftless screw is an excellent example of our skills and capabilities of developing logistical solutions in close cooperation with our customers. We can now offer a complete package of segments and spirals. We ensure, the continuity of ready to go components for the ongoing production, and we gladly serve both the one time customer and customers with a continuous need for segments and spirals.



SHAFTLESS SCREWS TRANSPORTING STARCH



Moistened potato starch is often used in the production of vodka, and correct transportation within its factory facilities is a necessity. BEMA has provided the perfect solution by producing two shaftless transportation screws. Shaftless screws was chosen because humidified starch can be sticky, addressing the importance of being able to transport these materials without sticky coagulation or clogging.

We often think of shaftless screws as equipment that is used in the waste water industry, but in this instance, these screws are produced to be applied in the food industry. Naturally this also means that all components are produced in stainless steel material. The screws are manufactured built with materials. The screws are manufactured built with fully welded joints in all areas.

The vodka-factory solution exemplifies that traditional solutions can reach other new areas of applications when the right materials are applied.

SCREW COMBINING HEATING AND TRANSPORTATION

BEMA has produced a heating screw where we combine transport and heating of the material. Welded around the screw housing is a heat jacket, from which heating of the material occurs. The heat source is heated oil which is fed to the heat jacket from an external system.

The solution incorporates certain calculations which we carry out with special calculation tools, so the energy is transferred correctly between the hot oil and the material in the screw.

Systems of this kind are of particular application in the process industry such as the medicine and food industry, and BEMA provide similar cooling screws, where instead of heating, cooling of the material is required for the screw conveyors.

During manufacturing, consideration is taken in accordance with requirements stipulated by PED-regulations and we can make the necessary risk assessment and CE mark the screw conveyor in accordance to that. Heating/cooling screws are yet another example that BEMA has both the technical expertise and ability to solve complicated transportation tasks – that demands engineering and solid craftsmanship.



SOLUTION DEMONSTRATES WIDER POSSIBILITIES

A new screw solution that BEMA are finalizing at a power plant, is again a good example of our abilities to handle intricate and complex screw conveyor systems. This solution demands exact disciplines both in the design phase and during manufacturing. The screw conveyor system is applied for transportation of different fuels between two internal silo systems.

The system consist of four sets on each three screws:

- An extraction screw that pulls the materials out of the silo
- A transportation screw lifting the material towards the receiving silo
- A feeding screw that delivers the material into the receiving silo

Each of the three screws solves a specific objective. All of BEMA's competences have been at play to achieve the correct designated solution. Some of the features enabled by our solutions are simply unique. Such as:



- An extraction screw mounted at the base of the silo with a high material pressure
- Hard metal facing in areas exposed to extreme wear
- Dimensioning of transitions to avoid blocking of material

All gear motors are prepared for frequency control so the mass flow can be controlled immediately from the control room. The whole system is designed to resist a combustible pressure up to 10 barG. BEMA has at the design phase undergone a FEM-examination of the screw housing, which at production has been verified by a pressure test to 1.2 times the design pressure.