BUSS ChemTech AG (BCT) offers the full scope of complete turnkey Green Anode Plant and existing Green Anode Plant upgrades with associated technology enhancements resulting in production improvements.

Our knowhow is based on over 65 years of experience within the aluminium industry focusing on dedicated anode production processes. We have developed ourselves to become a strong and reliable partner thanks to our many years of experience in innovating the process.

YOUR MAIN ADVANTAGES

- Low Green Anode Plant OPEX
- Fully continuous production

As a contractor with extensive process experience we provide you with continuously improved and fully dedicated proprietary and key equipment.

PROCESS PHILOSOPHY

Our compact and modular process concept based on a fully continuous process flow allows flexibility with improved cost efficiency. The reduced amount of required equipment, the use of proven quality equipment connected with a dedicated process design, leads to remarkable advantages beyond the traditional process standards.

This leads to the following advantages:

- Compact design, short conveying distances
- Continuous raw material “just in time” process with considerably reduced material segregation
- Fully continuous and well-known BCT Horizontal Paste Line (HPL) for the most homogeneous paste preparation
- Unique Anode Forming process with a high production availability with significantly reduced maintenance cost
- BCT’s fully customized Plant Controlling System (SCADA)

DRY MATERIAL HANDLING

This process includes the feed from the raw material storage up to screening and crushing of calcined pet coke as well as recycling of anode scrap for classification of different fractions. The throughput of the fine milling process is adjustable and continuous. The compact design with short conveying distances with the reduced process steps improves the overall plant availability further. The efficient butt recycling and green scrap recycling process completes the dry material handling package.

Your main benefits:

- Compact just-in-time in process material supply/storage
- Less material in process without segregation
- Fully continuous operation with adjustable throughput regulation
- Reduced noise level

ANODE PASTE PREPARATION

The paste preparation process consists mainly of coke preheating, mixing/kneading and paste cooling. Our famous and continuously enhanced proprietary BCT Paste Kneader and BCT Coke Preheater is known as the most advanced solution within the paste preparation segment. The easily controllable horizontal process flow with the improved and proven kneading process geometry ensures a highly homogeneous paste preparation for top anode quality. The horizontal paste cooling process with the accurately controlled and efficient hurling and whirling process, rounds up BCT’s well-known Horizontal Paste Line (HPL).

Your main benefits:

- Compact design, reduced building size
- A fully horizontal process flow, no gravity influence
- Homogeneous paste preparation with reduced pitch content
- High Green Paste density

ANODE FORMING

BCT re-introduced the hydraulic anode press as the new application in cooperation with partner (Laies GmbH) known as a global leader in industrial pressing technology. This new system keeps the previously known advantages of a hydraulic anode press compared to a vibro compacting forming technology. Additionally, further improvements closed the gap respectively and outperforms the vibro compactor technology on major features.
YOUR MAIN BENEFITS
- Low maintenance, high process availability
- Improved anode density and densification
- Fewer rejects, high anode dimension accuracy
- Low paste pressing temperature, lower emissions
- Fast mold change, low noise

SERVICES & RESPONSIBILITIES
We are providing you the full scope of project services to guarantee you a smooth project completion. Our scope of services includes but is not limited to:
- Initial feasibility study
- Basic and Detail Engineering
- Project Management
- State of the Art Technology / Process design
- Customized Equipment- and Plant supply
- Plant installation & Plant commissioning
- Process and Plant Performance Guarantees
- Training of your personnel
- Ongoing customer service support after project handoff
- Plant modernization upgrades & capacity enhancement project
- EPC project scope

BCT is committed to provide you with the best solution for your specific requirements to ensure you have the competitive edge in the market.