inCONTROL
Customer magazine

Quality in Control.
1947–2017

technos B
High-performing, versatile radio control with a vivid 3.5" color display in a rugged ergonomic design.

radiomatic® photon
Safe working with camera assistance.

Project
HBC radio technology on Germany’s highest construction site.

Quality in Control.
Dear customers,

HBC is celebrating its birthday: 70 years ago, our company was founded in Crailsheim, Germany. As we look back to all that has happened over these seven decades, there is no alternative other than to call this an incredible story of success. Having started as a two-man-company directly after WWII in war-ravaged Crailsheim, we are today a highly innovative and global technology company with approximately 450 employees.

You, our valued customer, are the greatest contributor to this story of success. I want to sincerely thank you for your trust, by consistently relying on our products and services for your applications.

We have worked hard to retain the confidence of our customers over the past 70 years with one basic principle that has guided our company: continuity! Even the rapid changes in technology, customer requirements and market competition, we have always stayed true to the values of our founders. We are a family-owned business with strong roots in Crailsheim. We focus on long-term collaborations with our customers, suppliers, and employees. We trust in our abilities and our quality by manufacturing on our own premises; from individual components to the finished, complex system. We continuously invest in the development of products and features that offer real benefits for our customers.

By building on these values and the continuity established over seven decades, HBC will continue to write our story of success together with you.

We are looking forward to continuing our successful and exciting collaborations!

Warmest regards,

Wolfgang Brendel
President & CEO
HBC-radiomatic GmbH

HBC radio technology on Germany’s highest construction site

Quality and durability are essential for the construction of a new cable car at a 3000 meter altitude.

At an impressive 2962 meters above sea level, the Zugspitze boasts the highest peak in Germany. On this alpine terrain with wind speeds up to 280 kph, and subfreezing temperatures until spring, there is clear demand for rugged HBC radio technology. Starting in 2015, with the help of two Liebherr construction cranes combined with HBC’s renowned spectrum B radio controls, the replacement of the existing Zugspitze cable car began. This state-of-the-art cable car, with a capacity for up to 500 passengers per hour, will be supported by the world’s tallest steel upright at 127 meters. Another fact: no other cable car bridges such a distance (3207 meters) between the upright and the summit station.
_radiomatic® photon_

Safe working with camera assistance.

Positioning a gripper hook precisely over the load, driving a logistic vehicle through narrow passages, or applying a drill bit exactly at the desired position: our radiomatic® photon camera assistance offers valuable help for demanding operations, complicated driving maneuvers and complete machine surveillance tasks.

_radiomatic® photon delivers live video images to the radio control’s color display. The operator is provided with a good view of the machine and working environment, even in areas with limited views or dead spots.

_radiomatic® photon is designed to interface with many Orlaco cameras from the FAMOS families which are an industry standard today. Depending on the application, cameras with different viewing angles can be used, and infrared cameras for use in low light conditions or even in complete darkness.

_radiomatic® photon is available as an option for technos 2, technos B and spectrum E.

Examples:

Compatible with different Orlaco cameras!

-FAMOS (various apertures available on request)
-FAMOS IR LED (infrared)
-radiomatic® photon transmission unit
HBC’s history starts in 1945. Following the end of WWII, two engineers, Alfred Huber and Martin Brendel establish their “radio-technological laboratory” in Crailsheim, Germany. At first, they made their living with radio repairs and a variety of electronics-based works, while in a city completely destroyed by the war and as part of a population dealing with oppressive living conditions.

The real passion of Huber & Brendel was another subject: the development of powerful radio-technological devices. By 1946, the two radio pioneers worked on a radio set that entered volume production with 100 units the following year. With entering the company in the commercial register in 1947, they laid the foundation for the successful evolution from a two-person company to a global technology leader with six international subsidiaries and approximately 450 employees worldwide. We would like to share with you the most important milestones in an illustrated journey through time.

Follow us as we venture through 70 years of radio technology “made by HBC”.

The first HBC headquarters in Crailsheim in 1947.

HBC presents Portafon 6: the first portable radio-telephone for civil use in Germany in 1950.

A group photo of the HBC team in 1950. A Portafon series is shown on the right.

1963: First radio-controlled storm warning system at Lake Constance.
In 1975, HBC develop their first radio control for hazardous locations in the oil and gas industry.

In 1968, HBC first presents a radio control for a gantry crane in a heavy industry environment in Solingen, Germany.

The first control for construction cranes follows in 1978.

The first HBC control for forestry winches premieres in 1972.

With the first spectrum transmitter in 1986, HBC starts a bestselling series that continues to set standards when it comes to quality and robustness.

In 1987, HBC presents the first handheld transmitter for the control of industrial cranes with push buttons.

A glance into the mechanical production at HBC in 1965.
With the introduction of the first patrol transmitter in 2000, HBC starts a bestselling series for forestry applications.

Since 2003, the linus series with its award-winning design convinces machine operators.

Another success story is launched in 1991 with HBC’s micron transmitter. The name micron is still acclaimed in the industry.

In 1993, HBC delivers the first radio control with data display.

With the introduction of the first patrol transmitter in 2000, HBC starts a bestselling series for forestry applications.

In 2005, the first HBC handheld transmitter with display for crane and machine data is launched.

Since 2007, the technos transmitters score big in diverse areas of application by their elegant, ergonomic design.

A group photo of the HBC team for the 50-year anniversary.
In 2007, HBC opens their new production site in Crailsheim with state-of-the-art production technology.

In 2010, HBC first presents spectrum D and micron 7, two radio controls with color displays.

From 2012 to 2014, HBC expands the production site in Crailsheim.

In 2009, the HBC subsidiary HBC-radiomatic, Inc. is relocated to their new location in Hebron, Kentucky (Greater Cincinnati / USA).

2012: HBC-radiomatic Schweiz AG relocates to the new company headquarters in Othmarsingen (Aargau).

HBC's product portfolio in 2017: 22 transmitter models in countless combinations.

With the company headquarters and the components production site in Crailsheim, HBC stands ready for the future in the anniversary year 2017.
technos B

The technos B is a high-performing, versatile radio control with a vivid 3.5" color display in a rugged ergonomic design. A wide range of available functions and features supports the optimum customization of this multitalented radio control.

Benefits at a glance:

- Up to 3 joysticks or up to 8 linear levers.
- Service without downtime with radiomatic® iLOG.
- Frequency management: Adaptive Frequency Hopping through 2.4 Ghz technology.
- HBC Safety Features radiomatic® shock-off / zero-g / inclination switch.
- Optional: HBC user identification and data logging with radiomatic® report.
- Optional: Direction contacts + 4 additional commands: PL d category 3 according to EN ISO 13849-1:2015.

Front panel lighting and flashlight
These useful functions are always included and easily activated.

radiomatic® photon
Video cameras mounted to the machine or to the working environment always provide the operator with a good view, even in complex environments or in blind spots.

Enabling switch with touch activation
To enable movement functions, the operator must first touch the rollover bar.

radiomatic® CPS (Continuous Power Supply)
This function lets the operator replace the battery without turning off the radio control. This allows for interruption-free machine operations and saves time.
Feedback via color display
The vivid 3.5" color display provides critical machine data in addition to error notifications and warnings, e.g. in case of high engine temperatures or overload conditions. Furthermore, it enables the indication of live video images via radiomatic® photon.

Your advantages:
- Free choice of data, graphics and design
- Simple, intuitive menu structure
- Status bar with field strength and battery capacity indication
- Warnings and error notifications appear automatically

Feedback via 4 LEDs

New: Li-ion battery, optional with capacity gauge.
radiomatic® iLOG for the quick activation of a spare transmitter.
Version with linear levers.

Quality in Control.
New spectrum devices for ATEX category 3

Versatile controls for hazardous areas.

For more than 40 years, whether for petrochemical or for heavy industrial applications, HBC radio systems have ensured safety, operating comfort and efficiency in hazardous working environments. With the new spectrum transmitters for ATEX category 3, we now offer our customers versatile and high-performing radio controls for the use in Ex zones 2 and 22 (ATEX).

Benefits at a glance:

- 3 housing sizes for a perfect fit to the customer’s requirements.
- Version with joystick or linear levers.
- Service without downtime with radiomatic® iLOG.
- Frequency management: Adaptive Frequency Hopping through 2.4 Ghz technology.
- Version with split-screen displays for feedback and status data.
- HBC user identification and data logging with radiomatic® report (optional).
- New NiMH battery BF225000.
- Use in Ex zone 2, gas group IIB, temperature class T4 (according to ATEX).
- New: use in Ex zone 22, IIIC, T135 °C (according to ATEX).

Rugged quality for the daily use in industrial applications.

Convenient carrying options for comfortable working.

Powerful exchange batteries, 10 hours of continuous operating time.
More application possibilities for Ex areas

HBC-radiomatic presents new antennas with ATEX and IECEx approvals – For the first time available for Underground applications and the 2.4 GHz spectrum.

With a new antenna generation, we now offer more possibilities for using HBC radio systems in explosion-proof areas. All three antenna versions and the antenna coupling module are certified according to ATEX and IECEx for Ex zones 1, 2, 21 and 22, as well as, for the first time, Underground (M1). In addition, an external antenna with Ex approval is now available for radio systems with 2.4 GHz technology.

Another advantage is the simplified After Sales handling: for each order of a radio system with an Ex transmitter, we now install the antenna coupling module in the receiver by default. If the radio system requires an external Ex antenna in the future, the antenna can be easily installed, saving valuable time. Therefore, retrofitting of the radio system by HBC is no longer needed.

The antennas are installed separately on the machine or in the working area. A stainless steel mounting bracket for the antenna is included in the delivery without surcharge. Aerial cables for the connection to the radio receiver are available in different lengths as an option.

The new antennas and the antenna coupling module are perfect for the following scenarios:

- **Zone 2 / 22**
  - **Zone 1 / 21**
  - Safe area
  - Radio receiver and antenna are used in the same Ex area.

- **Zone 2 / 22**
  - **Zone 1 / 21**
  - Safe area
  - The radio receiver is used in Ex zone 2 / 22, the antenna in Ex zone 1 / 21.

- **Zone 2 / 22**
  - **Zone 1 / 21**
  - Safe area
  - The radio receiver is used outside the Ex area, the antenna within the Ex area 1 / 2 / 21 / 22.
High-performing radio technology for maritime applications

FSE 736 radiobus® is the first HBC radio receiver with AC power supply to be approved according to DNV GL.

Our renowned radio receiver FSE 736 radiobus® is now available with approval according to DNV GL. The international ship classification society DNV GL (Det Norske Veritas - Germanischer Lloyd) is the leading consulting agency regarding safety issues and risk management for maritime applications. For middle- and long-term perspectives, the approval according to the new DNV GL procedure is essential. It is accepted worldwide, for example by the US Coast Guard.

Until now, the radio receiver FSE 737 radiobus® with DC power supply has already been available with DNV GL certification. The FSE 736 radiobus® now is the first HBC radio receiver with AC power supply that meets these requirements. In combination with the previously certified radio transmitters of the spectrum series, we now offer numerous different possibilities for stationary applications in the maritime industry.