

Bridgnorth Aluminium - Case Study



About Bridgnorth

Since beginning life as Star Aluminium in 1933, Bridgnorth Aluminium has gained over eighty years of experience in the aluminium rolling industry. Their 27 hectares of land are home to world-class manufacturing assets, from the casthouse to state-of-the-art Litho Centres. Bridgnorth Aluminium Ltd's assets include a casthouse, rolling mill, two Litho Centres, a multi-slitting line and finishing lines. Having manufactured aluminium strip since 1933, [Bridgnorth Aluminium Ltd](#) has firmly established itself as a trusted supplier of rolled aluminium products.



The Project Overview

At the beginning of 2022, Bridgnorth initiated a market exploration to modernize their long-standing 'client-server' based Workforce Management system, which had been operational for approximately 20 years. This system encompassed Time and Attendance, Access Control, HR, Scheduling, Payroll, and Visitor Management for a workforce exceeding 500 employees, presenting a substantial and intricate deployment with numerous challenges to address.



Time & Attendance

Track worked hours, Lateness and Overtime



Data Capture

Choose from a range of clocking methods



Scheduling

Plan Shifts, manage Holiday Sickness & Absence



Access Control

Secure your site. Management of doors, turnstiles & barriers



Payroll

Run Weekly, Fortnightly, and Monthly Pay runs



Self Servicing

Holiday & Absence requests, Time sheet and Roster Views



Visitor Management



HR Software

Manage Personal Records, Skills Training Appraisals, Mail Merge.

The Project Team

Chronicle Computing

Howard Lancaster – Sales Consultant

James Zalewski – Installation Lead

David Bassam – Developer

Zac Ballard – Product Trainer

Rupert Lassen – Project Lead

Bridgnorth Aluminium

Steve Denton – IT Director (Project lead)

Tom Patton – IT Manager

Michelle Shotton – Payroll

Michalis Loupasis – HR

Elliott Lynch – Training Manager

Project Summary

Chronicle dedicated over 150 hours to various pre-installation tasks, which included:

- Conducting a comprehensive site survey
- Designing and developing the implementation plan
- Specifying and developing numerous system changes
- Creating and testing the SAP SuccessFactors integration
- Delivering bespoke Bridgnorth specific product walkthroughs
- Providing bespoke onsite and off-site user training
- Producing a custom self-servicing video
- Conducting HR training, Payroll training, Access Control training, and Time and Attendance training.

“The flexibility of the Chronicle Online product and their attitude and willingness to adapt their solution to Bridgnorth’s working rules was second to none”. **Michelle Shotton – Payroll Bridgnorth Aluminium**

Site Survey



James Zalewski, the lead engineer from Chronicle, and Steve Denton, Bridgnorth’s Project Lead, conducted a thorough review of all 49 doors, turnstiles, barriers, and safe swipe points.

Using our smartphone app, they captured pictures and recorded detailed notes for each unit. This included information on access, power requirements, data connectivity, and specific usage details such as whether it supported reader in/out functionality and if it had safe swipe capabilities.

“Due to the size of the site, the volume of doors, turnstiles and barriers needing to be controlled and the ongoing Health and Safety Fire Reporting concerns, careful planning was required to sequence the installation to minimise disruption” **Rupert Lassen – Project Manager Chronicle**

Installation Plan

Using the data gathered from the site survey, Steve Denton and Rupert Lassen created the installation timeline and planned the sequence of doors to install. This process took a couple of days to ensure thorough planning and coordination.

The installation required specialized hardware, including stainless-steel back plates for mounting readers, special relays to control turnstiles, and IP65-rated waterproof boxes to house door controllers outdoors. In some cases, custom-made hardware was necessary to meet the specific requirements of the project.



System Build

Following Chronicle's standard methodology, the team shared an Excel project pack with the client to collect all shift patterns, lunch breaks, rounding rules, and overtime policies. The Project Manager then configured this data into Chronicle's system.

In the early stages of the project, the team released the software to Bridgnorth, enabling key stakeholders to monitor the progress of the system build and customization work. This transparency ensured alignment with Bridgnorth's requirements and facilitated collaboration between the project team and the client.

Hardware Preparation

Chronicle's installation team prepared and tested all 49 devices in the office before shipping. This preparation helped speed up installation and prevented on-site issues. This proactive approach ensured that the devices were fully functional and ready for deployment upon arrival.

Furthermore, the team configured both the software and hardware using the naming conventions provided by Bridgnorth. This standardized approach made it simple for Bridgnorth to monitor and manage Chronicle's system efficiently.



Ali Yousaf one of Chronicle Apprentices and the Installation Team Darius and Jack preparing 49 devices

Training of Engineers and Tweaks to hardware and software

In response to Bridgnorth's request for a 'Safe Swipe Muster Point' feature, all Chronicle engineers and support staff underwent a training session to familiarize themselves with the new functionality. Additionally, Chronicle's development team implemented several modifications to both the hardware and software to support this new feature.

One of the primary challenges faced during this process was to modify the hardware and software to distinguish between regular clock-ins or outs and the newly introduced 'safe swipe' actions. This involved reconfiguring the system to ensure that individuals were not inadvertently clocked in or out when using the 'Safe Swipe Muster Point,' thereby creating a separate category of records specifically for these instances.

What is Safe Swipe?

Safe Swipe is a critical feature implemented by Chronicle to ensure the safety of personnel during emergencies at Bridgnorth. Here's how it works:

When the fire alarm is triggered, Chronicle's system receives the signal to either open or close specific doors as required. Simultaneously, an automatic email is dispatched to designated fire marshals, containing a customized fire roll call report. The report shows real-time information on where individuals are in each building and identifies who has swiped 'safe' on a terminal within the seven-minute window.

The concept behind Safe Swipe centers on Chronicle's ability to track the attendance of employees, contractors, and visitors using doors, barriers, and turnstiles. When a fire alarm activates, everyone has a seven-minute window to reach the designated muster point and swipe their identification to confirm they are safe.

As a result, after the 7-minute period elapses, fire marshals are provided with a concise report listing any individuals who remain unaccounted for. This report is further organized by location within the 27-hectare site, facilitating efficient and targeted response efforts during emergencies.

Fire Reporting Features

1. Safe Swipe Points:
 - Designated locations where individuals can confirm their safety during emergencies by swiping their identification.
2. Custom Fire Report:
 - Accessible in the Gatehouse, on tablets, in printed form, and via the mobile app.
 - Provides detailed information about the status of individuals during fire alarms, aiding in accountability and response efforts.
3. Custom Safe Swipe Audit Report:
 - Displays a comprehensive list of individuals who swiped safe within the 7-minute fire alarm window, facilitating post-incident review and analysis.

4. Fire Panel Integration:

- Enables the system to receive live data from fire panels in the event of an emergency, enhancing situational awareness and response coordination.

5. Automatic Fire Report Email:

- Automatically triggered 7 minutes after the fire alarm activation.
- Sent to designated Fire Marshals, providing timely updates on the status of individuals and locations within the facility.

6. New Visitor Request Screen in Employee Self-Servicing:

- Allows employees to submit visitor requests through the self-servicing portal.
- Captures essential details such as the date, visitor's name, company affiliation, and access levels required.

7. Ability to Control Door Operations:

- Provides the capability to designate which doors should fail safe or remain secure when the fire alarm is activated, enhancing safety protocols and evacuation procedures.

Installation



- A team of 5 Chronicle engineers dedicated one month to installing all equipment at Bridgnorth.
- Despite encountering weather delays caused by heavy November rain and wind during the installation of external equipment, the team remained committed, working late on several occasions to meet project milestones.
- The implementation of 50 doors, safe swipe points, and terminals was carefully staged to minimize disruption to Bridgnorth's daily operations.
- The primary challenge during installation was Bridgnorth's requirement to avoid any parallel run of clocking data, since all data came directly from the turnstiles. **As a result**, the team had to plan the installation of critical units with precision. **To ensure accuracy**, these installations needed to align exactly with the go-live date — the first of the month — for payroll processing. **Because parallel systems weren't possible**, timing and coordination became essential to the project's success.

Darius installing late into the evening due to weather delays ->

"Installation was challenging on our 27-hectare site due to the size and number of devices being installed. The team at Chronicle meticulously designed a custom installation plan that caused minimum disruption to our day-to-day operation and stayed late when encountering challenges to successfully deliver on time". Michelle Shotton – Payroll Bridgnorth Aluminium

Time and Attendance, Access Control and Muster Point Data Capture

To meet Bridgnorth's technical and budgetary requirements, Chronicle employed a diverse array of data capture methods. Collaboration with US provider ATS and UK provider Grosvenor facilitated the integration of hardware with Chronicle Online software, enabling control over 49 doors, turnstiles, and barriers, while also providing safe swipe and clocking points throughout the extensive 27-hectare site.

The following hardware was utilized in conjunction with Chronicle Online software:

- Hardware from US provider ATS: (Maximus)
- Hardware from UK provider Grosvenor: (Access Control, Modular Blades, IT11)

This comprehensive approach ensured seamless integration and effective management of Time and Attendance, Access Control, and Muster Point data capture, aligning with Bridgnorth's operational needs and budget constraints.



Bridgnorth Integrations

Bridgnorth, under the ownership of Viohalco, utilizes SAP SuccessFactors globally for managing employee data. Seamless integration between Chronicle Online and SAP was crucial for Bridgnorth to ensure smooth management of new hires, departures, and updates to employee information without the need for duplicate data entry.

Success Factors SAP Integration – Chronicle developed a robust integration with SAP SuccessFactors to facilitate the seamless exchange of employee data. This integration included an overnight import process, enabling the migration of various employee details from SuccessFactors to Chronicle Online. The imported data included key employee details. It covered shift schedules, manager names, and home addresses. In addition, it contained bank account information such as account name, number, and sort code. The data also included unique employee identifiers like payroll and employee numbers.



It recorded important dates, including birth dates, start dates, and leave dates. Furthermore, it listed monthly pay values, bonuses, and job descriptions. The import also captured weekly targets, contracted hours, and full contact details — including phone numbers and email addresses for both home and work.

This integration allowed Bridgnorth to manage its workforce efficiently within Chronicle Online. It also connected seamlessly with the employee data stored in SAP SuccessFactors, which streamlined administrative processes and improved data accuracy.

Import of Historic Holiday, Sick, and Absence Records

To help Bridgnorth's payroll and HR teams quickly adopt the Employee Self-Service and Holiday Request features in Chronicle, the development team imported all historic leave data. The process involved extracting holiday, sickness, and absence records from Bridgnorth's previous Workforce Management system.

In total, the team transferred data covering a period of one and a half years. This import ensured that all 500 employee records were complete and up to date within Chronicle. As a result, Bridgnorth could continue managing leave and attendance seamlessly from day one.

By importing this historical data, Bridgnorth's payroll and HR team could seamlessly transition to utilizing Chronicle's Employee Self-Servicing functionality, enabling employees to manage their own holiday requests efficiently. Additionally, having access to past holiday, sick, and absence records within Chronicle provided valuable insights for workforce management and planning purposes. This streamlined approach facilitated the integration of Chronicle into Bridgnorth's existing processes and ensured continuity in managing employee records and requests.

Bespoke Bradford Factor Calculation

The Development team at Chronicle implemented a customized Bradford Factor calculation to meet Bridgnorth's specific requirements. As part of the process of importing historical sickness records, the team also backfilled the worked days data. This enabled Chronicle and Bridgnorth

to generate a Bradford Factor report promptly, providing insights into employee absence patterns.

Furthermore, Bridgnorth had a unique version of the Bradford Factor that deviated from the standard calendar year or rolling one-year period. Instead, it analyzed absence data over a span of 1.5 years. This customized approach was developed and rigorously tested early in the implementation phase to ensure accuracy and alignment with Bridgnorth's needs. By tailoring the Bradford Factor calculation to Bridgnorth's preferences, Chronicle provided a valuable tool for managing absenteeism effectively and making informed workforce decisions.

Chronicle General Software Enhancements

1. Absence Request Feature in Self-Servicing:

- Enables employees to request absences for specific purposes such as work trips or other predefined types directly through the self-servicing portal.

2. Self-Servicing Overtime:

- Allows employees to input reasons and notes related to overtime directly into the system, providing transparency and clarity regarding overtime hours worked.

3. Changes to Personnel Fields in Chronicle:

- Addition of an extra email address field, accommodating both personal and work-related email addresses for each employee.

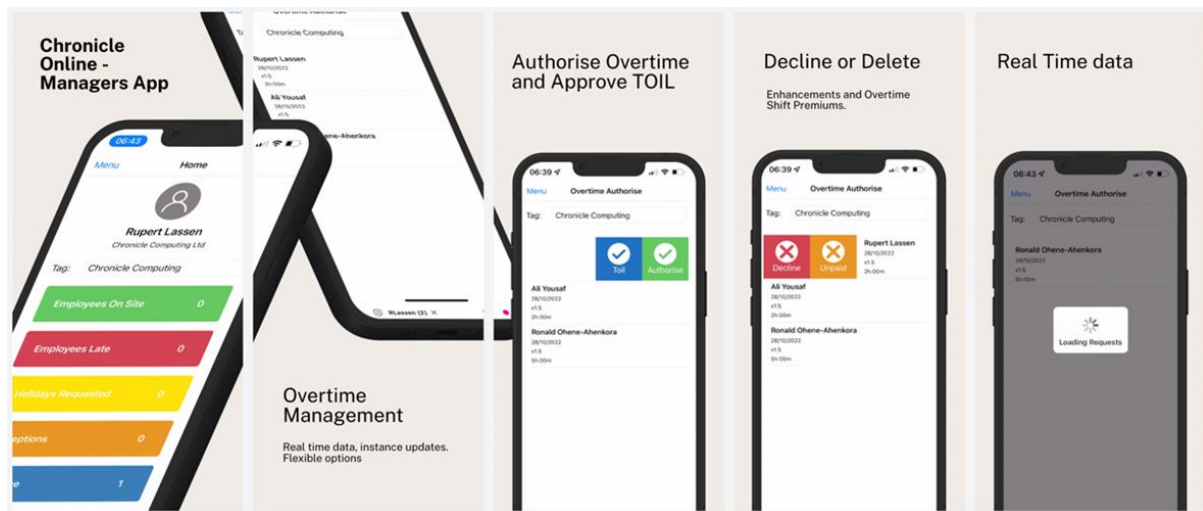
4. Ability to Relabel Employee Custom Fields:

- Provides flexibility for organizations to customize and relabel employee-specific fields within the system, aligning with their unique requirements and terminology.

5. Two New Access Control Movement Reports:

- Access Control Movement Report: Enables administrators to track and review movements through a specific door over a specified date range.
- Employee Movement Specific Report: Provides insights into the movement patterns of individual employees within the facility, aiding in security and operational management.

These software enhancements enhance the functionality and usability of Chronicle, empowering organizations like Bridgnorth to streamline processes, improve data management, and enhance security measures.



Health and Safety

As part of Bridgnorth's rigorous safety protocols, Chronicle was mandated to obtain Safe Contractor Accreditation, reflecting the company's commitment to maintaining high safety standards. Given the hazardous nature of Bridgnorth's operations, all engineers were required to adhere to strict safety measures, including:



- Wearing high-visibility vests, hard hats, safety glasses, and boots to mitigate risks and comply with health and safety regulations.
- Conducting comprehensive 1-hour health and safety inductions for all engineers to ensure awareness of potential hazards and proper safety protocols.
- Compliance with Safe Contractor Accreditation requirements, signifying adherence to industry-recognized safety standards and practices.

By enforcing these measures, Bridgnorth and Chronicle prioritized the safety of personnel and upheld regulatory compliance within the work environment.

"Completing the Safe Contractor assessment gave Bridgnorth total peace of mind that Chronicle had its internal processes, training and documentation in place for such a complex job." **James Zalewski - Installation Manager Chronicle**

Bespoke Rules

1. Bespoke Overtime Rules for 4 on 4 off Shifts:

- Customized overtime rules tailored specifically for employees working on a 4 on 4 off shift pattern. This ensures accurate calculation and compensation for overtime hours worked within this unique scheduling framework.

2. Bespoke Flexi-Time Rules:

- Implementation of custom flexi-time rules, including flexi-holiday entitlements and calculations. This allows employees to manage their working hours more flexibly, accommodating personal commitments while ensuring compliance with organizational policies.

3. Ability to Define Repeating Bonus Payments:

- Integration of functionality to define and automate repeating bonus payments to staff based on various frequencies such as daily, weekly, fortnightly, or monthly intervals. This ensures consistency and efficiency in administering bonus payments, reducing manual effort and minimizing errors.



By incorporating these bespoke rules into the workforce management system, Chronicle provides Bridgnorth with the flexibility and precision needed to effectively manage employee schedules, overtime, and bonus payments according to their unique operational requirements.

“A significant amount of custom development work was required to enhance the offering, pre and post installation in order to provide a good fit for Bridgnorth. The work was specified by Rupert Lassen and Steve Denton.” **David Bassam -Development Director Chronicle**

Training and Implementation

1. Production of a Custom Training Video:

- A bespoke training video was created to facilitate self-service functionality for all 500 staff members. This video serves as a comprehensive resource to guide employees through the use of Chronicle’s self-servicing features, enhancing user understanding and proficiency.

2. Employee Self-Servicing Video:

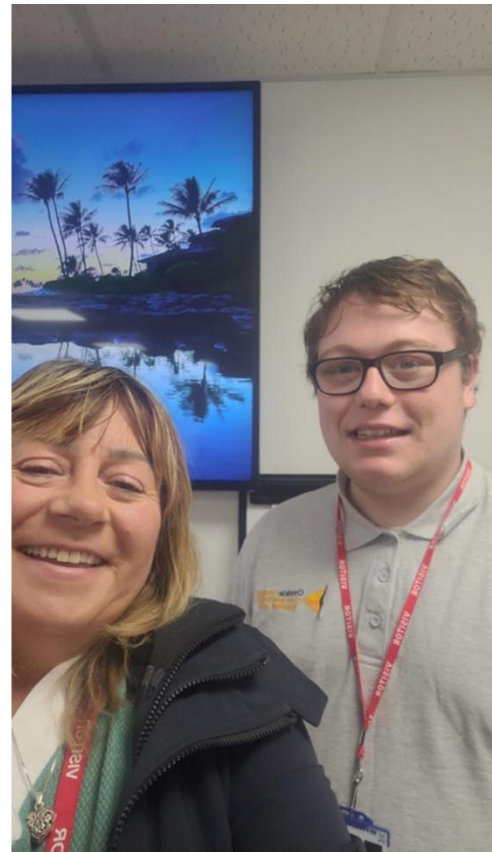
- An example of the self-servicing video can be accessed via the provided link (<https://www.youtube.com/watch?v=Hbs5k7UcRME>). This video illustrates the functionality and usage of Chronicle’s self-servicing capabilities, empowering employees to manage their own tasks efficiently.

3. Onsite Training Sessions:

- Five onsite training sessions were conducted over a span of three days, engaging managers and users of Chronicle. These sessions provided hands-on instruction and guidance on utilizing Chronicle's features effectively, ensuring comprehensive understanding and successful implementation.

Through these training initiatives, Bridgnorth equipped its workforce with the knowledge and skills necessary to leverage Chronicle's functionalities optimally, promoting self-sufficiency and efficiency in workforce management tasks.

Zac Ballard Training Onsite



Suzanne Warner and Zac after training

Payroll Reporting

- New employee tag/department report
- Custom Payroll Report

chronicleonline.azurewebsites.net/Reports/AdvancedReports

Chronicle Online Home View Manage HR Access Reports Toolbox Self service Payroll Switch Company Xero Rupert Lassen

☐ Include left employees

Tag
Chronicle Computing

Employee
[All Employees]

Start date
28/10/2022

End date
03/11/2022

Report
Payroll Custom20 Report

Order by
Surname

Filter string

Display report

1 of 3

Whole Page

Chronicle Computing
A Cloud Based Workforce Management Solution

Payroll Custom 20 Report

88 Chronicle Computing
Start Date 28/10/2022 End Date 03/11/2022

Payroll No	Cost Code	Rostered	Worked	OT1	OT2	Overtime	Total Worked	Off Site Work	Paid Absences	Unpaid Absences	Sick Absences	Covid Absences	Works Accident	Holidays	Flexi/Lieu
COST CENTRE NAME: Product 1															
P1		35.00	28.00	0.00	0.00	0.00	28.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P1		35.00	28.00	0.00	0.00	0.00	28.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0004	P1	35.00	21.00	0.00	0.00	0.00	21.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0197	P1	40.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0219	P1	40.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Totals:		185.00	77.00	0.00	0.00	0.00	77.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
COST CENTRE NAME: Product 2															
0006	P2	35.00	28.00	0.00	0.00	0.00	28.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Other

- Our development changed everyone's email in the Chronicle system ad hoc
- Added and removed tags in bulk

"Development of bespoke work has been super quick and easy with Chronicle, all work is specified and clear timelines provided plus you actually get to speak with the lead developers. I particularly like the test system in place to view the work prior to it going live to all staff".

Michelle Shotton – Payroll Bridgnorth Aluminium