

COMPANY

**Brigade Electronics**

LOCATION

**South Darenth, UK + Global**

SOFTWARE

**Autodesk Fusion Lifecycle (Fusion Manage)**

# PLM That Connects People, Processes and Data.



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**Ryan Bates**  
PLM Systems Developer  
& Technical  
Administrator  
**Brigade Electronics**



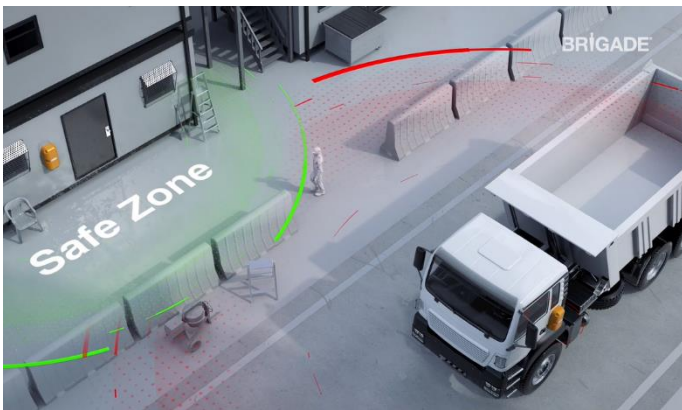
## How Autodesk and Cadline helped Brigade Electronics achieve project efficiency

Based in Darenth, near Dartford in Kent, Brigade Electronics is a global market leader in vehicle safety systems, offering a comprehensive range of products to reduce collision risk and maximise efficiency, including camera monitor systems, reversing alarms, ultrasonic proximity sensors, digital recorders and thermal image cameras.

Many of the company's projects start with a new idea – the need, for example, for a sensor system capable of predicting future collisions and enabling the user to take action to avoid them. Projects typically move on into, first, a business case of what proposed systems should look like and deliver, and second, a developmental and commercial review phase, evaluating whether the solution has met the business case, or further tweaks are needed.

## Scoping the challenge

To make this process as efficient as possible, Brigade Electronics is focused on streamlining operational procedures and working practices. It identified the need to both enhance visibility over live projects and to restructure its new product introduction (NPI) process. At the same time, it wanted to move away from siloed, linear ways of working to reduce project delays, improve supply chain collaboration and more accurately meet customer delivery dates. In doing all this, Brigade Electronics was also looking to reduce manual working and eliminate tasks that did not contribute to core business goals.



## Finding a way forward

To help it address these challenges, standardise critical business processes and tailor workflows to its needs, Brigade Electronics decided to implement Autodesk Fusion Lifecycle, now Autodesk Fusion 360 Manage, a product lifecycle management (PLM) platform that connects people, processes and data across departments and geographies. Autodesk sold the product and took the lead on the implementation, before handing the account over to its platinum partner, Cadline, because of the reseller's skillset and capability in PLM solutions delivery.

Ryan Bates, PLM Systems Developer and Technical Administrator, said: "We were recommended Cadline by Autodesk and were immediately impressed with their service, support and knowledge of the Autodesk software. It was therefore an intuitive choice to work with them on this project."

Cadline focused on using Autodesk Fusion 360 Manage to digitise processes ranging from item and bills of materials management to change management, and from documentation management to snagging and problem reporting. At the same time, it concentrated on restructuring the whole NPI process to give Brigade Electronics enhanced visibility and control, enabling the company's leadership teams to ensure any issues were identified and resolved quickly, project milestones were met and costs minimised.

Crucially, the work done by Cadline also allowed Brigade Electronics to reduce engineering hours spent on projects, freeing up engineers to add value in other parts of the business and enabling it to achieve a rapid return on its investment in Fusion 360 Manage.

## Supporting data sharing

Building on this work, Cadline has helped develop a range of workspaces for Brigade Electronics but has gone further by developing a bespoke approach that supports data sharing across the organisation and beyond.

As Cadline's commercial director, Scott Woolven, explains: "We have written a piece of bespoke code which sits around the system, so when a project is released, it gathers the right files for the right people and puts them into the right locations. And then all those people are notified so everyone has access to the correct version of the data at the right time."

Brigade are working on further automation with Cadline, who have developed scripts that then trigger an automatic synchronisation with all the items in the bill of materials so that all the bill of materials work that has been done and digitised is ready to be pushed automatically into Brigade Electronics' ERP system (Microsoft Business Central) an enterprise resource planning app from Microsoft, before being synchronised with the site content management system. This secure shared access will streamline project delivery, improve accuracy and enhance productivity once it is fully in place.

Brigade Electronics' confidence in Fusion 360 Manage is growing still further and the company now runs more than 30 processes within the system. It has a quality management system, quality issue tracking, and its NPI

process, including a wide range of business cases, product development processes and supply selections, retirements and commercial reviews.

In addition, Brigade Electronics also uses Fusion 360 Manage to store details of all supplier contacts: potential, current and obsolete, over 500 in total, including process scorecards; supplier appraisals and details of memorandums of understanding (MoUs), quotations and ISO certificates.

## Reaping the rewards

Brigade Electronics is now reaping the rewards of having Autodesk Fusion 360 Manage and a new approach to data storage, management and sharing in place. The company now has solid and reliable product, project and business information, which is held within the system but can be made available to those stakeholders who need it when they need it.

Brigade can quickly and easily share relevant data with distributors and suppliers downstream. The new approach has largely eliminated manual keying and manual entry into other systems and, partly as result of this, errors and delays in project delivery to customers. It can also share data with its engineering team which uses the Autodesk computer-aided design software solution, Autodesk AutoCAD LT® for engineering drawings.

According to Ryan Bates: “We are impressed with how customisable Fusion 360 Manage is. With other comparable systems if you want something customised, it is either not possible or you have to book a day of integration with an engineer. With Fusion 360 Manage, you have the capability to do workflows but if you want to add scripting or emails you can do that too. That flexibility is a key benefit to us in much of the work we do today”.

“Using this approach has also significantly reduced the number of questions we get from the team about project data and details. Engineers now simply go to the business case themselves and find this kind of information on their own. That has saved us a lot of time.”

Cadline has also played a key role in ensuring that the implementation and use of Autodesk software at Brigade Electronics has been such a success.

“Cadline has always been responsive,” said Bates “They reply quickly to queries, and they respond quickly to any tickets we raise even if they are not directly within the support contract.”

In recognition of all this, Brigade Electronics has now moved to an annual support contract with Cadline which includes training.



## Looking to the future

Brigade Electronics is happy with the success it has achieved in using Fusion 360 Manage to streamline operational processes. It currently has more than 50 users of the software across multiple departments. The company expects adoption levels to ramp up still further over the coming months and years as more and more stakeholders see the benefits of the product lifecycle management (PLM) data that Fusion 360 Manage offers up.

Today, Brigade Electronics has several new projects in progress, including one aimed at improving meeting management which involves migrating data about supplier meetings and from supplier issues logs into the Autodesk system. It now wants to spread the word about the benefits of Fusion 360 Manage. The next phase therefore is getting suppliers to buy into and start using the solution and the processes that support it. Over time, Brigade Electronics is confident about extending the approach across its whole project ecosystem.