

# **FACILITYtwin**

SMARTER PLANTS, BETTER OPERATIONS



make  
everyday  
better.

# FACILITYtwin brings your facility to your fingertips, transforming productivity, risk, cost and flexibility outcomes.

FACILITYtwin makes it easy for you to relate operational and asset information to plant locations in a mobile, highly visual, user-centric interface. This platform-agnostic, best-of-breed, digital productivity tool is a virtual twin of your facilities that empowers operators of asset-intensive facilities to plan and execute workflows with far greater certainty and precision than ever before.

It provides you with the flexibility to improve decision making, productivity and the risk and costs associated with running your facilities without interfering with your regulatory processes and systems. It supports your key business activities, including:

- Maintenance and Reliability
- Capital projects

- Operations
- Production changeovers
- Utilities
- Risk/Compliance
- Lifecycle Asset Management (LCAM)
- Product Lifecycle Management (PLM)

## What are the business drivers for FACILITYtwin?



### Reduced costs

Operational costs are reduced through productivity enhancements, analytics insights, training and risk management efficiencies. Capital costs are improved by having easy access to highly accurate information, reducing rework and contingencies in project delivery.



### Increased productivity

Operational and maintenance information and data is presented in the context of its precise plant location and is accessible quickly and easily. Smart visuals allow people to plan and execute their daily tasks with far greater certainty and accuracy, reducing rework and improving personnel productivity and plant availability.



### Greater flexibility

Access to your digital facility is available on a range of mobile devices, making it easily accessible from anywhere, whenever your team needs it. Some of the benefits include the ability to improve collaboration during planning and optioneering engineering projects or even understand and respond to issues faster. The experience is just like being on site.



### Improved risk and compliance outcomes

FACILITYtwin improves your understanding of your facilities, which gives you greater operational security and significantly reduces regulatory, financial and safety risks.

Routine operational assessments are delivered with far greater certainty and efficiency. For example, risk assessments can now include an instant virtual plant walkdown where the precise nature of work can be accurately articulated by visualising the plant, and / or by simulating 'what-if' scenarios.

Knowledge accumulated by your facility management personnel over time is no longer at risk of walking out the door. Using FACILITYtwin you can tag this knowledge to the exact plant location, putting the knowledge of the most experienced in the hands of new recruits.

## Why users love FACILITYtwin?

Unlike other products in the market, FACILITYtwin is a highly visual, mobile and user-friendly experience that allows you to:

- contextualise facility information.
- extract more value from existing data by providing better visibility compared to existing IT systems, without interfering with your compliance processes.
- to simulate 'what-if' scenarios.

### Exceptional user experience

FACILITYtwin presents data and documents into one user-friendly, visually exceptional, mobile platform. The 2D drawings of your facilities are brought to life by identifying equipment locations with precision in 3D models and real-life photographic environments.

The ability to link this visual data to your systems and facility engineering drawings, means for the first-time, frontline staff can easily access traditionally difficult to find and harder to relate plant information.


## An essential, everyday productivity tool.


### Improved stakeholder engagement


FACILITYtwin boosts collaboration and informs operational and project decision making. Virtual access via the high-quality photographic interface of your facilities means a reduction in the need for site walkdowns, greater collaboration with remote stakeholders and less hosting of third party visitors.





## Who will use FACILITYtwin?

 **Maintenance Technicians** always have the right task information and location.


 **Site Engineering Directors** have ready access to their plant; confidence multifunctional teams have access to the right information and are collaborating openly; and have full visibility to activity progress via a tracking dashboard.


 **Maintenance Managers** have instant access to reliability information and access to the digital plant to support decision making.

 **Utilities Managers** have access to accurate, current and contextual data analytics.

 **Risk & Regulatory Leaders** can monitor and reduce quality deviations through better planning and access to accurate information, plus there will be a digital historical record of activities for review.

 **Capital Project Managers** have access to accurate facility engineering information to support projects from optioneering to delivery and can better engage service providers and remote stakeholders.

 **Operations Managers & Directors** can track task completion via the dashboard.

 **Production Engineers** can also better track task progress in context of the facility through digital links, including changeovers and turnaround, through the simple and fast functionality to support complex activities.

 **Global Enterprise Directors** now have any time access to all factories digitally and remotely from the convenience of their mobile or desktop device. This insight into facility operations improves transparency and productivity for the production network.

## Features

### Information at your fingertips

- **LOCATE:** Access your assets instantly
- **CONSULT:** Equipment info & performance data to hand 24/7
- **LINK:** Connect with your existing systems like ERP, CMMS and MES
- **STATUS:** Quickly check equipment Status – Calibration | LOTO | Condition Assessment and Link to Asset live plant data supporting troubleshooting
- **TRACK:** Digital record of routine or contracted works like changeovers / turnarounds

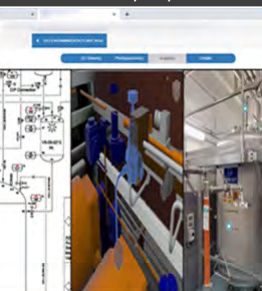
### Operational Tasks and Insights

- **DASHBOARD:** Instant management data and trends
- **EXPERT:** Tagged multimedia tutorials providing clarity for task execution
- **TRAIN:** Introduce and refresh employees to new tasks, new areas without walking the plant and integrate your training modules
- **SMART:** Integrated SmartApp modules

### Planning and Optioneering

- **MEASURE:** Quickly check dimensions and spatial constraints
- **MARK-UP:** Digitally red-mark plant location or proposed changes and share
- **SIMULATE:** Visual what-if analysis – see the impact of proposed plant changes

Data Visualisation, Linked Smart P&ID, 3D, Photo



Integrated Training Content



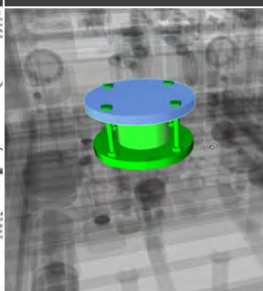
Asset Performance Data



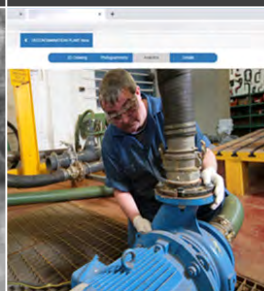
Vendor Diagrams



Locate Assets



Reference Media



## Applications

### Maintenance and Reliability

- Task Planning
- Routine | Ad hoc | Troubleshooting
- Engineering Change Control
- Spare parts management
- Preventative Management modifications
- Remote Assist
- PTW | LOTO | MSRA | SIL
- HAZOP | HAZID | GMP | ATEX

### Capital Projects

- Project Optioneering
- Project Logistics
- 3rd Party Engagement
- Tender Development
- 3D Model Management
- Records Retrieval
- Minor Upgrades
- Project Handover to O&M

### Production Changeovers

- Logistics Planning
- Plant Reconfiguration
- Physical Works Completion
- Inter-Campaign Checks
- Identify Line Spades
- Batch Record Preparation
- Cleaning
- Safety and Quality Reviews
- Disposables Management

## Implementing FACILITYtwin – our approach

If you think FACILITYtwin is right for you, we can support you through the full process to:

- Help you develop your business case for change, focusing on the highest value applications
- Set up FACILITYtwin for your facility in a few weeks, through an established data gathering process
- Facilitate FACILITYtwin pilot progress reviews
- Support implementation with transformation services
- Provide ongoing software and information maintenance

**FACILITYtwin** contextualises asset maintenance and performance data in user-centric and easy-to-use mobile interfaces.

### About Beca

At Beca, we design and optimise assets and infrastructure to make every day better for our clients and communities. Our people are thinkers, creators, planners and practitioners who work together to provide innovative solutions to the complex problems faced by our clients.

With over 100 years' experience in project delivery, engineering design and technology, we know how important it is to bring together traditional delivery with the innovations for today and tomorrow to help make your business the best it can be.

That's why we have set up a Digital Innovation Hub, designed to be at the forefront of cutting-edge technology and features for our suite of digital products and services, targeting game-changing business cases to deliver value for our clients 24/7.

### What We Do

We provide a range of digital products and technical services:

### Products

- CAPEXinsights: A comprehensive portfolio and project management tool

- B-Tune: Intelligent Building Tuning product
- Industrial IoT Platform
- Seismic assessment product

### Digital services

- Digital engineering/ asset information management
- Digital technology roadmap consulting
- Technical and transformation services
- Software engineering
- Modelling / simulation
- Data integration

## Learn more about our capabilities

**digital  
innovation  
hub.**



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Learn more about FACILITYtwin by asking for a demonstration by a Beca representative.

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