



CORPORATE BROCHURE

COMPANY INFORMATION
AND SOLUTIONS OVERVIEW

TAKE **CONTROL** OF YOUR
ENGINEERING INFORMATION
THROUGHOUT THE ASSET LIFECYCLE

IT'S POSSIBLE

Our customers operate in a volatile world in which they must constantly adjust to maintain or improve profitability.

The increase in engineering complexity within capital intensive industries makes it extremely difficult to manage information from multiple sources, make that data available to stakeholders around the world and trust that it is always correct. We are dedicated to making this easier by providing a solution that ensures our customers can access accurate, up-to-date engineering information at any time and from any location.

We know that customers in asset-intensive industries have specific requirements and different needs. We offer a system of record that meets company and industry-specific needs, ensuring compliance with regulations, leveraging best practices and reducing risk.

We believe that it is possible to provide the right asset-related engineering information to the right person at the right time. Our solutions evolve to meet new market issues like extended contractor and supply chains, knowledge retention, and leverage technologies like the Cloud. With 30 years of experience and a global network, we offer unrivaled expertise and local support.

So take control of your engineering information. Unite your teams and departments around the world. Improve efficiency, data quality and ease of access.

It is possible with BlueCielo.

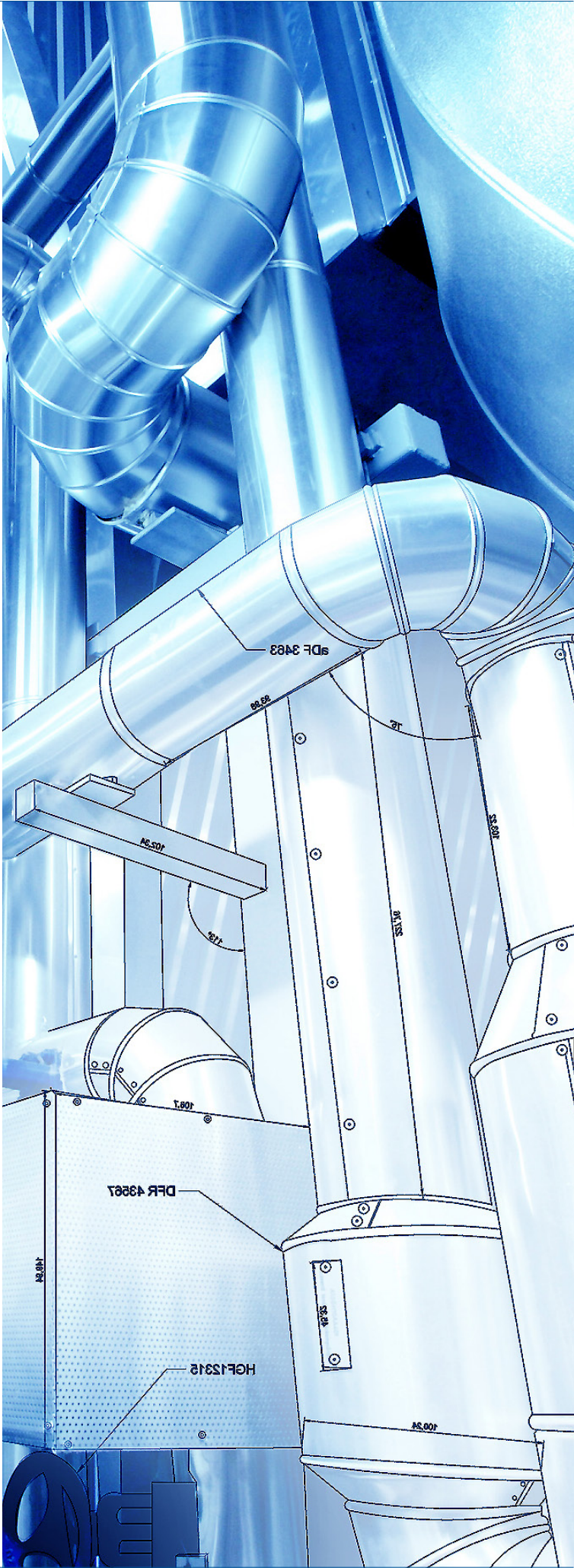


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MARKET DYNAMICS

Our customers act in a dynamic and globalizing market. Their main goal is to contribute to the profitability of the organization, but both internal and external factors change the circumstances constantly, requiring the plant manager to take appropriate action.

Ensuring profitability leads to the unending pursuit of zero down-time. This becomes harder due to the increasing longevity of the plant and its assets, which must be adapted to changing market demands within a shortening time frame to get the highest profit.

Market demand is constantly changing and adapting to it requires a different approach. At the same time, through outsourcing, technology shifts and innovations, more

specialized players surface within the supplier network and they are not always geographically close. Maintaining and improving existing assets is then further challenged by ever changing and tightening regulations.

Unmanaged risk may have various causes, but the effects are always unwanted. Our customers are kept awake at night by unplanned process downtime which, in worst case scenarios, may lead to a damaged brand reputation. Managing risk is complicated by knowledge scarcity which may occur in certain (geographical) areas of the organization. In crisis situations, knowledge scarcity may lead to prolonged downtime and subsequent revenue drain.

ARE YOU IN CONTROL?

The main challenge for our customers is to be in control. To keep their plants running safely while under continuous modification and innovation, our customers need to know:

Does each member have a complete view to the granular level of up-to-date master data of the assets so that they can do their job correctly and safely?

Is each stakeholder aware of the changes that are in progress? Not just as designed or as-built, but as pending, across all plant modifications, including concurrent projects.

And do they manage a unified process so that the data is kept complete and consistent while complying with internal and external regulations?

For many customers it is hard to answer these questions. They are using dedicated applications designed to optimize an individual department. Each of these departments has their own processes, metrics, standards and their dedicated applications.

These systems serve their primary needs, but they are not integrated. Their outputs to the adjacent team or department are often too late, incomplete or incomprehensible.

This impacts on information sharing and collaboration and can cause risk. At the intersection of these systems or processes is where the risk or the leakage occurs.

What is needed is a system that unites information from multiple sources in a single point of truth. Such a solution can increase interoperability, enhance collaboration and reduce the risk of downtime.



EXTERNAL
FACTORS
CHANGE THE
CIRCUMSTANCES
CONSTANTLY

“BLUECIELO MERIDIAN ENTERPRISE PROVIDES KANEKA WITH A REGULATORY COMPLIANT SYSTEM TO MANAGE THE ASSET LIFECYCLE AND MANAGEMENT OF CHANGE PROJECTS.”

KANEKA

GROWING ORGANIZATIONAL NEEDS

As market complexity has evolved, so too have the systems that support engineering information management. Paper-based archives are increasingly being replaced with digital warehouses so that data is available globally. Manual processes such as project management, approval cycles and performance monitoring can now be automated, saving time and resources and simplifying the audit process. However, information management solutions differ greatly in the functionality they offer, and do not always match the needs of the organization.

What Do You Need?

In order to achieve operational excellence, a company's information management systems must match their business process needs. Not every division or every business in every industry requires state-of-the-art functionality if this will not be useful. What is needed is a system that can support current practices and enable future growth to maintain profitability.

“THE BLUECIELO SOLUTION PROVIDES US WITH SINGLE SOURCE OF ASSET INFORMATION AND MANAGES THE PLANT RELATED ENGINEERING AND MAINTENANCE PROCESSES.”



Drawing Management Systems (DMS)

The higher the engineering complexity and the impact of plant modifications, the greater the requirements for managing technical data throughout the entire asset lifecycle. In the below figure the requirements for managing engineering information are grouped into maturity levels, each of which provides certain functionality.

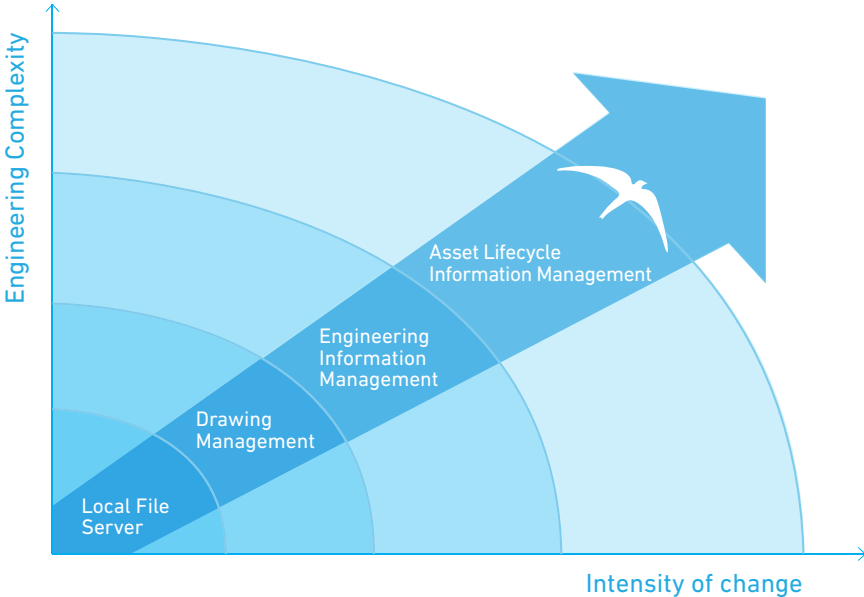
DMS systems manage single files during the document lifecycle. They do not manage the essential relationships between documents or the asset(s) to which they relate. While this functionality is sufficient for generic document management, it does not meet the needs of managing technical engineering information during change projects.

Engineering Information Management (EIM)

EIM solutions enlarge on this scope by managing all of the information used during engineering throughout a project lifecycle. They focus on supporting the lifecycle of engineering data, including all engineering-related business processes for the creation, collaboration and distribution of engineering documents and data.

Asset Lifecycle Information Management

ALIM takes this much further. ALIM not only links assets and their related information, it integrates departments, business applications, contractors and suppliers. This means managing both the assets and asset-related technical documentation throughout the entire asset lifecycle. This cohesive approach enables the higher consistency, quality and completeness of data, simplifying the management of complex information and improving regulatory compliance.



ASSET LIFECYCLE INFORMATION MANAGEMENT



Asset Lifecycle Information Management is a proven strategy that supports the creation, exchange and distribution of technical asset information in all phases of the plant & asset information lifecycle.

An ALIM strategy covers more than just enterprise content management or asset information management. It includes Project Performance Management, Asset Performance Management and Asset & Project Portfolio Management.

Asset Lifecycle Information Management acts as the glue between systems and teams.

By standardizing asset information services, emphasizing interoperability and supporting extended analytics over wider data sets, ALIM provides a foundation for physical and human asset performance and productivity.

How ALIM Unlocks Value to Improve Operational Excellence

An entire factory can be considered an asset with its own lifecycle. This lifecycle extends from the factory’s design and construction, to commissioning and handover, through operations and maintenance until its eventual decommissioning.

Increase Plant Revenue

But we also look at a more granular level. Optimum plant revenue can only be achieved when the production lines, consisting of pumps, valves, vessels, process lines, etc. are performing well. Each of these assets has their own lifecycles and related (technical) information.

In the event of a disruption of production, operations & maintenance need to fix problems as quickly as possible. This requires immediate availability of up-to-date asset-related information (asset data integrity) for the production line as it relates to the entire factory.

This combination of both granular and global views of assets show a much more dynamic environment in which all asset-related information must be managed.

Optimize Asset Performance

Our customers optimize asset performance by improving operations & maintenance processes, while plant optimizations projects are evaluated and selected by Asset & Project Portfolio Management.

After approval and assigned budget, Project Performance Management ensures that modification projects are efficiently executed, and asset data is handed over smoothly after commissioning.



IMPROVING

OPERATIONAL EXCELLENCE

Asset Lifecycle Information Management (ALIM) provides measurable benefits for owner operators, especially with regard to improving operational excellence. This is due to ALIM's unique focus on managing information that may be constantly or concurrently in change over extended periods of time.

Scalable Solutions to Enable Growth

A scalable solution is essential, but for this to be practically implemented, it must also support the different requirements of each site. An ALIM strategy ensures that each site improves its information management, even as the entire organization benefits from a standardized approach.

Seamless Support for Enterprise Asset Management

Support for EAM systems such as IBM Maximo, SAP EAM and Infor EAM is key to connecting maintenance with engineering. This automates the integration between assets, plant operations and the required technical documentation while improving interoperability.

Collaboration with External Suppliers

Collaborating with a global team of suppliers and contractors is an important consideration in order to manage operations at a lower cost. BlueCielo solutions feature extensive tools for data exchange to facilitate successful hand-over of projects. This guarantees immediate availability of up-to-date "as-built" technical asset information.

BlueCielo solutions offer powerful support for engineering professionals and the creation of technical documentation. A robust feature set addresses the need to securely manage the "as-built" environment while flawlessly handling multiple concurrent engineering projects.

"IT IS EXTREMELY IMPORTANT THAT ALL PARTIES WORK IN ONE SYSTEM. THIS IS THE ONLY WAY THAT WHETHER THEY ARE ONSHORE, OFFSHORE, SUPPLIER, CONTRACTOR OR MY OWN OFFICE, EVERY PARTY CAN BE GUARANTEED FAST AND EASY ACCES SO THAT DOCUMENT AVAILABILITY IS NEVER AN ISSUE."

ExxonMobil



BLUECIELO SOLUTIONS

BlueCielo solutions provide a single point of truth for asset-related information throughout the entire asset lifecycle. The solution is scalable to support the needs of all sites, regardless of the current maturity level. The solution puts you in control of all information that is constantly under change and ensures each stakeholder has full confidence they are working with up-to-date and consistent asset information.

A Single Point of Truth

Each stakeholder accessing the BlueCielo Meridian solution can find up-to-date and consistent engineering information to granular level within a single point of truth. Users can search by site, by asset number, by using meta-data to find documents or by projects in which information was modified. This (global)

warehouse of asset-related information allows discovery of modifications done in one part of the process (or site) for optimizations elsewhere. BlueCielo Meridian shows traceability back to the original source of error, which is especially useful in case of inspections or to renew the license to operate. The system also allows discovery by role and responsibility.

Maintain Asset Data Integrity

The progress of all plant modifications can be monitored at all times. This includes showing deviations from the standard, such as delivery overdue, with notifications provided to stakeholders when appropriate. It also provides full insight in the performance of the supplier network or individual department against plan or contract.

Plant modifications are related to the assets impacted by the change project. At the end of the project, the new version of the master documentation is made available, so that those accessing asset information are provided with a clear overview of the as-built situation.

Support Concurrent Engineering

Typically many plant modifications are executed concurrently and each stakeholder must have the right information to execute their task correctly. BlueCielo Meridian provides comprehensive protection, ensuring data consistency and completeness while protecting regulatory compliance.

The system manages both the master data as well as the entire modification process, executed internally and in cooperation with a network of external contractors and suppliers. This results in a compounding database of knowledge, so that new hires can quickly see how it was done before, how it was done well and how they can do their job better.

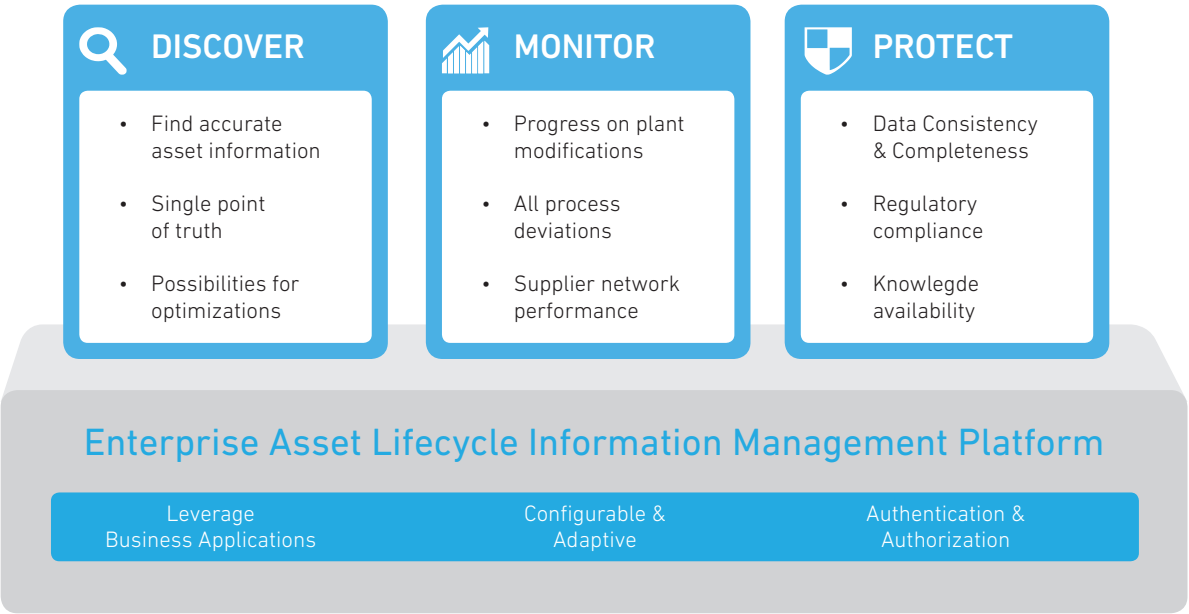
Enhance Regulatory Compliance

BlueCielo Meridian offers a common and unified platform for the authorized and authenticated individuals to see their personal view and to do the job within their span of control. The data is kept consistent and is available anytime and anywhere.

BlueCielo Meridian additionally offers a number of features for security, traceability and validation specifically suited to stringently regulated environments, such as those subject to cGMP, GxP or FDA 21 CFR Part 11 standards.

Improve Interoperability

BlueCielo solutions leverage current investments in business applications such as the Maintenance Management System, Enterprise Resource Planning and multiple CAD systems. Our solution seamlessly integrates with existing business processes and data conventions and is easily adapted to suit current naming and numbering conventions.



“BLUECIELO MERIDIAN ENTERPRISE HAS PROVEN TO BE A VALUABLE BOOST TO PRODUCTIVITY. ENGINEERING DATA MANAGEMENT IS AN IMPORTANT WAY TO CREATE THE INTEGRATION THAT IS NEEDED TO BE MORE PRODUCTIVE.”



BLUECIELO AT A GLANCE

COMPREHENSIVE SOLUTION

- Scalable to support business growth
- Meets the most stringent industry demands
- For Engineering Information Management
- For Asset Lifecycle Information Management

SUSTAINABLE VALUE

- Proven implementation methodology
- Measurable return on investment
- Best practices industry templates
- Long-term customer relationships

GLOBAL REACH - LOCAL SUPPORT

- Proven implementation services
- Unparalleled technical support
- Global partner network
- Strategic technology alliances

PROVEN TRACK RECORD

- 30 years' specialized knowledge and experience
- Over 300,000 users across more than 50 countries
- Top-ranking global customers in various industries
- Significant expertise in 5 key verticals:
chemical, metals & mining, oil & gas, pharmaceutical and utilities

OUR COMMITMENT

BlueCielo has delivered software solutions to manage engineering information for 30 years. Today we have over 160 employees in seven countries and a global network of more than 50 partners worldwide providing local support.

We deliver platform-independent solutions that integrate with and leverage our customers' existing systems to maximize their return on investment.

Through our commitment to our customers, we have gained unparalleled expertise in the field Asset Lifecycle Information Management on all maturity levels.

We remain committed to using these strengths to solve the challenges of our customers and our agility to adapt to the changing needs of global industry markets.

Continuous innovation requires continuous change. We support the changing needs of our global customers through the development of new initiatives to add greater value.

Value Assessment

Quantify the financial benefits our solutions can offer for a strong business case. Get absolute return on investment (ROI) figures based on a clear measure of improved business processes.

Industry Templates

Best practice templates to shorten time to value. Speed up the implementation process. Build a foundation that can be easily extended to support business growth.

BlueCielo Academy

BlueCielo Academy ensures the smooth adoption and user satisfaction of BlueCielo solutions. Classroom, on-site and virtual training courses facilitate learning anywhere, any time.

“THE AIM SOLUTION PROVIDES US WITH SINGLE SOURCE OF ASSET INFORMATION AND MANAGES THE PLANT RELATED ENGINEERING AND MAINTENANCE PROCESSES.”

GRIFOLS

OUR CUSTOMERS

We are committed to helping our global customers meet their specific challenges. We know that each situation is different and we listen and collaborate to deliver solutions that give our customers what they need.

We work to get the job done, delivering solutions on time, to budget and to our customers' specifications. Our expert teams in service and support use their knowledge to deliver solutions that help our customers now and support their growth in the future.

We build strong relationships for the long term that are based on cooperation – and the results show.

Today, BlueCielo is the preferred provider in its field for the world's top companies in our targeted verticals.

50+
COUNTRIES

1200+
CUSTOMERS

\$ 1.5 T+
ASSETS

300K+
USERS

“THE ASSET MANAGEMENT MODULE BRIDGES THE GAP BETWEEN MAINTENANCE AND ENGINEERING AND THE IMMEDIATE ACCESS TO RELEVANT TECHNICAL INFORMATION HELPS US TO DECREASE UNPLANNED PROCESS DOWNTIME, THEREBY INCREASING OUR PRODUCTIVITY. THIS MODULE WILL AID IN GERDAU AMERISTEEL'S CONTINUED GROWTH AND SUCCESS IN THE YEARS TO COME.”



CHEMICAL



METALS & MINING



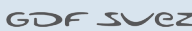
OIL & GAS



PHARMA



UTILITIES



GLOBAL COVERAGE

GLOBAL FOOTPRINT TO
DELIVER **LOCAL SUPPORT**

BLUECIELO LOCATIONS



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