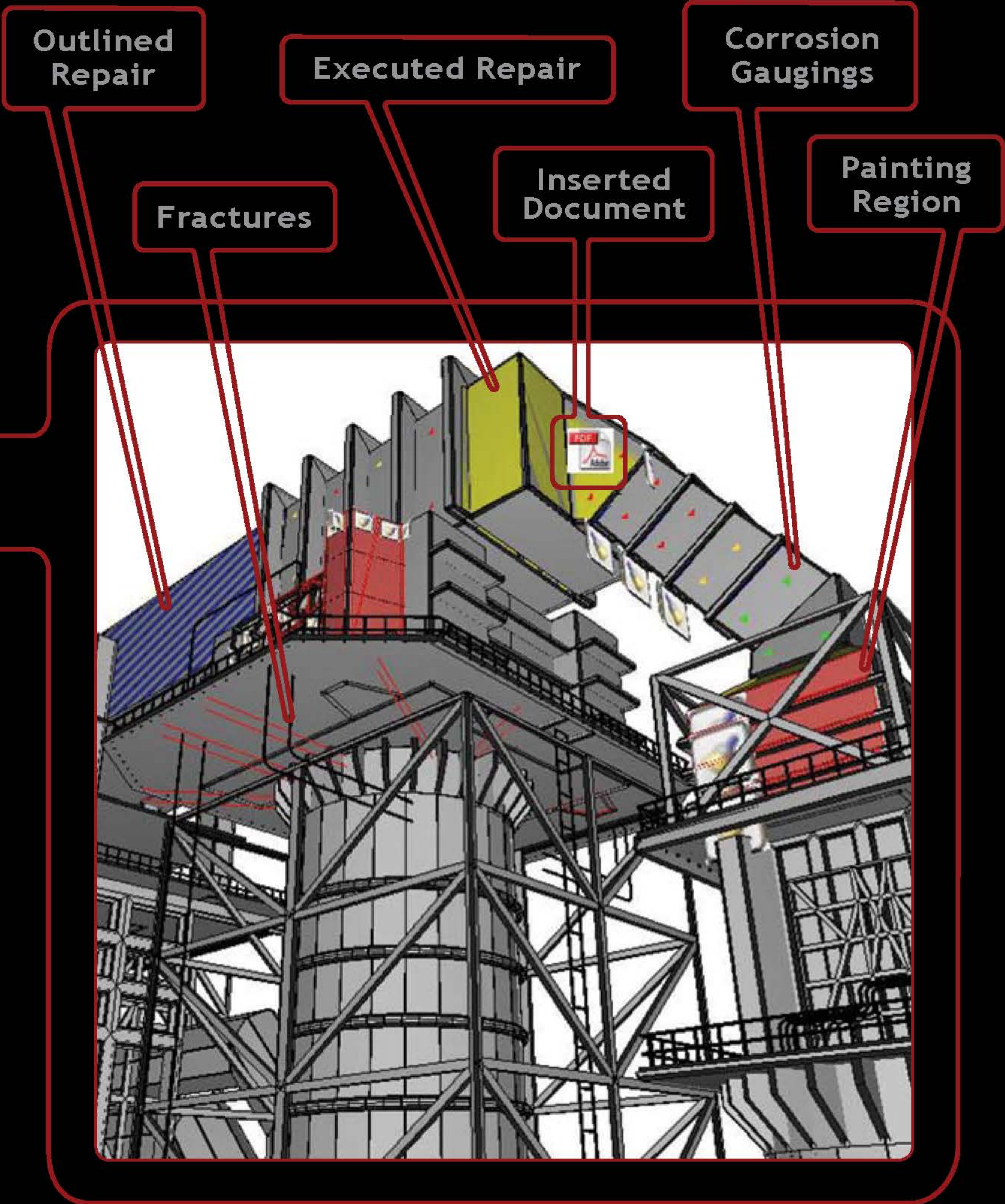




Introducing a revolution in asset
integrity and maintenance management

C4D® is cutting-edge technology for managing the maintenance of ships, offshore units, industrial plants, bridges, cranes, storage tanks, aircraft and other structures - focusing on the reduction of costs and risks to achieve maximum performance from services and materials.



C4D® is more than just a technology - it is an investment in competitiveness, environmental responsibility and quality of life. With no equivalent in the world market C4D® offers an innovative approach to structural maintenance by integrating and automating the management process - leading to improved effectiveness, cost savings and avoiding failures, pollution or casualties.

The Challenge

Research shows that 75% of mechanical failures in industrial plants arise from faults in structures and other static equipment - and in the maritime industry, ship hull failures are one of the principal causes of oil spill disasters.

The maintenance regime for such structures involves periodic inspections to assess condition by observations and measurements - with the aim of monitoring corrosion, cracking and coating deterioration.

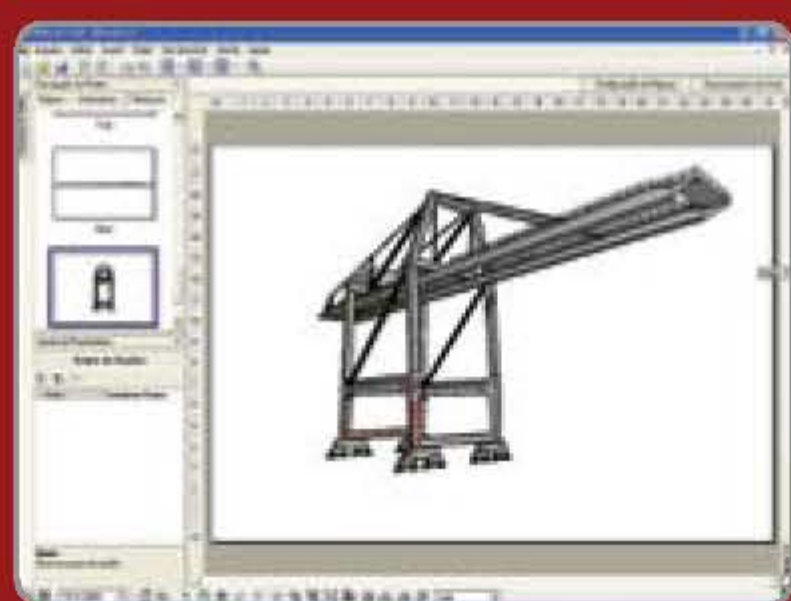
Traditional records of inspections rely on paper-based reports and mark up of drawings - a method that may not ensure a high-quality, reliable and effective management system.

The Solution

C4D® is an integrated IT environment for building, maintaining and interacting with temporal-geometric models of a structure through an intuitive, graphically driven user interface that simplifies the complex four-dimensional data management process.

By maintaining an up-to-date status of structure condition with a comprehensive history of inspections and repairs, C4D® simulates deterioration processes to predict future condition - allowing maintenance actions to be planned and executed effectively.

In summary, C4D® is the solution - organizing data and facilitating actions in the present to assure proper structure maintenance and avoid failures in the future.



Customer Needs

- Manage and foresee structure degradation;
- Control asset condition and extend life;
- Optimize return on capital investment;
- Minimize operational and maintenance costs;
- Prevent accidents, casualties and pollution;
- Implement knowledge management policies;
- Facilitate in-house and third party data exchange;
- Comply with industry and statutory obligations;
- Manage risks to reduce insurance premiums.



Benefits

- Cost savings in materials and services;
- Control over investment priorities;
- Effective maintenance strategy;
- Monitoring of critical areas;
- Prediction of future deterioration;
- Assignment of inspection priorities;
- Risk reduction and mitigation;
- Identification of best practices;
- Warranty period management;
- Internet based supplier quotation;
- Performance based contracts;
- Quality assurance improvement;
- Knowledge management;
- Data consolidation and standardization;
- Integration with ERP and PMS systems;
- Intuitive graphical user interface;
- Scalable system implementation.

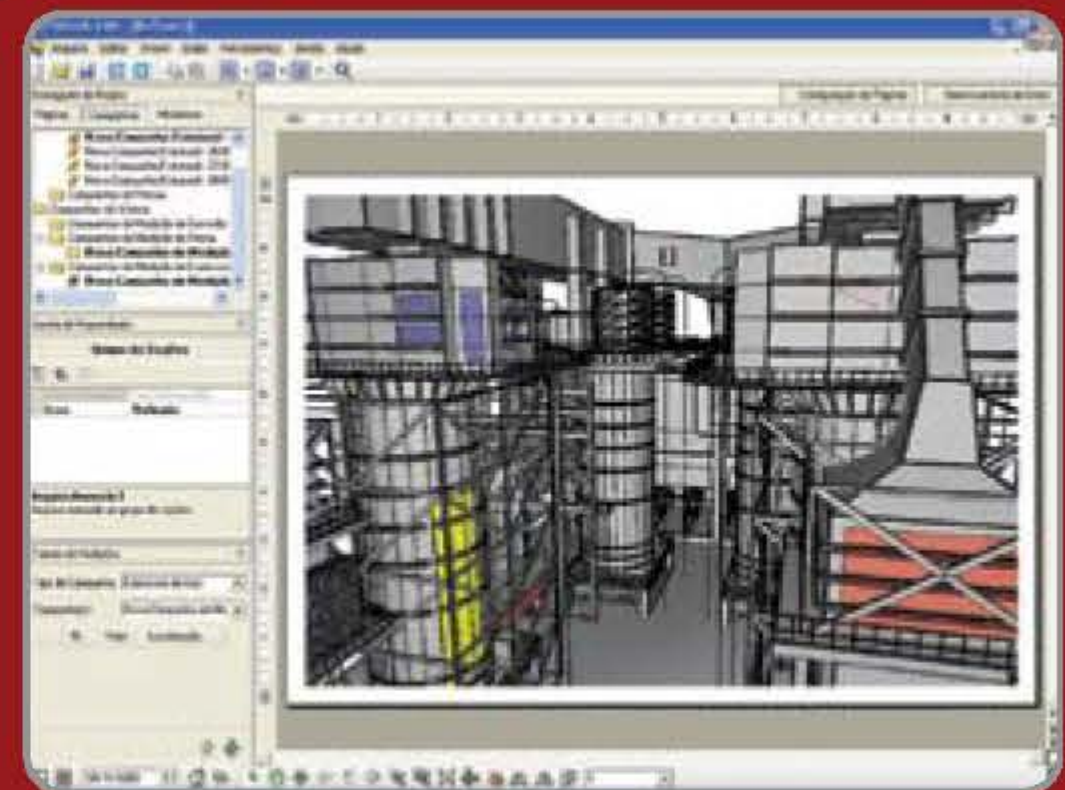
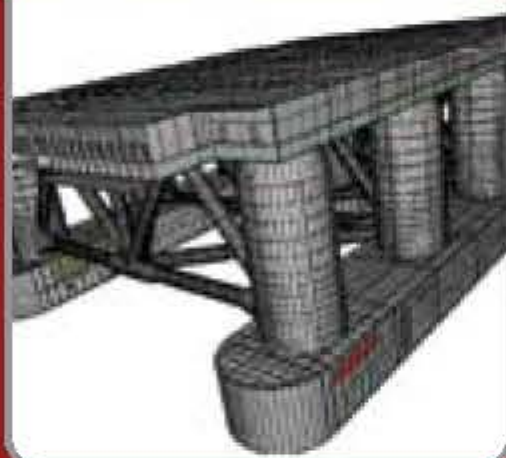
Implementation

3D models of structures and static equipment are created using their original construction drawings - then the deterioration from past inspections and previous repairs are added to complete the C4D® implementation.

C4D® software installation and model implementation can be achieved over the internet.

Features

- Track steel and coating degradation;
- Produce corrosion rates and statistics;
- Automatically outline areas for repair;
- Determine materials needed for repair;
- Calculate areas for shot-blasting;
- Estimate paint areas and volumes;
- Create a complete repair specification.



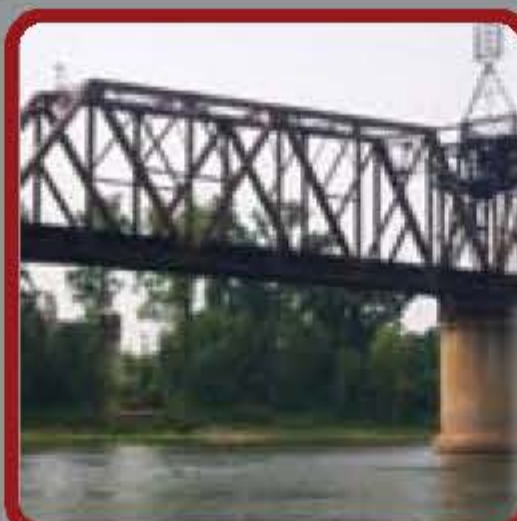
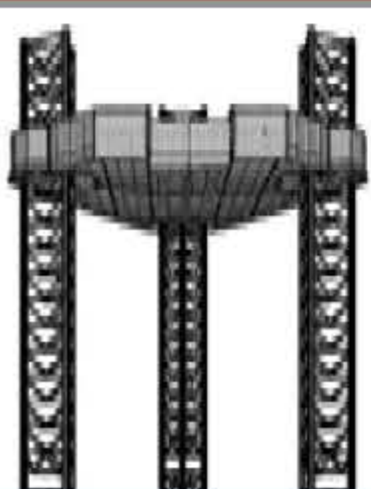
System

- Operation over the Internet
- Manage all survey and repair data
- Choice of language by menu option
- Intuitive, familiar and friendly user interface
- Insertion of documents such as photos, reports, spreadsheets, drawings and schedules
- Structures of any size and complexity
- Runs under Microsoft® Windows™.

Our Services

PhDsoft® supports every step:

- Implementation planning
- C4D® customization
- IT environment integration
- Asset modeling
- Baseline data input
- User Training.







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