



Operational Excellence Services

Smart O&M Solutions INTEGNANCE VR Fast Digital Twin Maintenance Viewer



Contact Us

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Access to Our Homepage

 <https://www.jgc.com/en/business/epc/operation-maintenance/service/>

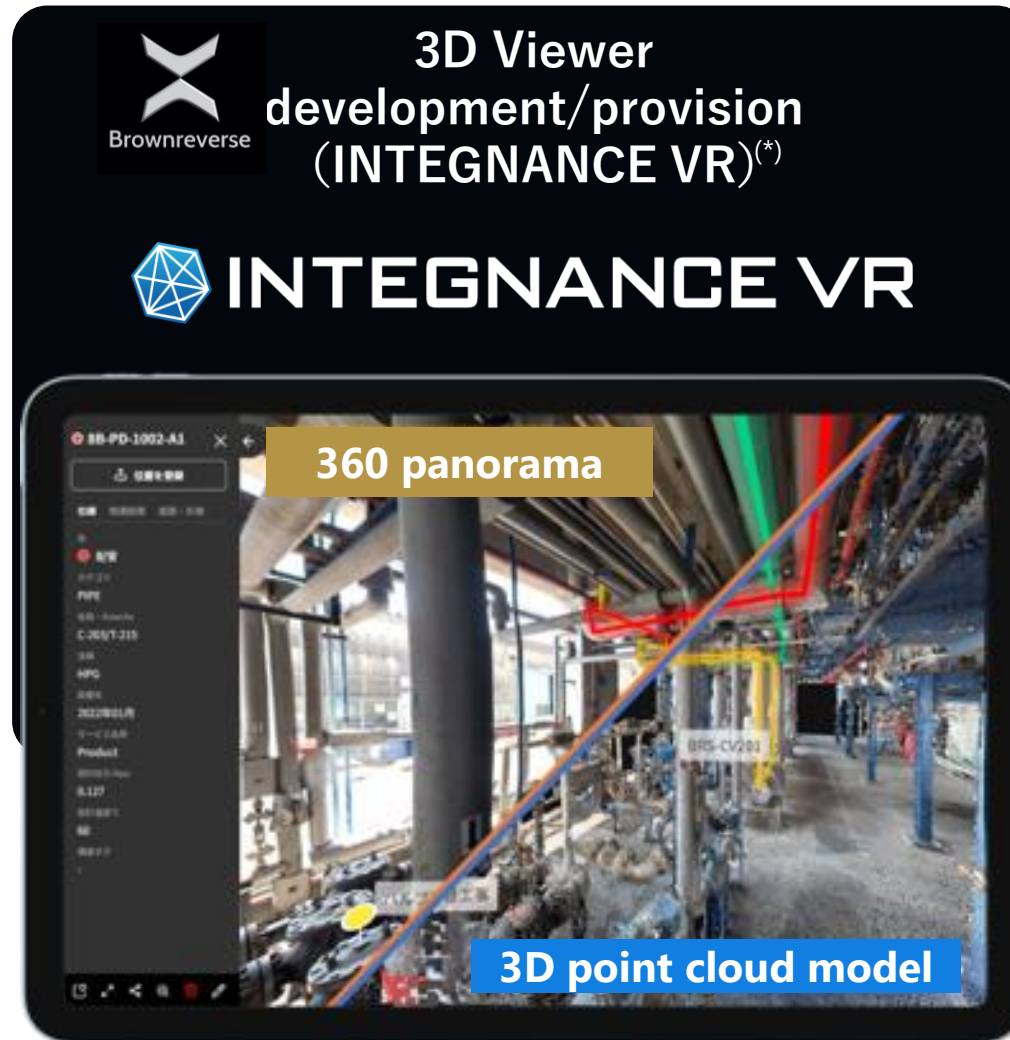
INTEGNANCE VR-Fast Digital Twin Maintenance Viewer

Do you have any of these issues?

- ☹️ **Struggling with promoting DX to aging plant which doesn't have 3D model**
- ☹️ **Wasting time on Site Visit for repair work planning, inspection planning, and daily maintenance work planning**
- ☹️ **Outdated or missing blueprints**

Our Solutions

- Our “Fast Digital Twin” replicates your plant as 3D model within 3 days at the earliest
- Without going to the site, maintenance planning can be developed via web
- Direct recording into a 3D model with tablets on-site is an efficient way to share site data without the need for blueprints



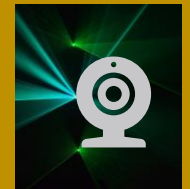
3D scanning



Wearable 3D Imaging Scanner



Drone

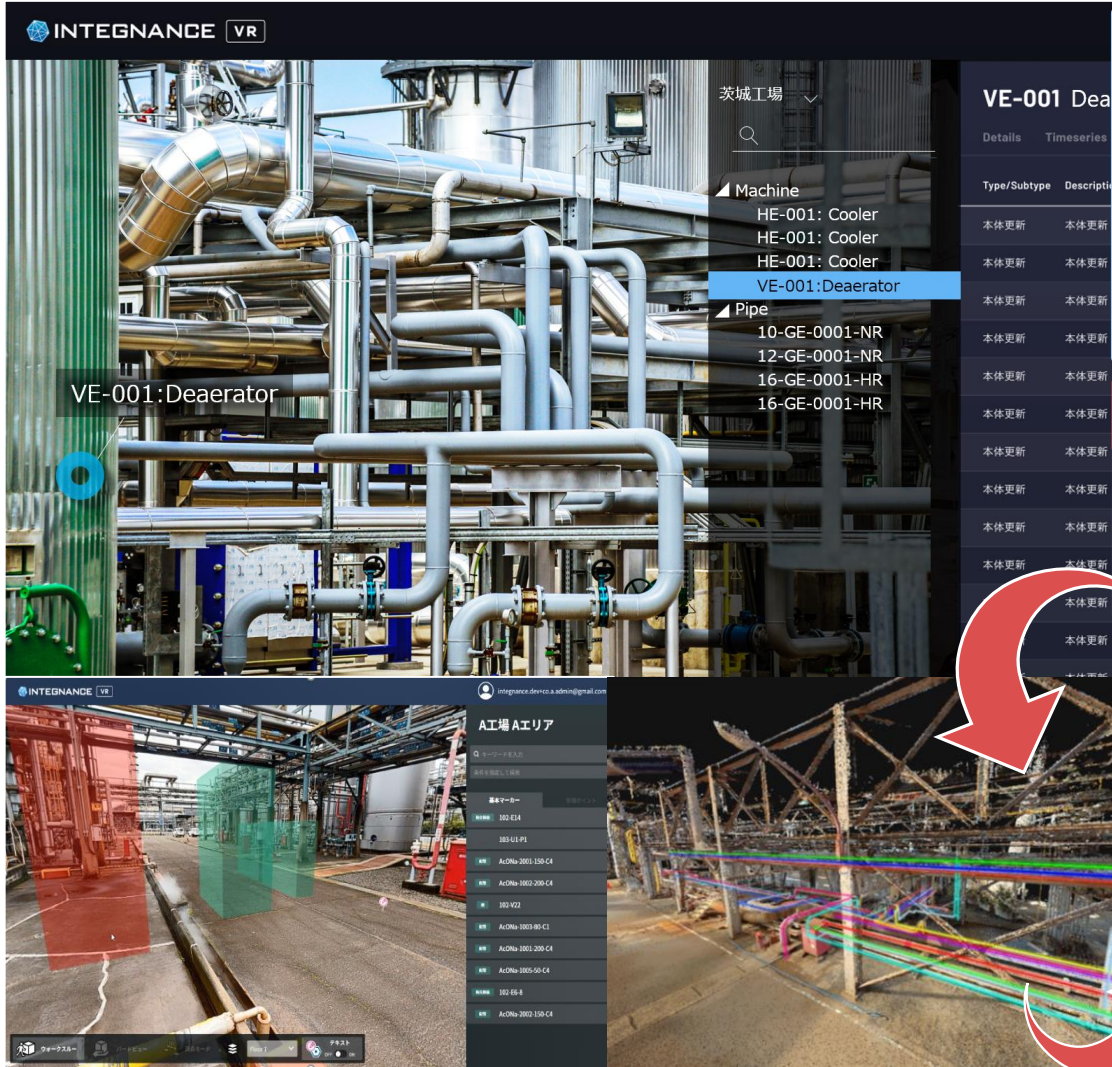


Imaging Laser Scanner

(*)INTEGNANCE VR is developed by Brownreverse which is one of JGC group companies.

INTEGNANCE VR-Fast Digital Twin Maintenance Viewer

Key Features



3D Simulation

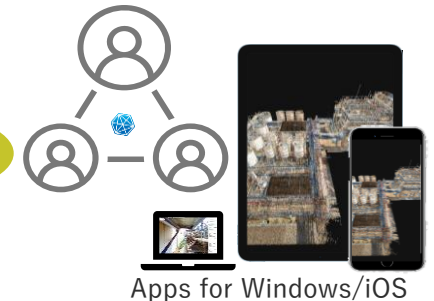
Planning of scaffolding area, Checking of material delivery routes, complicated construction, etc.

Desktop Survey

Measure the length between two points on the display without reading the drawing or measuring the actual length in the site.

Anytime Anywhere Access

- No special hardware required.
- Easy sharing thru URL.
- collaborative editing by multiple users.



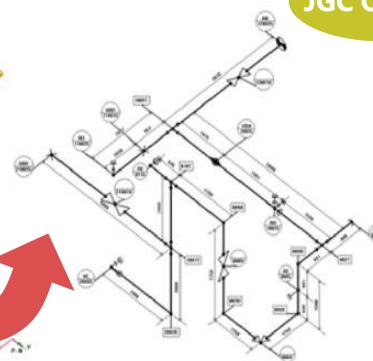
Automatic Piping Recognition

Mapping of corrosive loops and corrosion /damage focus areas on 360 panorama image

JGC Original

Automatic Isometric Output

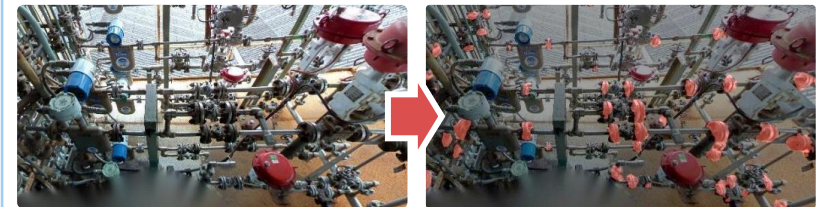
JGC Original



Automatic Flange/Valve Detection

JGC Original

Auto detection of flanges/valves positions from 360 panorama image by utilizing AI machine learning technology



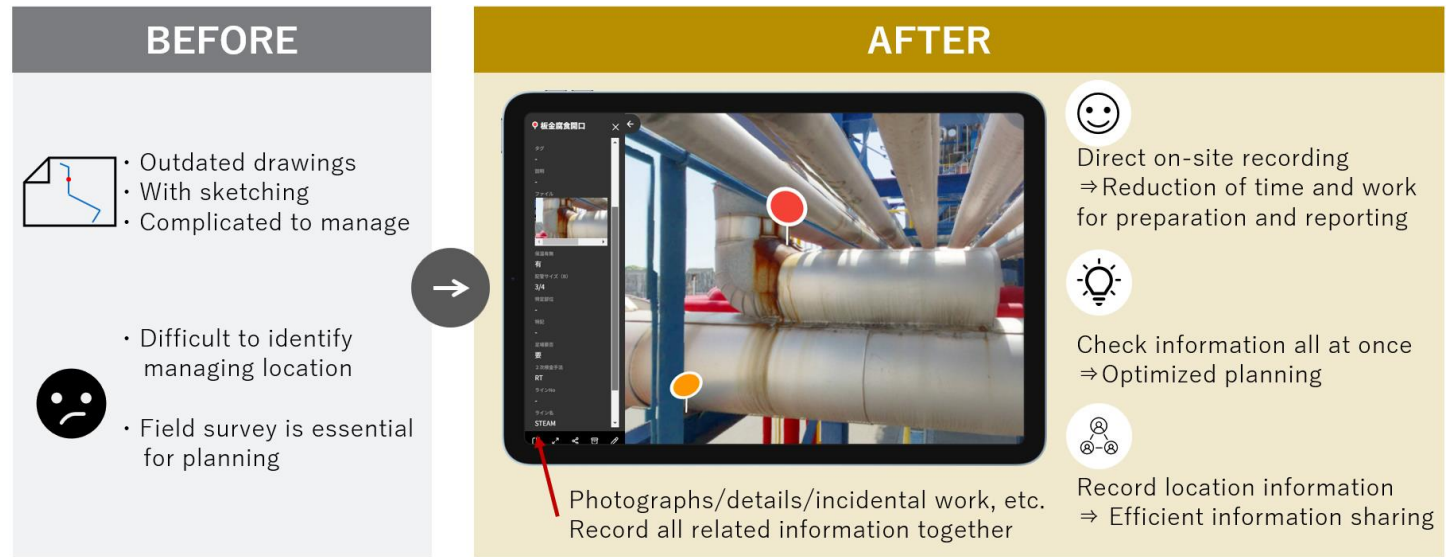
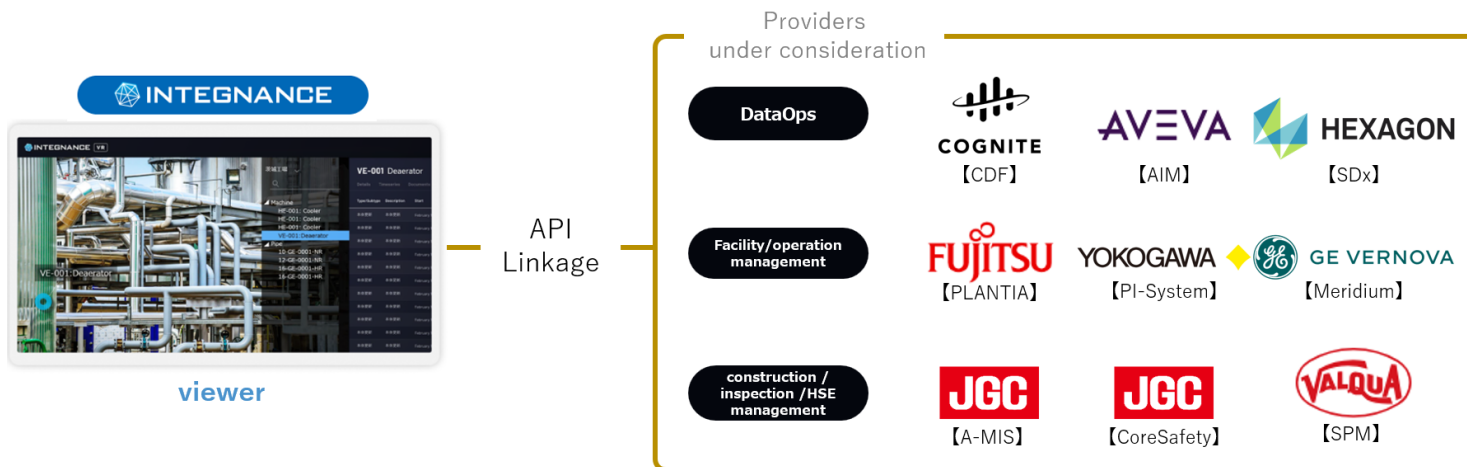
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Use Case

Direct recording of 3D model into tablets on-site
saves 22,500hr annually. (45% reduction)

System Integration

Integrating data infrastructures with WEB API makes it easier to reference
and update related information on INTEGNANCE VR.



Our Experiences

Over 50 Sites

INTEGNANCE VR has been adopted to over 50 sites.

Recent news:

INTEGNANCE VR was adopted for an ammonia production base in Indonesia for a joint study on reducing GHG emissions.(Sep 2024)