FOEx
For Explosion Proof

FOEx is a knowledge-based service company specialized in explosion proof.

For Explosion Proof!!

Company Introduction

"FOEx" is abbreviation of "For Explosion Proof". As international society is entering the era of eco-friendly energy, the usage of carbon-neutral gas is growing as well as wind and solar energy.

We are expecting hydrogen-based society will come eventually, and predicting the necessity of advanced explosion proof technologies for hydrogen gas and other carbon-neutral gas going to increase internationally.

FOEx will serve as a professional engineering company that focus on technologies for diagnosis on ships and plants, engineering of Ex-equipment, research on explosion problems that inevitably accompanying with carbon-neutral hydrogen-based society.

As safety starts with trust, FOEx, a company seeking for trust in technology, products, and people, promises that we'll grow into a company that fulfills social responsibilities.

Training | Consulting | Technical Service

Engineering | Research & Development

Summary

Company Name	FOEx Co., Ltd.
CEO	Kang Gyuhong
Established	2021.06.28
Location(H.Q)	602, Ulsan Green Car Technology Center, 362-11 Jongga-ro, Jung-gu, Ulsan (44428), Republic of Korea
R&D Center	9F 902, 44, Charyong-ro 48beon-gil, Uichang-gu, Changwon-si, Gyeongsangnam-do (51391), Republic of Korea
Certificate	✓ IECEx Certified Service Facility ✓ IECEx CoPC (Certificate of Personnel Competence) ✓ IECEx RTP (Recognized Training Provider)

Business Area

Engineering

- ✓ Hazardous area classification
- ✓ Explosion proof solution
- ✓ Safety assessment and solution
- ✓ Hydrogen Safety
- ✓ ESG Safety
- ✓ Electrical Machine

Education and Consulting

- ✓ IECEx CoPC training
- ✓ Technical training
  **Motor, Electrical engineering
- ✓ Safety, Hydrogen
- ✓ Certification Consulting
  **IECEx, ATEX, UL, KCs

IECEx Service Facility (Hazardous area services) field engineering

- ✓ Ex Inspection and maintenance
- ✓ Ex Design and selection
- ✓ Ex Installation

SaaS platform Business

- ✓ Ex ICT
- ✓ Ex SaaS platform

| Consulting | Consulting on the development and certification of IECEx explosion-proof equipment, LNG-hydrogen fuel cell risk assessment, safety standard development, and more, for public institutions, companies, and associations.

| Engineering Services | Safety and diagnostics for explosion-proof zones on ships and plants, development of explosion-proof solutions, and other safety and diagnostic projects for companies and public institutions.

| Training | Education and testing on international explosion-proof (IECEx) personal qualifications for those in the chemical engineering and gas-fuel energy fields.

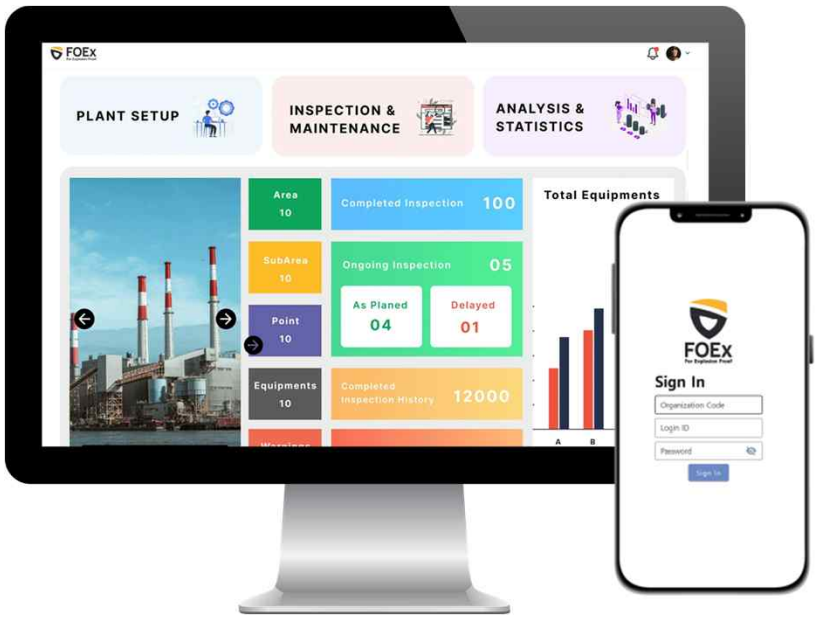
| SaaS Platform | SaaS platform business, development and provision of explosion-proof ICT and explosion-proof SaaS platforms.

FOEx Suite Concept

The FOEx Suite platform provides web-based safety diagnosis, management and real-time status diagnosis solutions for a number of information to manage operational safety, facility diagnosis and compliance with domestic and international standards and regulations in explosion-prone areas such as LNG, hydrogen and ammonia ships.

Particularly, it is a SaaS(software-as-a-service) based smart platform that meets the inspection standards required by IECEx, an international explosion-proof standard, and KCs explosion-proof certification, and has a user's plant database and asset management system.

FOEx
For Explosion Proof



FOEx is an IECEx Certified Service Facility and IECEx RTP

FOEx Suite

CLOUD

Customization Reflecting Customer Requirements

External Server

Use the cloud server integrated with the FOEx Suite by default.

Internal Server

Excludes the cloud server, allowing users to operate their own servers independently.

Hybrid Server

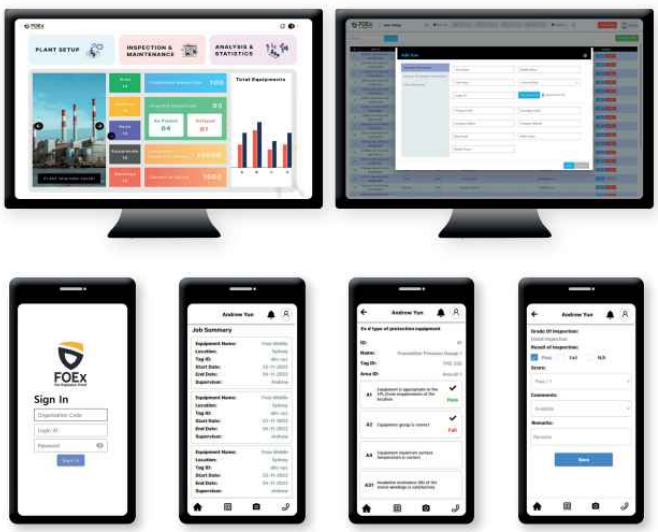
Applies both external and internal servers simultaneously within the FOEx Suite.

Introduction of FOEx Suite Technology

Smart maintenance for hazardous area industries

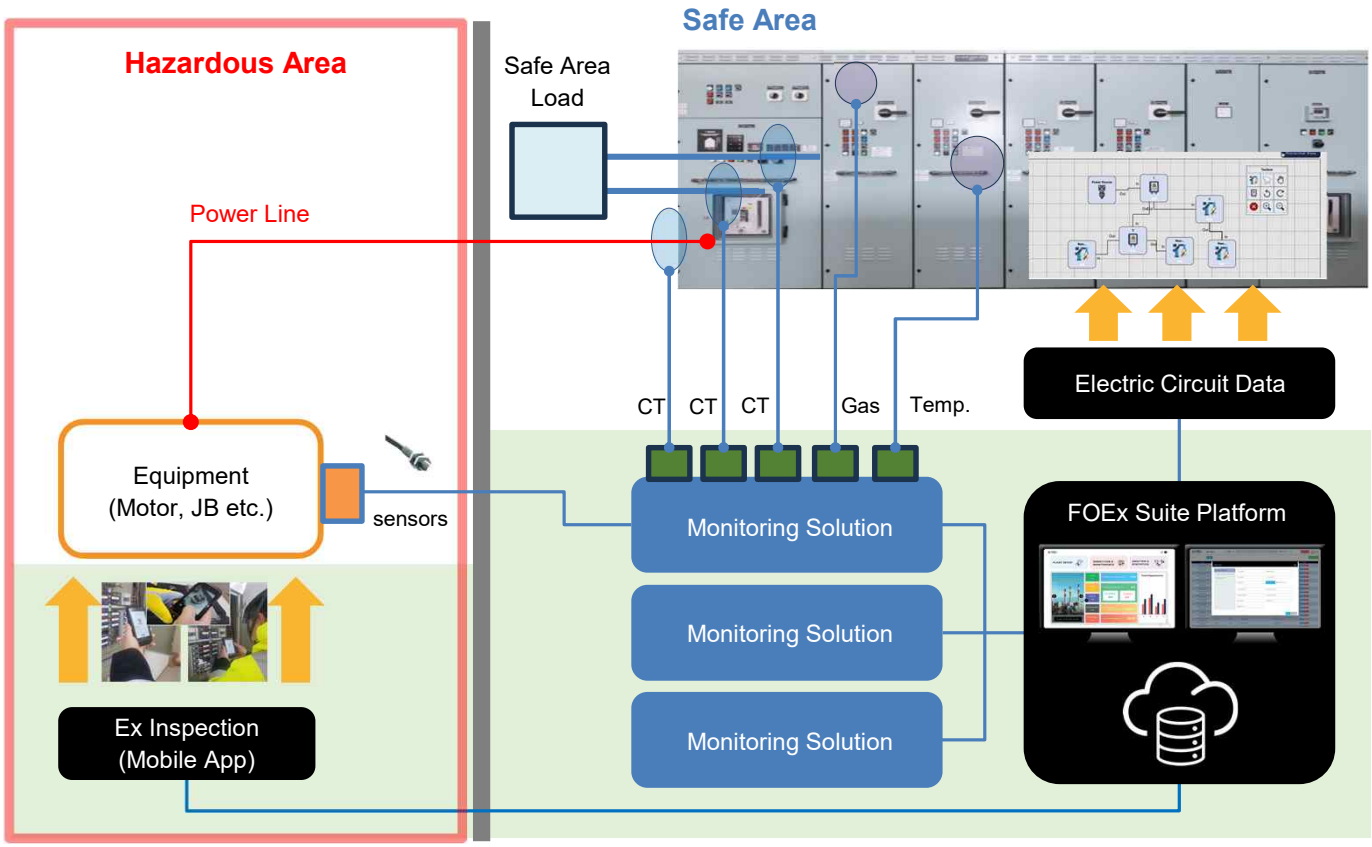
- Digitalization of explosion proof zone safety diagnosis is slower than in other fields.
- Predictive maintenance approach possible through condition monitoring.
- High barrier to entry.
  - Business owners think it is expensive.
  - There is insufficient data. Therefore, they are unaware of the problem.
- Unexpected downtime is a major challenge for companies operating in hazardous industries → recognized as a serious problem industries.)
- In fact, 82 per cent of the oil and gas businesses surveyed have identified predictive maintenance as a strategic priority to combat this.

Explosion safety management Web App. and Mobile App.



Digitalization in the explosion proof industry

Overview of FOEx Suite



FOEx Suite Structure

Design | **Installation** | **Initial Inspection** | **Operation & Maintenance**

Sign in
- Accounts
- Users

Site Setup
- Site list
- Area
- Sub Area
- Distribution Panel
- Equipment

Team Setup
- Inspector
- Manager
- Worker
- Outsourcing

Job Setup
- Ex inspection
- Corrective

Analysis
- Report
- Statistics
- RBI
- CBM Analysis

Electricity
- Electric Circuit
- Connection
- Intrinsic Safety

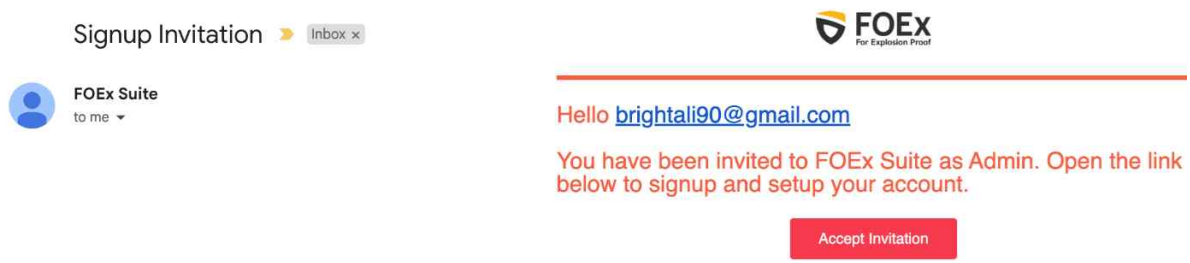
CBM
- Vibration
- Temperature
- Current

Industry support
- Manufacture
- Service Provider
- End user

FOEx is an IECEx Certified Service Facility and IECEx RTP

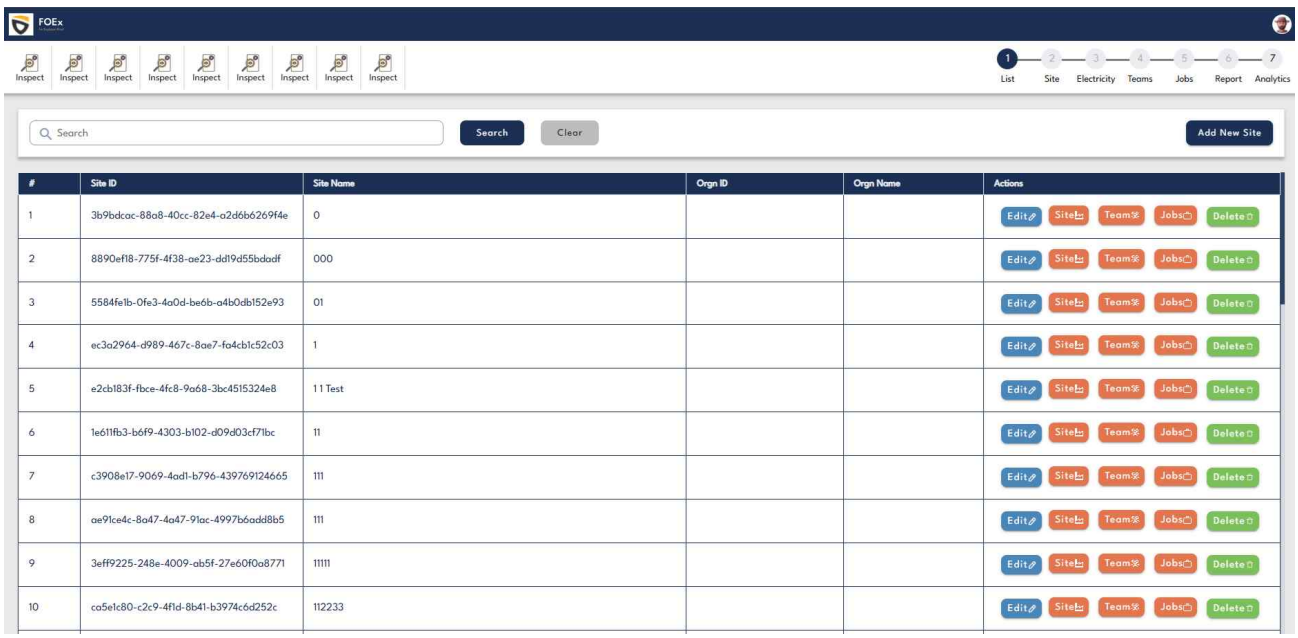
Sign in

When invitation send user will receive an email with a link to accept the invitation.

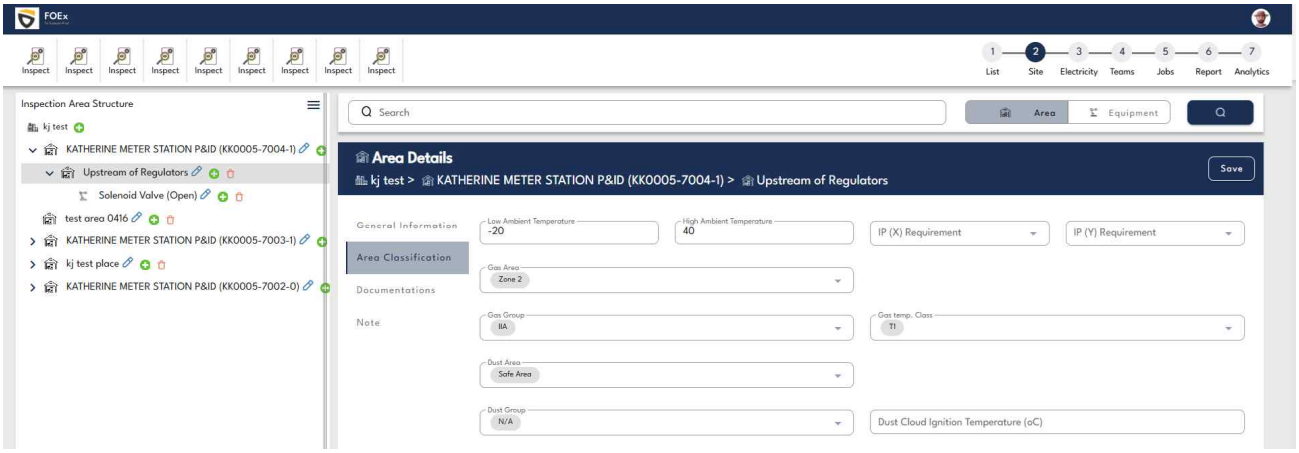


On clicking the Accept Invitation button signup form will appear.

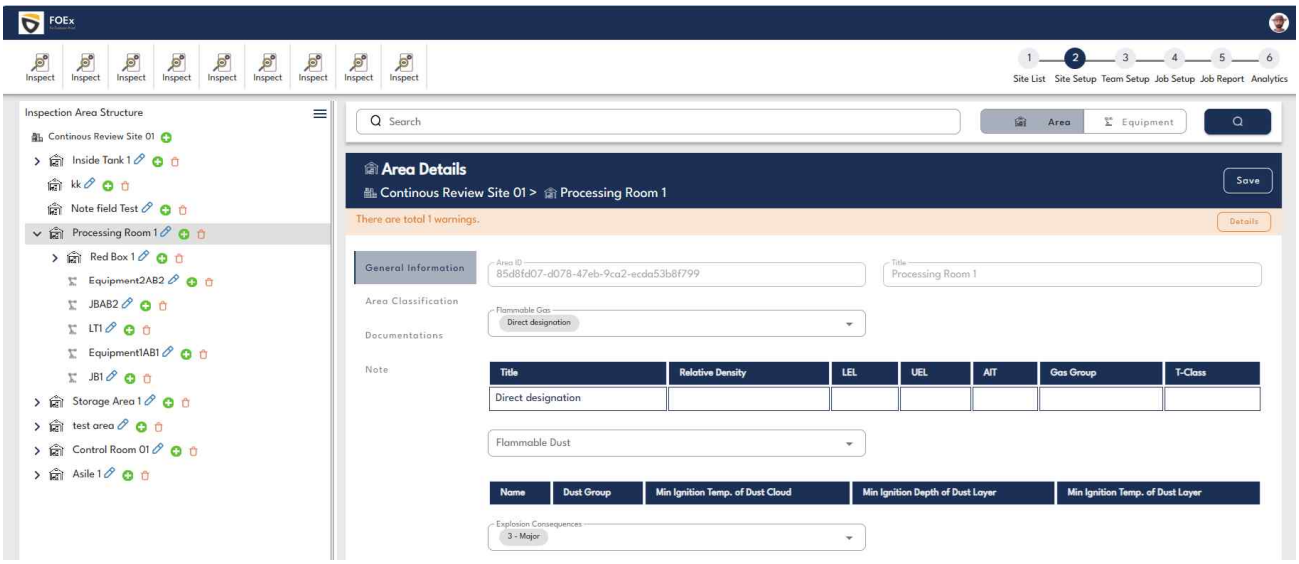
Site List



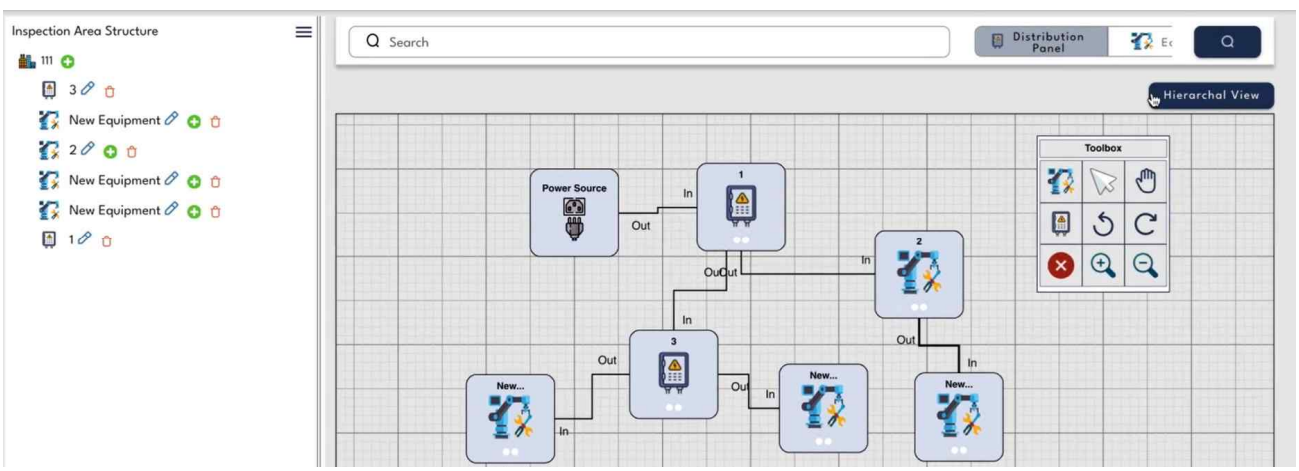
Sign Setup



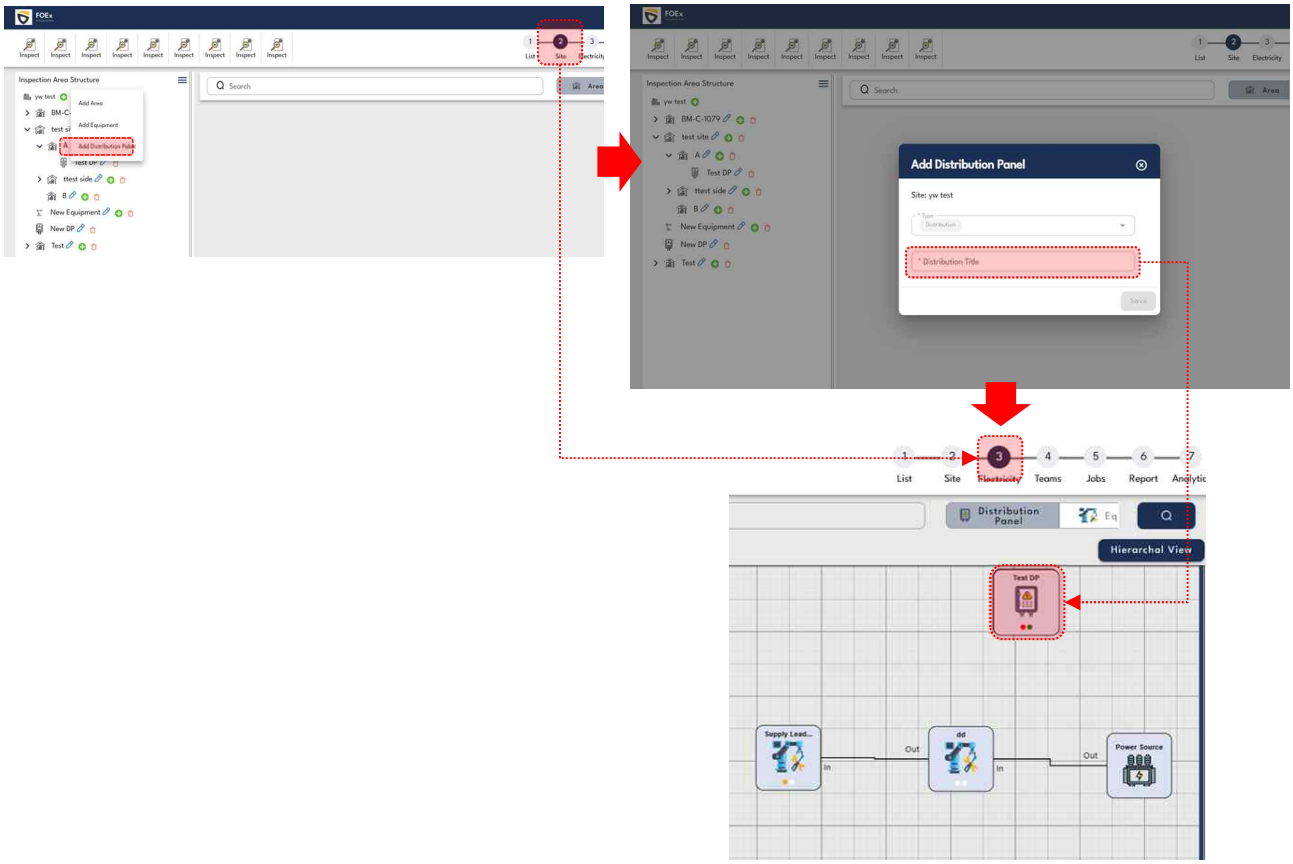
Database Input and Management



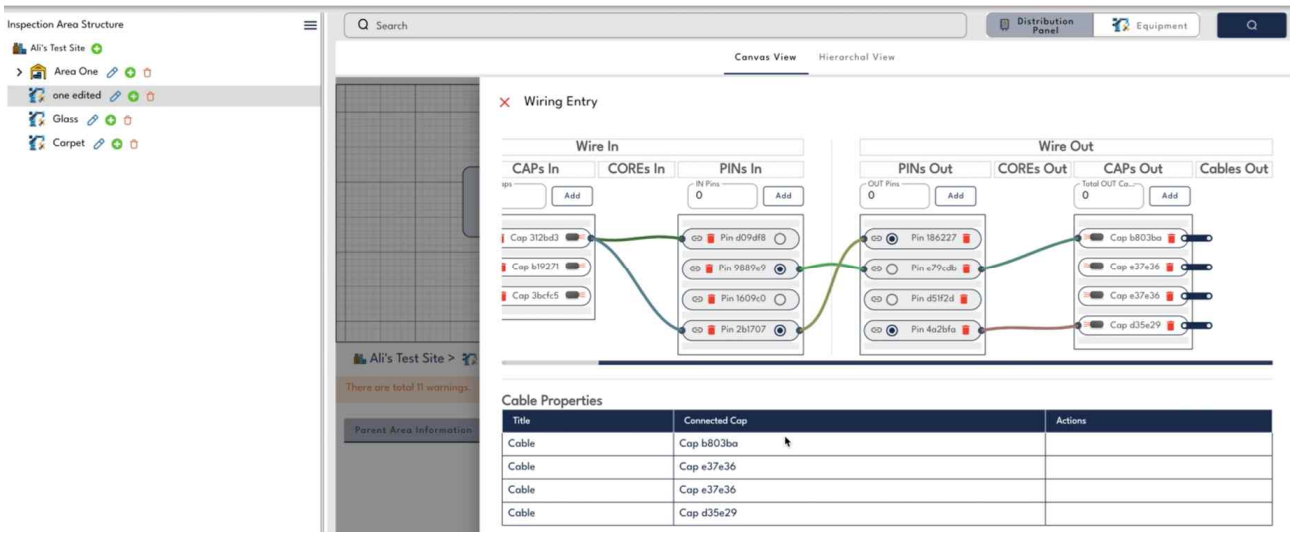
Electric Circuit Solution



Object Setup Process

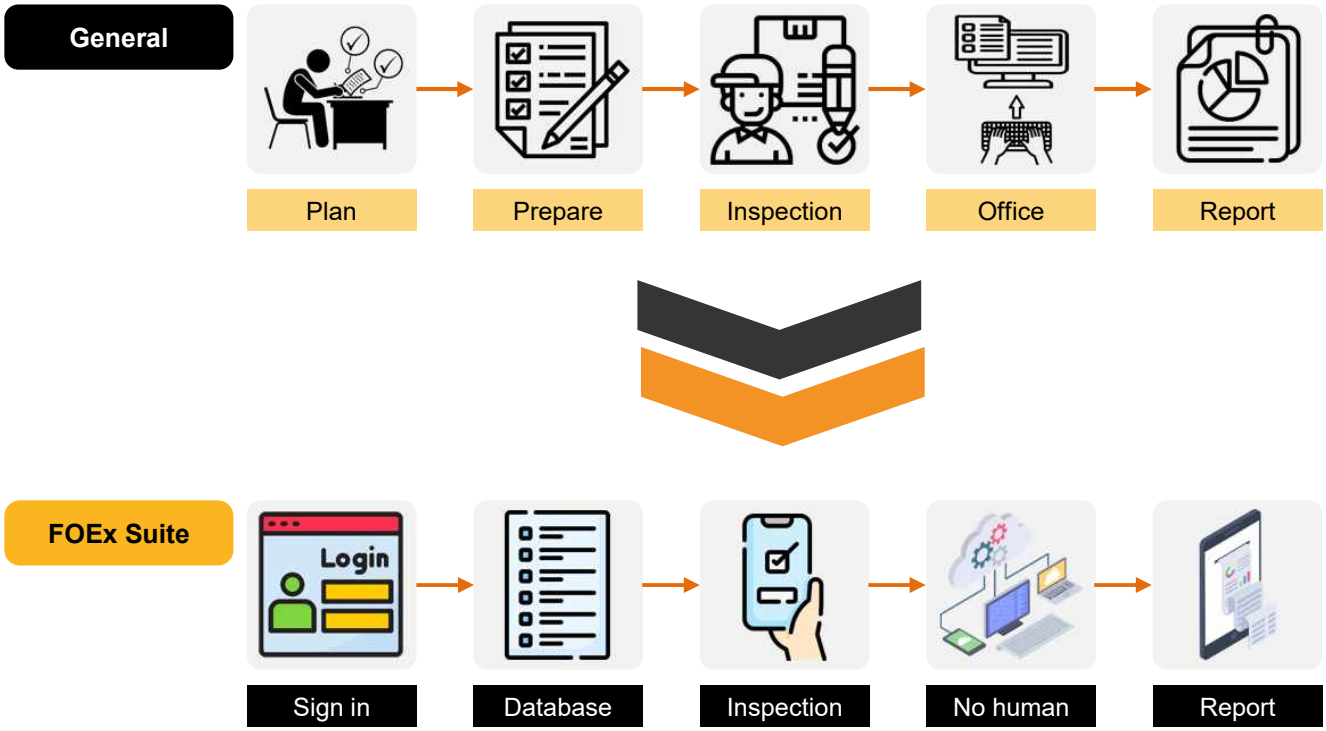


Object Setup Process

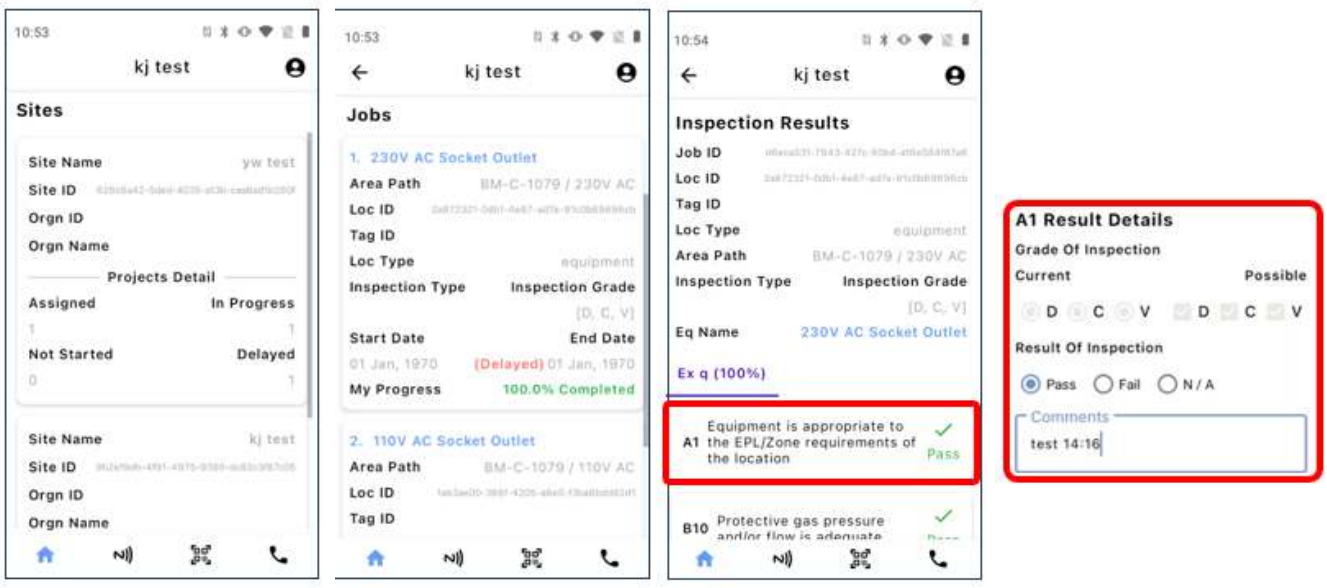


Introduction of FOEx Suite Technology

JOB Suite Web & Mobile App → Inspection FLOW

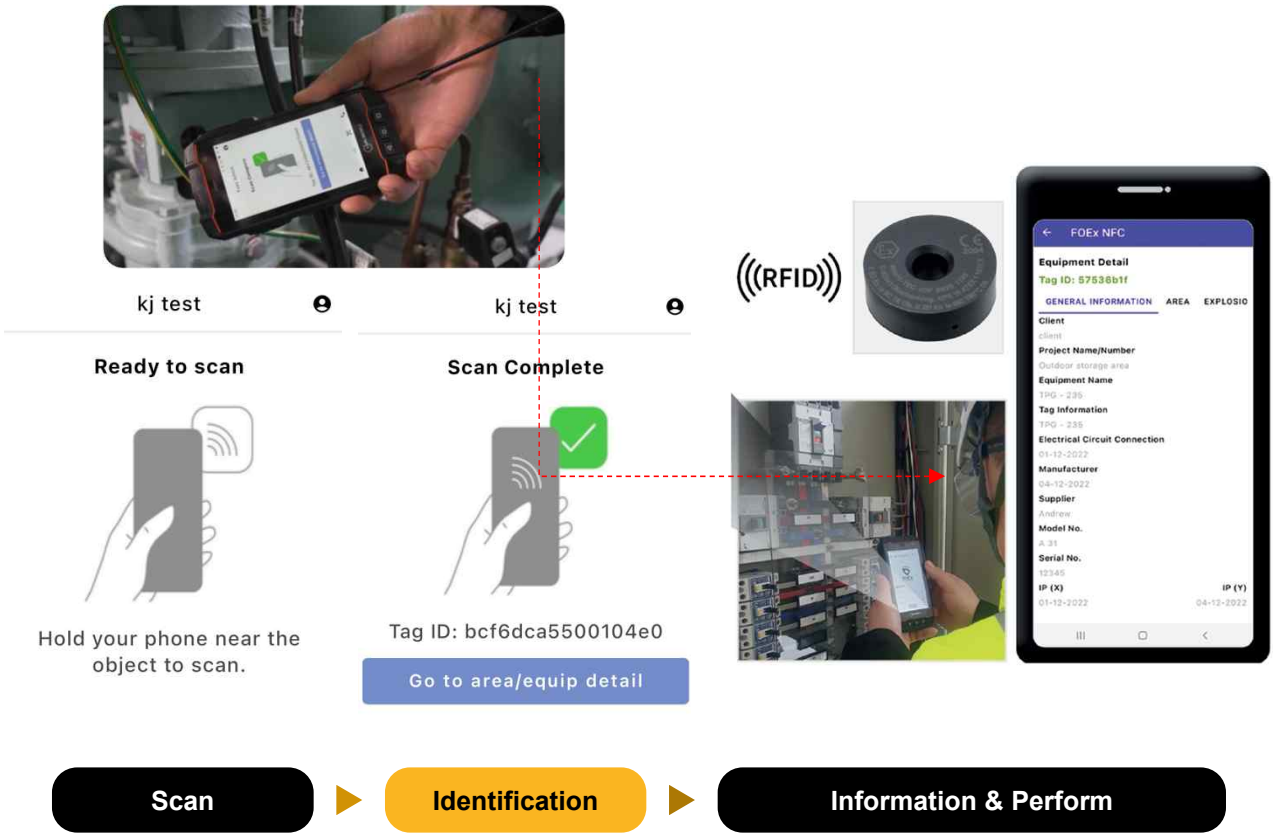


Mobile App for field inspector



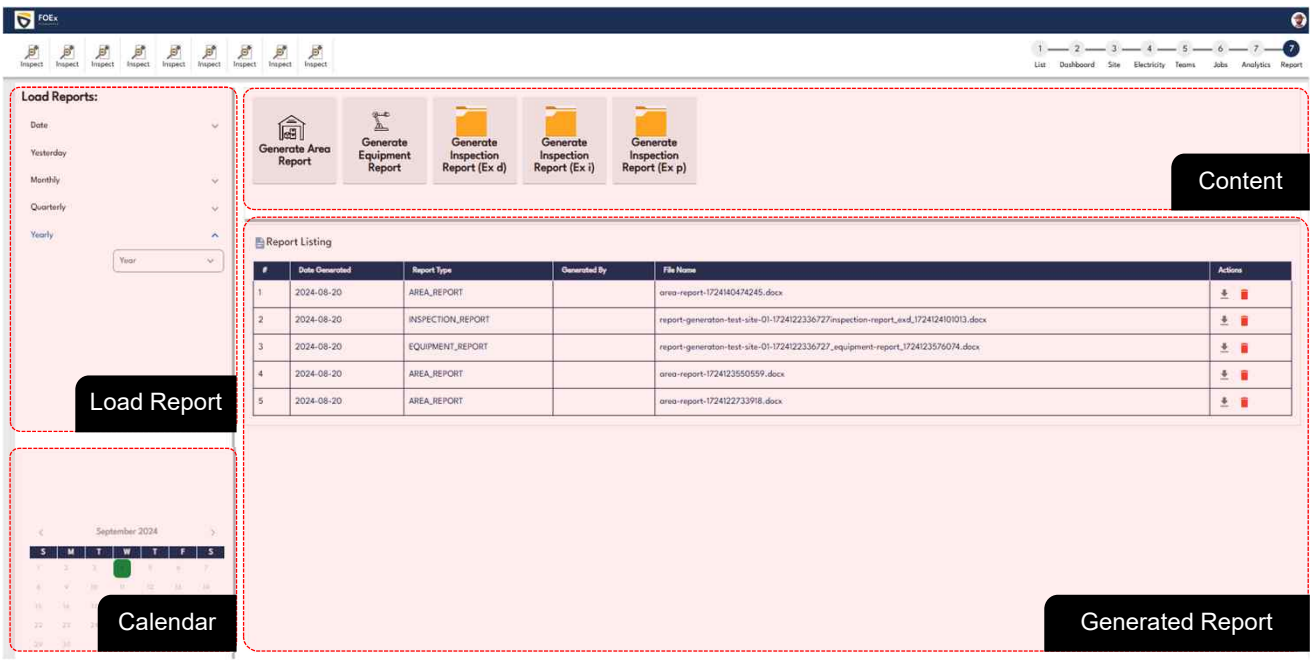
Assigned Site ▶ Assigned Jobs ▶ Inspection Items ▶ Inspection Result

Tagging Device → Mobile App



Scan ▶ **Identification** ▶ **Information & Perform**

Auto Report Generation



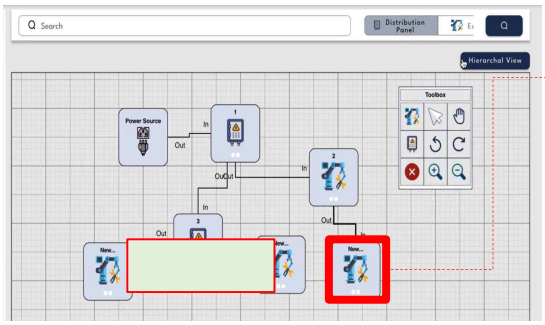
Introduction of FOEx Suite Technology

Statistical Analysis

Condition Monitoring Solution

On-Line Condition Monitoring with Electric Circuit Solution

Electric Circuit



Real Time Condition Monitoring

Digital Model

History List

Digital Twin Solution for Hazardous Area

Industry Support

Explosion Proof Industry Support Platform

Ex Service Supplier

- Sign up
- Product Register

Market opportunity Advertisement

FOEx Suite

Area-Equipment Matching

Optimized Recommendation

Safety Management

End User

- Demand
- Maintenance

Repair, Install, Design

Online Big Data

FOEx Suite Product Map

Division	Demo	Basic	B+M1	B+M2	B+M3	CBM	IS
Function							
- Site Setup	O	O	O	O	O		O
- Electric Circuit	O			O	O		O
- Team Setup	O	O	O	O	O		O
- Job Setup	O	O	O	O	O		O
- Report	O	O	O	O	O		O
- Analysis		O	O	O	O		O
- Risk Based Management					O		O
- Condition Based Monitoring						O	O
- Industry Support			O	O	O		O

FOEx Suite Field Solution

FOEx
For Explosion Proof

(44428) 602, Ulsan Green Car Technology Center, 362-11 Jongga-ro, Jung-gu, Ulsan, Republic of Korea

TEL +82-52-277-8922 **FAX** +82-55-293-0255

E-mail ghkang@foex.kr **Website** http://www.foex.kr