

# CAPABILITY PROFILE



Federal Synergies India Private Limited  
July 2021



Aerial Inspections of Solar Installation near Pushkar, Rajasthan

# Introducing Federal Synergies

*Practicing creative thinking with the ability to innovate*

Born in 2012, Federal Synergies possesses a unique balance of international technology implementation experience, industry experience and proven local business capabilities with requisite technical, operational and business expertise. Leveraging sovereign capabilities along with innovative collaboration with global supply chain, FS envisions to practice technology and revolution to everyone and co create next best practices for its customers and partners.

At FS, we believe in bringing innovation to solve traditional business problems using emerging technology. We specialize in designing, developing, deploying and delivering customizable end to end solutions.

FS aims to have a positive impact by increasing operational efficiency and safety thereby reducing costs and enhancing the bottom-line.

Federal Synergies India Private Limited is a **Shanta Synergies Group** Company.



*Inspection of Agricultural lands with 4K Camera and IR Sensor can help identify potential yield per hectare*

*Aerial Inspections of Tea Gardens, Dooars, North Bengal*





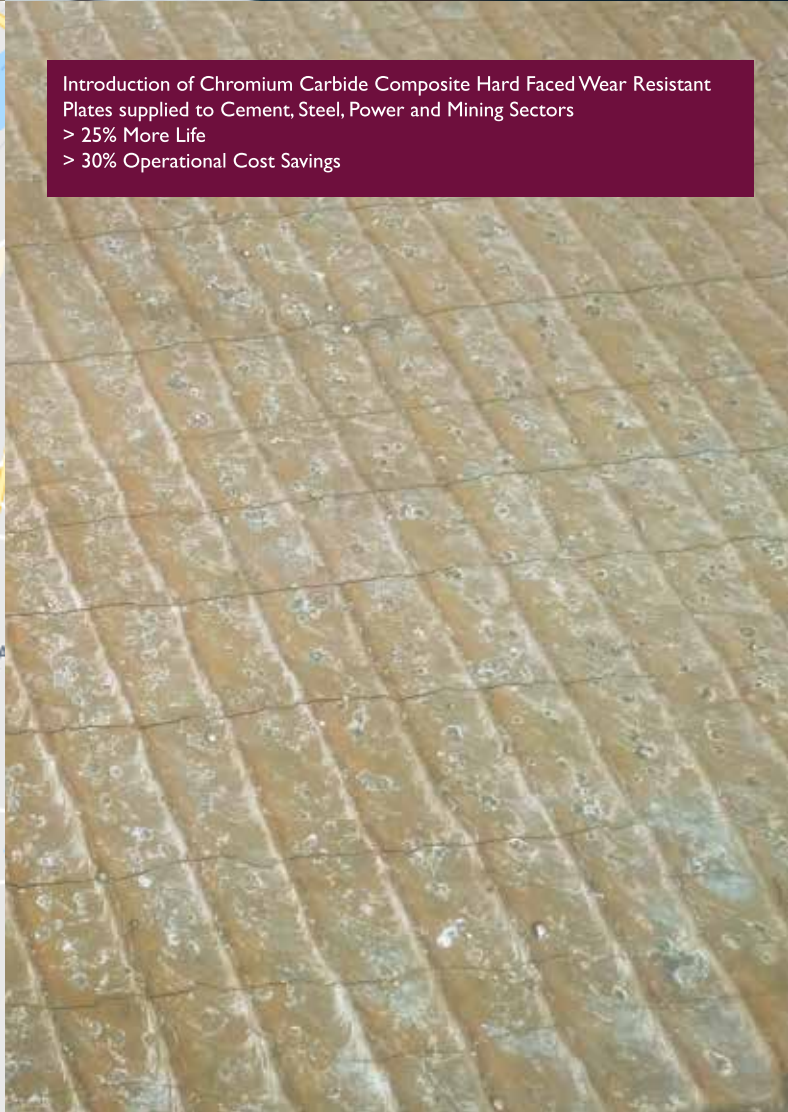
Supervision of workforce undertaking Jointing of 1.1 KV LT cables along with analysis of faults in West Surbarban District of Kolkata for CESC Ltd.

We understand SCADA Systems and deployments, and can support Electrical Panel requirements for MV/ HT/ EHV Systems.



Establishing Cable Fault Analysis Center to identify and analyse cable faults scientifically, with field supervision & GIS Data Capture  
> Reduction of 25% Faults in the Target Network

Introduction of Chromium Carbide Composite Hard Faced Wear Resistant Plates supplied to Cement, Steel, Power and Mining Sectors  
> 25% More Life  
> 30% Operational Cost Savings





# FS Power Infra

We have an expertise in different types of cable jointing LT/HT/EHT voltage levels and can meet complete requirements of customers. We have with us experienced senior supertension jointers with more than 30 years of field experience and astutely certified from world renowned joint manufacturing companies like **ABB Kabeldon** and **Nexans**.



We have a team of experienced and skillful people to deal with cable laying, cable jointing (6.6 KV/ 11 KV/ 33 KV/ 66 KV/ 132 KV/ 220 KV) erection of network assets, testing and commissioning.

*“Precision”*



## Signalling & Telecom Infrastructure Setup

With an experienced set of young professionals, we have the complete team that is capable of installation, setup, testing and commissioning of complete set of OFC, Power, Signalling and Telecom Cables for Metro and Railways - as per RDSO specifications.



## Digitalisation Change Agent

We have the capability to help identify, assess, design and implement strategic hardware and software powered development contracts to achieve the digitalisation change required by our customers.



# FS Aero

Powered by Kesowa

Demand for energy is rapidly growing, increasing the need to re-engineer efficiencies into our existing infrastructure and going ahead to build well-planned assets for the future. Large scale infrastructure projects should leverage emerging technologies such as Drone Technology, AI, AR and VR for effective management of assets.



## Planning & Design Stage

Using the output from UAVs, project engineers can optimize the design for a project, ensuring a more accurate timeline and estimate for the cost and time required.

- > Assistance in Land Acquisition
- > Effective planning and creation of detailed pre-construction project reports
- > Efficient project scheduling
- > Helping in determining scope of work

## Construction Stage

Providing smarter, safer and quicker day to day progress reports to project managers, leadership team and stakeholders; Drones can assist in assessing structural integrity, thereby ensuring employee and public safety.

- > Project monitoring for laying out transmission lines across a large geographical spread
- > Real time insights from Construction Sites
- > Help in identifying safety hazards and red flags

## Maintenance, Security & Surveillance

Enabling manager to quickly detect deficiencies and risks associated with infrastructure allowing rapid intervention and thus minimizing additional expenditure with minimum costs.

- > Drones cover large areas in a shorter time period as compared to traditional means
- > Cost effective & reliable alternative to monitor assets
- > Enhance labour safety and reduce labour costs significantly



Overhead Lines Surveying



Hotspot Detection in Substation

# FS Smart Grid

Assessing customer problems and creating custom made solutions to enable customers to capture value motivates FS Team. We believe in choosing open standards, driving innovation, fostering best suit of solutions without re-inventing the wheel. Most importantly, we believe in delivering turnkey solutions keeping the customer's requirements in view above all else.



## Identifying problem statement

Every problem is unique and needs a unique solution. We kick off our engagements by understanding our customer's objectives, requirements and help them identify problem statements.

## Bringing Global Local

We have invested in strategic partnerships with global players to ensure we can co-create next best practices for our customers.

## Designing the Solution Architecture

In order to maintain highest quality and applicability of our solutions, we customise the different components of the solutions to the local geography.

## Executing Solutions

Leveraging FS Team's unique experience and indept understanding of operational situations enables forecasting of operational issues and resolving them, thereby ensuring completion.

## Turnkey EPC Execution

FS engages with customers for complete turnkey projects wherein the scope of engineering design, procurement, construction along with maintenance of the solution is taken up.

## Managed Services & SAAS

Understanding complex solution deployments, Team FS is open to provide Managed Services and Solution as a Service to customers as per their requirement.

*Smart Meters Installed at a Residential Complex  
Howrah, Kolkata*





### Smart Metering at Kolkata, West Bengal

Smart metering deployment in selected areas of Kolkata has resulted in reduction of Non Technical Losses through advanced analytics, improved operational efficiency, fully automated meter reading and improved customer service.

Smart Electricity Meters compliant to IS 16444 have been installed and commissioned under a RF Canopy.

### Smart Metering at Kota, Rajasthan

A systematic process of Meter Replacement along with GIS Capture from an In-house Development Tab lead to quick turn-around time and efficient installation of the Smart Meters. The solution allowed KEDL to use real time data from Day 1 of the Smart Meter Roll Out.

Project Size - 2,00,000+ End Points



### Smart Water at New Town, West Bengal

Implementing Intelligent Water Management Network for New Town, West Bengal under the guidance of WBHIDCO Ltd. The project will enable consumers to understand and monitor self water consumption, as well as create accountability by mapping usage of water from the Water Treatment Plant to the consumer's premises.

Implementation by Shanta Colibri India Private Limited



### KEIIP, Kolkata, West Bengal

Project for "Water Supply System Instrumentation and Information Technology Upgrade" awarded in June 2019 by Kolkata Environment Improvement Trust, under Kolkata Municipal Corporation. An ADB Funded Project, this milestone project will bring transparency and systems to accounting and consumption of water in Kolkata.

Implementation by Shanta Colibri India Private Limited

## Offerings

Requirement analysis and formation of requirement matrix

Selection of product to suit requirement

Ensure quality assurance with Principal with customization

Supply & Installation

IT Integration and Process Streamlining

Post Installation Support

Managed Services for Customers

## Customers

New Town Kolkata Development Authority

CESC Ltd.

Kota Electricity Distribution Limited

KEIIP

KMC

WBSEDCL

WBPDCL

Delhi Jal Board

Bidhannagar Municipality

Public Health Engineering Department, WB

Electrosteel Castings Ltd.

Hindustan Zinc Ltd.

Haldia Port.

## Certifications

Quality Management System

ISO 9001:2015

Environmental Management System

ISO 14001:2015

Information Security Management System

ISO 27001:2013

CMMI Level 3

## Affiliations

ASSOCHAM

Indo French Chamber of Commerce

Confederation of Indian Industry

Indian Smart Grid Forum

MRO Association of India



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