DANLIN ENGINEERS

ENGINEERING EXCELLENCE

GLOBAL DELIVERY PARTNER

GLOBAL ENGINEERING NETWORK ZONE

ISO 9001:2015 Certified

SMARTPLANT 3D TRAINING

GEN Z

BEYOND 3D SP3D MODELLING

Practical 3D plant design training



REAL PROJECT SCENARIOS



INDUSTRY-ALIGNED CURRICULUM



EXPERT MENTORSHIP



LEARN FROM ANYWHERE



SMARTPLANT 3D TRAINING

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SMART PLANT 3D INTRODUCTION

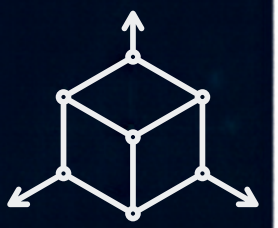


Build the foundations of confident plant modelling.





01/
INTRODUCTION



Templates / Session Files

Create and manage project templates and session files.

Filters (Database query)

Use filters to query and control the data you work with.

Selecting Objects

Select single or multiple objects quickly and accurately.

Common Toolbar

Understand and use the essential tools for everyday tasks.

Manipulating Views

Pan, zoom, orbit and set views to work more efficiently.

Inserting Reference Files

Insert drawings and models to support your project.

WBS Items

Create and manage WBS items to structure your project.

Sequencing Objects

Define sequence and relationships between objects.



PIPING

From intelligent routing to production-ready isometrics.

ROUTING OF

- PIPE
- ELBOW & TEE
- VALVE
- INSTRUMENT
- SPECIALTY ITEM
- TAP
- SPLIT CONNECTION
- SPOOL BOUNDARY



01

01 Piping Hierarchy
Define systems, sub-systems and piping classes.

02 Route Pipes
Create intelligent routes with dynamic connectivity.

03 Inserting Components
Insert elbows, tees, reducers and other standard components.

04 Routing a Sloped Pipe
Apply accurate slopes for drainage and process flow.

05 Routing Pipes from the P&ID
Import R&D data and auto-generate routed piping.

02

06 Placing Instruments
Place and connect instruments with tagging and orientation.

07 Placing Piping Specialty Items
Add strainers, traps, vents and other specialty items.

08 Placing Taps
Add taps and connections for instruments and testing.

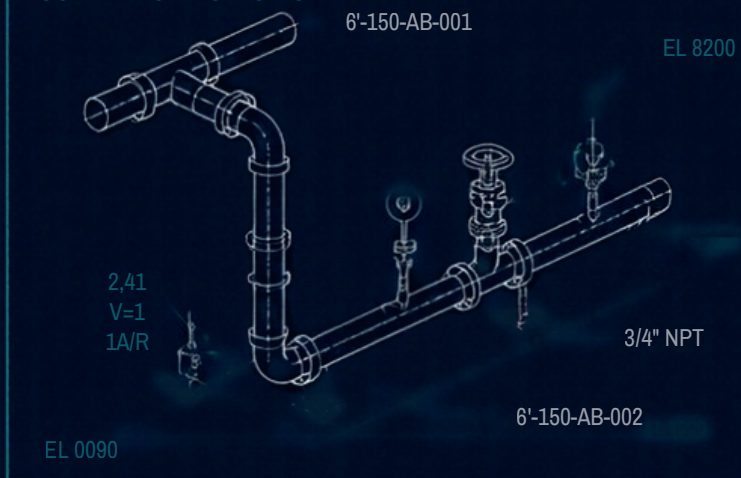
09 Inserting Splits
Create split connections and branch take-offs accurately.

03

10 Creating Spools
Define spool boundaries and generate spool data.

11 Creating Isometric Drawings
Produce production-ready isometric drawings.

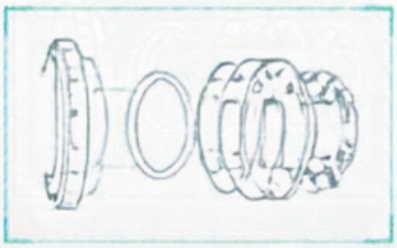
ISOMETRIC PROJECTION



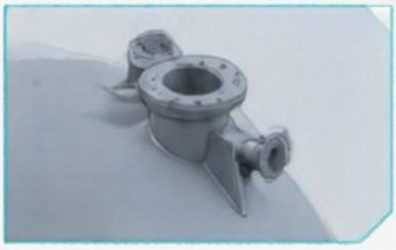
EQUIPMENT

Position intelligent equipment in a coordinated plant environment.

Learn how to place, position and manage equipment with accuracy in SP3D. This chapter covers equipment types, nozzle connections, relationships, solid modeling basics and foundation coordination to build a clash-free, construction-ready model.



SOLID MODELING DETAIL





EQUIPMENT PLACEMENT

- 01 Equipment General Overview
- 02 Placing Equipment
- 03 Placing Equipment Shapes
- 04 Placing Equipment Component

EQUIPMENT RELATIONSHIPS

- 05 Equipment Nozzle Ports
- 06 Equipment Positioning Relationships
- 07 Manipulating Equipment
- 08 Space management

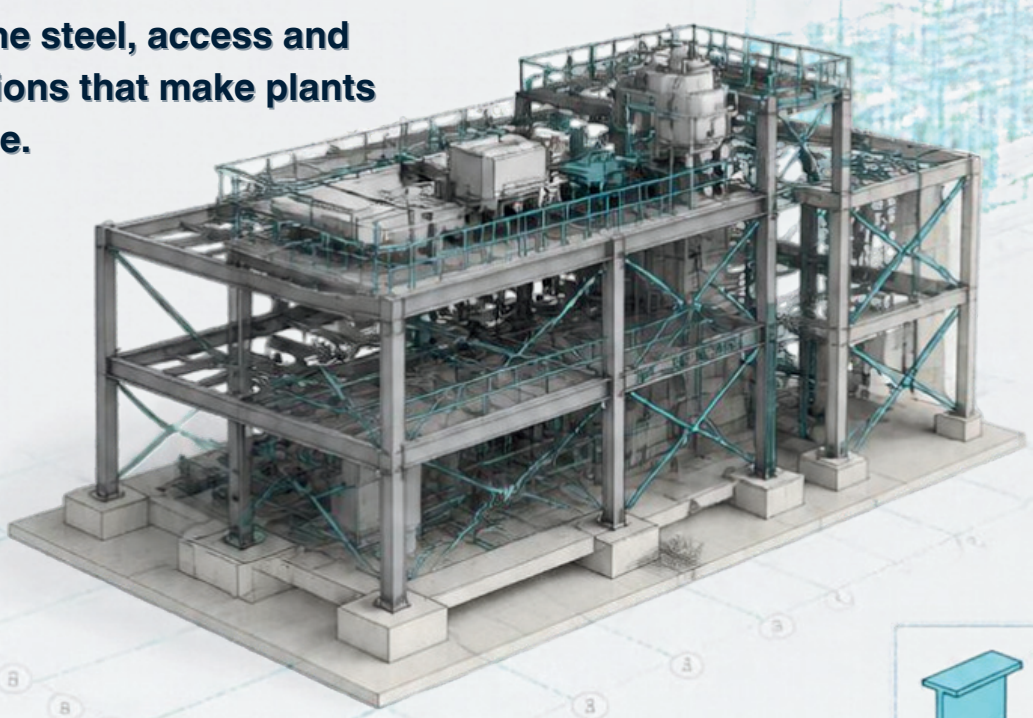
FOUNDATIONS & MODELING

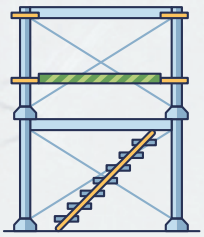
- 09 Solid Modeling Intro
- 10 Equipment Foundations

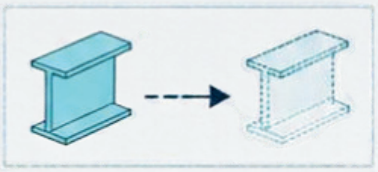
ACCURATE EQUIPMENT PLACEMENT

STRUCTURE

Model the steel, access and foundations that make plants buildable.







Placing Grids / Coordinate systems
Establish accurate grids and coordinate systems to control model position and alignment.

Linear Member System
Create and manage steel sections, profiles and connections using the Linear Member System.

Structure Modelling
Build steel structures with beams, columns and bracing to form the core plant framework.

Slabs
Model concrete slabs and decks with thickness, openings and edge conditions.

Walls
Create concrete and panel walls with openings, offsets and construction details.

Stair/Ladders/Handrails
Add access with stairs, ladders and handrails to meet safety and access requirements.

Footing
Model isolated, strip and combined footings with reinforcement and embed items.

Equipment Foundations
Create equipment foundations with plinths, anchor bolts and embedded components.

Surface Style Rules
Apply surface styles and hatches to control visual output and documentation.

Copy/Paste Members
Reuse members quickly by copying, pasting and repeating at new locations.

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05 / SUPPORTS & COORDINATION

SUPPORTS & COORDINATION

REFERENCE FILE



Coordinate every connection with confidence.

Placement of supports
Accurate positioning of supports for reliable construction.

Hangers, Spring
Apply and manage hangers and spring supports.

Guide, Rest
Add guides and rests to control movement and loads.

Making special pipe support
Create custom supports for unique requirements.

Placing Control Points
Insert and manage control points for precise coordination.

Interference Detection
Detected phases and Interferences before fabrication.

Inserting Reference Files
Bring in reference models for seamless coordination.

QUALITY CONTROL IN COORDINATION

VERIFY
Check alignment, levels and clearances.

VALIDATE
Validate supports and loads as per specifications.

DETECT
Detect Interferences and resolve proactively.

DELIVER
Deliver a clash-free, coordinated and constructible model.

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COURSE OUTCOME

UNLOCK YOUR POTENTIAL

PROGRAM INVESTMENT

₹ INR 31,999 +GST

Build practical confidence across piping, equipment, structure and coordination.

PIPING EQUIPMENT STRUCTURE COORDINATION

FROM TRAINING TO PROJECT READINESS

Begin your SP3D training journey.

Duration 25–35 Hrs.
(Variable based on candidate).

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