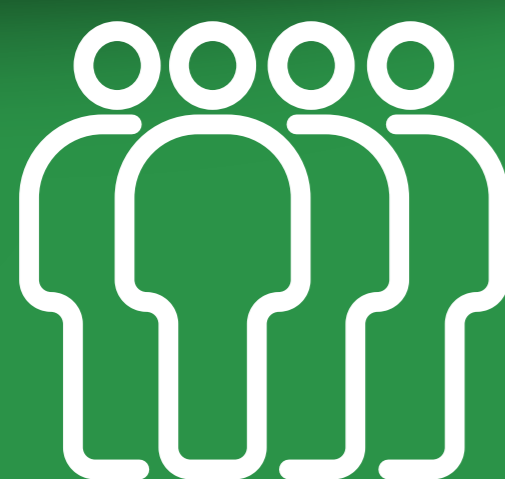


## TYPICAL OIL + GAS FACILITY DESIGN

MULTI-DISCIPLINE ENGINEERING

Halker's experienced team of multi-discipline engineers and designers are the foundation to the success of every project we work on. We use industry standard software solutions to design, model, and simulate project operations to maximize efficiency and effectiveness from start to finish.

The results are real-world solutions; innovative, fit-for-purpose designs that are based on impactful business and production objectives for projects of all sizes.



### 2D DESIGN PACKAGE

# TIER 1

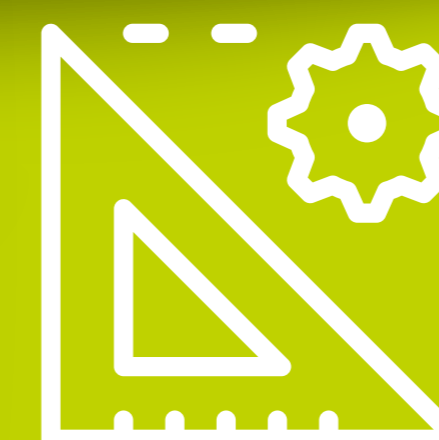
IDEAL FOR SIMPLE PROJECTS WHERE A CONTRACTOR CAN CONSTRUCT A QUALITY FACILITY WITH MINIMAL OVERSIGHT.



### 3D DESIGN PACKAGE

# TIER 2

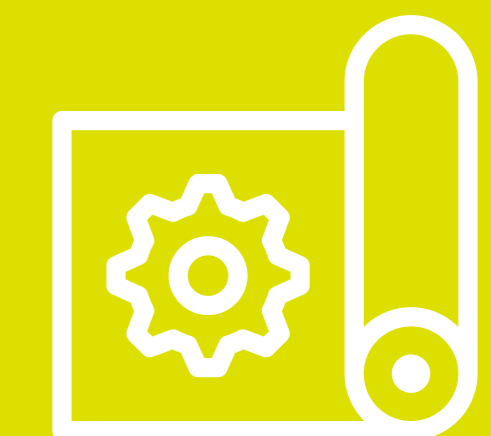
IDEAL FOR PROJECTS WHERE OWNER / OPERATOR PREFERENCES CAN BE IMPLEMENTED IN THE FINAL PRODUCT.



### DETAILED DESIGN PACKAGE

# TIER 3

IDEAL FOR PROJECTS WHERE MAXIMIZING SHOP FABRICATION, PRE-PLANNING OR VENDOR BIDS CAN RESULT IN SUBSTANTIAL SAVINGS.



• DESIGN BASIS	✓	✓
• PROCESS FLOW DIAGRAM (PFD)	✓	✓
• PIPING & INSTRUMENTATION DIAGRAMS (P&IDs)	✓	✓
• SITE LAYOUT	✓	✓
• GENERAL PIPING PLAN	✓	✓
• TVCS MEMO / 0000a	✓	✓
⊗	• 3D NAVISWORKS MODEL	✓
⊗	• PIPE, VALVE & FITTING BILL OF MATERIALS	✓
⊗	• PIPING PLANS, SECTIONS & SUPPORT PLAN	✓
⊗	• MECHANICAL EQUIPMENT LIST	✓
⊗	• FOUNDATION LOCATION PLAN	✓
⊗	• 14 C SAFETY DEVICE OPTIMIZATION	✓
⊗	• AREA CLASS DRAWINGS & API RP 500	✓
⊗	• INSTRUMENT INDEX & IO LIST	✓
⊗	• INSTRUMENT LOCATION PLAN	✓
⊗	• ELECTRICAL LOCATION PLAN	✓
⊗	• CABLE TRAYS & CABLE CONDUIT SCHEDULE	✓
⊗	• ELECTRICAL LOAD LIST & ONE LINE DIAGRAMS	✓
⊗	⊗	• PROCUREMENT SUPPORT& DATA SHEETS
⊗	⊗	• AS-BUILT SUPPORT
⊗	⊗	• CONSTRUCTION SPECIFICATIONS
⊗	⊗	• PIPE SUPPORT DETAILS
⊗	⊗	• CAUSE & EFFECT DIAGRAM (C&E)
⊗	⊗	• GROUNDING PLAN & INSTALLATION DETAILS
⊗	⊗	• HEAT TRACE SCHEDULE
⊗	⊗	• CONTROL SYSTEM PANEL & WIRING DIAGRAMS
⊗	⊗	• ARC FLASH STUDY - NFPA 70e COMPLIANCE
⊗	⊗	• BID PACKAGE FOR CONSTRUCTION SUB SELECTION