

Oil Production

Early Production Facility



Definition

An Early Production Facility (EPF) is a modularised integrated solution for oil and gas production which enables customers start oil/gas production on a fast track basis. Time is the key factor to achieve the commercial benefit. EPFs are preferred by several oil and gas operators for marginal field development or to quickly monetize the fields prior to installation of a permanent facility. This provides financial and operational benefits for oil and gas production.

Product Application:

- Offshore - Mobile Offshore Production units (MOPU)
- Onshore - upstream oil/ gas processing

CECO Guarantees:

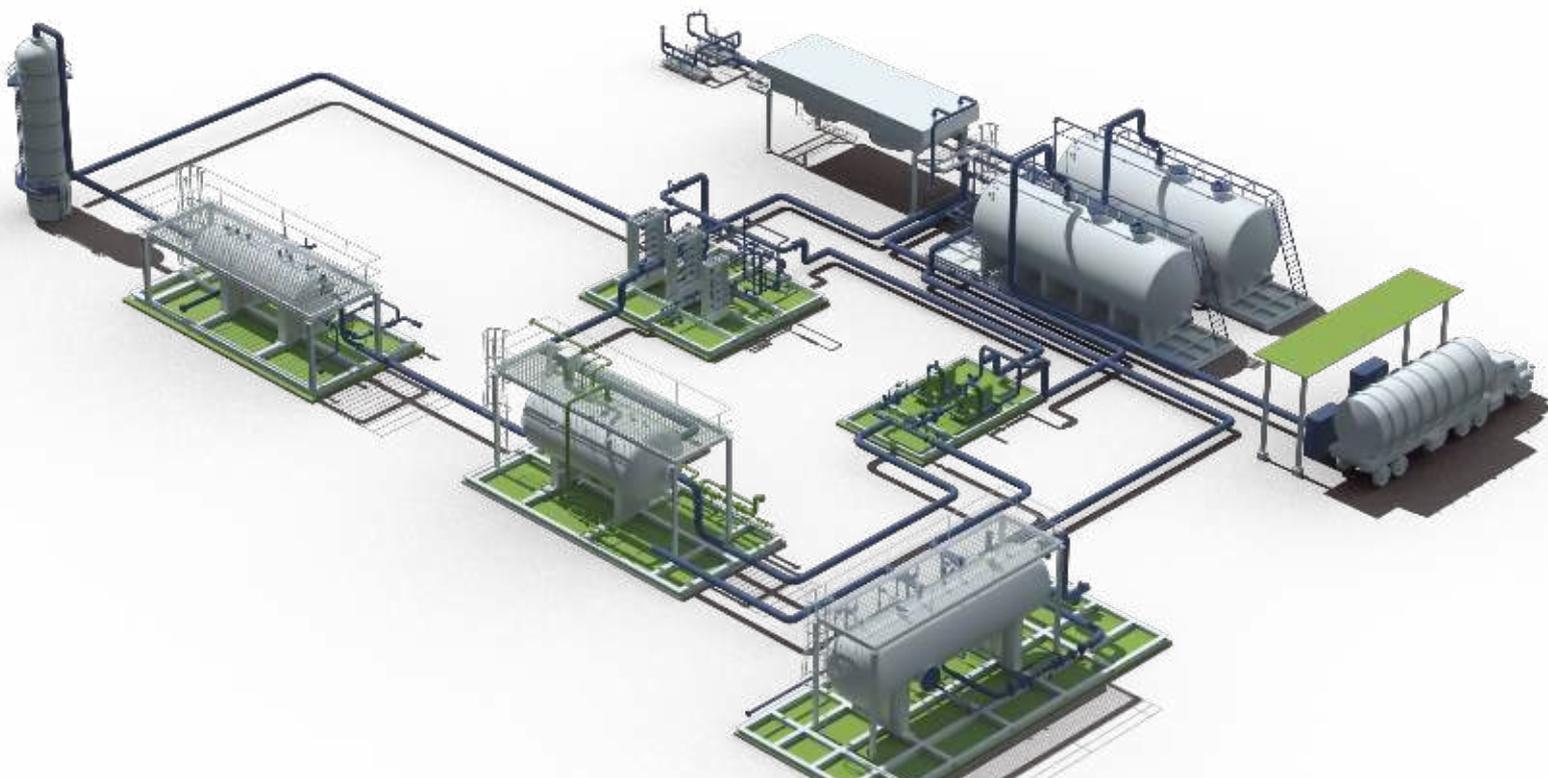
CECO Peerless can offer the following guarantees for Early Production Facilities based on our in-house product and technology expertise:

Process Gas Treatment:

- Gas Sweetening Unit (GSU): ≤ 50 PPM v/v H₂S and 3-5% CO₂ in treated gas
- Gas Dehydration Unit (GDU): 7 lbs/ MMSCF water in treated gas
- HC and Water Dew point control (-50°C to -200°C and 00°C to -100°C respectively)

Oil Treatment package:

- Water in crude oil: BS&W ≤ 0.1 -0.5% v/v
- Crude oil RVP: <10 psia
- Salt content: 5-10 PTB



Oily/ Produced water package:

- Oil in water: <5 PPM using primary, secondary treatment and tertiary treatment
- TSS: < 3 microns

CECO Peerless offer includes an end to end solution for an integrated EPF package with following equipment:

- Gas Treatment: Gas Compression, Gas Sweetening unit, Gas Dehydration unit, Dew Point Control unit, Gas Metering system
- Oil Treatment: Three Phase Separators, Crude oil Heaters, Electrostatic Desalters/Heater Treaters, Crude Stabilization unit, Crude Storage, Metering and Pumping Units
- Produced water: CPI Separators, Deoiler Hydro cyclones, Induced Gas Flotation (or DGF/DNF), Nutshell Filters
- E&I Package: Integrated Control and Monitoring system (PLC) and ESD system
- Structural Modules: Modularised skid for ease of transportation
- Plant Utilities

Features:

- Fast track engineering attributed to standardisation of packages
- Modular design of process skids to lower transportation cost and benefit mobilization/demobilization operations
- Meets Customer Performance Guarantee
- Overall low CAPEX and OPEX for customers

CECO Peerless Offer:

- Combined experience of our proven technologies into an integrated solution
- End to end solution for complete EPF and utilities
- Fast track EPC, commissioning and operation at client site for short and long term
- Low cost of ownership
- Commitment to meet the customer requirement and budget

Capability:

- 20+ years of experience in providing solutions for Oil, Gas and Produced Water treatment system
- Adapt to customer specific requirements for custom-made design to meet performance
- Rich industry expertise for fast track delivery of units

Our Services:

- Complete Engineering, Procurement, Fabrication & Testing of EPF modules
- Process and Mechanical guarantee for all key equipment
- Pre-commissioning, commissioning and operation assistance at site
- Quick supply of Spare Parts Interchangeability for smooth uninterrupted operation
- Troubleshooting & Optimization of units
- Rental Services