

# Aluma Systems

## Petrochemical Plants



Turnkey Solutions, Petrochemical  
Maintenance & Turnarounds

## OVERVIEW

**With extensive expertise providing turnkey equipment rental, erection and dismantling services solutions to the petrochemical refinery industry, Aluma Systems is a trusted contractor of choice for plant construction, shutdowns and industrial-maintenance projects.**

Our innovative solutions span a full range of concrete formwork and scaffolding services with years of experience on reactors, boilers, storage tanks and other plant components and systems. Aluma leads the industry in safety and invests heavily in research and development. Our innovative scaffold accessories make erection and dismantling on any component of the plant safer and more efficient. Our project-management teams work with customers from start to finish ensuring that each project is on time and on budget every day. Let Aluma engineer innovative customized products and solutions for your next petrochemical project.

### A. Suspended Smoke Stack Platforms

Aluma's experienced in creating suspended smoke stacks for exterior and interior circular platforms and suspension systems.

### B. Coker Platform

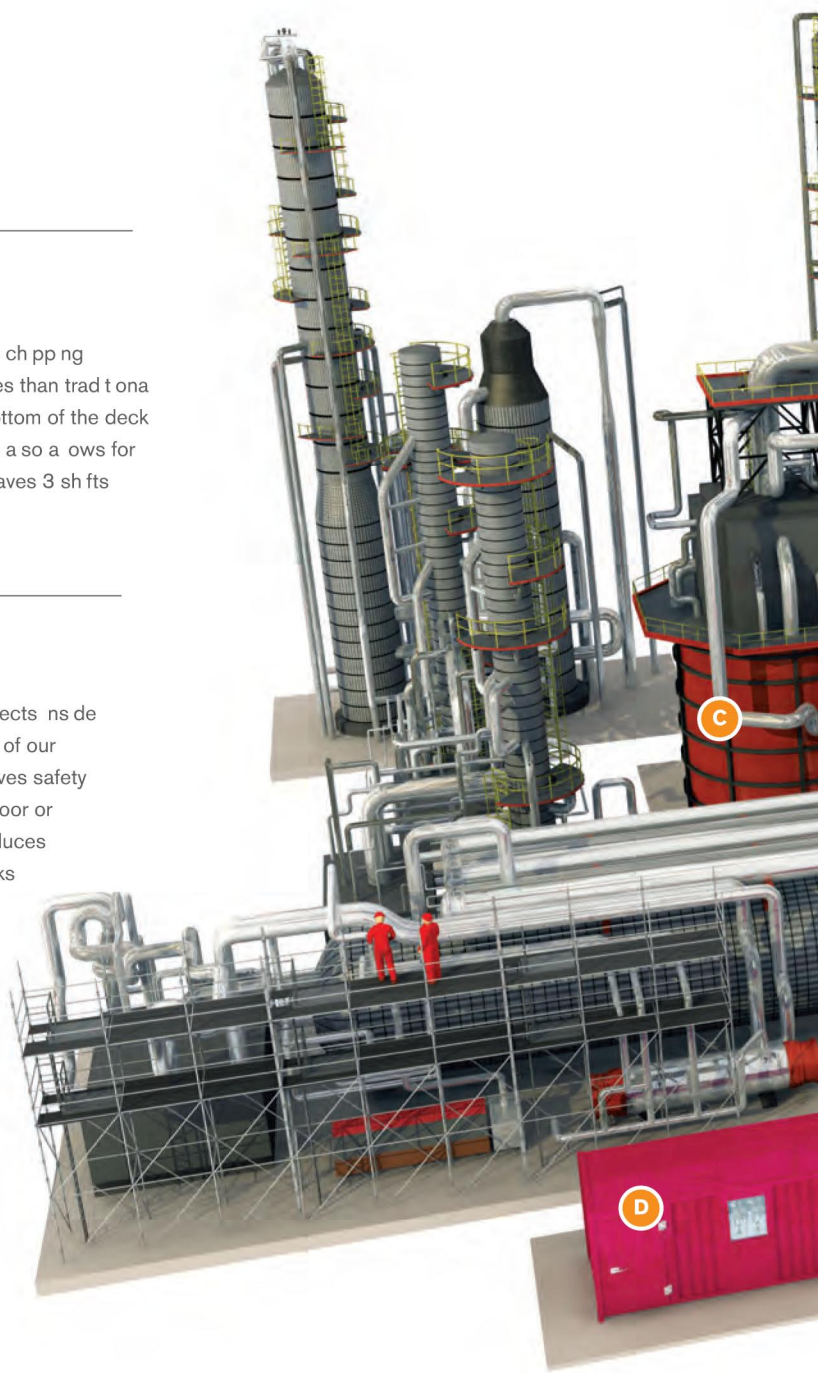
Aluma takes a unique time-saving approach to engineering decks for electronic chipping machines inside the coke reactor. Our engineering solution requires fewer pieces than traditional designs. The design is strong enough for a dance floor to be rigged from the bottom of the deck and permits two chipping machines to operate simultaneously. The deck design also allows for building a scaffold to reach the cylinders on top of the coker and on average saves 3 shifts in turnaround times.

### C. Boiler Services

Aluma's expertise in industrial scaffolding installation and safety services for projects inside and outside the boiler can enhance safety and reduce downtime. One example of our innovative design is our open-center access solution which reduces risk, improves safety and saves costs. Building scaffolds with just perimeter decks when no dance floor or superheat access is required eliminates the need for many center legs. This reduces the dangers associated with establishing center legs from partially plank decks and saves an estimated 25% on material and labor. This design significantly reduces downtime.

### D. Blast Resistant Offices

Blast-resistant offices are essential safe-space solutions for refinery workers. These mobile offices maximize safety and productivity by safely locating workforce closer to work zone. Offices are available in 20 or 50 psf. Read more about blast-resistant offices in the enclosed brochure.



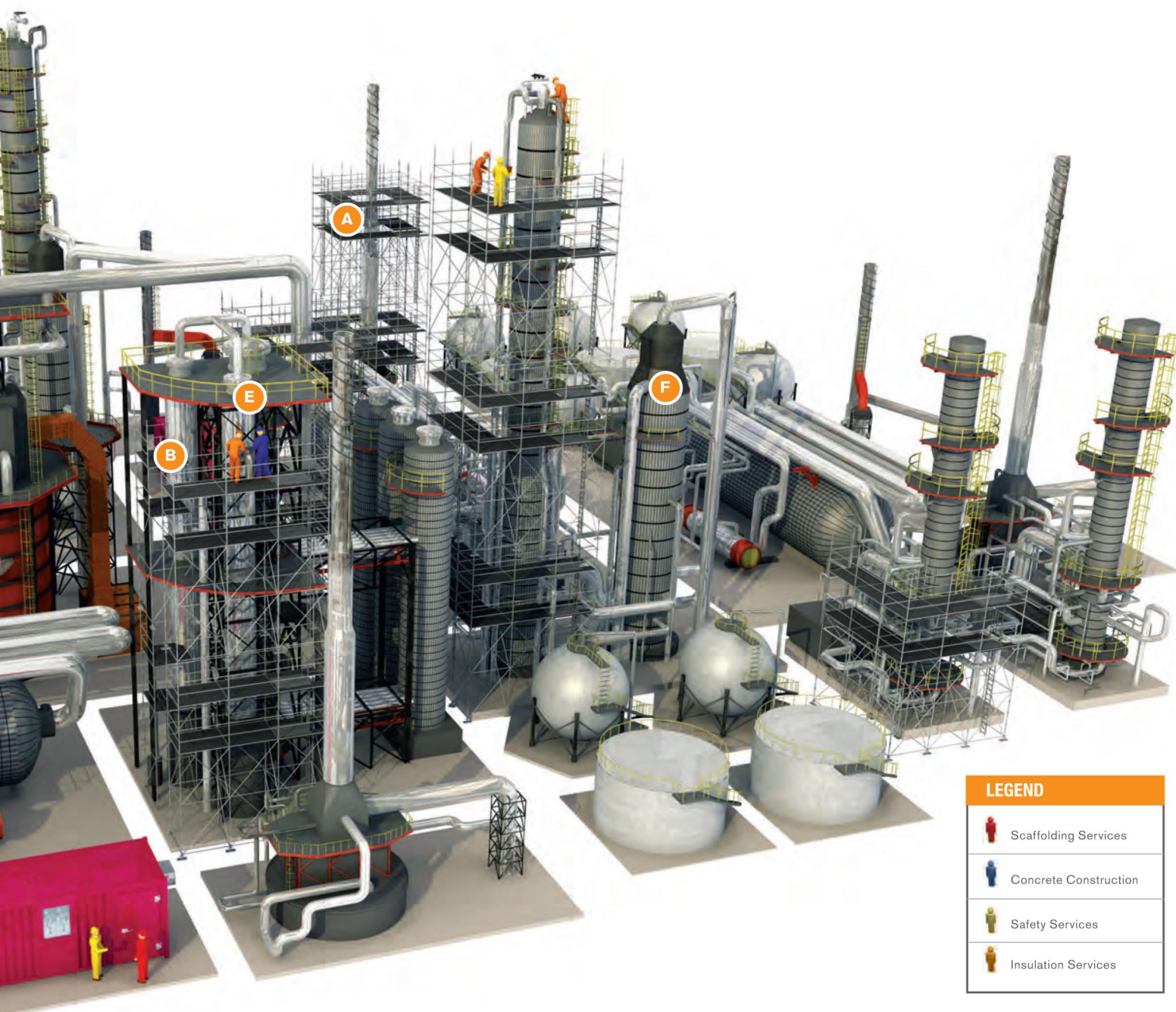


## E. Coker & Reactor Services





Aluma's suspended platforms are uniquely designed for petrochemical refinery cokers and reactors and can be suspended inside the unit. They are lowered and raised using lifting devices. Suspended platforms expand and contract as the unit's width changes. Expandable suspended platforms are designed to go through small openings in the coker and other reactors in the refinery. Our aluminum platforms have a high load capacity, are lightweight and can be built to accommodate all sizes and shapes of cokers and reactors. It is estimated that our efficiently erected and dismantled suspended platforms can save up to 3 shifts in downtime.

## F. FCCU Unit

Aluma's capabilities include scaffolding as well as shoring services. This unique combination allows us to serve FCCU units ranging in weight from 300,000 lbs to 900,000 lbs. We use heavy shoring frames with high load capacity per leg surrounded by scaffolding. The half shell of the FCCU unit rests on our innovative U-head, which is used around the shoring. This unique application design saves customers 40% in labor and material costs as well as an estimated average of 50% on downtime.



### LEGEND

-  Scaffolding Services
-  Concrete Construction
-  Safety Services
-  Insulation Services



**Aluma Systems  
Industrial Services**

304-69 Avenue NW  
Edmonton, Alberta  
Canada T6P 0C1  
T 780.440.1320  
F 780.440.2535

[www.aluma.com](http://www.aluma.com)