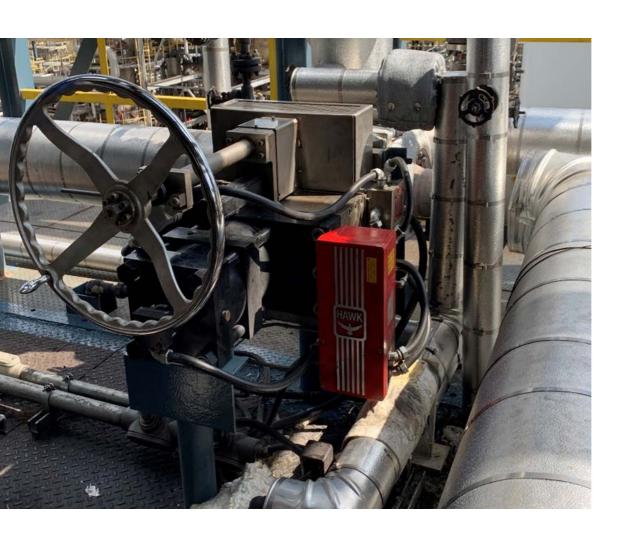




# MEA HAWK SWITCH

Implement valve health monitoring into your delayed coking process

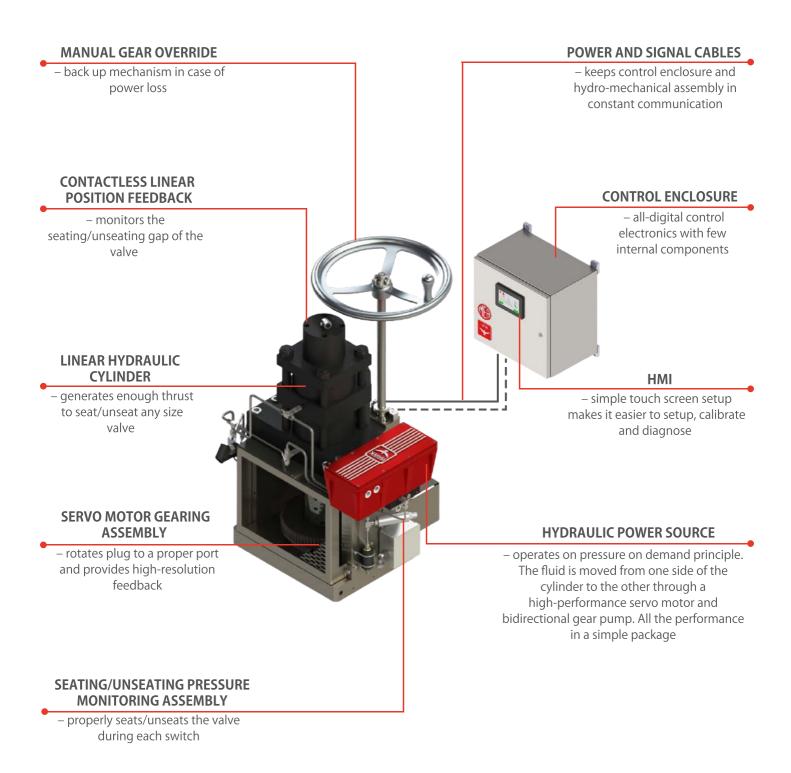
Self-contained electrohydraulic actuator for wedgeplug coker switch and isolation valves



# Transformative technology doesn't happen overnight

This actuator is a lesson in design evolution. It represents decades of hydraulic experience, industry insight, and technology – all advancing into one industry-shaking solution: The MEA Hawk Switch electrohydraulic actuator.

## **TAKE A CLOSER LOOK**



### **FEATURES AND BENEFITS**



#### **ALL IN ONE PACKAGE**

Linear and rotary motion control actuator.

Operation and sequencing are all done by MEA.

The customer just installs actuator onto the valve, connect power and inputs signals from DCS and SIS



#### SIMPLE SETUP AND CALIBRATION

Easy HMI setup, advance alarming & diagnostics Ability to change the speed of operation and intermediate stops



#### **VALVE HEALTH MONITORING**

Seating/unseating thrust monitoring Rotation torque monitoring Seating/unseating gap monitoring



#### **POSITION INDICATION**

High-resolution position feedback Feedback visualization indication on HMI The local visual indicator on an actuator



#### **MECHANICAL OPERATION**

Equipped with manual handwheel override



#### **MAINTENANCE FREE**

No filter changes No oil sampling



#### **UTILIZATION OF HYDRAULICS**

Eliminates stiction of the valve



#### **IMPROVES SAFETY**

Safety interlock system (SIS) signals acceptable Emergency stop button Setup settings password protected

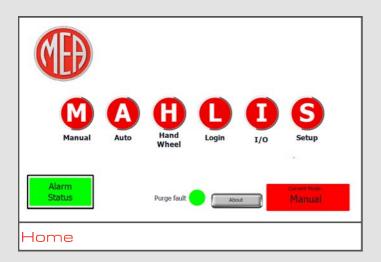
## **TECHNICAL SPECIFICATIONS**

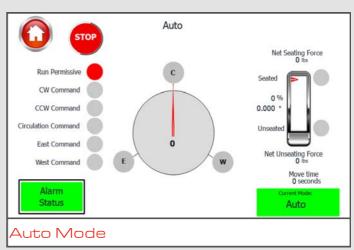
Power Supply	120 VAC/208VAC/240VAC/480VAC
Input Options	Multifunction Discrete Sequencing, Ethernet IP
Power Loss Failure	Fail Last with Compete Manual Overrides
Operating Temperatures (Actuator)	-20°F – 130°F (-29°C – 54.4°C) (Std)
	-40°F – 110°F (-40°C – 43°C) (Cold Weather Package)
	30°F − 180°F (-1°C − 120°C) (High Temperature Package)
Operating Temperature Controls	-20°F-130°F (-29°C - 54.4°C) (Std)
	-40°F – 120°F (-40°C – 49°C) (Cold Weather Package)
Position Feedback	Linear Motion - Non-Contact Electro-Magnetic Feedback – Passive 4-20mA Feedback
	Rotary Motion – High-Resolution Encoder
Limit Switches	Programmable Electronic (Std)
Hazardous Area Classification	Cl 1, Div 2, Groups A, B, C, D
	Cl 1 Div 1, Groups A, B, C, D
	ATEX, II 3G EEx nA II T3 -40°C ≤ Tamb ≤ 65°C
	ATEX, II 2G EEx 'd' IIB, T3 -40°C ≤ Tamb ≤ 65°C

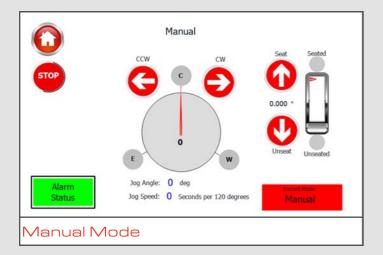
## The intuitive user interface makes control easier

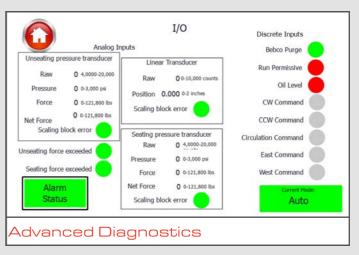
Hawk's all-digital control electronics are easy to use. A simple touch screen setup makes it easier to find operational information, so you can make critical decisions faster.

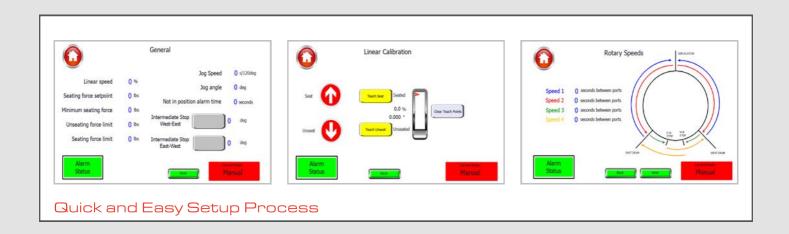
- Hawk requires no external hardware or peripheral devices normally needed during installation setup
- Operating parameters are easily programmable, including speed, position limits, acceleration, deceleration
- Critical alarms and diagnostic features are built-in and easily accessible via the touch screen

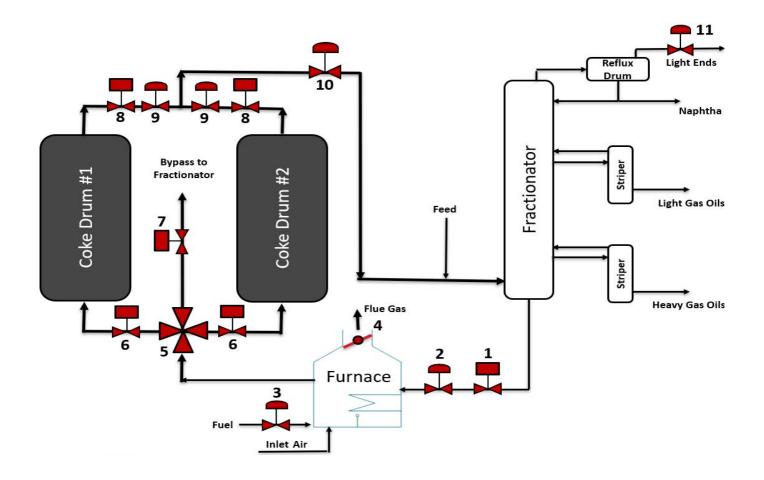












- 1. Furnace Feed Isolation
- 2. Furnace Feed Control Valve
- 3. Furnace Fuel Control Valve
- 4. Inlet Air/Flue Gas Damper
- 5. Coker Switch Valve
- 6. Coke Drum Feed Isolation
- 7. Coke Drum Bypass Isolation
- 8. Overhead Coke Drum Isolation
- 9. Coke Drum Vapor Control Valve
- 10. Back Pressure Control Valve
- 11. Fractionator Light Ends Pressure Control Valve



MEA is the industry leader in hydraulic actuator systems, with a worldwide presence. For hydraulic solutions, there's no one better.

#### **POWER CONTROL**

MEA Eagle and Phoenix hydraulic power control units deliver reliability through redundancy.

# TRADITIONAL HYDRAULIC ACTUATORS

MEA offers a full range of options, including lift and turn, rotary and linear hydraulic actuators.

### **AFTERMARKET SUPPORT**

Partner with MEA for 24/7 technical support, planned maintenance, system upgrades, rebuilds and replacement parts.

