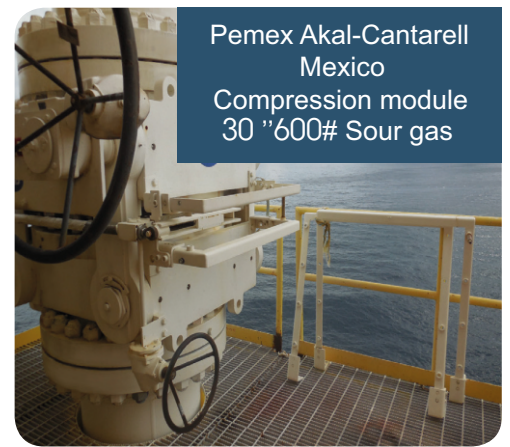




Petrobras SBM  
FPSO Saquarema & Marica  
Metering skid 20 "300#  
Crude oil



Aramco Abqaiq KSA  
10 "1500#  
Control valves isolation

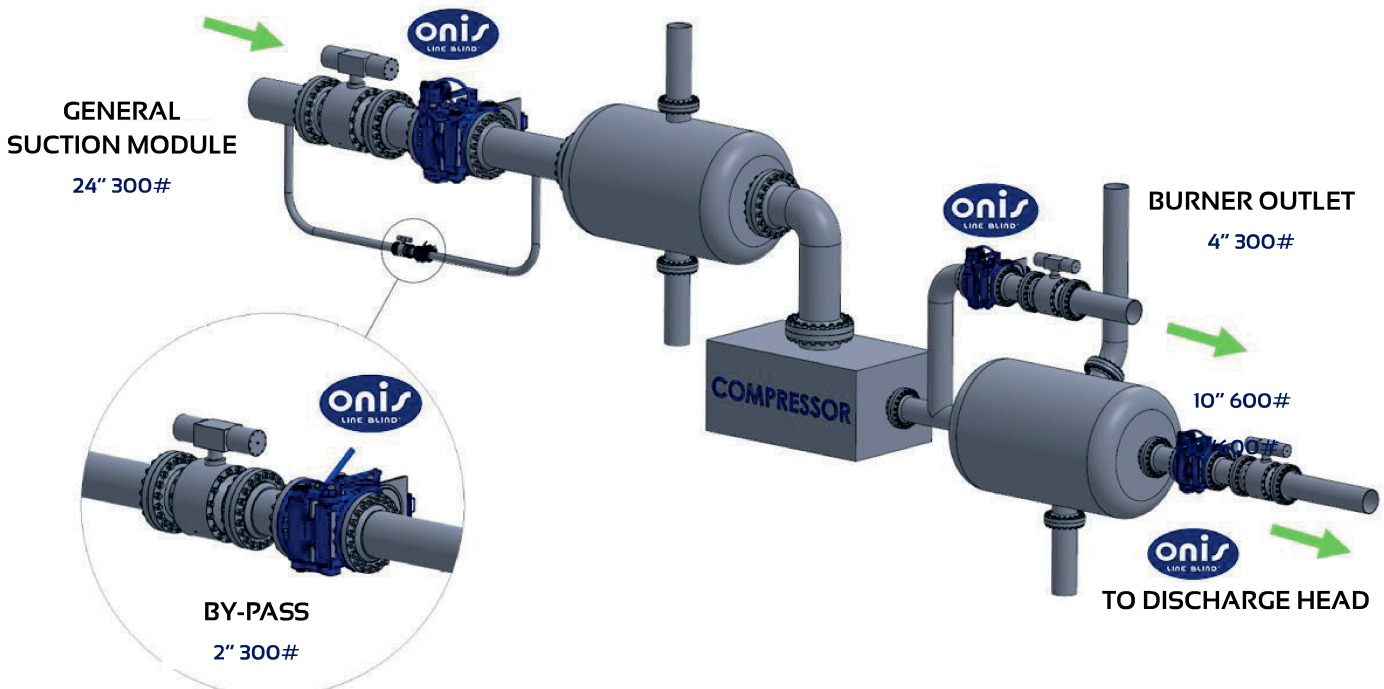


Pemex Akal-Cantarell  
Mexico  
Compression module  
30 "600# Sour gas

### BENEFITS

- Minimizes venting of gas to the environment
- Reduces the exposure of operators to contaminants
- Minimizes accidental product losses

### MODULE COMPRESSION GAS TYPICAL







## A breakeven point in just a few months through a safer way to blind the whole process

| QTY | DN  | PN    |
|-----|-----|-------|
| 1   | 2"  | 300 # |
| 1   | 2"  | 600 # |
| 1   | 4"  | 300 # |
| 2   | 4"  | 600 # |
| 1   | 10" | 600 # |
| 1   | 24" | 300 # |

### BUSINESS CASE

- Replacement of **7 Figures-8** (traditional blinding) with **7 ONIS Line Blinds from 2" to 24"** on a compression module with a 120 MMSCFD capacity.
- A shut down maintenance program is required **every 6 months**.

### YOUR LINE BLINDS PAID IN 3 MONTHS OR LESS

|   | Traditional blinding "Figure-8" | ONIS Line blind            | Benefits   |
|---|---------------------------------|----------------------------|--|
| Staff   | 10                              | 2*                         |  8 men exposure <b>SAVED</b>        |
| Tools   | Many tools, cranes...           | Zero tool                  |  Hazard and hassle <b>SAVED</b>     |
| Time of blinding operation (From full bore to blinded position /blinded to full bore) | 72 hours for each operation     | 8 hours for each operation |  64 hrs of production <b>SAVED</b> |
| Loss due to downtime  | \$1,000K                        | \$120K                     |  \$880K <b>SAVED</b>              |
| Equipment cost  | Cost of Figures-8 included      | \$380K                     | -  |
| <b>PAY-BACK PERIOD</b>  | -                               | -                          | <b>70 days</b>   |

\*Only one operator is needed but some regulations require at least a supervisor in addition to the operator

The need to maintain the different modules on an upstream oil & gas production in optimum operating conditions is essential for meeting the production requirements.

| Company   | Area           |
|-----------|----------------|
| Aramco    | Saudi Arabia   |
| Arco      | USA            |
| PDVSA     | Venezuela      |
| Pemex     | Mexico         |
| Petrobras | Brazil         |
| SBM       | Brazil         |
| Total E&P | United Kingdom |
| Total E&P | Congo          |
| Zadco     | UAE            |

**More than 400  
ONIS Line Blinds  
in upstream oil & gas  
operation  
worldwide**