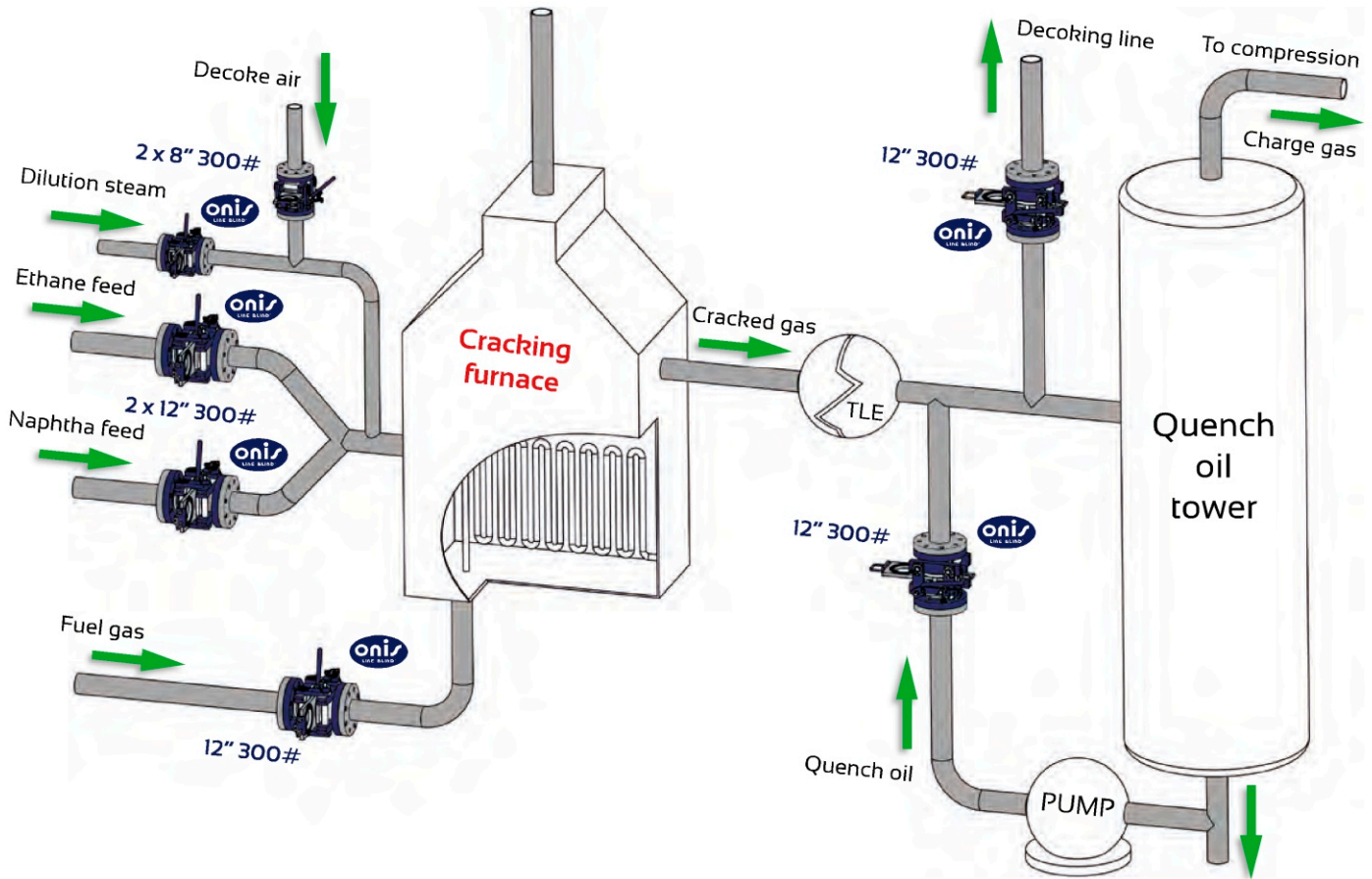


TYPICAL STEAM CRACKER PROCESS



Decoking process without ONIS Line Blind is long and demanding:

- Decoking process can last 20 to 40 hours
- Depending on the feedstock, coil configuration and severity, decoking for steam cracking furnaces is required every 14-100 days on average
- Decoking is also required for quench oil towers and other sections

Using ONIS Line Blinds allow to:

- Reduce downtimes by more than 30%
- Guarantee a 100% safe and efficient positive isolation





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

BUSINESS CASE

QTY	DN	PN
8	2"	300 #
8	8"	300 #
8	12"	300 #

- Replacement of **24 Figures-8** (traditional blinding) with **24 ONIS Line Blinds from 2" to 12"** on 8 steam cracker furnaces (3 blinds per furnace) to improve the decoking operation.
- A decoking operation is required **every 20 days**.

YOUR LINE BLINDS PAID IN 2 MONTHS OR LESS

	Traditional blinding "Figure-8"	ONIS Line blind	Benefits
Staff	5	2*	 3 men exposure SAVED
Tools	Many tools, cranes...	Zero tool	 Hazard and hassle SAVED
Time of blinding operation (From full bore to blinded position /blinded to full bore)	12 hours for each operation	2 hours for each operation	 10 hrs of production SAVED
Loss due to downtime	\$420K	\$70K	 \$350K SAVED
Equipment cost	Cost of Figures-8 included	\$500K	-
PAY-BACK PERIOD	-	-	45 days

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

Company	Area*	Company	Area*
BASF	Worldwide	OMV	Germany
Borealis	Austria	Naphtachimie	France
Borouge	UAE	Petrobras	Brazil
BP	Germany	Qapco	Qatar
Braskem	Brazil	Qatofin	Qatar
CP Chem	USA	Ras Laffan Olefins	Qatar
CNOOC	China	Sabic	United Kingdom
LyondellBasell	Germany	Sasol	USA
Dow	USA	Sasol	South Africa
DSM	Netherlands	Shell	Worldwide
Enichem	Italy	Sibur	Russia
ExxonMobil	Worldwide	Total	Worldwide
Huntsman	USA	Versalis	France
Kemya	Saudi Arabia	Williams Olefins	USA