

# Highest Olefins Yields in the Industry

Selective Cracking Optimum REcovery (SCORE™) combines the expertise and experience of KBR and ExxonMobil to offer advanced steam-cracking technology to the petrochemical industry. Features of SCORE include:



SCORE – steamcracker technology resulting in highest Olefins yields in the industry.

- Safety
- Exceptional reliability & operability
- Highest yield selectivity to valuable light olefins
- Wide feed flexibility
- Low ethylene production cost
- Low maintenance costs
- High on-stream factor
- Environmentally compliant designs
- Low capital investment
- Efficient energy utilization

**Selective Cracking** is KBR’s pyrolysis furnace technology. SCORE features the short residence time SC-1 furnace design that provides the highest yield selectivity to light olefins in the industry and a highly reliable mechanical design.

**Optimum REcovery** is KBR’s olefins product recovery section technology. This technology incorporates advanced features so that our clients achieve the optimum balance between operating and capital costs.

## Greater Feed Flexibility

The highly selective SC-1 furnace design can be used to crack feeds ranging from ethane through vacuum gas oils.

## SCORE Furnaces Give Highest Yields

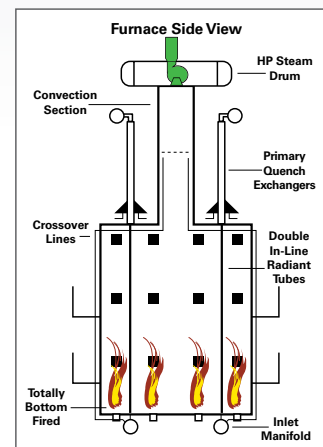
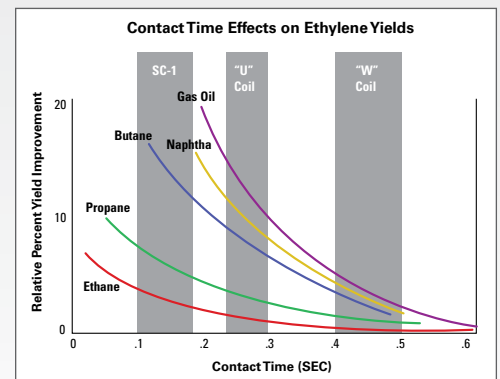
SC-1 furnaces have the following benefits:

- Highest single pass ethylene yield for all feeds
- The same propylene production capability
- Lowest feedstock consumption
- Reduced capital and operating costs

## Unique, Reliable Mechanical Design

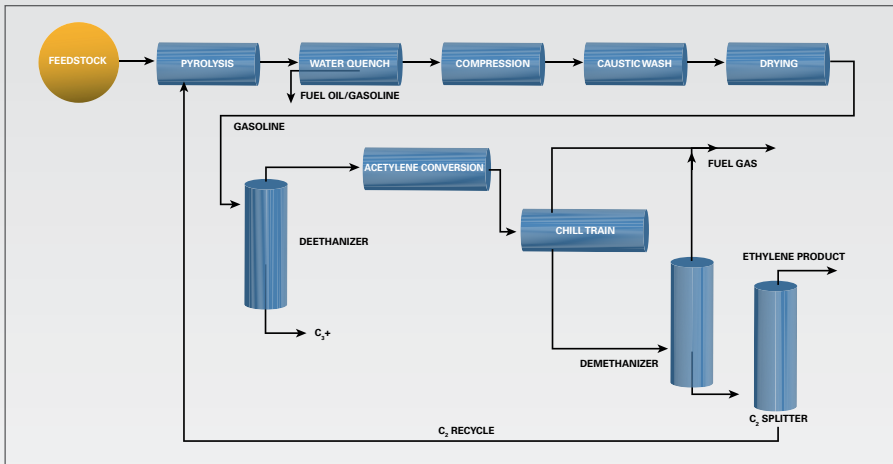
SC-1 furnaces have a unique and reliable design featuring:

- Design commonality for all feedstocks
- Capability to run multiple feedstocks in one furnace
- No mechanical cleaning of in-line quench exchangers
- On-line decoking while furnace remains in production
- Total floor firing



# SCORE recovery section technology

SCORE recovery section technology features front-end acetylene converter flow schemes, optimized for project specific needs. The Deethanizer First design is utilized primarily for ethane-based crackers and the Depropanizer First is used for heavier feeds. These schemes have low equipment count, capital cost and maintenance, with high on-stream availability. They utilize low pressure fractionation towers and highly selective acetylene reaction systems. KBR can also offer a conventional Demethanizer First flow scheme that provides wide feedstock flexibility. Regardless of the flowscheme, KBR recognizes and engineers reliability in its designs.

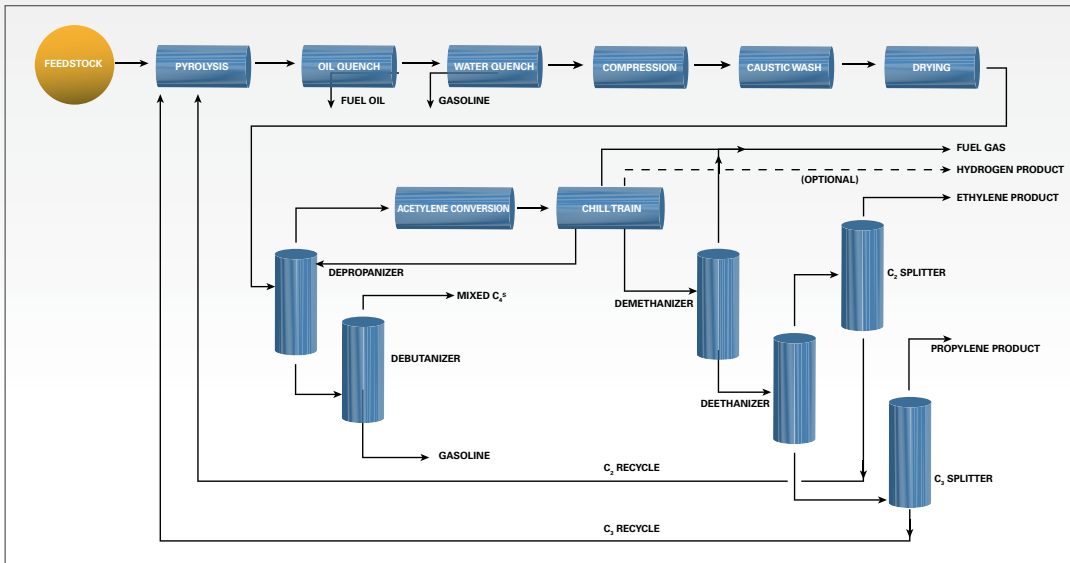


Deethanizer First

## Other Services

KBR maintains a group of ethylene technology specialists from a broad range of engineering disciplines. This team provides efficient execution of new projects and responsive client support and technical services after start-up.

KBR has the experience and capability to extract the maximum economic capacity from existing ethylene plants via revamp projects.



Depropanizer First

KBR holds regular petrochemicals conferences where clients from around the world meet to receive updates on the latest ethylene technology developments and network with other owners, operators and suppliers.