

NIAGARA BLOWER SOLUTIONS

What is WSAC®?

The Wet Surface Air Cooler is a closed-loop, evaporative cooling system.

Wet Surface Air Coolers are optimized for industrial applications where rugged design/fabrication and cost effective efficient closed-loop cooling/condensing are required.

Applications:

Liquid Cooling
Gas Cooling
Vapor Condensing

Industries:

Refining
Power
Wastewater
Pulp & Paper
Metals
Mining
Food/Beverage

CASE STUDY

IMPROVED EFFICIENCY FOR GAS PROCESSING FRACTIONATION

Customer: **GAS PROCESSORS**
Installation Locations: **EAST AND WEST TEXAS**
Application: **FRACTIONATION PLANT COOLING**

THE CHALLENGE Increase NGL fractionator efficiency and production while reducing operating costs.

THE SOLUTION Use a Wet Surface Air Cooler (WSAC®) for

- Propylene refrigerant condensing (De-Ethanizer)
- Propane and Butane liquid cooling (Reflux)
- Natural Gasoline cooling



WSAC® BENEFITS

Increased gas fractionation capacity (~20%)
Reduced compressor horsepower (33%)
High capacity condensing (500,000 lbs/hr)
Lowest condensing temperature (~90°F)

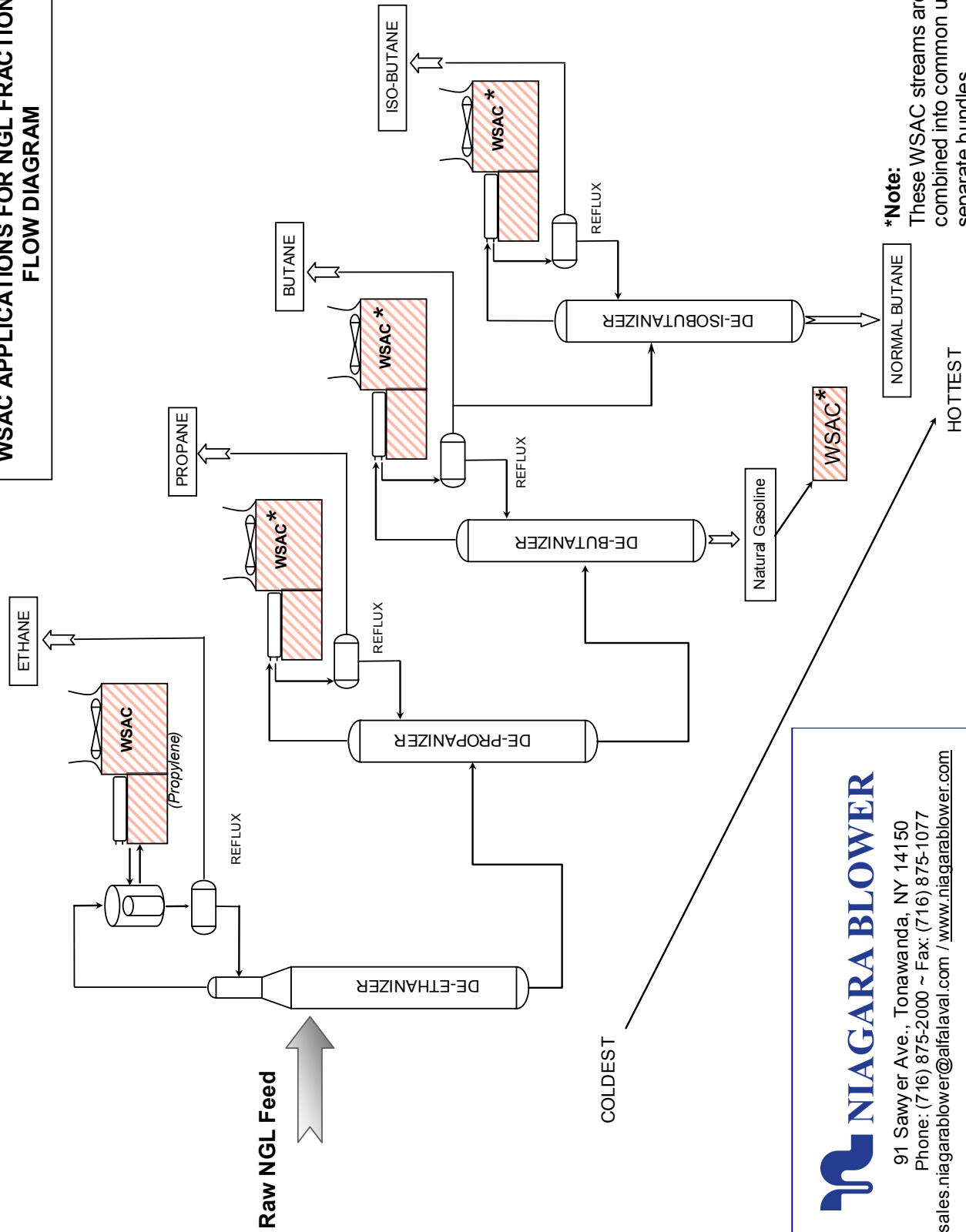
ADDITIONAL WSAC® ADVANTAGES

Colder condensate outlet temperature for reflux streams than fin fan air coolers
Smaller footprint than conventional cooling systems
Closed-loop, ASME U stamped code tube bundles



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**WSAC APPLICATIONS FOR NGL FRACTIONATION
FLOW DIAGRAM**



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