



Model 5840 Natural Gas Membrane

PRODUCT FACT SHEET

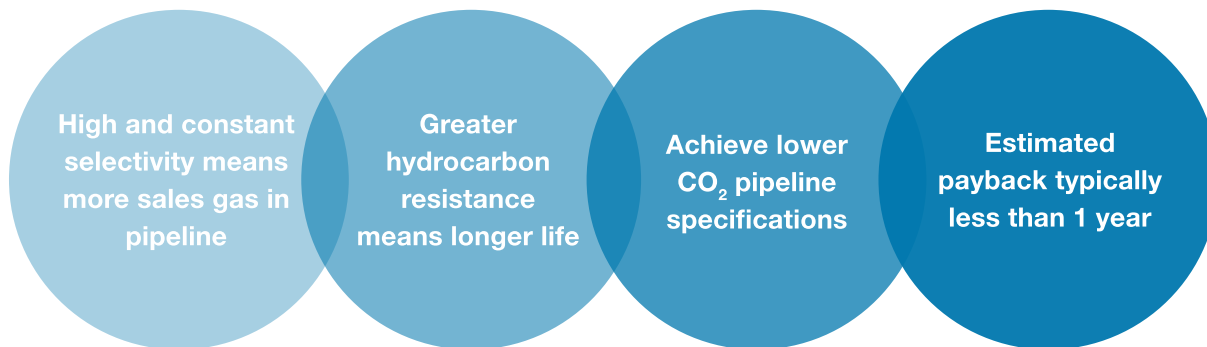
OVERVIEW

Air Liquide Advanced Separations (ALaS) Model **5840** is a high performance, best in class hollow fiber membrane element offering excellent CO₂ removal efficiency in natural gas applications. The higher and constant selectivity of the **5840** membrane improves hydrocarbon recovery and ultimately lengthens the replacement cycle. The **5840** is designed specifically for drop-in replacement of spiral wound cellulose acetate elements in natural gas service. No modification of the existing membrane tubes or piping network is needed.

OPERATING CHARACTERISTICS

MAXIMUM OPERATING TEMPERATURE	90°C (194°F)
MAXIMUM OPERATING PRESSURE DIFFERENTIAL	100 bar-d (1470 psi-d)
MAXIMUM PARTICLE CONTENT LIQUID CONTENT	100% removal of >1µm size Pressure Dew Point Margin of +20°C
WEIGHT (MEMBRANE MODULE)	20.4kg (45 lb)

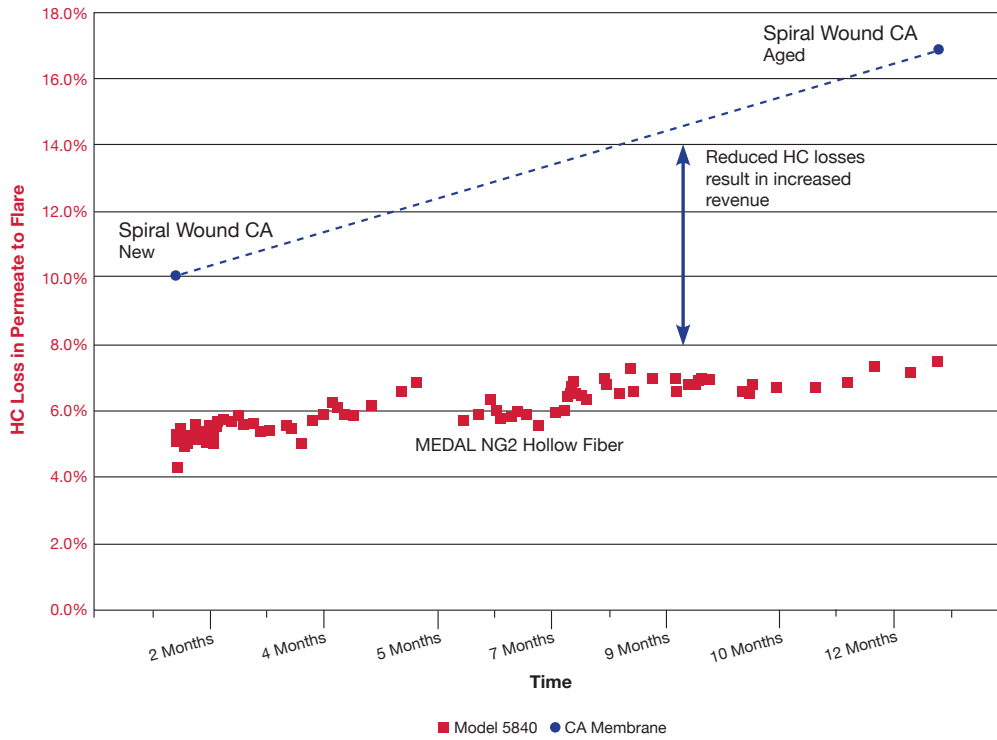
CUSTOMER BENEFITS



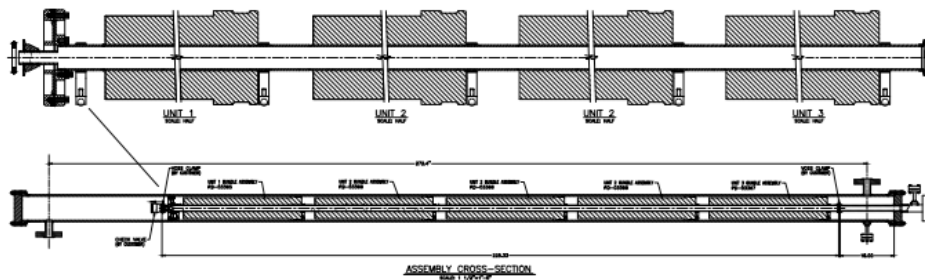
COMMERCIAL SCALE DEMONSTRATION - 950 PSI, 16.5%-7.5% CO₂

Parameter	(ALaS) Model 5840	Spiral Wound CA
Feed flow, MM scfd:	126.4	126.4
Sales gas flow, MM scfd:	108.6	103.7
Customer CO ₂ Spec in sales gas (%):	7.5	7.5
Number of elements:	215	288
Hydrocarbon losses (%):	5 - 7	10 - 17

EXAMPLE SIDE-BY-SIDE COMPARISON - 950 psi, 16.5%-7.5% CO₂



RETROFIT INSTALLATION INSIDE EXISTING TUBE



5840 elements are shipped in Unit 1, Unit 2 and Unit 3 configurations. The elements are shipped individually.



UNIT 1 is pushed into the existing vessel along with the residue side seal assembly attached.



The required number of UNIT 2 elements are sequentially installed.



UNIT 3 is installed and connected to the permeate collection tube of the existing vessel using all existing hardware.

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