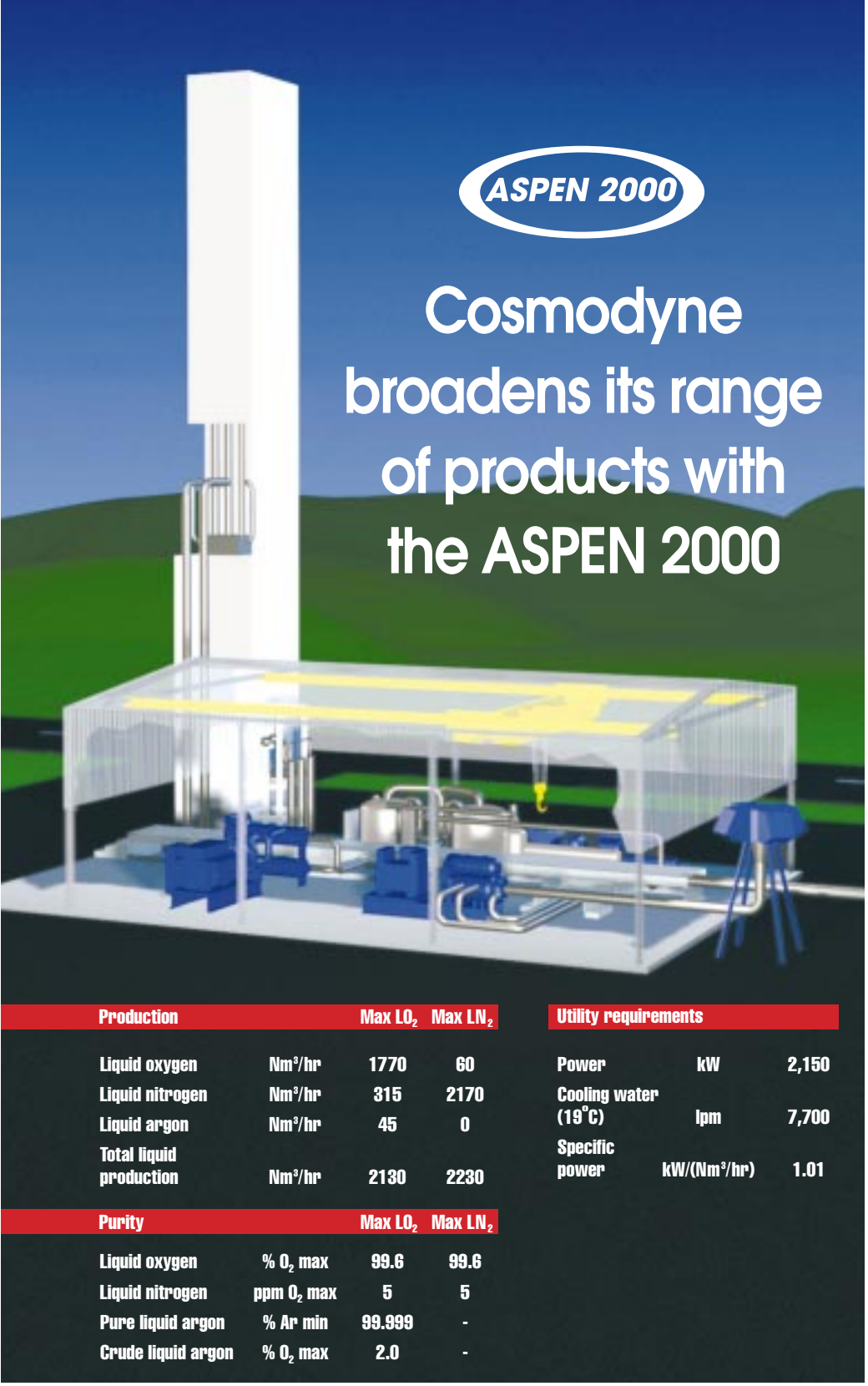

Cosmodyne broadens its range of products with the ASPEN 2000

Production		Max LO_2	Max LN_2
Liquid oxygen	Nm^3/hr	1770	60
Liquid nitrogen	Nm^3/hr	315	2170
Liquid argon	Nm^3/hr	45	0
Total liquid production	Nm^3/hr	2130	2230

Purity		Max LO_2	Max LN_2
Liquid oxygen	% O_2 max	99.6	99.6
Liquid nitrogen	ppm O_2 max	5	5
Pure liquid argon	% Ar min	99.999	-
Crude liquid argon	% O_2 max	2.0	-

Utility requirements		
Power	kW	2,150
Cooling water (19°C)	lpm	7,700
Specific power	$kW/(Nm^3/hr)$	1.01

Cosmodyne has broadened its product range with the addition of the ASPEN 2000 to its best-selling ASPEN line of air separation plants. This unit produces liquid oxygen, liquid nitrogen, gaseous nitrogen, and as an option, liquid argon, by distilling atmospheric air. ASPEN plants are pre-fabricated, modular, easily deployed, and can be installed anywhere.

The ASPEN 2000 produces more than 2,000 Nm^3/hr (75 tpd) of liquid products. In addition to this, the plant generates about 3,000 Nm^3/hr (100 tpd) of nitrogen gas in the Max oxygen mode. The unit consists of air and recycle compressors, an air treatment module, a cold box module, a turboexpander skid, and manifold and plant assembly modules.

"The ASPEN 2000 is our latest effort to meet the needs of our customers with growing production requirements," said George Pappagelis, Cosmodyne's Director of Sales and Marketing. "By incorporating all the key features of the ASPEN line in a larger format, we now can offer our customers a truly comprehensive selection of products."

Customers also may opt to produce crude or pure argon. This is possible through the addition of argon distillation columns and heat exchangers to the cold box. Argon refining can be accomplished with the addition of the argon refinery module. Other optional equipment includes a cooling water module with tower and pumping skid and partial building with service crane.

The plant's specific power at standard conditions is approximately 1.0 kW/Nm^3 (2.6 kW/hSCF) and it can be configured for either 50 or 60 cycle electricity. Purity specifications for the 2000 are 99.6% for liquid oxygen and 5 ppm O_2 Max for liquid nitrogen. For optional argon, purity specifications are 98% for crude liquid argon and 99.999% for liquid refined argon. An area of approximately 17 m x 26 m (55 ft. x 85 ft.) is needed for this plant.

Like other ASPEN models, the 2000 features a compact, modular design that simplifies shipping and installation. It also makes it easy to transport the plant to a new location. Another benefit is that each unit is pre-fabricated at Cosmodyne's manufacturing center in Torrance, Calif. USA. This results in a higher level of overall quality assurance because the plants are built according to factory specifications in a controlled environment. In addition, Cosmodyne can conduct mechanical and performance testing on the equipment prior to shipping. This testing duplicates the actual conditions under which the plant will be operating, and it can help to eliminate downtime or unforeseen delays that otherwise might occur once the plant reaches the customer's site.

For more information, contact George Pappagelis at Cosmodyne, info@cosmodyne.com.