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ACD's P2K Supplies Argon for Aircraft Engine Plant in Asia



valves, actuator, and temperature and pressure sensors is controlled by a programmable logic controller (PLC) mounted on the P2K skid. In the event that the temperature goes below a pre-set limit, as indicated by the low outlet vaporizer temperature, the system control panel will automatically change over to the standby vaporizer.

It is anticipated that the plant will have the capacity to produce about two hundred and fifty latest generation fuel efficient engines per year, for use on the latest state of the art aircraft being manufactured in the USA and Europe. The multi-million dollar plant is capable of manufacturing approximately half of the company's projected annual demand for engines over the next seven to eight years. With the plant's successful start-up, ACD looks forward to the continued growth of the aerospace industry in the ASEAN region and providing its customers with highpressure cryogenic transfer solutions.

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In response to rising growth trends in the Asian Pacific region, a major aircraft engine manufacturer recently commissioned its newest engine manufacturing plant at Seletar Aerospace Park in Singapore. The state-of-the-art aircraft turbine manufacturing facility was designed by a leading Singapore based industrial gas company, who worked closely with Cryogenic Industries Malaysia to develop a system suitable for their specifications. An ACD dual automatic P2K pumping system was selected to provide a high pressure argon gas supply to the facility from a large 26,000 liters vertical storage tank.

ACD's reciprocating, skid-mounted P2K system was engineered to supply high pressure liquid argon to Cryoquip ambient air vaporizers rated at 300 m³/hr. The argon gas is stored in two pallet-mounted buffer tanks, allowing the flexibility to add additional pallets to accommodate customer consumption as future demand increases.

High pressure argon from the buffer storage flows through a pressure regulating manifold that reduces the pressure to 90 barg (minimum) for process use. A pressure transmitter relays a signal to begin the pumping operation when the pressure in the buffer tanks is down to 110 barg and shut down when 200 barg is reached. Operation of the dual pumping system, related

