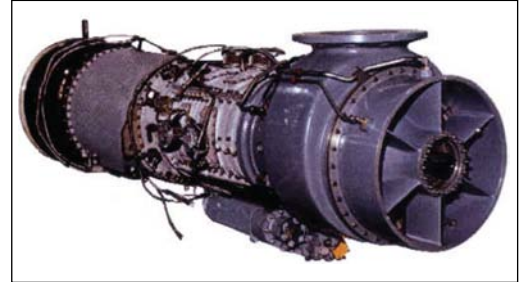


Gas Turbine - Power Generation

The aeroderivative design of this gas turbine engine provides a lightweight, fuel efficient, compact configuration that can be easily adapted for a variety of mechanical drive applications rated up to 7,400 hp, and for power generation systems ranging from 3.9 to 6.4 MW.



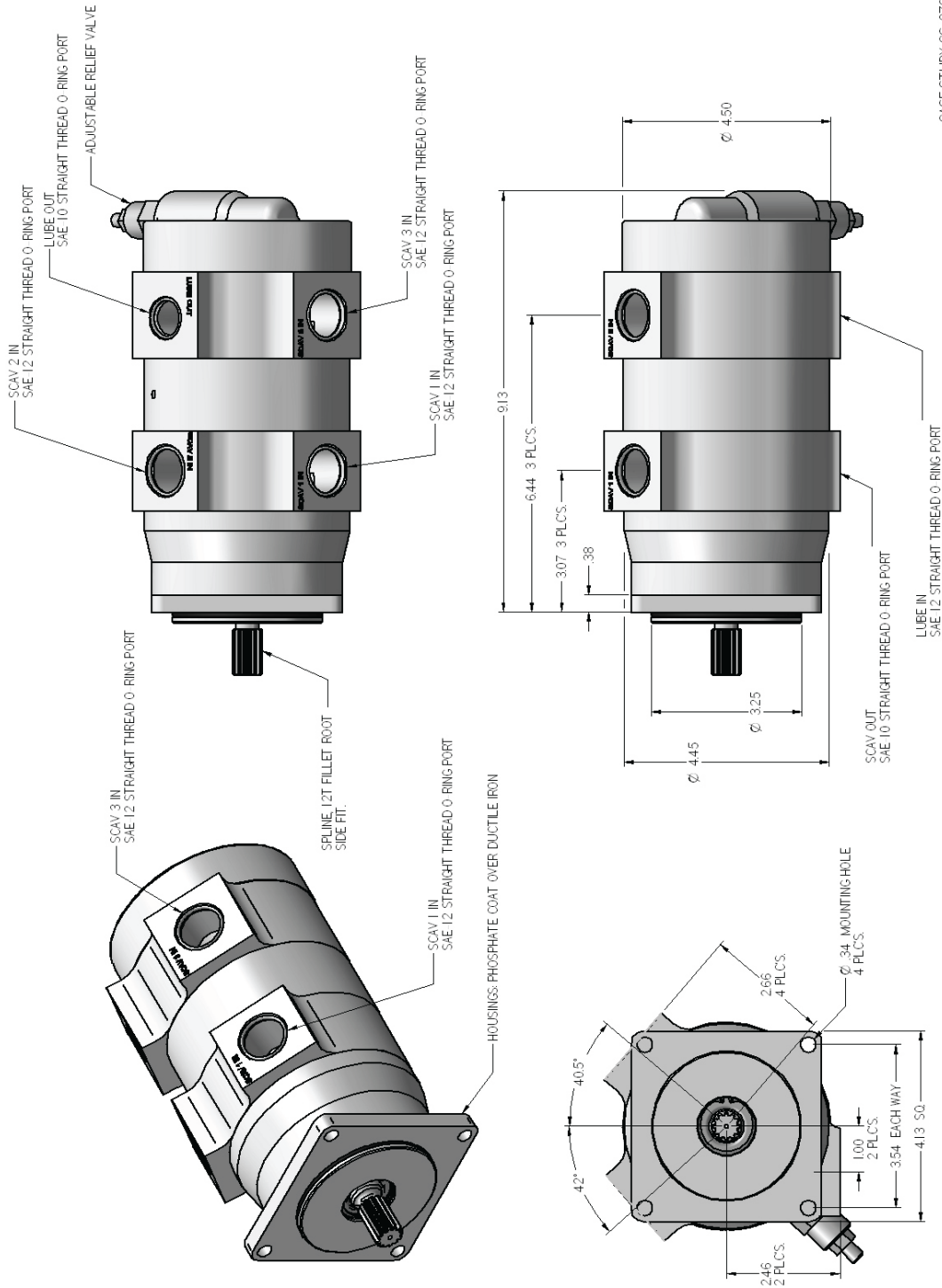
Pump Description:

A custom designed, multi-circuit, gerotor pump provides four independent functions; lube oil supply to the turbine bearings, and oil scavenge from three independent oil sumps. All circuits feature cast ductile iron housings with gerotors carried on a hardened AISI 8620 steel shaft, supported by steel backed PTFE-lead impregnated bronze journal bearings. Dowel pins provide accurate positional alignment of adjoining cast iron housings, which are then clamped together with a series of tie-rods and tie-bolts. The individual pump housings are piloted and clamped together with a series of tie-rods and tie-bolts. Lube output flow is regulated to maintain constant pressure downstream of the pump. The pump features an internal, forced lubrication system that protects critical components during adverse operating conditions.

Selected Performance Data:

Fluid	MIL-L-23699, MIL-L-7808
Flow Rate - Lube Circuit	8.8 GPM @ 55 psid (regulated)
Flow Rate - Scav #1	14.9 GPM @ 50 psid
Flow Rate - Scav #2, #3	8.0 GPM @ 50 psid
Temperature Range	-45 degF to +250 degF
Operating Speed	3250 rpm
Lube Regulating Valve	Integral - regulate flow to 55 psid
MTBF	80,000 hours
Duty Cycle	Continuous
Weight	35 lbs
Drive Interface	Male spline, Class 5, ANSI B92.1





CASE STUDY CS-079 LUBE & SCAVENGE PUMP