



Customer name \_\_\_\_\_  
 Customer ref # \_\_\_\_\_  
 User name \_\_\_\_\_  
 Jobsite location \_\_\_\_\_  
 Callidus ref # \_\_\_\_\_  
 Date: \_\_\_\_\_ Revision #: \_\_\_\_\_

**FLARE SYSTEM DATA SHEET**

**FLARE TYPE:**  Elevated Flare  Enclosed Ground Flare  Pit Flare  Multipoint Ground Flare  
 Guy Wire Supported  Self-supported  Derrick Supported  Tripod Supported  Enclosure Fence

**FLARE TIP:**  Non-assisted  Steam assisted  Gas assisted  Air-assisted  Super-sonic HP

**DRUM TYPE:**  Vertical Knockout  Liquid Seal  Horizontal Knockout  None

**PURGE SEAL TYPE:**  Density Seal  Velocity Seal  None

**UNITS FOR DATA SHEET:**

Flow:  KG/HR  LB/HR  SCFD  NM<sup>3</sup>/HR  LBMOLES/HR  
 Temperature:  °C  °F  °R Heating Value:  BTU/SCF  BTU/LB  KJ/NM<sup>3</sup>  
 Pressure:  PSIG  BARG  KPAG  KG/CM<sup>2</sup>  
 Radiation:  BTU/HR-FT<sup>2</sup>  KW/M<sup>2</sup> Velocity:  FT/SEC  MPH  M/SEC

**PROCESS DATA:**

PROCESS RELIEF CASE	FLOWRATE	TEMPERATURE	ALLOWABLE SYSTEM PRESSURE DROP	LOWER HEATING VALUE	MOLECULAR WEIGHT
Maximum					
Smokeless					
Normal					
Minimum					

**UTILITY DATA:**

UTILITY	PRESSURE	TEMPERATURE	MOLECULAR WEIGHT	LOWER HEATING VALUE
Fuel Gas				
Natural Gas				
Purge Gas				
Instrument Air				
Plant Air				
Plant Water				
LP Steam				
MP Steam				
HP Steam				



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POWER TYPE	VOLTAGE	PHASE	HERTZ	AC or DC
General Instruments				
General Lighting				
Aviation Lighting				
Ignition Control Panel				
Motors Under 100 HP				
Motors 101-500 HP				
Motors 501-1000 HP				
Motors Over 1000 HP				

**ENVIRONMENTAL DATA:**

Average wind speed(process design) \_\_\_\_\_  
 Maximum wind speed(mechanical design) \_\_\_\_\_  
 Site elevation above sea level \_\_\_\_\_  
 Site relative humidity \_\_\_\_\_  
 Minimum ambient temperature \_\_\_\_\_  
 Average ambient temperature \_\_\_\_\_  
 Maximum ambient temperature \_\_\_\_\_  
 Seismic zone for site \_\_\_\_\_  
 Maximum allowable radiation: at grade \_\_\_\_\_ with without solar  
at distance \_\_\_\_\_ with without solar  
 of: \_\_\_\_\_  
 Solar radiation at site \_\_\_\_\_  
 Maximum noise level(dBA): at grade \_\_\_\_\_ smokeless max. flow  
at distance \_\_\_\_\_ smokeless max. flow  
 of: \_\_\_\_\_  
 Electrical area classification at/near flare \_\_\_\_\_

**CUSTOMER AND JOBSITE INFORMATION:**

Customer name	_____	End users name	same	_____
Street address	_____	Street address		_____
Post office box	_____	Post office box		_____
City/State/Country/Zip	_____	City/State/Country/Zip		_____
Contact name	_____	Contact name		_____
Phone number	_____	Phone number		_____
Facsimile number	_____	Facsimile number		_____



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**GENERAL DESIGN CRITERIA:**

Rank the following factors in order of importance(1-8)(1=high) relative to the flare equipment for this project:

Equipment cost \_\_\_\_\_ Utility usage \_\_\_\_\_ Experience \_\_\_\_\_ Noise \_\_\_\_\_  
 Installed cost \_\_\_\_\_ Smokeless capacity \_\_\_\_\_ Weight \_\_\_\_\_ Field service \_\_\_\_\_

Applicable specifications:  NEC  IEC  NEMA  AISC  
 AWS  ASME  ANSI B31.3  ASCE 7-93

**DETAILED SCOPE OF SUPPLY:**

- Ladders/platforms:  Per OSHA  Caged  Saf-T-Climb  Galvanized  Painted
  - Ignition system:  Manual  Automatic relight  Pilot status monitors  Regulators  
 Sun/rain shield  Free standing  Self-inspiring type  FFG type  
 Direct high energy spark ignition  Optical pilot monitoring device
  - Aviation marking:  Per ICAO  Per FAA  Fixed  Retractable  
 L+P access  Strobe type  Incandescent type  Banded paint
  - Utility piping/wiring:  Pilot gas  Ignition lines  Steam lines  Conduit  Assist gas  
 Thermocouple wire  High energy ignitor wire  Power wire
  - Corrosion protection:  SP-2 cleaning  SP-6 sandblast  SP-10 sandblast
- Other \_\_\_\_\_
- Red oxide primer  Inorganic zinc primer  Epoxy primer
  - Epoxy finish paint  Silicone finish paint  Other \_\_\_\_\_

**DETAILED MECHANICAL DESIGN CRITERIA:**

SYSTEM COMPONENT	INTERNAL DESIGN PRESSURE	MECHANICAL DESIGN TEMPERATURE	MATERIAL OF CONSTRUCTION	PROCESS SIDE CORROSION ALLOWANCE
Seal drum				
Knockout drum				
Waste gas riser				
Density seal device				
Support structure				
Steam piping				
Pilot gas piping				
Ignition piping				



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**GAS COMPOSITION:**       Mole %       Weight %

COMPONENT	MAXIMUM FLOW CASE	SMOKELESS FLOW CASE	NORMAL FLOW CASE	MINIMUM FLOW CASE	PILOT FUEL GAS
Methane	33%	33%	33%	100%	100%
Ethane					
Propane					
Butane					
Pentane					
Hexane					
Heptane					
Octane					
C9+ Saturates					
Ethylene					
Propylene					
Butylene					
Butene					
Butadiene					
Acetylene					
Benzene					
Toluene					
Xylene					
Styrene					
C9+ Unsaturates					
Ammonia					
Hydrogen					
Hydrogen Sulfide					
Carbon Monoxide					
Carbon Dioxide					
Water					
Nitrogen					
Oxygen					

**COMMENTS: All flaring cases involve the venting of nitrogen-blanketed tanks. The vent gas from the tanks is assumed to be 100% nitrogen, but will contain small amounts of various hydrocarbons. The compositions above include the methane (or natural gas) that will be added as required to raise the heating value of the flare gas stream.**