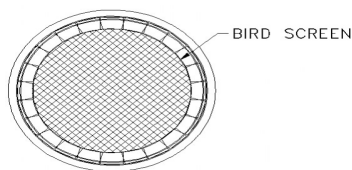


FS-ECD-25 - High Efficiency Enclosed Combustor



BIRD SCREEN



BIRD SCREEN

2" SIGHT GLASS

BMS

PILOT

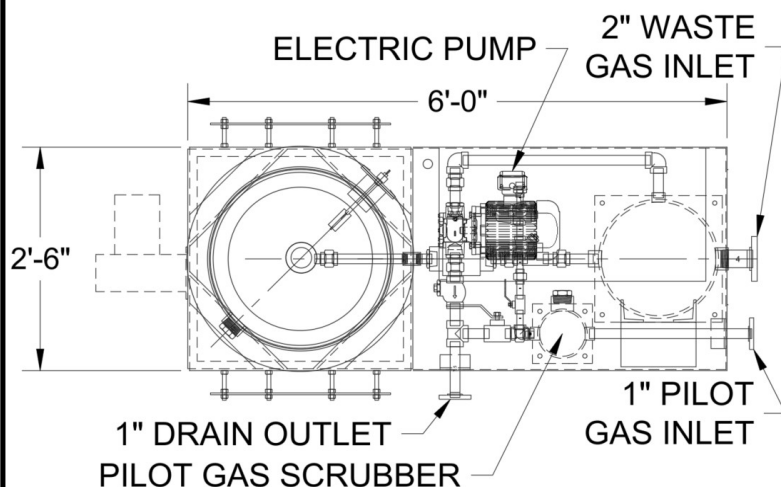
KO POT

OPTIONAL
INLET AIR
BLOWER

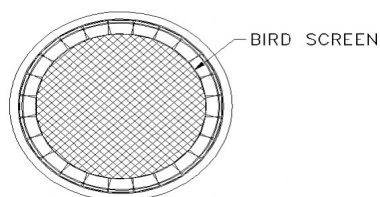
AIR VENTS
IN BASE

DESIGN DATA

Design Parameters	Max Flow Rate (MSCFD):	25
	Design MMBTU/Hr:	2.5
	Average MW:	44
	Cp/Cv:	1.24
	LHV (BTU/SCF):	2300
	Specific Gravity:	1.57
	Design Chamber Temp (F):	1400
	Design Temp of Gas (F):	100
	Chamber Temperature Monitoring:	Yes
	High Temperature Shutdown:	Yes
	2300 Deg Blanket Refractory (In):	3
	Inlet Knockout Drum w/ Electric Pump:	Yes
	Fuel Gas Scrubber:	Yes
	Flame Ionization Pilot Monitoring:	Yes
	BMS System W/ Pilot:	Yes
Results	Min. Inlet Pressure (Oz/In ²):	4
	Total Pressure Drop of Unit (Oz/In ²):	3.3
	At Full Flow	
	Waste Gas Inlet:	2"
	Burner Stages	2
	Lower Stack Outer Diameter (In):	24
	Overall Stack Height (Ft):	20'-0"
	Max Chamber Temp (F):	<1800
	Combustion Efficiency (%):	>99%
	Pilot Gas Consumption (SCFH):	40
	Out Wall Skin Temperature (F):	<150



FS-ECD-50 - High Efficiency Enclosed Combustor



BIRD SCREEN

BIRD SCREEN



2" SIGHT GLASS

BMS

PILOT

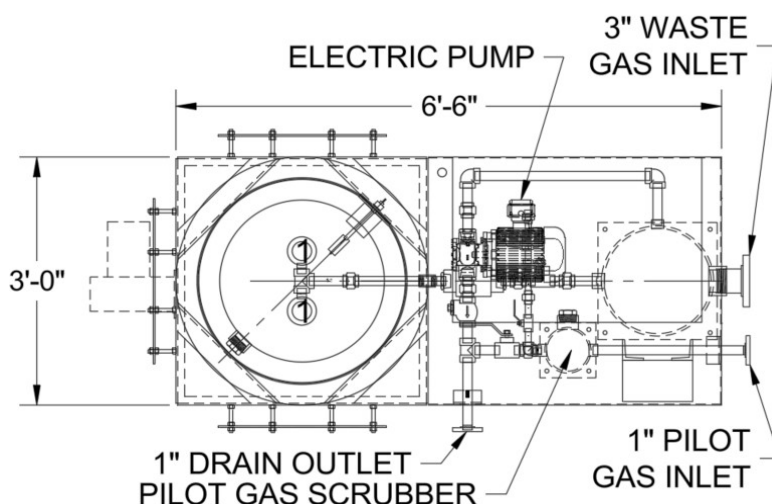
KO POT

OPTIONAL
INLET AIR
BLOWER

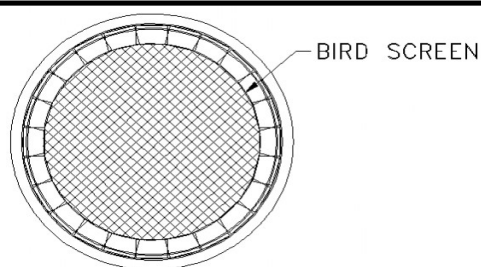
AIR VENTS
IN BASE

DESIGN DATA

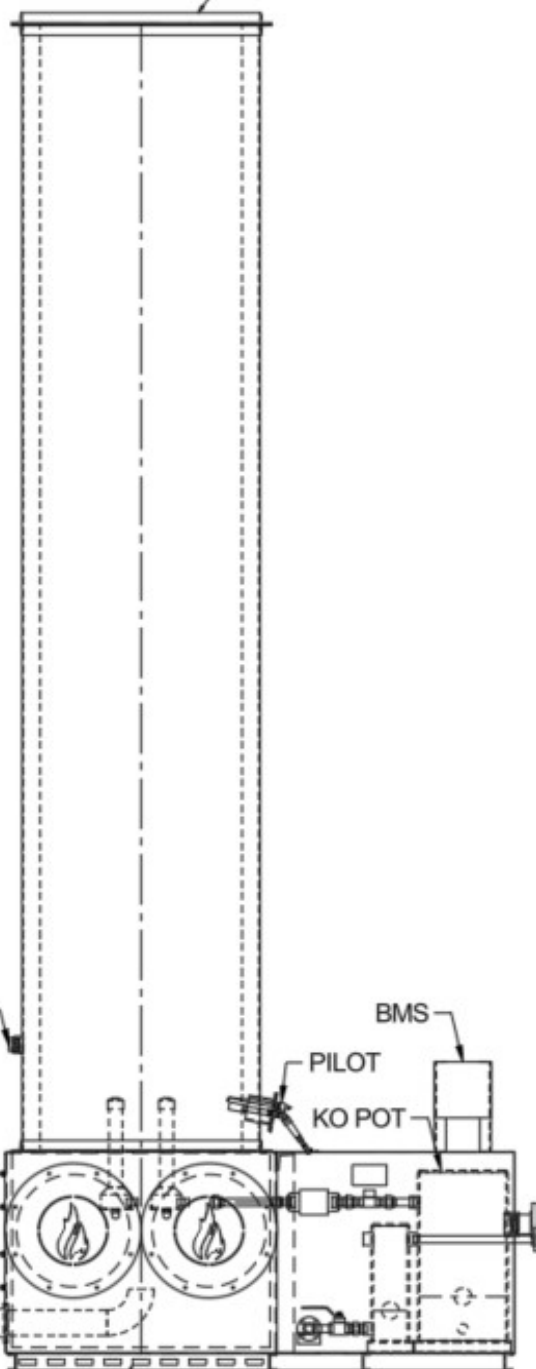
Design Parameters	Max Flow Rate (MSCFD):	50
	Design MMBTU/Hr:	5
	Average MW:	44
	Cp/Cv:	1.24
	LHV (BTU/SCF):	2300
	Specific Gravity:	1.57
	Design Chamber Temp (F):	1400
	Design Temp of Gas (F):	100
	Chamber Temperature Monitoring:	Yes
	High Temperature Shutdown:	Yes
	2300 Deg Blanket Refractory (In):	3
	Inlet Knockout Drum w/ Electric Pump:	Yes
	Fuel Gas Scrubber:	Yes
	Flame Ionization Pilot Monitoring:	Yes
	BMS System W/ Pilot:	Yes
Results	Min. Inlet Pressure (Oz/In ²):	4
	Total Pressure Drop of Unit (Oz/In ²):	3.3
	At Full Flow	
	Waste Gas Inlet:	3"
	Burner Stages	2
	Lower Stack Outer Diameter (In):	52
	Overall Stack Height (Ft):	20'-0"
	Max Chamber Temp (F):	<1800
	Combustion Efficiency (%):	>99%
	Pilot Gas Consumption (SCFH):	40
	Out Wall Skin Temperature (F):	<150



FS-ECD-100 - High Efficiency Enclosed Combustor

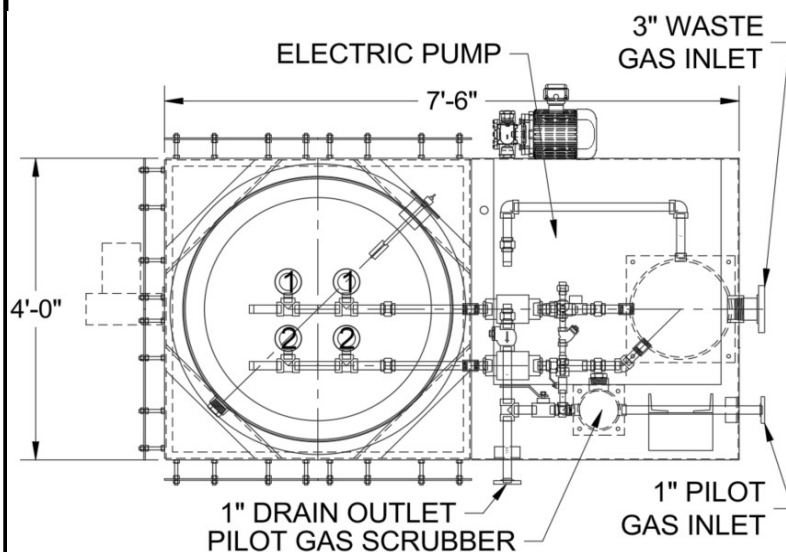


BIRD SCREEN

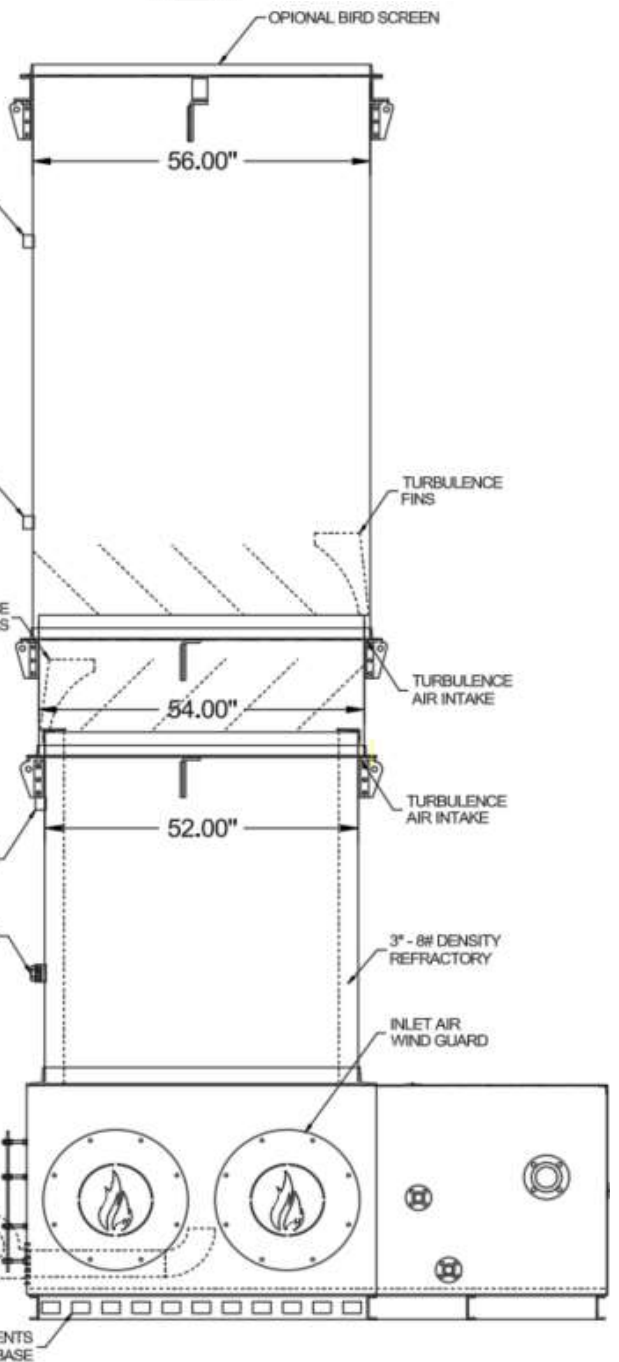
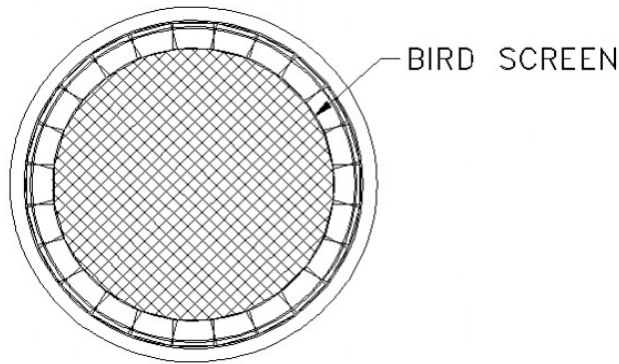


DESIGN DATA

Design Parameters	Max Flow Rate (MSCFD):	100
	Design MMBTU/Hr:	10
	Average MW:	44
	Cp/Cv:	1.24
	LHV (BTU/SCF):	2300
	Specific Gravity:	1.57
	Design Chamber Temp (F):	1400
	Design Temp of Gas (F):	100
	Chamber Temperature Monitoring:	Yes
	High Temperature Shutdown:	Yes
	2300 Deg Blanket Refractory (In):	3
	Inlet Knockout Drum w/ Electric Pump:	Yes
	Fuel Gas Scrubber:	Yes
	Flame Ionization Pilot Monitoring:	Yes
	BMS System W/ Pilot:	Yes
Results	Min. Inlet Pressure (Oz/In ²):	4
	Total Pressure Drop of Unit (Oz/In ²):	3.3
	At Full Flow	
	Waste Gas Inlet:	3"
	Burner Stages	2
	Lower Stack Outer Diameter (In):	42
	Overall Stack Height (Ft):	20'-0"
	Max Chamber Temp (F):	<1800
	Combustion Efficiency (%):	>99%
	Pilot Gas Consumption (SCFH):	40
	Out Wall Skin Temperature (F):	<150

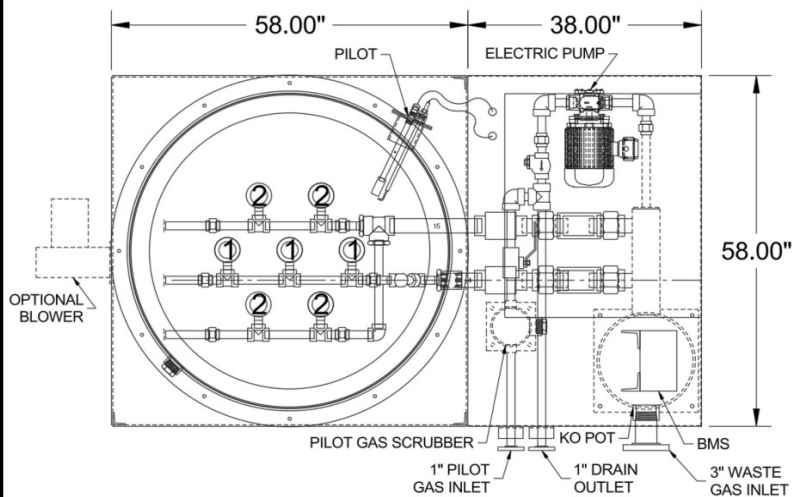


FS-ECD-200 - High Efficiency Enclosed Combustor

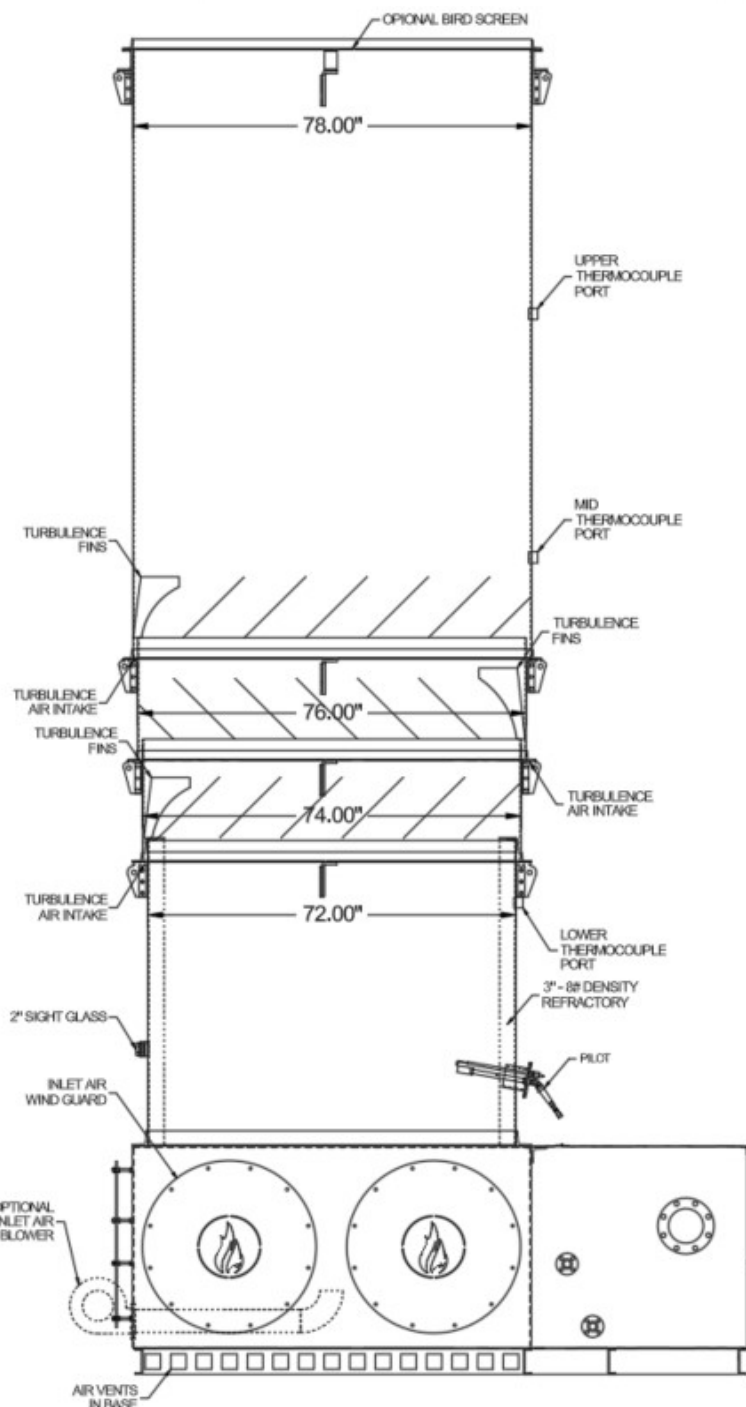
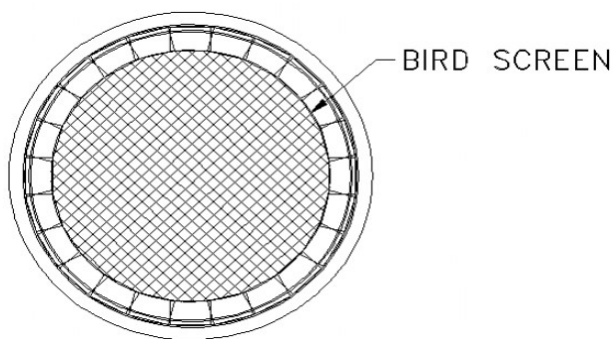


DESIGN DATA

Design Parameters	Max Flow Rate (MSCFD):	200
	Design MMBTU/Hr:	20
	Average MW:	44
	Cp/Cv:	1.24
	LHV (BTU/SCF):	2300
	Specific Gravity:	1.57
	Design Chamber Temp (F):	1400
	Design Temp of Gas (F):	100
	Chamber Temperature Monitoring:	Yes
	High Temperature Shutdown:	Yes
	2300 Deg Blanket Refractory (In):	3
	Inlet Knockout Drum:	Yes
	Fuel Gas Scrubber:	Yes
	Flame Ionization Pilot Monitoring:	Yes
Results	BMS System W/ Pilot:	Yes
	Min. Inlet Pressure (Oz/In ²):	4
	Total Pressure Drop of Unit (Oz/In ²):	3.3
	At Full Flow	
	Waste Gas Inlet:	3"
	Burner Stages	2
	Lower Stack Outer Diameter (In):	52
	Overall Stack Height (Ft):	17'-8"
	Max Chamber Temp (F):	<1800
	Combustion Efficiency (%):	>99%
	Pilot Gas Consumption (SCFH):	40
	Out Wall Skin Temperature (F):	<150

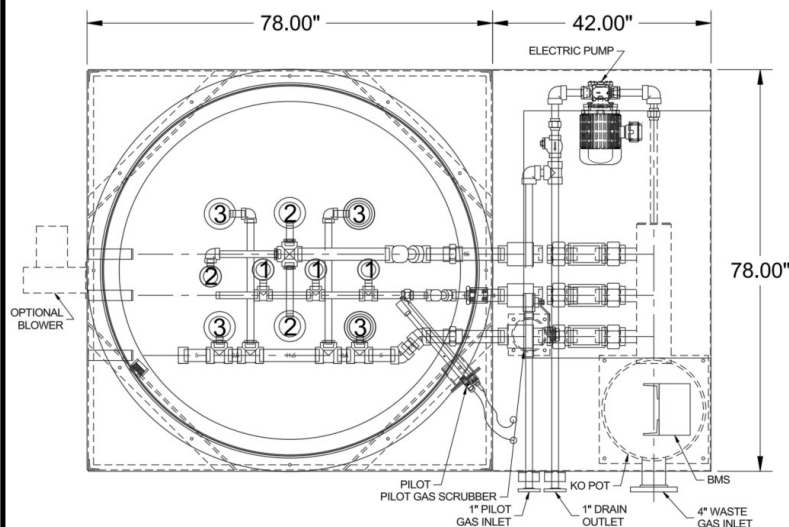


FS-ECD-400 - High Efficiency Enclosed Combustor

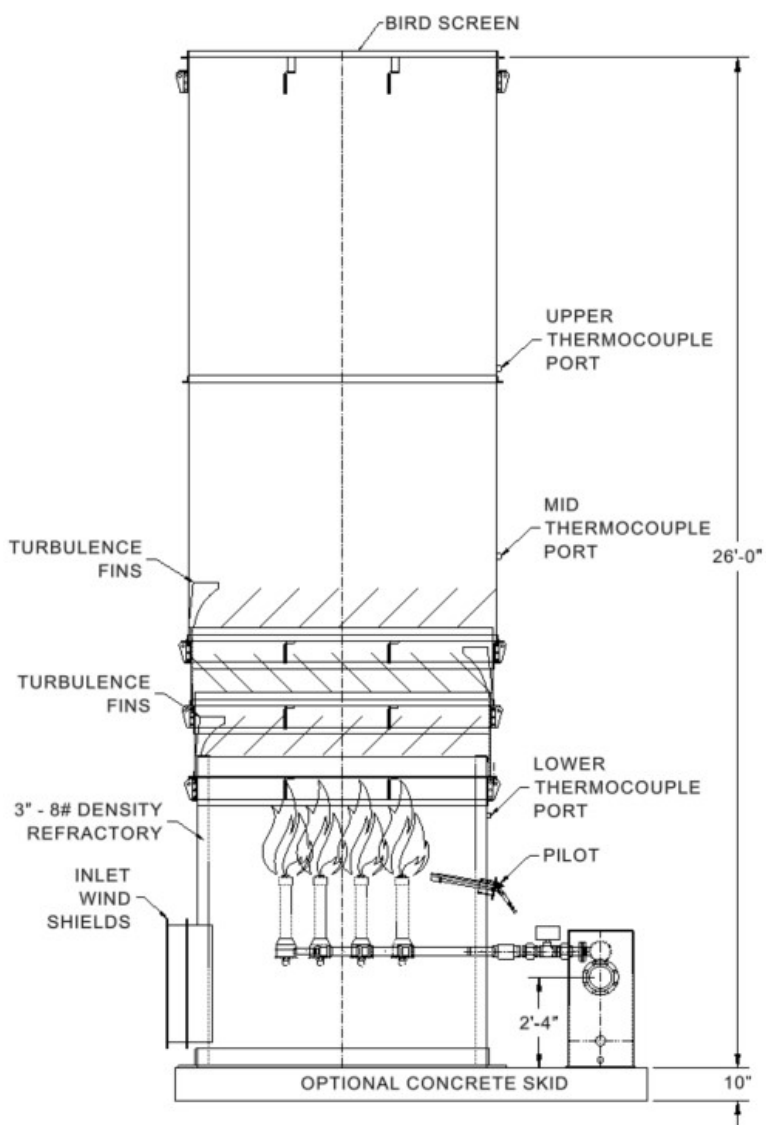
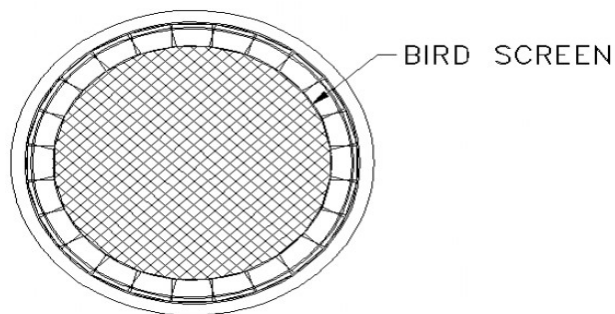


DESIGN DATA

Design Parameters	Max Flow Rate (MSCFD):	400
	Design MMBTU/Hr:	40
	Average MW:	44
	Cp/Cv:	1.24
	LHV (BTU/SCF):	2300
	Specific Gravity:	1.57
	Design Chamber Temp (F):	1400
	Design Temp of Gas (F):	100
	Chamber Temperature Monitoring:	Yes
	High Temperature Shutdown:	Yes
	2300 Deg Blanket Refractory (In):	3
	Inlet Knockout Drum w/ Electric Pump:	Yes
	Fuel Gas Scrubber:	Yes
Results	Flame Ionization Pilot Monitoring:	Yes
	BMS System W/ Pilot:	Yes
	Min. Inlet Pressure (Oz/In ²):	4
	Total Pressure Drop of Unit (Oz/In ²):	3.3
	At Full Flow	
	Waste Gas Inlet:	4"
	Burner Stages	2
	Lower Stack Outer Diameter (In):	72"
	Overall Stack Height (Ft):	21'-7"
	Max Chamber Temp (F):	<1800
	Combustion Efficiency (%):	>99%
	Pilot Gas Consumption (SCFH):	40
	Out Wall Skin Temperature (F):	<150

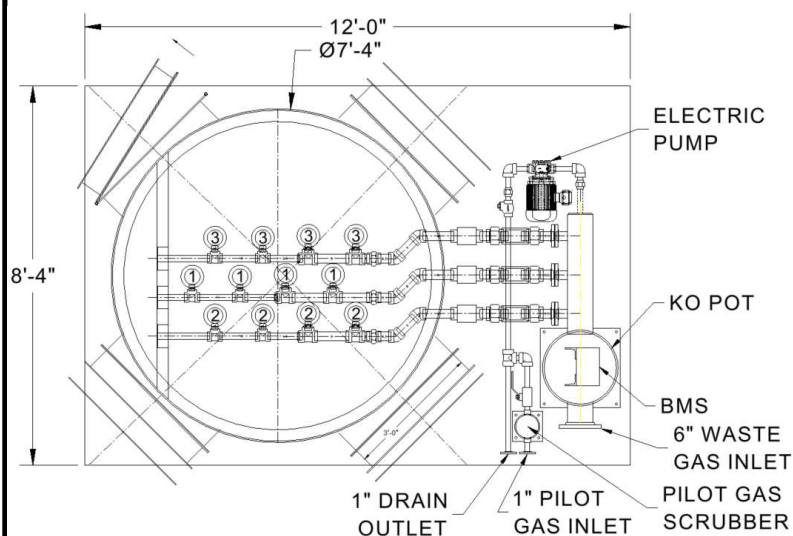


FS-ECD-600 - High Efficiency Enclosed Combustor

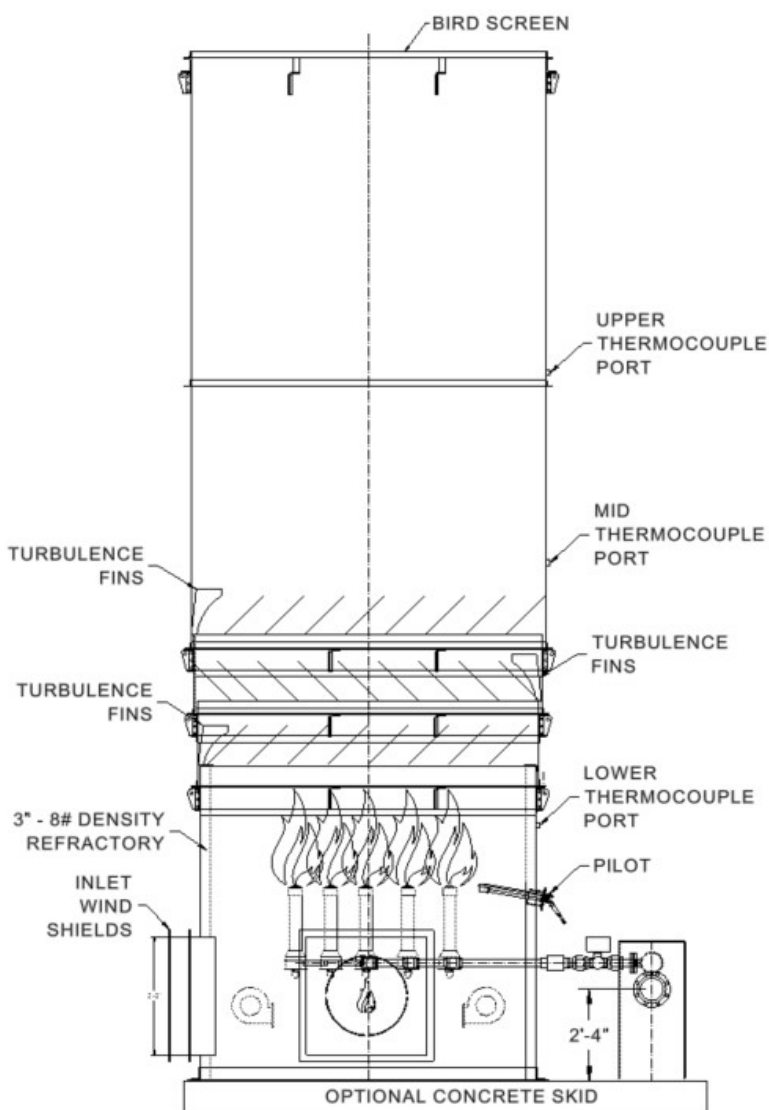
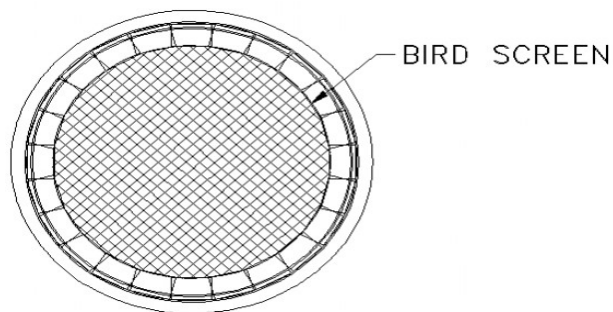


DESIGN DATA

Design Parameters	Max Flow Rate (MSCFD):	600
	Design MMBTU/Hr:	60
	Average MW:	44
	Cp/Cv:	1.24
	LHV (BTU/SCF):	2300
	Specific Gravity:	1.57
	Design Chamber Temp (F):	1400
	Design Temp of Gas (F):	100
	Chamber Temperature Monitoring:	Yes
	1800 Deg High Temperature Shutdown:	Yes
	2300 Deg Blanket Refractory (In):	3
	Inlet Knockout Drum:	Yes
	Fuel Gas Scrubber:	Yes
	Flame Ionization Pilot Monitoring:	Yes
Results	BMS System W/ Pilot:	Yes
	Min. Inlet Pressure (Oz/In ²):	4
	Total Pressure Drop of Unit (Oz/In ²):	3.3
	At Full Flow	
	Waste Gas Inlet:	6"
	Burner Stages	3
	Lower Stack Outer Diameter (In):	88"
	Overall Stack Height (Ft):	26'-0"
	Max Chamber Temp (F):	<1800
	Combustion Efficiency (%):	>99%
	Pilot Gas Consumption (SCFH):	40
	Out Wall Skin Temperature (F):	<150

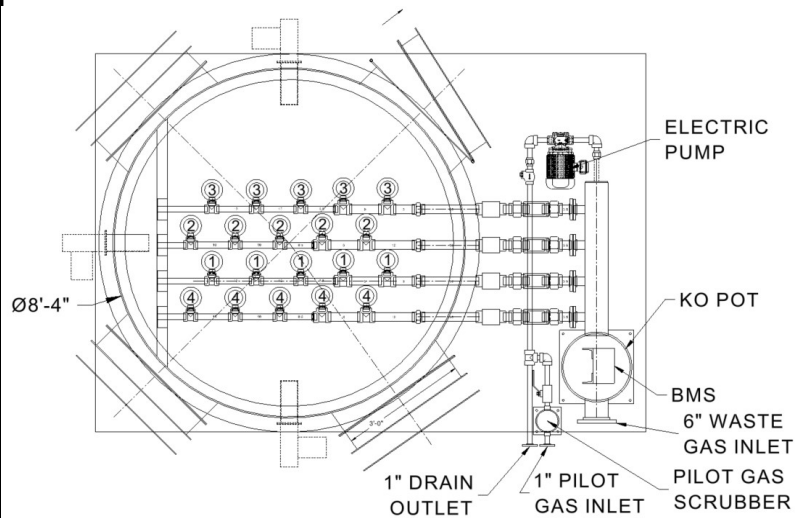


FS-ECD-800 - High Efficiency Enclosed Combustor

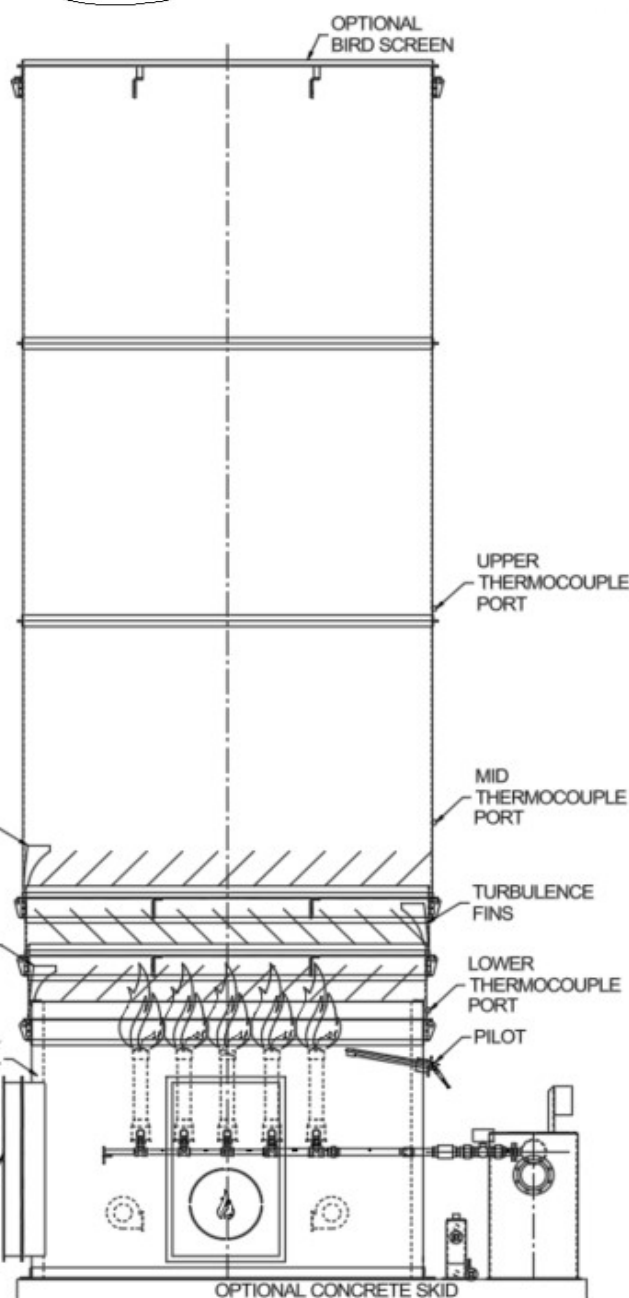
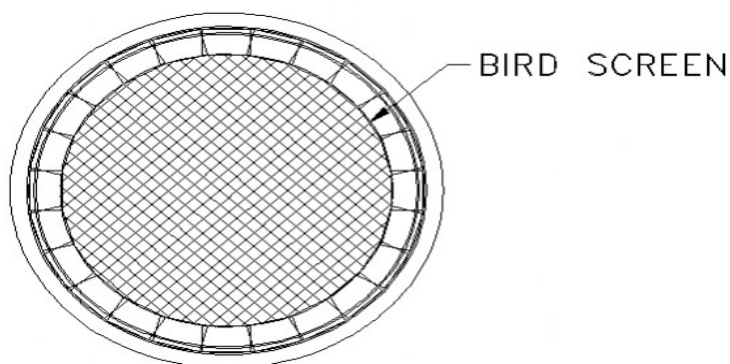


DESIGN DATA

Design Parameters	Max Flow Rate (MSCFD):	800
	Design MMBTU/Hr:	80
	Average MW:	44
	Cp/Cv:	1.24
	LHV (BTU/SCF):	2300
	Specific Gravity:	1.57
	Design Chamber Temp (F):	1400
	Design Temp of Gas (F):	100
	Chamber Temperature Monitoring:	Yes
	1800 Deg High Temperature Shutdown:	Yes
	2300 Deg Blanket Refractory (In):	3
	Inlet Knockout Drum:	Yes
	Fuel Gas Scrubber:	Yes
	Flame Ionization Pilot Monitoring:	Yes
Results	BMS System W/ Pilot:	Yes
	Min. Inlet Pressure (Oz/In ²):	4
	Total Pressure Drop of Unit (Oz/In ²):	3.3
	At Full Flow	
	Waste Gas Inlet:	6"
	Burner Stages	4
	Lower Stack Outer Diameter (In):	100"
	Overall Stack Height (Ft):	26'-0"
	Max Chamber Temp (F):	<1800
	Combustion Efficiency (%):	>99%
	Pilot Gas Consumption (SCFH):	40
	Out Wall Skin Temperature (F):	<150



FS-ECD-800 - High Efficiency Enclosed Combustor



DESIGN DATA

Design Parameters	Max Flow Rate (MSCFD):	1600
	Design MMBTU/Hr:	160
	Average MW:	44
	Cp/Cv:	1.24
	LHV (BTU/SCF):	2300
	Specific Gravity:	1.57
	Design Chamber Temp (F):	1400
	Design Temp of Gas (F):	100
	Chamber Temperature Monitoring:	Yes
	1800 Deg High Temperature Shutdown:	Yes
	2300 Deg Blanket Refractory (In):	4
	Inlet Knockout Drum w/ Electric Pump:	Yes
	Fuel Gas Scrubber:	Yes
	Flame Ionization Pilot Monitoring:	Yes
	BMS System W/ Pilot:	Yes
Results	Min. Inlet Pressure (Oz/In ²):	4
	Total Pressure Drop of Unit (Oz/In ²):	3.3
	At Full Flow	
	Waste Gas Inlet:	8"
	Burner Stages	4
	Lower Stack Outer Diameter (In):	132"
	Overall Stack Height (Ft):	35'-0"
	Max Chamber Temp (F):	<1800
	Combustion Efficiency (%):	>99%
	Pilot Gas Consumption (SCFH):	40
	Out Wall Skin Temperature (F):	<150

