



 QUESTOR TECHNOLOGY INC. 510, 100 - 4th Ave SW CALGARY, ALBERTA, T2P 3K7		
CUSTOMER:		
CLIENT:		LOCATION:
TYPICAL Q500 DETAILS		
DWN. BY: J.V.	DATE: /2005	JOB No.: 2005
APP. BY: D.M.	DATE: /2005	DWG.#: QUOTATION REV.#: Δ



QUESTOR Q500 INCINERATOR

TECHNICAL SPECIFICATIONS

Design Basis

Maximum throughput:	500,000 scf/d of methane equivalent gas
Fuel requirement:	(varies depending upon waste gas composition)
Design operating temperature:	600 to 1200 °C

Questor Q500 Incinerator Detail

Total height:	27 ½ feet (8.4 meters)
Total weight:	14,000 lbs (4,300 kg)
Foot print:	4' OD (1.2 m)
Number of sections:	1 – Stack and air induction
Stack material:	A36 - Refractory lined
Stack OD:	48 inches (122 cm)
Stack Refractory I.D.:	40.3 inches (102 cm)
Stack length:	18 feet (5.5 m)
Stack wall thickness:	0.25 inches (6.4 mm)
Air induction material:	A36
Air induction OD:	48 inches (122 cm)
Air induction length:	8 feet (2.4 m)
Air induction wall thickness:	0.50 inches (12.7 mm)
Wind shroud:	Stainless steel, 5' - 10 " OD
Flanges	A105 BWRP
Bolting	A335

Refractory Specification

Type:	4LI
Thickness:	3 inches
Manufacturer:	Rescocast
Maximum working temperature:	2600°F (1427°C)



QUESTOR Q500 INCINERATOR

TECHNICAL SPECIFICATIONS

Gas Supply Connections

Waste gas: 4 inch RFWN
Pilot gas: ¼ inch NPT
Fuel gas: 1 inch RFWN

Combustion Air

Natural draft: 3 openings c/w flame arrestor cells (Optional)

Pilot Gas Burner

Pilot Ignition Control: Profire 1100,
Number of Igniters: 1
Capacity at 3 psi: 1200 scf/d

Fuel Gas Manifold

Manifold material: Stainless steel 304
Nozzle – orifice: Varies

Waste Gas Manifold

Operating Pressure Range: 1 – 40 psig
Manifold material: Stainless steel 304
Nozzle – orifice: Varies



QUESTOR Q500 INCINERATOR

TECHNICAL SPECIFICATIONS

Control Panel

NEMA 4, local control panel:
Ignition panel:

120 VAC heater/24 VDC controls
NEMA 4 x enclosure

Surface Preparation

Sand blast:
Top coat:

SP6
High temperature aluminum

Fuel Management System – Compliance with CSA-B149.3

Stack top temperature:
Temperature transmitter:

Type K Thermocouple, Inconel 600 thermowell
Rosemount Type 644 with local readout and
signal to PLC

Motor valve:
I to P converter:

Fisher Type 119
Fisher Type 646

Optional Equipment

Inline flame arrestor:
Air intake flash back arrestors:

150 ANSI, RF, Steel body, SS cell
Spiral wound aluminum