

UltraNOx Burners

1000-24000 kg/hr

Cochran is a leading provider of fully engineered heat and energy solutions across the globe. Operating worldwide, the Cochran brand is a globally recognised benchmark for British engineering and manufacturing; a name that stands for unrivalled quality, dependability, durability and premium performance.

Now, developed from its well-respected and fully proven burner platform, Cochran have launched the new 50mg NOx UltraNOx burner range. Fully MCPD Compliant and Hydrogen ready, this benchmark standard has been achieved without the need for Flue Gas Recirculation (FGR). FGR can be offered to further reduce NOx emissions, where we have achieved results down to 20 mg/Nm³.*

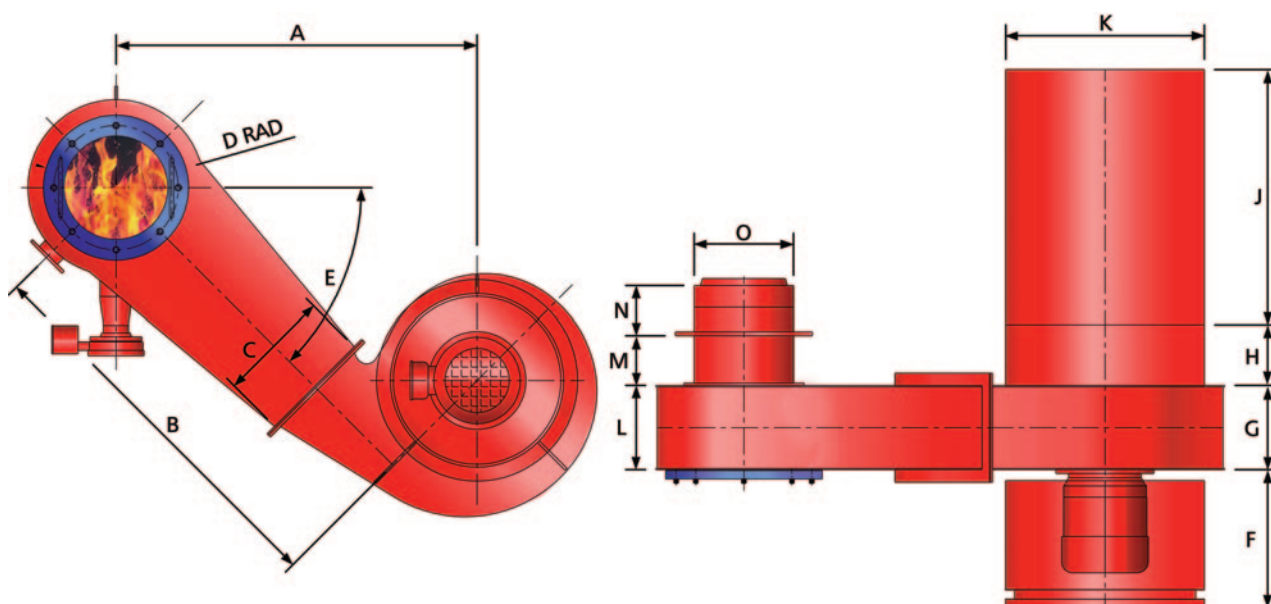
Delivering low operational noise and excellent fuel efficiency across the 4 to 17 MW burner net heat output range, the new 50mg Nox UltraNOx has been rigorously tested in the field. For maximum efficiency and flexibility, the UltraNOx can be offered with all leading combustion control systems.

Cochran's UltraNOx burners offer the following key features:

- Fully MCPD compliant and 100% hydrogen ready burner delivering from 4 to 19 MW burner net heat output. Suitable for firing oil or gaseous fuels including Hydrogen or for triple fuel firing, providing maximum flexibility.
- From 50mg NOx @3% O₂, without the need for FGR*. For maximum efficiency and flexibility, the UltraNOx can be offered with all leading combustion control systems.
- Minimum turndown for Type E burners 8:1 gas and 5:1 on fuel oil*.
- Available as a rapid combustion head upgrade retrofit to existing boiler plant - significantly cutting NOx emissions and reducing CAPEX. Integrated modular options, VSD, O₂ trim, sequencing, remote monitoring also available.
- Low operational noise, featuring a muffler and air intake silencer as standard.
- Premium spec includes laser cut stainless steel flame plates throughout, quick release connections on fuel lines. All key stainless and aluminium parts CNC machined in-house, ensuring superb quality, fit and ease of commissioning.
- Proven design with extensive real-world testing in the field and supported by Cochran's network of highly experienced UK-based service engineers. Cochran's famous build quality, designed, developed, manufactured and tested in-house at our UK factory, with a powder coated finish for maximum durability. Bespoke design solutions and applications available.



UltraNOx Burners Type E 6000-24000 kg/hr



UltraNOx Gas and Dual Fired Type E Burners

Boiler Duty	Kg/Hr	6000	7000	8000	9000	10000	12000	14000	16000	18000	20000	22500	24000
Burner Heat Output for all applications	KW	4298	5015	5731	6448	7164	8597	10030	11463	12895	14328	16119	17194
Dimensions	A	mm	1666	1295	1457	1363	1387	1493	1631	1658	2170	1988	1919
	B	mm	1709	1400	1540	1500	1534	1671	1711	1810	2326	2115	2066
	C	mm	334	378	378	378	378	588	682	682	682	682	742
	D	mm	295	315	340	365	365	390	440	440	440	440	470
	E	mm	30	45	40	45	45	38	28	33	28	28	30
	F	mm	777	789	635	635	665	727.5	869	869	872	872	914
	G	mm	266	302	302	302	302	318	412	412	412	412	534
	H	mm	258	269	269	269	269	278	280	272	274	274	278
	J	mm	906	1114	1126	1126	1126	1202	1256	1256	1256	1256	1256
	K	mm	553	713	713	713	713	765	780	780	780	780	780
	L	mm	266	302	302	302	302	318	412	412	412	412	534
	M	mm	196	194	240.5	240.5	240.5	242.5	253	253	253	253	253
	N	mm	218	205	205	205	205	205	225	220	215	220	220
	O	mm	327	362	410	410	410	462	512	512	512	512	554
Turndown - Natural Gas Firing	8: 1	8: 1	8: 1	8: 1	8: 1	8: 1	8: 1	8: 1	8: 1	8: 1	8: 1	8: 1	8: 1
Turndown - Distillate Oil Firing	5: 1	5: 1	5: 1	5: 1	5: 1	5: 1	5: 1	5: 1	5: 1	5: 1	5: 1	5: 1	5: 1
NOx based on ST37 type furnace mg/Nm ³			50-80 (60-70)	50-80	50-80	50-80	50-80 (60-800)	50-80	50-80	50-80	50-80 (60-70)	50-80 (60-80)	50-80 (60-80)
Approx Weight	Kg	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA

Options: Remote monitoring and data logging - accessible via Internet; O₂ Trim; Exhaust Gas Monitoring; and Integral Gas Leak testing.

Note: All performance figures anticipated and based on a conventionally fired three pass wet back steam boiler with an normal operating pressure of 10 barg.

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