



ISX and Signature Euro 5. Utilising SCR technology.



ISX and Signature Euro 5



The latest additions to Cummins' ISX and Signature engine family utilise SCR (Selective Catalytic Reduction) exhaust aftertreatment technology for emissions reduction.

With Euro 5 emissions compliance, the SCR engines give customers a further technology choice backed by Cummins' unrivalled service support network.

The ISX and Signature are Australia's biggest selling heavy-duty truck engines and with SCR continue to be offered with ratings from 450 to 600 hp and peak torque from 1650 to 2050 lb ft.

There are no engine hardware changes from 485 hp/1650 lb ft to 600 hp/2050 lb ft, and all ratings 485 hp and above deliver best-in-industry engine brake performance of 600 retarding horsepower.

While the base 15-litre ISX engine design remains the same, the SCR variants incorporate a new common rail fuel system, a wastegate turbocharger, and a single overhead camshaft.

The XPI (Extreme Pressure Injection) common rail fuel system allows very precise injection and combustion control. It operates independently of engine speed and provides injection pressures greater than 30,000 psi.

As the only diesel engine manufacturer with in-house integration of the critical subsystems from air handling to exhaust aftertreatment, Cummins is able to optimise the combustion process to maximise fuel economy.



The XPI common rail system also negates the need for the second camshaft that mechanically drives the injectors in the EGR variants of the ISX and Signature.

Emissions technology.

Leadership in combustion research, fuel and air-handling systems, filtration, electronic controls and exhaust aftertreatment allows Cummins to provide the most appropriate emissions control solution for each market served.

SCR has been used by Cummins in the South Pacific for several years, being the standard technology on the ISFe5, ISBe5, ISLe5 and ISMe5 engines meeting Euro 5 and ADR80/03 emissions regulations.

This technology doesn't change the design or operation of the basic engine. Rather, SCR is an exhaust aftertreatment system which converts nitrogen oxides (NOx) in the exhaust stream into harmless gases.

This means engine combustion can be optimised for improved fuel economy and reduced heat rejection.

The SCR system is a fully integrated in-house design, developed by Cummins Emissions Solutions. In fact, Cummins is the only diesel engine manufacturer with in-house integration of the critical subsystems from air handling to exhaust aftertreatment.



The entire Cummins SCR system is centrally controlled and monitored from the engine ECM.

SCR works by injecting Diesel Exhaust Fluid (DEF) into the exhaust stream in small quantities. DEF – or AdBlue® as it is also known – is nothing more than a solution of 32.5% urea and deionised water.

DEF works with the heat of the exhaust and a catalyst to convert NOx into nitrogen and water vapour – two harmless and natural components of the air we breathe.

DEF consumption is generally 4% to 6% of normal diesel consumption, depending on vehicle operation and application.

DEF is a non-toxic, non-flammable liquid and is widely available in the South Pacific, including from Cummins branches and dealers.

Specifications.

Type	4-cycle, in-line, 6-cylinder, turbocharged/charge air cooled
Bore & stroke	137 x 169 mm (5.39 x 6.65 in)
Displacement	15 litres (912 cu in)
Compression ratio	17.2:1
Oil system capacity	49.2 litres
Dry weight	1286 kg (2836 lb)

Warranty coverage.

Cummins' base engine coverage* is 2 years or 402,336 km, whichever occurs first. It covers:

- Full parts and labour on warrantable failures.*
- Travel or towing when an engine is disabled by a warrantable failure or further operation would cause damage (from date of delivery through the first year).
- Consumables not reusable due to covered failure.
- No deductibles.



There is also major components coverage of 5 years, 804,672 km, or 12,500 hours whichever occurs first.

* Plan covers defects in materials or factory workmanship.

Extended coverage program.

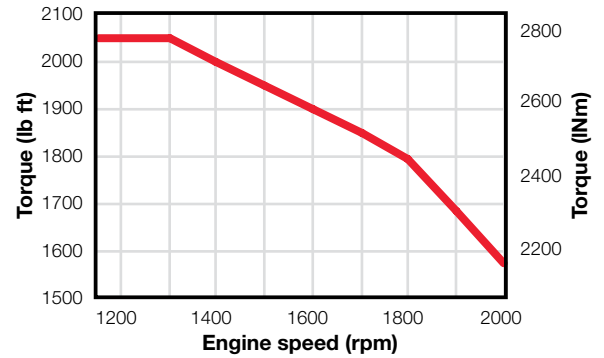
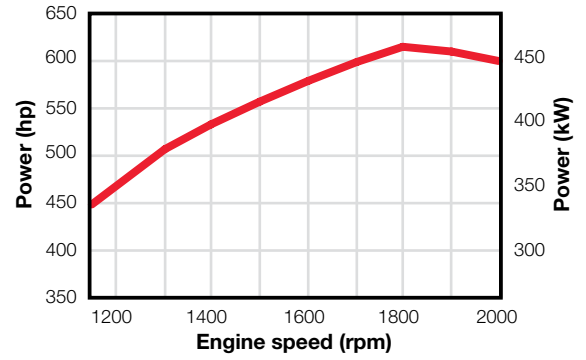
As the industry leader for coverage and value, Cummins offers an extended warranty program called Warranty Plus. A competitively-priced program, it provides coverage for up to five years, 18,000 hours, 600,000 litres of fuel, or 1,200,000 km (whichever occurs first). Importantly, we can tailor the Warranty Plus program specifically to your application. Contact your local Cummins branch or Cummins truck dealer for pricing and full terms and conditions.

Signature e5 600

Performance curves.

600 hp @ 2000 rpm
 2050 lb ft @ 1150 - 1300 rpm

RPM	POWER		TORQUE	
	hp	kW	lb ft	Nm
1150	449	335	2050	2779
1200	468	349	2050	2779
1300	507	378	2050	2779
1400	533	397	2000	2712
1500	557	415	1950	2644
1600	579	432	1900	2576
1700	599	447	1850	2508
1800	615	459	1795	2434
1900	610	455	1685	2285
2000	600	447	1576	2137

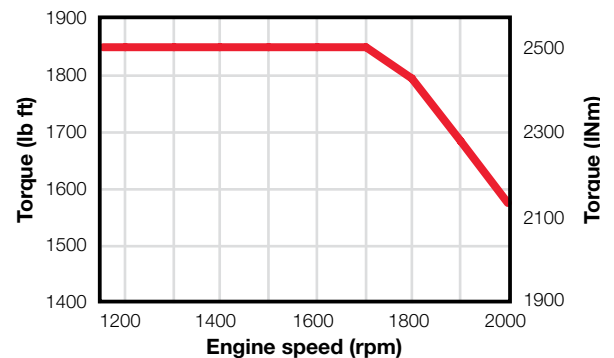
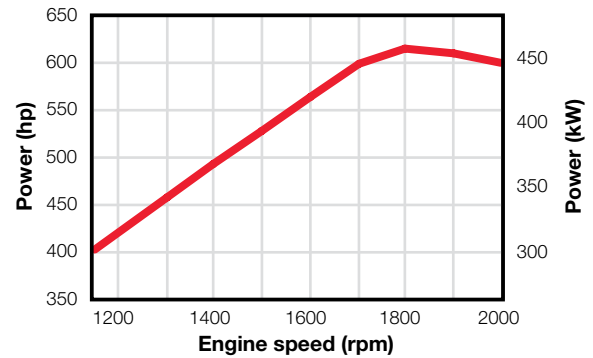


ISXe5 600

Performance curves.

600 hp @ 2000 rpm
 1850 lb ft @ 1150 - 1700 rpm

RPM	POWER		TORQUE	
	hp	kW	lb ft	Nm
1150	405	302	1850	2508
1200	423	315	1850	2508
1300	458	342	1850	2508
1400	493	368	1850	2508
1500	528	394	1850	2508
1600	564	421	1850	2508
1700	599	447	1850	2508
1800	615	459	1795	2434
1900	610	455	1685	2285
2000	600	447	1576	2137

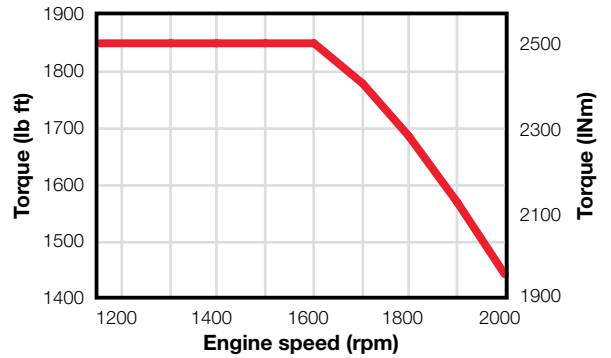
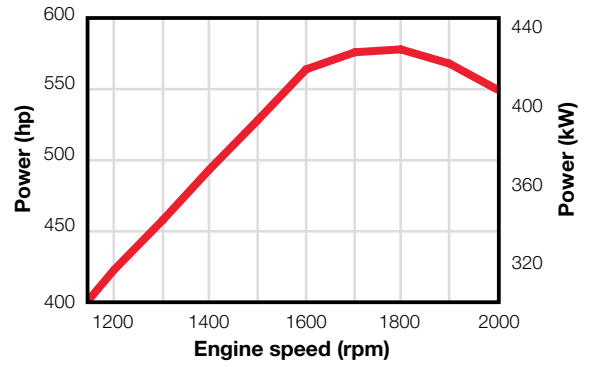


ISXe5 550

Performance curves.

550 hp @ 2000 rpm
1850 lb ft @ 1150 - 1600 rpm

RPM	POWER		TORQUE	
	hp	kW	lb ft	Nm
1150	405	302	1850	2508
1200	423	315	1850	2508
1300	458	342	1850	2508
1400	493	368	1850	2508
1500	528	394	1850	2508
1600	564	421	1850	2508
1700	576	430	1779	2412
1800	578	431	1687	2287
1900	568	424	1570	2129
2000	550	410	1444	1958

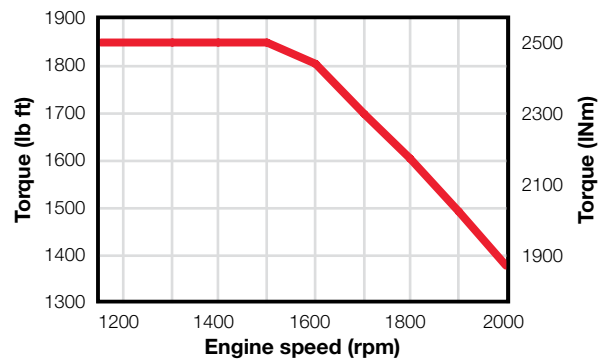
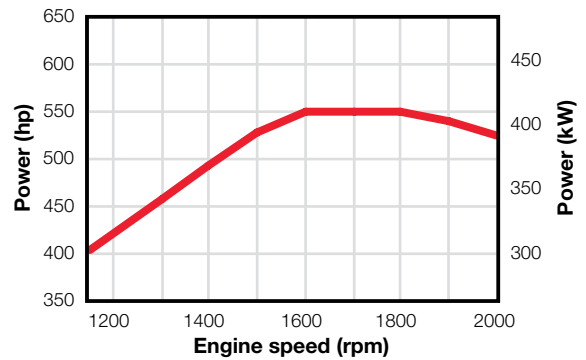


ISXe5 525

Performance curves.

525 hp @ 2000 rpm
1850 lb ft @ 1150 - 1500 rpm

RPM	POWER		TORQUE	
	hp	kW	lb ft	Nm
1150	405	302	1850	2508
1200	423	315	1850	2508
1300	458	342	1850	2508
1400	493	368	1850	2508
1500	528	394	1850	2508
1600	550	410	1850	2447
1700	550	410	1699	2304
1800	550	410	1605	2176
1900	540	403	1493	2024
2000	525	391	1379	1870

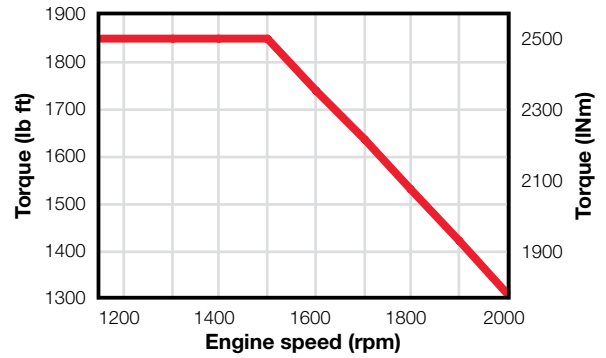
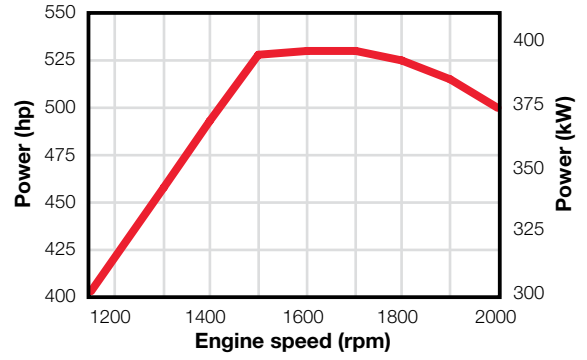


ISXe5 500

Performance curves.

500 hp @ 2000 rpm
 1850 lb ft @ 1150 – 1500 rpm

RPM	POWER		TORQUE	
	hp	kW	lbft	Nm
1150	405	302	1850	2508
1200	423	315	1850	2508
1300	458	342	1850	2508
1400	493	368	1850	2508
1500	528	394	1850	2508
1600	530	395	1740	2359
1700	530	395	1637	2219
1800	525	391	1532	2077
1900	515	384	1423	1929
2000	500	373	1313	1780

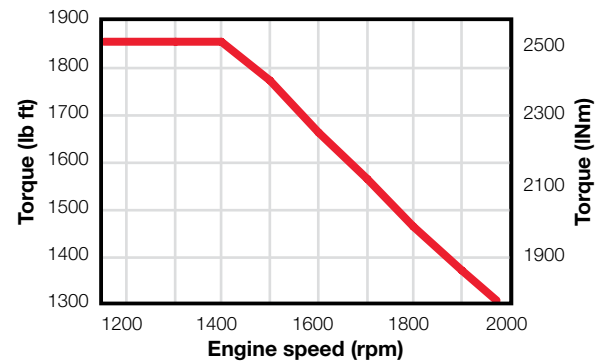
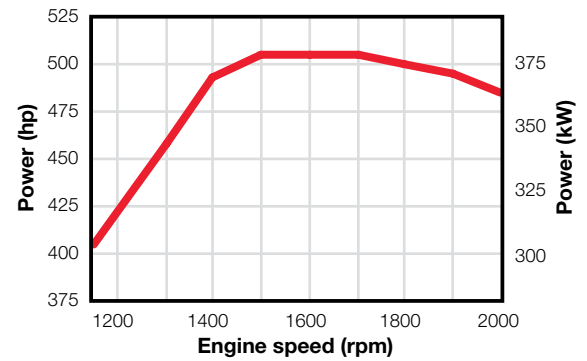


ISXe5 485

Performance curves.

485 hp @ 2000 rpm
 1850 lb ft @ 1150 – 1400 rpm

RPM	POWER		TORQUE	
	hp	kW	lb ft	Nm
1150	405	302	1850	2508
1200	423	315	1850	2508
1300	458	342	1850	2508
1400	493	368	1850	2508
1500	505	377	1768	2397
1600	505	377	1658	2248
1700	505	377	1560	2115
1800	500	373	1460	1979
1900	495	369	1367	1853
2000	485	362	1274	1757

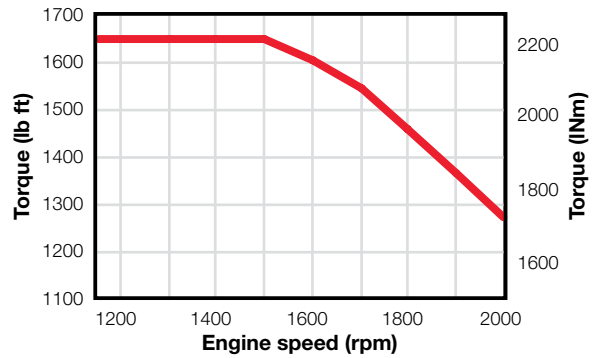
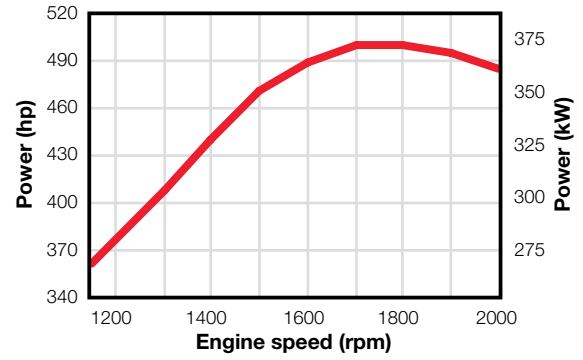


ISXe5 485

Performance curves.

485 hp @ 2000 rpm
1650 lb ft @ 1150 – 1500 rpm

RPM	POWER		TORQUE	
	hp	kW	lb ft	Nm
1150	361	269	1650	2237
1200	377	281	1650	2237
1300	408	304	1650	2237
1400	440	328	1650	2237
1500	471	351	1650	2237
1600	489	365	1605	2176
1700	500	373	1546	2096
1800	500	373	1460	1979
1900	495	369	1367	1853
2000	485	362	1274	1727

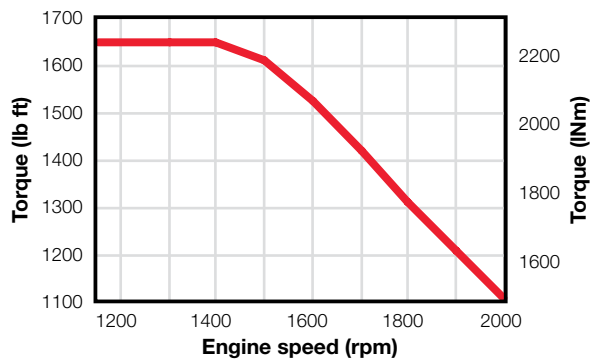
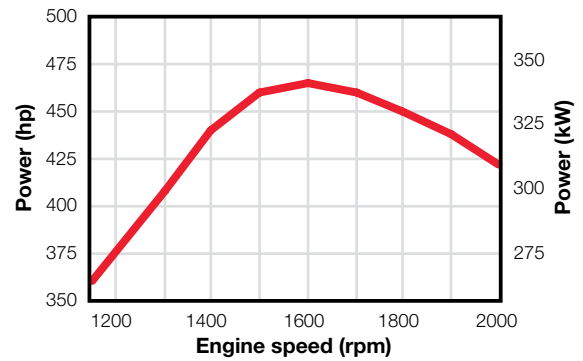


ISXe5 Fleet 450*

Performance curves.

450 hp @ 1800 rpm
1650 lb ft @ 1150 – 1400 rpm

RPM	POWER		TORQUE	
	hp	kW	lb ft	Nm
1150	361	269	1650	2237
1200	377	281	1650	2237
1300	408	304	1650	2237
1400	440	328	1650	2237
1500	460	343	1612	2186
1600	465	347	1526	2069
1700	460	343	1421	1927
1800	450	336	1313	1780
1900	438	327	1210	1641
2000	422	315	1107	1501



* The Fleet 450 can't be electronically updated to higher power and torque settings. The engine has stand-alone hardware that is specifically tuned to achieving top fuel economy at the 450 hp setting.

Cummins deliver unmatched industry support with the largest service and support network in Australia and New Zealand.

AUSTRALIA

New South Wales

Grafton	02 6641 1000
Leeton	02 6953 3077
Muswellbrook	02 6541 0611
Newcastle	02 4964 8466
Queanbeyan	02 6297 3433
Sydney	02 9616 5300
Tamworth	02 6765 5455

Northern Territory

Darwin	08 8935 2200
--------	--------------

Queensland

Brisbane	07 3710 4700
Cairns	07 4035 2999
Emerald	07 4983 9000
Mackay	07 4952 8100
Mt Isa	07 4749 8600
Toowoomba	07 4633 7627
Townsville	07 4774 7733

South Australia

Adelaide	08 8368 4300
Mount Gambier	08 8725 6422

Tasmania

Devonport	03 6424 8800
-----------	--------------

Victoria

Campbellfield	03 9357 9200
Laverton	03 8368 0800
Mildura	03 5025 9900
Pakenham	03 5943 3700
Swan Hill	03 5033 1511
Wodonga	02 6024 3655

Western Australia

Bunbury	08 9725 6777
Geraldton	08 9964 5449
Kalgoorlie	08 9080 1300
Karratha	08 9144 4646
Perth	08 9475 8777
Port Hedland	08 9174 3200

NEW ZEALAND

Auckland	09 277 1000
Bay Of Plenty	07 345 6699
Palmerston Nth	06 356 2209
Whangarei	09 438 8892

PAPUA NEW GUINEA

Lae	05 475 7000
Port Moresby	05 323 2471

At your service.

24 hours a day, 365 days a year.



One number Australia wide for parts & service after hours assistance.



One number New Zealand wide for parts & service after hours assistance.



Experienced Cummins technicians ready to answer your calls.



All 200 Cummins field service vehicles fitted with GPS.



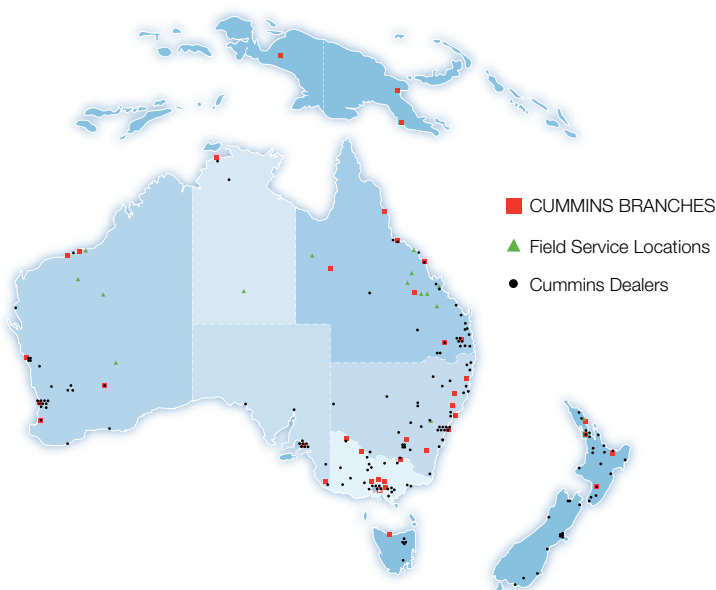
Improved efficiency in meeting your needs.

For Australia

1300Cummins
Ph 1300 286 646

For New Zealand

0800Cummins
Ph 0800 286 646



Cummins Head Office
2 Caribbean Drive
Scoresby Vic 3179 Australia
Phone 613 9765 3222
Fax 613 9763 0079
www.cummins.com.au