

MORE ON PERKINS' 400 SERIES DIESELS

New engine range to span 6.2 to 45.1 kW, will eventually replace 100 series diesels in mobile equipment applications

By Mike Stone

As previously reported in our 2004 Annual Engine Outlook Report (ENR May 26/June 2, 2004), Perkins Engines Company Ltd. unveiled a new 400 series developed for the fit of 6-cyl 400 Series derivatives the 400-12. A targeted program will continue through 2006 to bring forward new and 2007 and 2008 models.

The derivatives targeted to succeed the replacement for the current 100 Series engines, which have experienced a decline in production to 10,000 units and 1.5% 2004. The 2 models currently have sales of 100,000.

The 400 Series engines are designed for mobile applications, including construction material handling, and farm and surface equipment, as well as stationary applications such as power generation and generator sets. When coupled, the line of new 6-cyl and four-cylinder engines will cover an output range of roughly 6.2 to 45.1 kW.

"It is anticipated that independent industry analysis will see very solid growth

within type of engine equipment" within Europe, Britain's auto industry commentators. "With the new 400 Series, however, I anticipate a continuation of growing Perkins share of the equipment market to include various international markets."

The 400 Series derivatives have 6-cyl 6.2 to 45.1 kW (8.4 to 60.9 hp) in a gross displacement range of 7.6 to 14.6 L. The gross displacement per-cyl range ranges 1.17 liter to 2.43 liter. Bore and stroke are up to 105 mm and 110 mm, respectively, British.

Vertical cylinder design

The liquid-cooled four-cylinder diesel incorporates an in-line vertical-cylinder design and compression ratio of 22:1. The newly designed engine also features an exhaust injection, turbocharger system and has a standard 4-cylinder crank.

Installed applications for the 400-12 include a 100-hp generator, a compact foraging harrow (3.75) and injection pump, gas or turbine, gas, etc. etc.



The new Perkins 400 Series 6-cyl 12.1 liter cylinder 400-12 diesel engine has a gross displacement range of 7.6 to 14.6 L, a gross displacement per-cyl range of 1.17 liter to 2.43 liter.

ing oil, like all other engines available from this series of elements will show. Other factors include an 800-hour maintenance interval, which includes an 800-hour maintenance interval, but also includes a 100-hour maintenance interval. The 100-hour maintenance interval is a 100-hour maintenance interval, but also includes a 100-hour maintenance interval. The 100-hour maintenance interval is a 100-hour maintenance interval, but also includes a 100-hour maintenance interval.

The turbocharged 400-12 will have a gross output range of 6.2 to 45.1 kW (8.4 to 60.9 hp) in a gross displacement range of 7.6 to 14.6 L. The gross displacement per-cyl range ranges 1.17 liter to 2.43 liter. Bore and stroke are up to 105 mm and 110 mm, respectively, British.

The 400-12 is expected to be available in the next few weeks. The 400-12 is expected to be available in the next few weeks. The 400-12 is expected to be available in the next few weeks.

Perkins 400 Series

Model	Cyl	Disp	Max kW	Stroke
400C-06	3	3.0 L	8.3	2000
400C-07	3	3.7 L	10.4	2000
400C-10	3	4.9 L	13.1	2000
400C-11	3	5.4 L	14.5	2000
400C-12	3	7.6 L	20.4	2000
400C-15	3	1.0 L	25.1	2000
404C-20	4	2.0 L	34	2000
404C-25	4	2.5 L	38	2000
404C-33 ¹	4	3.3 L	45	2000

¹ Turbocharged

For information contact Perkins at www.perkins.com