Putting The Lid On Catalyst Issues

DCL International unveils next generation of QUICK-LID catalytic converter systems for stationary engines; improvements highlight serviceability, access

DCL International has developed the next generation of its QUICK-LID catalytic converter systems for stationary diesel and natural gas engines. The newest units incorporate features designed to improve serviceability and access.

While it is a given that emissions control technology must first and foremost remove harmful constituents from the engine exhaust gas stream, it is equally true that they must also be able to operate in the real world, where durability, reliability and serviceability are critical. It was with those facts in mind that DCL International Inc., the Concord, Ontario, Canada, supplier of advanced emission control systems for stationary and mobile engines, developed the next generation of its QUICK-LID catalytic converter system. The QUICK-LID catalyst systems, first developed in the mid-1990s, are targeted toward diesel and natural gas engines used in power generation, gas compression and other industrial drive applications.

The new QUICK-LID systems incorporate a range of new features, most of which are intended to improve serviceability and access. "The main objectives were to improve the reliability of the system," said John Muter, technical manager at DCL. "Because the whole purpose of the QUICK-LID is to be a housing our customers interact with, the main way to do that was by making the maintenance easier.

"If it's easier for them to maintain, they'll do a better job and the system will be more reliable. They are designed to serve for 10 years or more and they'll need to be maintained many times during that life."

Perhaps the most significant enhancement of the new generation QUICK-LID units is the elimination of the gasket around the catalyst element. The only remaining gasket in the unit is located around the lid portion of the catalyst housing to prevent leaking. The elimination of the gasket offers significant savings to the customer, the company said, and also allows for easy replacement and cleaning of the catalyst element.

"You will never have to purchase another gasket for your catalytic converter," noted Paul Cook, manager, North American Sales-Industrial Catalyst Division. "The gasket located on the lid is made of durable material that rarely needs replacing."

The QUICK-LID is engineered to allow simplified access to the catalyst section. The cover plate is designed for easy removal, and the catalyst is held in place with retaining bars that hold the element securely yet enables quick removal of the catalyst element, which also incorporates handles for ease of installation and maintenance. Flanged lock bolts and nuts are used in place of lock washers and the new QUICK-LID units also incorporate an improved captive hardware system that is designed to eliminate loose hardware.

The QUICK-LID system has a 304L stainless-steel housing engineered to provide long service life in the most extreme applications. The housing also includes space for additional catalyst elements, the company said.

Service life is also enhanced by the use of metal foil catalyst substrates with rigid supports and a patented C-channel. A range of cell densities is available to allow for optimization of performance and backpressure.

A range of catalyst elements, including three-way catalysts for use with rich-burn or stoichiometric engines; oxidation catalysts for lean-burn natural gas engines; and diesel oxidation catalysts are available. The units can be sized for use with engines in excess of 1 MW.

The newest QUICK-LID models can also be specified as part of a catalyst-silencer module to meet critical- and hospital-grade specifications.

DCL manufactures the QUICK-LID units at its expanded Concord facilities. The company, now in its 20th year, manufactures catalytic converters, catalytic mufflers, diesel particulate filters and stock mufflers for off-highway vehicles, stationary engines, industrial processes and specialized on-highway vehicles. dp

- Mike Brezonick -

For More Information Now
On This Company Go To:
DirectLink @
WWW.DIESELPROGRESS.COM