

Diesel Powered Engines... opportunities await you

A good number of AERA active member shops do some type of diesel engine machining. As opportunity for more traditional work diminishes, shops are looking for alternative customers where profitability can be maintained or improved. Due to the nature of diesel engines, a greater degree of care must be taken to machine and assemble components to exacting tolerances or the engine may not run. With this increased attention to specification tolerance come better than average profits.

This issue of Engine Professional will cover a number of diesel applications from garden variety to more specialized propane fueled or performance oriented engines. Surprisingly, there is a great deal of diversity among diesel engines mostly driven by application. Joe Mondello covers important details to make any diesel head flow more air. Joe will give chapter and verse about what is required to perform the best valve job and what he found does and does not work. Joe has decades of successful experience on and off the flow bench to share with you.

Many large displacement diesel engines like the Detroit 60 enjoy long model runs sometimes lasting over thirty years. Modifications or improvements take place regularly so we think it important to keep engine shops working on these engines up to date. To that end, we have included a section on the Detroit 60 engine complete with high resolution images and current specifications.

A little discussed diesel application is those fueled by propane. We are lucky to have Keith Long of Diesel Performance Products write a piece on propane injection for diesel engines.

This should prove interesting mostly because other alternative fuels for diesel have been discussed in detail, but not propane.

Finally, Gary Reed from Lock-N-Stitch will cover in depth, various cast iron and aluminum repairs employing both traditional and proprietary technologies well within the reach of an average engine shop. Gary classifies types of repair and the best methods to use when repairing cracks and catastrophes both normal and accidental.

Other areas of interest cover coatings, specialized components and a host of "do's and do not's" typically associated with diesel engine machining, assembly and repair. Further, AERA will post an installation and break-in procedure to assist any shop with these very important tasks. It has been recognized that many quality-built engines have failed due mostly to improper installation and break-in. It is hoped that readers keep and follow these procedures to avoid costly come backs and damaged customer good will. ■



Prior to becoming president of AERA, John Goodman was director of the Advanced Technology Center (ATC) for Micromatic-Extron. The ATC focused on manufacturing honing solutions and studies for OEM engine manufacturers. Testing of traditional and unique honing abrasive systems, coolants, fixtures, tools and software were primary responsibilities of the ATC lab.