



## GKN VALVE TRAIN COMPONENTS

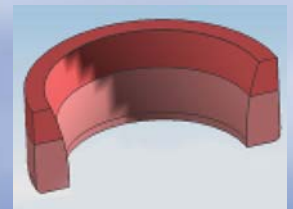
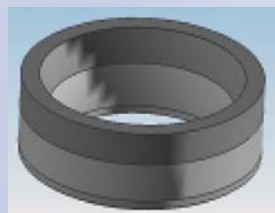
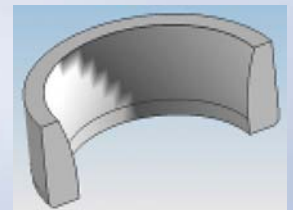
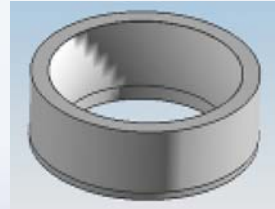
Prod. Group No. 1340, 1360



### Valve Seat Inserts

(Application – 2 wheelers, passenger cars (both gasoline and diesel engine), commercial vehicle engines, Genset engines)

- Valve Seat Inserts, produced by P/M, offer high material utilization that is near net shape with minimum machining and greater dimensional accuracy
- In high volume applications, the as-molded, reproducible inner profile geometries allow for the reduction (or potentially elimination) of subsequent cylinder head machining
- Double layer valve seat inserts offer greater material utilization by using a high alloy material on the wear surface and a lower alloy for non wear critical areas
- Copper infiltration is used to make nearly fully dense valve seat inserts that improve heat transfer properties and machining



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### Valve Guides

- P/M produced valve guides offer high material utilization and dimensional accuracy
- Complex materials are used to offer greater machinability of the inner diameter of the cylinder head; thus reducing overall cost
- Inter connected porosities allows for oil impregnation. This assists the engine by keeping the valves well lubricated
- Application – 2 wheelers, passenger cars (both gasoline and diesel engine), commercial vehicle engines, Genset engines)

