Fig. 1. CYLINDER BARREL AND HEAD
Cylinder
Boring
If boring is done incorrectly, lose power from the combustion of the fuel.
Ideal Bore
Our Original Bore
Custom Jig
Step 1 - Cutting
Step 2 - Honing
Piston
Head
I. Cam
Cam with Cam Followers
Valve Timing through Cam
It is a reciprocating lever that conveys radial movement from the cam lobe into linear movement at the valve to open it.
Valves
Valve Guides

Rationale:

1. Along with the valve spring, it serves to positively locate the valve so that it may make proper contact with the valve seat.

2. Serve also to conduct heat from the combustion process out from the exhaust valve and into the cylinder head where it may be taken up by the cooling system.
Widening the opening
Using temperature differential to press guides into place.
Valve Seats
Valve Seat Width (Intake and Exhaust):
Standard: 1.25 – 1.55 mm (0.049 – 0.061 in)
Service Limit: 2.0 mm (0.08 in)

3- angle High Performance Cut
Valve seat cutting tool
Grinding the Valves
Valves - after
Thank you!