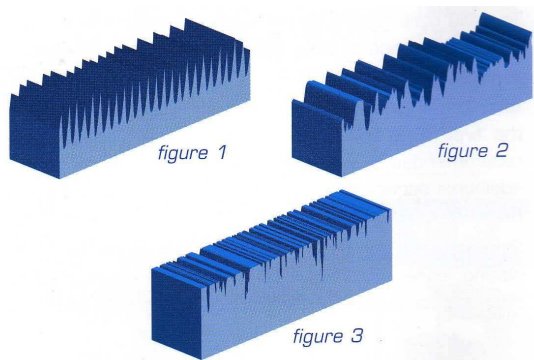


PLATEAU HONING

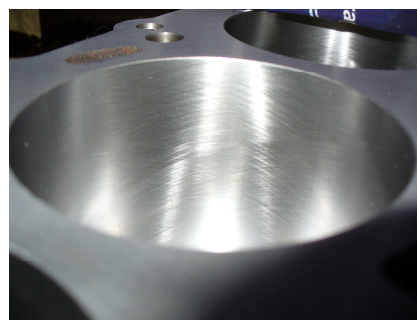
The ideal finish of an engine is made up of a pattern of scratches along the surface of the bore. Under magnification, these scratches make up a series of peaks and valleys. The piston rings run up and down along the peaks and the valleys act as oil reservoirs for lubrication to the cylinder.

Traditional honing methods tend to form sharp or folded peaks, (see figure 1 and 2) which is not ideal. During the “bedding in” process these peaks wear or break off and act as abrasives in the engine oil, promoting premature cylinder wear. The accuracy of the piston ring clearance is altered as the rings no longer ride against the top of the peak. The folded material also has a tendency to collect in the valleys restricting the available space for oil to collect, therefore inhibiting lubrication of the rings.



With plateau honing, a different surface is achieved. The peaks formed during the initial honing are flattened and free from sharp points and folds, eliminating breakage, (see figure 3) creating clean troughs for optimum lubrication.

To keep in line with original manufacturers specifications and ensure a precise finish, Galloway Engines employ plateau honing technology when machining cylinder bores. These tools, which consist of a series of nylon filaments impregnated with silicone carbide, have the ability to sear off as opposed to folding over the peaks of a surface finish.



Plateau honing tools will also remove loose debris from the valleys which results in more efficient cleaning of the surface after honing.

The result is a perfect engine finish with the perfect bore finish.

To ensure the best performance and the maximum life from your engine, your cylinders should be plateau honed. Call Galloway Engines for more information on how we can provide your engine with the highest quality hone for your cylinders, ensuring the perfect bore finish.