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Our Kawasaki fork legs being ground down to remove pits. The multi-stage hard chroming process results in a much deeper chrome layer than original

STORY/PICTURES: Brian Crichton



Measuring the stanchion diameter with a micrometer



The saaten stage takes off deep pits using compound-laden mop



Measuring leg again after it has been in the vat for hours

# HARD CHROMING: New life for tired legs

**T**he hard chrome on a fork leg is there to do a job. It is a bearing surface with a low co-efficient of friction. With use and time the chrome on the fork leg corrodes and pits, reducing efficiency, tearing oil seals and ruining looks too.

Of course you can always replace with new, but Andy Morgan, owner of AM Philpot, argues that rechroming is better, and less expensive. The rechroming is to a considerable depth, relatively speaking.

"We plate and regrind to leave a minimum of ten thou (0.010in) chrome. Original manufacturers chrome from half a thou (0.00050in) to one thou (0.001in) only,

so our coat is quite a lot thicker," says Andy, a motorcyclist since he was 16.

The chroming is an electroplating process so again, preparation is all important. The forks legs are buffed and polished. There are also several rinsing stages.

The chrome flakes go into a vat of chromic acid (H<sub>2</sub>CrO<sub>4</sub> hexavalent chromium). A direct electric current applied at a constant temperature ensures a uniform coat. AM Philpot plate at two amps per square inch at five to six volts at 52-55deg C. Hard chroming a fork leg usually takes all night and most of the next day.

Where deeper pits have had to be polished out (saaten) this area receives

extra local chroming to bring it back to size. The rest of the newly-chromed leg is masked with wax. At the trim stage the chromer takes off sharp edges using a hand held grinder. You can't turn the leg on a lathe because the chrome would chip.

For a pair of fork legs such as those on our Kawasaki triple, AM Philpot charge £135 inc VAT and delivery. They also tackle upside-down forks (£195) and offer a complete 'break' service (strip and rebuild) at £220 (standard) and £275 (upside-down forks). There's a 12 month guarantee.

● AM Philpot (Hard Chrome), Unit D Cradock Road Ind Est, Luton, Beds LU4 0JF. 01582 871234, [www.amphardchrome.co.uk](http://www.amphardchrome.co.uk).