

# Gr



"Yah, mein friend ooo' got 1340cc big-bore, ooo' got big oil radiator, ooo' haf not got six-pots..." and he's got stock, cock paintwork...



# Üntmeister

**A Suzuki 1200 Bandit making 173bhp? Is this ace tuner Herbert Kainzinger's idea of a joke? No, it can't be – he's German**

**W**hen someone takes a perfectly ordinary Suzuki 1200 Bandit and tunes it to 173bhp you have to admit that, apart from being slightly mad, they've a sense of humour. Warped perhaps, even verging on hysterical, but a sense of humour no less.

Germans aren't famous for having a larf, but when top tuner Herbert Kainzinger (builder of the 200bhp V-Max, see last month) decided to take his mate's Bandit to the limit, he must've had a smile on his face. A stock 114bhp Bandit is a bit of a handful, a mildly tweaked one (130-odd bhp from a Dynojet kit and a pipe) is a monster, so God knows what 173bhp must feel like...

Well, God and me. As Herbert wheels the Suzuki down from the back of his trailer, it looks remarkably stock. The only visible signs of the insanity lurking within are a massive extra oil cooler bolted behind the front wheel and some rather large braided hoses running about the place. In fact it looks a bit boring. A dull bronze/brown paint job doesn't help one jot.

Herbert fires the bugger up, but even burbling happily through its Akrapovic pipe on tickover the Bandit is anything but intimidating. So let's ride the thing then...

Wow. Obviously. Wheelies, obviously. Instant, utter, stump-pulling power from zero revs – taken as read. Arms torn from sockets, of course, and then there's eyeballs rammed so far back into my skull they burst out the back of my Arai and dangle on stalks over each shoulder. Naturally.

You can tell when you ride a fit motor. For a start it's as crisp as fresh bag of Walker's, with perfect fuelling giving immediate throttle response; you open the taps a fraction, it goes. Simple as that, as Trev is so fond of saying. Only a few seconds have passed, the Bandit is tonking along at over 150mph while you hang on, flapping in the breeze like a tea towel on the washing line in a force ten.

Handling isn't compromised by all this power. Bandits are pretty good anyway – the upright riding position gives a motocross feel, so you can chuck the bike around with your weight well over the front end, levering the bars into going where you want to go.

Mildly exhausted by a few minutes' wrestling, I return to the waiting Herbert to talk about the machine.

So Herbert, my friend, why did you build this beast of a bike?

*The Bandit we are building for one of our good customers last year. He's a big guy. He was two times World Champion in... you call it! Hammer. Yah, hammer throwing. He's a big guy – you means nearly two metres high (6.5ft) and 135kgs (21.25st) – a big baby so he does need a powerful engine.*

*He came to me and asked me: 'I need a bike. Look at me. I'm heavy, I'm big and I need a bike specially modified for me. You think I should*



order? We had a discussion about it and then we said, 'OK, take a Bandit'. So we ordered a Bandit for him as a totally new bike. Then we started the modifications, and worked on the bike for four months in the last wintertime.'

What's the spec of the bike?

'OK. We strengthened and balanced the crank, then fitted 85mm forged Cosworth pistons which means a displacement of 1,340cc. 86mm is possible, but it makes no sense because the walls are too thin and the liners turn oval - then you have big oil consumption.

Rods are standard, but Magnaflexed, balanced and matched - not only the weight of the rods must be the same, but the weight of the big end and the small end too.

We also have beryllium copper valve seats. For an engine making big power this is standard not because it sounds good for sure, but the important thing is for realising really good power you need to transfer the heat away from the valves. Such a short time of contact between the valves and the seats gives you a problem. So you need a material to transfer the heat as soon as possible. For this beryllium copper.

For carbs, we have four 41mm Keihin



The simplest way of showing why flatslides are called flatslides

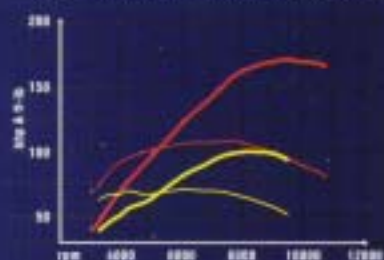
flatslides with two accelerator pumps - you need two because with this big displacement if you open the throttle too hard you fall over the firing.'

That's a comprehensive list. You must take a lot of time with your engines...

'One of the most important things for me is modifying the shape of the cylinder head. For me it's the polishing of the inlet and exhaust tracts. This is OK, we do it because the guys like to see polished areas, but the biggest job is modifying the design of the valves, going from the stem to the diameter, and modifying the chambers where the gases are burning. This is the point where you're making power, and not in polishing inlet tracts. ▶

#### Power & Torque

- Tuned Bandit 171.1bhp @ 9500rpm
- Tuned Bandit 108.0ft-lb @ 7500rpm
- Stock Bandit 100.3bhp @ 8250rpm
- Stock Bandit 70.9ft-lb @ 6250rpm



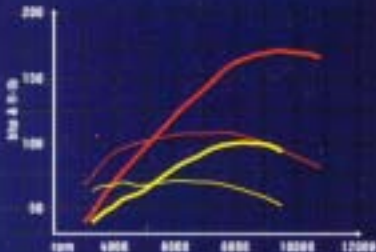
Danner and blitzen in the form of two red lines. Note how the big-bore's torque curve tails off at the same point the stocker's power curve ends



**'It's always lifting - wheelies, wheelies, wheelies...'**

## POWER & TORQUE

- Tuned Bandit 171.1bhp @ 9500rpm
- Tuned Bandit 108.0ft-lb @ 7500rpm
- Stock Bandit 100.3bhp @ 8250rpm
- Stock Bandit 1200 70.9ft-lb @ 6250rpm



Dinner und blitzen in the form of two red lines. Note how the big-bore's torque curve tails off at the same point the stocker's power curve ends