

Latest high-pressure hydraulic fixtures

Forms & Gears, Asia's leading fixture builder, has launched a 2 m x 1 m high-pressure hydraulic horizontal machining centre fixture to machine 16 and 12 cylinder blocks on a 1,200-pallet machine. The high-

Hall No 1B
Stall No B103

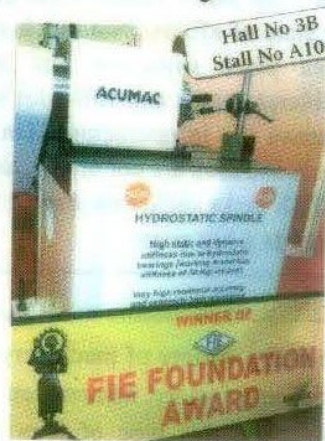


holding force of high-pressure hydraulic clamps and the vibration dampening by the use of high-pressure work-supports enable high parameters to be used resulting in lower cycle times. Forms & Gears fixtures are available with features like wireless pressure drop sensing, poka-yoke, missed operation checking and averaging for first setup components by means of sequenced cylinders, air seat sensing, locating pin-breakage sensing, dual pressure for roughing and finishing operations, etc.

- *Forms & Gears*

Acumac launches hydrostatic spindle

Acumac Machine Tools has introduced hydrostatic spindle that runs on hydrostatic bearings designed to get high-static and dynamic stiffness and have high life. The hydrostatic bearings are journal bearings used to support machine tool spindles for any application. These bearings are used to support radial and axial loads acting on the spindle from any cutting process. Hydraulic oil is supplied to the journals having four lobes at high pressure and through a series of restrictors so that the spindle is lifted off its contact with the bearing



before the spindle starts running. Hence, the metal contact that is present in the hydrodynamic

bearing is completely eliminated. This results in total absence of metal-to-metal contact, both in static and dynamic conditions. Hence, these spindles have high life. Since the spindle is supported under high oil pressure, it gives high stiffness even during running.

The spindle built by Acumac is of cartridge type and has a stiffness of 30 kg/micron.

According to the company, no other small-scale machine tool unit has developed such a spindle in the country.

- *Acumac Machine Tools Pvt Ltd*