COX TEE-DEE .020

Country of Origin: USA.

Type: Glowplug ignition shaft rotary-valve with plain bearing. Fuel tank included.

Bore: 0.300in (7.62mm).

Stroke: 0.282in (7.16mm).

Swept Volume: 0.01993cu in (0.3266cc).

Weight: 21 grammes-0.75 oz (less tank); 24 grammes-0.85 oz (with tank).

This engine is essentially the same, in general design and construction, as the TD .010 just described, but is made to a larger scale, exactly doubling its capacity from .010 to .020cu in or just under 0.33cc. The .020 is, nevertheless, still very small and light: it is a mere 1.25in high from its centre-line to the top of its glow-head terminal and can be installed, complete with fuel tank and prop, for a weight of only one ounce.

At the time when the TD .020 was first seen on the market in 1961-62, the Cox company were in the process of introducing two complete new ranges of shaft rotary-valve engines in addition to their existing reed-valve motors. Most of these were tested and reported upon in Model Aircraft, but the TD .020 was not one of them so we are obliged to cheat a little here and refer, instead to our test report published in the USA, at the time, in Model Airplane News.

This, as the graph shows, credited the TD .020 with a peak power output of .055 b.h.p. at 23,000 r.p.m. on 30 percent nitromethane fuel. As with the .010, suitable commercial props are rather scarce but, on the three-bladed 3-1/8 x 21/2in. Cox prop supplied with our test motor, a speed of 23,200 r.p.m. was recorded which was slightly better than the maker’s own claim of 22,750 r.p.m.

From Aeromodeller October 1979