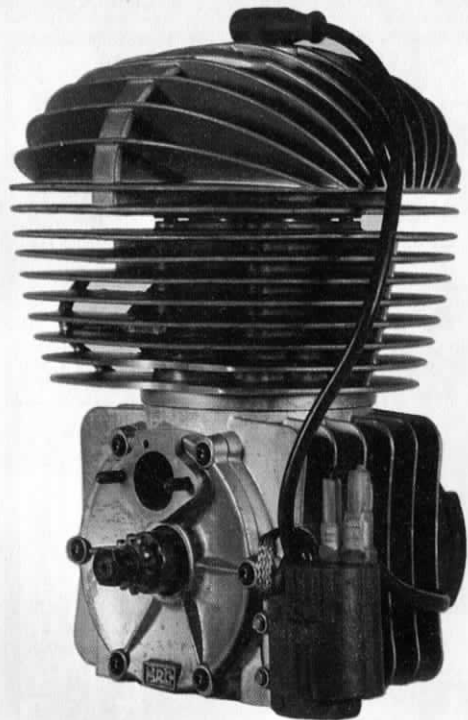


# LOOK WHAT FATHER CHRISTMAS HAS BROUGHT!



**Atomik  
AKL95 reed  
valve from  
MRC Merlin**

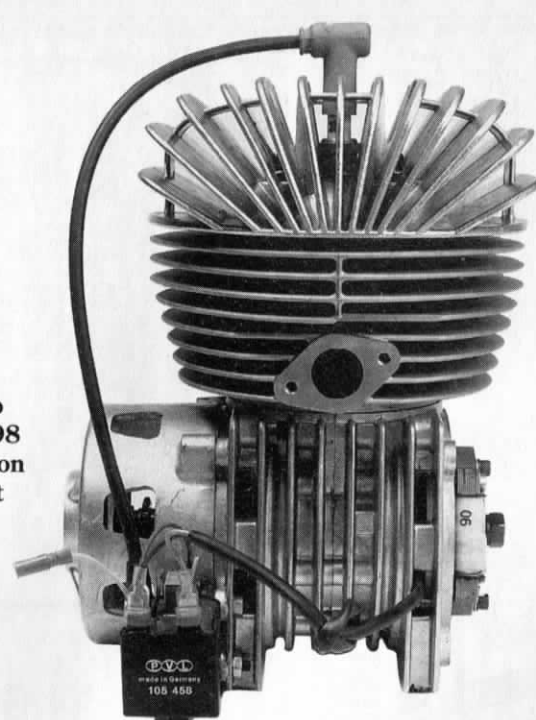
News has started to filter in of the latest generation of 100cc motors to be released onto the international arena. Although details are sketchy at this time, we can at least reveal the external appearance and basic details of some of them.

**BOMBARDIER-ROTAX** - Five models have been homologated by the marque to beat, and certainly a couple of them are of radical design. At least one of the reed models has both the sprocket and the ignition system on the right hand side, whilst the DS-D-L rotary model has the sprocket on the left and two carbs on the right! The piston port PP-95 is alone in having a bore of 50.0 and a stroke of 50.5, the other models all have a 49.6 x 51.5 configuration.

**DARTFORD KARTING** - The Solo SR55 reed valve and the Solo PP98 piston port are Dartford Karting's offerings and the latter is to be offered with an optional pull start at no extra cost to those who want this feature.

**DINO** - Denmark's finest have homologated a model of each type of engine, the 505 Reed, the 505 PP and the 505 TT rotary, along with the 305 float and 315 diaphragm carburetors.

**ITAL SISTEM** - Six models have been homologated by this Italian concern, although they appear to be holding back on showing off one of their reed valve motors, the ML22. The five that have been released split into one of each type under the Ital Sistem name (MV21 rotary, ML21 reed, MA21 piston port), and a further rotary (SV11) and reed (SL11) which are to be marketed under the Saetta banner.



**Solo  
PP98  
piston  
port**



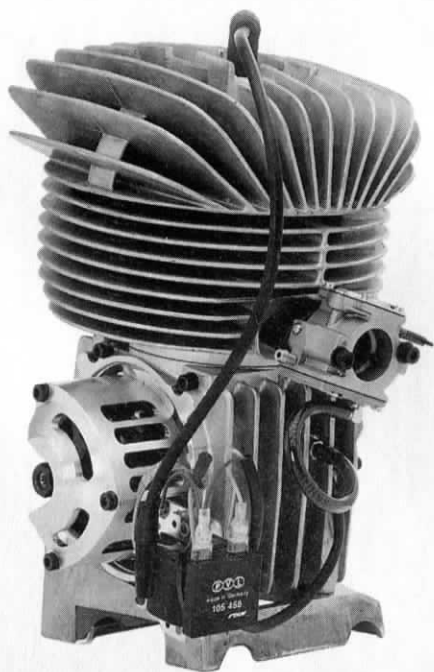
**Rotax VM-95  
XP reed  
valve with  
the engine  
sprocket and  
ignition on  
the right**



**Saetta SL11  
reed valve  
from Ital  
Sistem**



**Ital Sistem  
MV21  
rotary**



**TKM BT95  
piston port**

Externally they can easily be separated by the shape of the cylinder head. An ignition system has also been homologated although none of the 600 motors produced for the motor inspection had it fitted. This will presumably change in the future as only the piston port motors have to retain the ignition that was fitted when homologated.

**MRC MERLIN** - Two Atomik models have been homologated, the AKL95 reed valve and the AKV95 rotary which has a 108mm diameter rotary valve.

**TAL-KO** - The TKM BT95 is Tal-Ko's only new application and is their first venture into the CIK Junior class, although of course they have plenty of experience with piston port type motors. The bore is 50.0 and the stroke 50.5, and the BT95 comes with PVL ignition and a Horstman clutch.

**VORTEX** - This newcomer to engine manufacture has released details of three models, a reed, a rotary and a piston port, but it maybe that there is another rotary that they are keeping quiet about. All three have a bore of 50.0mm and a stroke of 50.5mm with a 100mm conrod which weighs just 103 grammes. The piston port VA95 has a rubber fixing flange for the carburettor said to reduce vibration as well as the heat exchange between the motor and the carb. A Horstman clutch is specified and this has a specially designed alloy cover for cooling. Particular emphasis was placed on the design of the crankcase of the reed valve model and the thickness of the VL95's cases is identical throughout ensuring uniform expansion and good heat elimination. From their dyno and track tests of the prototype, Vortex claim that the crankcase heat values are lower than those of the competition. The two case halves on all three types of engines couple together using a slot rather than the classic fitting pin system to increase the torsional tightness and the strength. Although traditional in appearance, Vortex say that the rotary valve VR95 has undergone the most development of the three versions. A 105mm diameter rotary valve is utilised rather than following the trend to increase the size of this component. All models use PVL ignition.

**Vortex VA95  
piston port**



**Dino  
505 TT  
rotary**

