

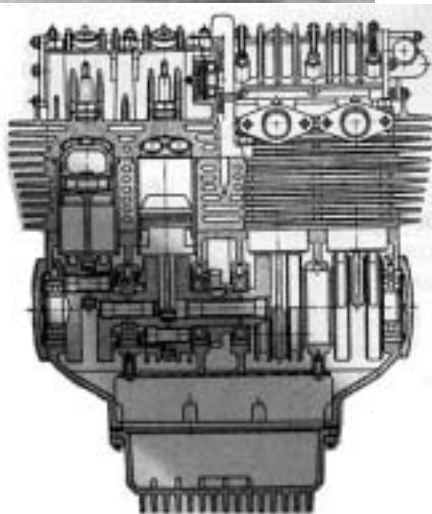
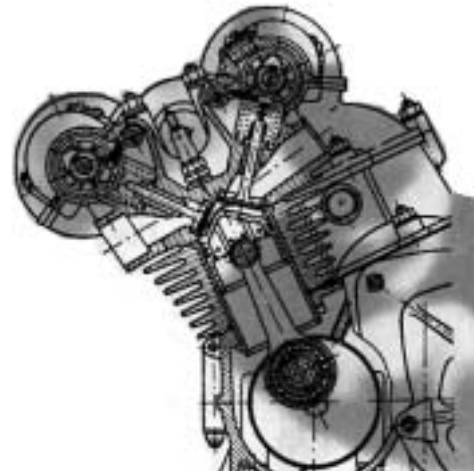
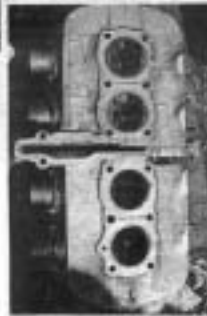
Vostok - Russian Purpose Designed Racing Motorcycles

The pictures below show various models of the 4 cylinder DOHC Russian Vostok racing motorcycles that were developed during the 1950s & 1960s. Vostok also produced twin cylinder racing bikes and two strokes. The four cylinder engines were loosely based on the MV Augusta of around that time. They tended to be heavy and still relied on old technology such as points and mechanical adv/retard for the ignition system. There is a lot more information on these interesting racing machines, but that is a whole new subject in itself!

Thanks goes to Motor Cycle News UK for allowing use of these photographs.



The Vostok 5-555 looked like a classic 1960s four — with duplex cradle frame and box section swingarm. And with development it might have been a threat to Ago and the MV Augusta.



Model. Yr. Cyls. BxS. cc. bhp&rpm. ? Kg. km/hr

ТЕХНИЧЕСКИЕ ХАРАКТЕРИСТИКИ МОТОЦИКЛОВ СЕРИИ "С"

| Модель | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|--------|------|---|---------|-----|------------|------|------|-----|
| C-154 | 1954 | 1 | 54/54 | 123 | 12.5/н.д. | н.д. | 80 | 140 |
| C-254 | 1954 | 2 | 54/54 | 246 | 23/8200 | 5 | 126 | 150 |
| C-354 | 1954 | 2 | 60/61 | 348 | 35/8200 | 4 | 144 | 165 |
| C-555 | 1955 | 2 | 72/61 | 498 | 47/7400 | 4 | 150 | 190 |
| C-157 | 1957 | 1 | 58.5/46 | 124 | 14.5/10000 | 4 | н.д. | 140 |
| C-257 | 1958 | 2 | 54/54 | 246 | 30/9900 | 5 | 125 | 165 |
| C-358 | 1958 | 2 | 60/61 | 348 | 40/9850 | 6 | 145 | 175 |
| C-159 | 1959 | 1 | 55/52 | 124 | 21.6/12800 | 6 | 80 | 170 |
| C-259 | 1959 | 2 | 55/52 | 248 | 38/11500 | 6 | 125 | 190 |
| C-360 | 1960 | 2 | 62/57.6 | 349 | 50.5/10100 | 6 | 130 | 210 |
| C-364 | 1964 | 4 | 49/46 | 349 | 59/13000 | 6 | 130 | 230 |
| C-565 | 1966 | 4 | 55/52 | 494 | 80/12400 | 6 | 155 | 250 |

1 - год создания; 2 - число цилиндров; 3 - диаметр цилиндра ход поршня, мм; 4 - рабочий объем, куб. см; 5 - макс. мощность, л.с./об/мин; 6 - число передач; 7 - масса мотоцикла, кг; 8 - макс. скорость, км/ч.

Russian Rotary Engined Prototypes.

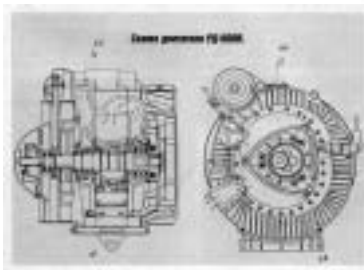
The Russians also developed Wankel (named after the inventor) rotary engine prototype motorcycles. They were developed in the Vneemotoprom motorcycle research and development centre in Serpukhov to the south of Moscow.

We will not cover the finer details of the Wankel engine here since there are many publications with such details, but briefly; the Wankel engine principal works with a multi lobed rotor prescribing a modified eccentric path around the toothed output shaft within a sealed chamber.

Other Wankel engined motorcycles: Van Veen of the Netherlands, DKW/Hercules/Sach of Germany, Suzuki of Japan and of course Norton of England. Cars included NSU and Mazda The seals on the tips of the rotors are difficult to make effective and durable, poor seals results in loss of compression and excessive oil consumption. Special, exotic and expensive seal materials and oils are required.

These Russian machines were not put into production probably due to engine sealing problems and lack of access to the required technology. It would have been an incongruous machine for Russian roads, the Wankel engines tend to thrive on high rpm and are perhaps more suited to a high performance machine.

Various photographs are shown below of the installations. One seems to be in the Dnieper based rolling chassis, one smaller and one much larger. Another version was made with a cross frame crankshaft more like the Norton installation - to see more images view www.monito.com/wankel/motorcycles.html



**Модернизи-
рованный мото-
цикл М-73
с двигателем
РД-515.**



All photos from MOTO, except bottom right from Jramba