**18** **Model Sheet**

1:2 E. Galloway 1834 | 2:3 Wankel 1954 | 3:4 Wankel | 4:5 Wankel | 5:6 Wankel | etc.

Types of internal-axis PLM (Sli) Group PLM IV/5

**19** **Model Sheet**

Oldham Franchot 1861 | (Woodcock)

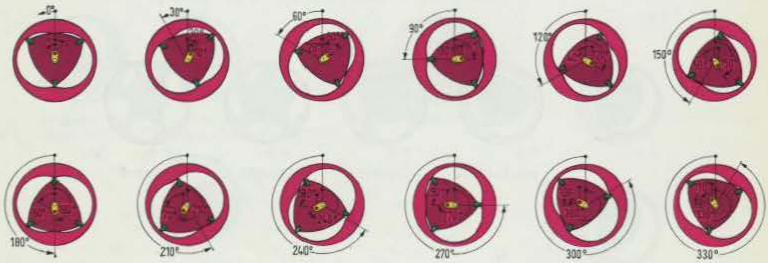
J. T. Beale 1877 | Zoller about 1925

Powerplus about 1925

Wankel 1945

Types of internal-axis PLM (S+R) Group PLM VI/5

**20** **Phasing Diagram**




Diagrammatic arrangement of relative rotor positions of 2:3 machine, outer rotor has additional PLM rotation

Internal-axis PLM (Sli)
IV Slip-engagement 2 : 3

Internal-axis PLM (Sle)
III Cam-engagement 3 : 2

Dillenberg 1961
Internal-axis PROM
IX Arctuate-engagement

Internal-axis PLM (Sle)
III Cam-engagement 2 : 1

Internal-axis PLM (Sle)
III Cam-engagement 2 : 1

ROPIMA machines with additional motion which is not required



Ramelli 1588

Wittig about 1900

Emery 1869

Davies 1867

Jones & Shirreff 1856

Types of internal-axis PROM machines Group PROM VI/5



Trotter 1805

Cochrane 1830

Fletcher 1843

Types of internal-axis SROM machines Group SROM IX/3



Tänzler 1937

Tänzler 1937

Tänzler

Types of external-axis PROM machines Group PROM X/11

**25** **Model Sheet**

Types of internal-axis PROM machines Group PROM X/5

**26** **Model Sheet**


Types of internal-axis PROM machines Group PROM XI/5

**27** **Sheet of Comparisons**


PLM and PROM machines with rolling-piston rotor

## Special Terms and Expressions Used in Conjunction with Rotary Piston Machines

| | |
|---|---|
| HKM = Hubkolbenmaschine | REM = reciprocating-piston machine |
| RKM = Rotationskolbenmaschine | ROPIMA = Rotary piston machine |
| DKM = D = Drehkolbenmaschine | SIM = Single rotation machine |
| KKM = K = Kreiskolbenmaschine | PLM = planetary-rotation machine |
| UKM = Umlaufkolbenmaschine | ROM = Rotating-piston machine |
| DU = Drehkolbenartige Umlaufkolben-Maschine | SROM = Rotating-piston machine similar to single-rotation machine |
| KU = Kreiskolbenartige Umlaufkolben-Maschine | PROM = Rotating-piston machine similar to planetary-rotation machine |
| (K) = Kammeingriff | (C) = Cam engagement (or meshing) |
| (S) = Schlupfeingriff | (Sl) = slip engagement (or meshing) |
| (KR) = Kreiseingriff | (A) = arctuate engagement (in circular arc) |
| $\overline{(G)}$ = Gegeneingriff | (Co) = counter engagement |
| $\overline{(H)}$ = Hubeingriff | $\overline{(R)}$ = reciprocating engagement |
| * Parallelachsige RKM | ROPIMA machines with parallel axes |
| * Parallel-außenachsige RKM | ROPIMA machines with external axes |
| * Parallel-innenachsige RKM | ROPIMA machines with internal axes |
| * Mittelachsige Maschinen | Central axis machines |
| * Winkelachsige Maschinen | Machines with axes inclined towards each other |
| * Winkel-außenachsige Maschinen | Machines with external axes inclined |
| * Winkel-innenachsige Maschinen | Machines with internal axes inclined |
| * Geschränktachsige RKM | ROPIMA intersecting or crossed axis machine |
| * Geschränkt-außenachsige RKM | ROPIMA intersecting external axis machine |
| * Geschränkt-innenachsige RKM | ROPIMA intersecting internal axis machine |
| Bauarten | types |
| Bauformen | models, versions |
| Schwerpunktverhalten | behaviour of the centre of gravity |
| Kolbenlaufer KL | RP = runner, rotor, rotating piston |
| Schwingbaum | rocking beam or swinging beam |
| Wagnerscher Hammer | electric bell actuating device said to have been invented by: John Maraud (E) J. P. Wagner (G) Neff (F) Page (USA) |
| Absperrteil = AL | SC = Sealing or containing components, not sealing element |
| Einteilungs- oder Systemblatt | classification chart |
| Umlaufkolben-Sternflugmotor | radial aircraft engine, Gnôme le Rhône |
| Kurvenerzeugungspunkte | curve generating points |
| Verzahnungskörper | (tooth) generating part or body |
| Paarkolben | double, double acting or pair of pistons |
| Paarflügelkolben | single vane right through rotor |
| Paarschieber | sliding vane valve |
| Eingriffskörper | catch, pawl, engating or meshing |
| Arenakurven | oval track shaped like circus arena |
| Schädlicher Raum | Volume contained at TDC |
| Kardenkreisgesetz | Principle of HYPOCYCLOID ($R = 2r$) |
| Kardankreisgetriebe | Epicyclic or planetary gearbox |
| Querzylindrisch | Cylinder transverse or parallel to axis of rotation |
| Ovalzahnräder | Oval gears (used in counting machines) |