

Auto-Motor - Autonomous working Suction-Turbine

Objectives

Here is described concept of a motor producing usable forces without corresponding input of energy - of common sense. Naturally no energy can be 'produced', nevertheless given energies are usable for producing certain profit. Energy used here is force of normal molecular motion within fluids.

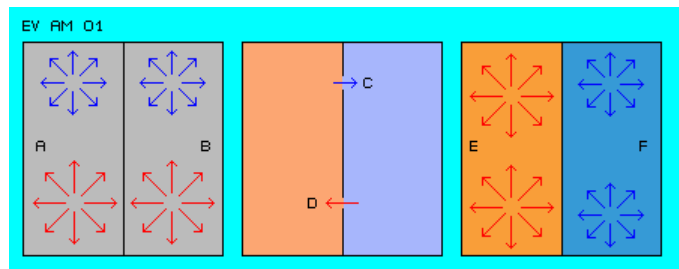
At first some known theoretic considerations and knowledge are discussed. At second part are mentioned some machines of known inventors, which did work at least by parts. Afterward, essential effect is pointed out. Based at these principles are to design and realize effective machines in great variety. Some variations here are presented.

'Physical phenomena' used here is well known. Known machines of similar design existed with 'phenomenal' efficiency. If now machines are build exactly corresponding to decisive effect, naturally self-running motor is possible.

Maxwell's Demon ...

Forces can only be used if some 'potential' exists in shape of any difference. Opposing is general tendency of increasing uniformity, e.g. by automatic levelling of heat. However even within fluid of same heat, no absolute 'entropy' exists as molecules are moving by different speeds. In order to use these differences, Maxwell created his famous demon:

At picture EV AM 01 at A and B are shown two tanks with fluid of same heat. All molecules within move chaotic into any directions between collisions mutually or with tank sides. There are molecules moving relative fast and their potential motion's directions here are represented by red arrows. There are slower molecules, moving less far within same time units, here represented by shorter blue arrows.



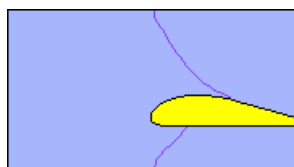
Maxwell's demon now was told to differ molecules of different speeds. If for example slow molecule runs from left towards separating wall, demon has to open a door for short moment (like marked at C). Opposite, fast molecules should be allowed to leave right tank (like marked at D).

Lastly would result high temperature resp. pressure within left tank (E) and lower temperature resp. pressure within right tank (F), so usable potential would come up. If handling of separation-act could be done with relative small efforts, usage of free energy thus would be possible.

This demon is celebrated in general, probably because there is no chance for realization and thus once again is approved impossibility of perpetuum mobile, even by best theoretical efforts. This example also demonstrates how nature sciences are barricaded within 'closed systems' - even that 'demon' already is really working, however not by complicated measurement of speeds and difficult handling of molecular doors.

... working really all times ...

Energy all times is represented lastly by any shape of motion. Each motion represents mechanical force with certain vector. Molecules normally move into any directions. Instead of differing by speeds it's much easier to differ molecules by vectors of its actual movements. Within each 'suction-area' this is done all times and totally automatic. Classic example for this process is lift produced by wings.



There are dozens of theories to 'phenomenon' of lift, most based on abstract formalism. My explanation however describes real cause as it's based only at inevitable behaviour of molecular motion (also multiply and detailed described at my Fluid-Technology or e.g. at article 'Why Sails do not pull' or e.g. at chapter 'suction and/or Pressure', there e.g. by this animation).

At picture EV AM 02 schematic is shown cross sectional view of wing (grey) moving from right to left side. If one would think by 'theoretic tanks' (like upside) three areas of different pressures would result. Downside of wing, air is not involved thus normal atmospheric pressure (C) exists. Wing is pressed ahead through air, thus ahead of nose results area of higher pressure (A) by dammed up air. Practically like by bow-wave, molecules are pressed ahead and upward (and as reaction would result corresponding forces pressing wing downwards). Back-upside of wing, space becomes wider thus resulting area of relative low pressure (B).

'Phenomenal demonic' suction areas however are, as their effects are completely contrary to previous 'bow-wave-effect'. Suction works as 'sorting-machine' as it elects (from motions potentially showing into any direction) these molecules with actual certain vector. This occurs purely passive, as only space is presented for certain motion's direction, which these molecules prevailingly fly.

Fact is, back-upside of wing exists area of relative low density. Into this area molecules fall, if they are occasionally pushed into that direction by total normal molecular motions. These molecules can fly relative far until next collision. If they are pushed back, that collision did take place relative late. This means for following molecules, again occasionally pushed into that direction, their collision partners 'got lost' or at least appear rather late.

At a whole results molecular flow into relative likely directions alongside upper surface of wing. Well known fact results in shape of reduced 'static' pressure (from upside towards wing) corresponding to stronger 'dynamic' pressure of flow (here showing to right side).

This missing or late appearance of collision partners affects from each molecule to each neighbour further ahead. So 'suction-effect' transmits from backside of wing's upper surface to nose of wing. Suction affects also 'round the corner', so even air from downside-ahead of nose flies upward - and not at all a bow-wave with huge resistance comes up.

At this picture at D and E 'sorter-function' of wing schematic is shown. Downside of wing (E) motion of air is merely unchanged.

Fast molecules (red) like slow molecules (blue) still go on moving into all potential directions. Normal atmospheric pressure thus affects upwards onto downside surface of wing.

In front of wing and upside of wing however, molecules prevailingly move into direction of next area of relative vacuum, i.e. with dominating direction of motions. This flow prevailingly runs parallel to upper side of wing, so at this surface weights only relative small pressure. Difference of pressures results lifting force.

At this application thus molecules are not sorted laboriously by its differing speeds, but molecules move into separated ways by complete automatism: downside by its normal chaotic motions, upside within ordered flow. As wing is moving ahead, also suction area continuously wanders ahead. Resulting of is steady, but only weak 'molecular wind' towards backside, producing previous difference of pressures on and on.

At this system, force (F) is only demanded for overcoming usual air-resistance of plane. Force (G) for compensation of gravity however is totally for free. This system is an 'anti-gravity-machine' insofar as lastly gravity by itself produces atmospheric air pressure. At downside surface of wing this pressure affects as lifting forces, while upper surface is protected versus by previous molecular wind, thus weight of atmospheric pressure there is reduced essentially.

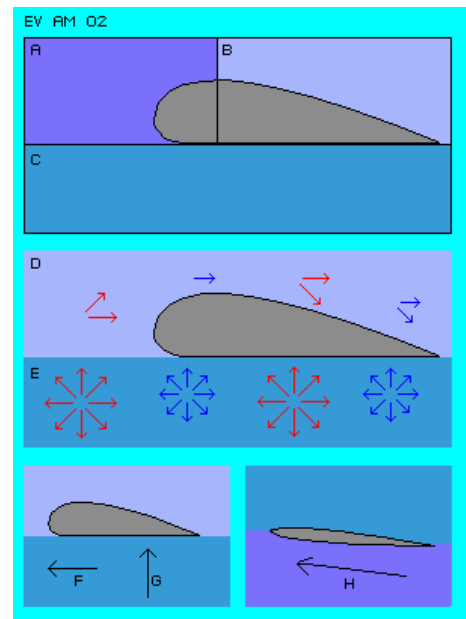
That atmospheric lifting at wings exclusively is based on molecular movements. If plane flies faster than sound speed, previous wind has no chance to fly back alongside wing - and lifting effect disappears. Supersonic aircraft thus has to build up area of higher pressure (H) by itself, practically has to push itself up that slope versus gravity. So much more power is demanded, not only for overcoming air-resistance but also for compensation of gravity force.

... also by turning around

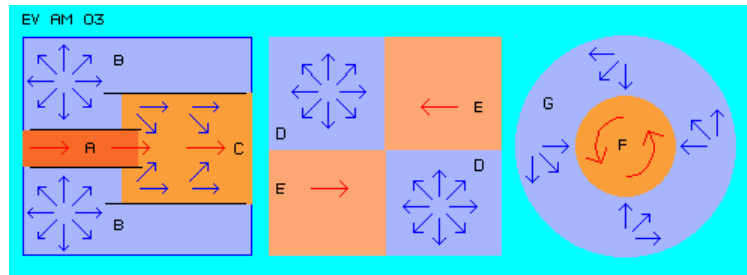
Lift at wings is an example for 'open systems', same time an example for producing certain profit (lifting plane's weight) as side-effect of Free Energy (of normal molecular movements) by skilful organisation (for automatic ordering of vectors of given motions).

A 'closed system' of similar effect for example is water-jet-pump, like schematic shown at picture EV AM 03. Within a pipe exists fast flow (A, red arrows), which ends within pipe of wider diameter. Aside of, fluid shows normal molecular motions (B, blue arrows) with movements into all potential directions.

Fast jet draws fluid with itself, so wide flow (C) exists system. At liquids exists some cohesion, so fast flow could really drag surrounding liquid into its direction. At gases however no cohesion exists, i.e. one molecule can not 'pull' another ahead.



Decisive effect again is (at this 'air-jet-pump'), molecules occasionally pushed into direction of fast flow will 'disappear' insofar as they are no longer available for its previous collision partners. Also that missing (resp. at least delay of returning) affects like 'suction' far back. All particles of surrounding gas wander towards fast flow, increasingly faster.



This effect not only works within closed systems, these movement's pattern also come up within free areas. Within local area of relative calm air resp. totally normal molecular motions (D), two gentle breeze (E) meet by little bit shifted directions, e.g. occasionally started by redirections at houses. Whirlwind can result with motion's intensity obviously much greater than existing surrounding winds, i.e. that local tornado can never ever result of that normal wind-energy.

Both flows roll inwards to circled tracks (F) building typical small whirlwind. There are no heat-differences demanded for self-acceleration of such movement-systems, but again normal atmospheric pressure causes this energy concentration. Like at previous pump, here molecules disappear into relative fast flow of centre, if occasionally pushed into that direction. Again comes up that wandering-process from surrounding air into centre with ordered flow resp. dominating vectors (G).

Self-Acceleration

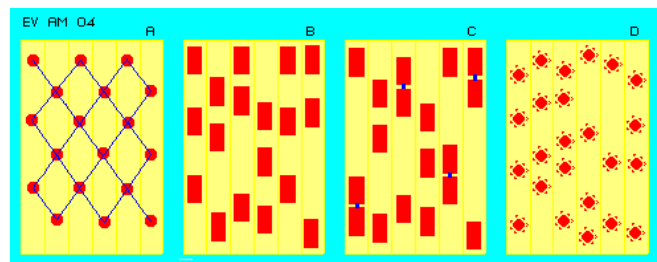
Whirl systems like these are possible within liquids and gases. All molecules are steady moving. Picture EV AM 04 however will point out special properties of liquid and gaseous physical state.

At A schematic are shown atoms or molecules (red spots) of solid body. These parts are steady trembling any kind, however are bound within any 'grids' (marked by blue lines). At B are shown separated solid bodies. These are independent mutually, i.e. one part can move without bothering an other part - until not in direct connection.

If one however imagines, red spots at B represent cars at six-lane highway, motions might come up similar to fluids. As soon as any gap comes up within that 'flow' (resp. stop-and-go-traffic), nervous drivers will change track. Each 'particle' will come ahead as far and fast as possible (at least at common traffic in Germany).

At picture at C some lorries with trailers are marked, which can not change track easy and close gaps immediately. This (coarse) example corresponds to behaviour of liquids, where particles build clusters and thus their possibilities for movements are limited.

Totally other kind behave particles of gases, like schematic shown at D. All parts are mutually independent and can move into all directions (marked by arrows around circled spots). All particles are steady moving, actually into certain direction until collision with next particle.



Ways of movement between collisions are of different lengths. Within area actually relative void, parts can fall relative long distances. Also parts, which actually are hit into likely direction, thus comes into relative void space. Each gap thus immediately allows relative ordered flow - naturally only until this area is filled up.

Such an area of relative vacuum e.g. exists back-upside of previous wing. Naturally this voidness is filled up immediately. Continuous flow can come up only if wing escapes into direction ahead, i.e. new areas of relative vacuum are produced on and on.

This 'disappearance' of parts (resp. its delayed coming-back) also occurs into neighbouring faster flows, like mentioned at previous tornado-example. Also this flowing-inside whirl from surrounding area can occur steady - however only if masses of whirl-centre can escape into axial direction (at tornados up and away). Whole pattern of motions will end, if upside of whirl comes up any 'cover'.

Usable Motion's Energy

Until that moment however, 'phenomenal' self-acceleration of such movement's systems is working. Mostly heat is assumed for being reason of, which however is of minor importance (like example of previous local spontaneous whirlwinds approve).

This permanent additional flow affects accelerating because molecules fall into central circling motion with its molecular speed (some 450 m/s). This fast speed contributes to actual turning speed of system. The faster central whirl is turning, the less collisions into contrary direction occur, i.e. the more uniform that flow becomes. Accelerating effect thus can work up to sound speed.

One also could say, static pressure of surrounding areas affect accelerating forces onto central whirl. This is affected prevailingly by local density of air - and naturally some more heat will contribute with some faster speed of molecules. Bernoulli did define result of that effect by statement, 'neighbouring flows all times are bended towards faster flow'. Even by formulas this effect is to calculate. Anyway, all times real cause of this self-acceleration-effect is based on quit normal behaviour of quit normal molecular movements.

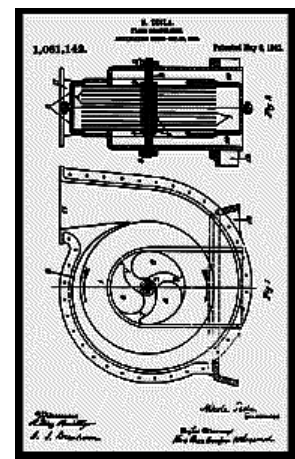
Thus decisive fact of systems like these is, vectors of given movements are ordered resp. only conditions for self-ordering function are to install. This can be done by continuously building up new suction areas or by initiating fast flow, preferably at circled resp. spiral tracks. That initiating speed is increased by inflow of parts with their molecular speed. Efforts for installing these initiating conditions are much smaller than automatic coming up concentration of motion energy. These mechanic forces of self-ordering flows (preferably of turning movements) are usable as mechanical (turning) momentum.

After these theoretic considerations now at following part some relevant practical experiences of known inventors and explorers shall be discussed.

Tesla-Turbine

In common literature Tesla is rarely mentioned, even he developed basics of our AC-Systems inclusive all constructional elements. In scene of alternative physics Tesla is celebrated. His inventions and experiments and demonstrations of diverse subjects were extraordinary, nevertheless not all got really relevant.

Tesla-Turbine was and is spectacular because working without blades but using only plane discs as rotor. Principle design is to use as turbine and also as pump, like this drawing of his patent application shows. At this pump, fluid enters nearby axis and is centrifuged by friction at turning discs, so fluid exits system tangentially.



At turbine, fluid from outside enters tangentially between discs by high pressure, flows inside at spiral tracks until exit near axis, thus drawing discs into turning motion by friction.

These machines are very effective however only at high revolutions. Corresponding strong are centrifugal forces affecting material of discs extremely. So these types of machines practically are not used.

At this machines can not come up self-acceleration, because space between discs is not wide enough. Concerning actual project however it's important, fluid really is to accelerate without blades but simply by adhesive friction at rotating plane surfaces.

Schauberger-Suction-Turbine

Practically unknown is Viktor Schauberger in common science of fluids, even he had spectacular success e.g. by regulation of rivers. Above this, Schauberger made many 'visionary' statements, however by most strange language and terms. Without any doubt, Schauberger described many processes of nature which didn't become common understanding up to now. He designed and developed many machines, e.g. also for energy-supply, but none of is really applied yet.

On and on Schauberger did point out importance of suction and e.g. described several times a 'suction turbine'. Fluid within should be accelerated up to sound speed, thus 'vacuum' would come up and machine would run based at normal atmospheric pressure, accelerating extremely and producing huge energies, nearby just for free.



Schauberger designed and produced pipes with especially low friction of flows. Nevertheless I suggest, he often offered fluid too less room to move. This bundle of spiral pipes e.g. were part of his 'home-power-station' - however did not work up to now.

Important for actual project however are Schauberger's statements concerning effects of suction and fluid motions, which 'nature-conform' has to move at spiral tracks, at its best at 'double winded planetar tracks'.

He tried to realize this pattern of movements by diverse machines. At pipe-system of this picture for example, fluid upside at first had to move by inward turning spirals, which downside open to wider spirals, while fluid within pipes flows twisting in addition. Following his suggestions I did try to organize corresponding processes of movements, described downside e.g. by Potentialtwistpump.

Mazenauer-Turbine

Based on an inspiration, Hans Mazenauer constructed imposing machines in 1970 and following years. Rotor practically was a double-cone and at its surface were integrated spiral canals. Canals were open towards outside and gliding alongside stationary wall of corresponding shape.

At this picture, front side of rotor would turn upwards. Canals at right side thus will work as pump for compressing air, while spiral canals left side work as turbine. Air within housing and within canals and also outside of machine is moving at spiral tracks all times.

Part of turbine shows larger radius (some 50 cm), thus effecting stronger centrifugal forces (than at pump-part), so machine will run autonomous (after being started). Air shows different pressure and heat at different areas, i.e. also heat of surrounding areas could be transferred into mechanical power.

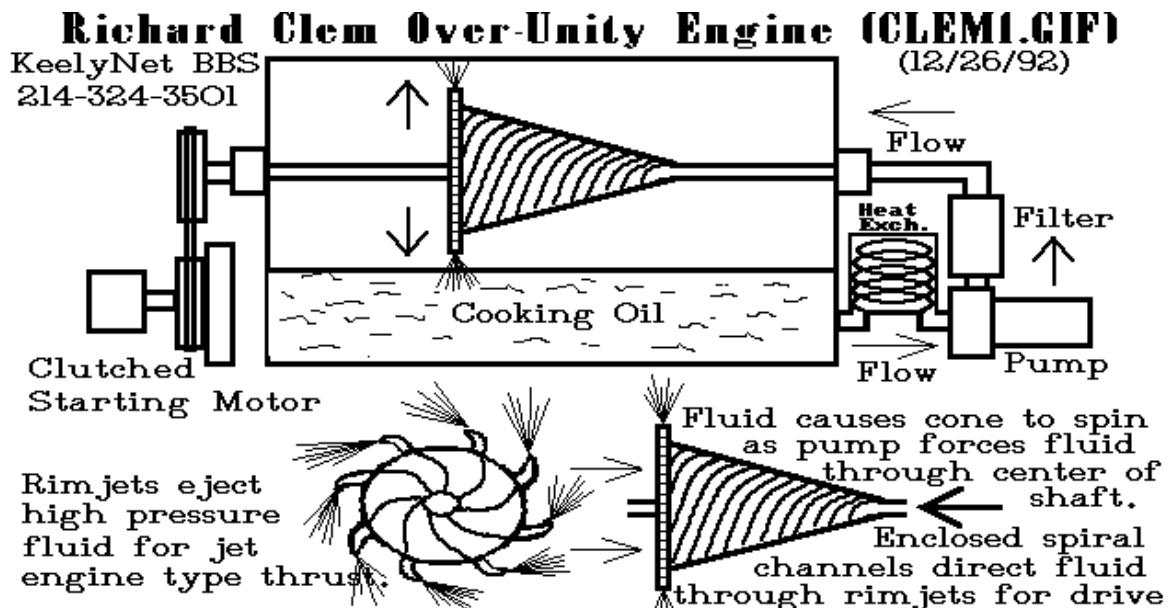


After several years of testing, this machine did really run. Unit was started by electric motor up to nearby 3.000 rpm, then drive was uncoupled. Machine did go on accelerating for minutes, up to estimated 12.000 rpm. No brake was prepared, so for decelerating machine, motor was coupled again, now running as generator - until all blow out of all fuses. Lastly machine did crash based on self-produced enormous centrifugal forces. Expenses for developing these machines were one million Swiss-Franks - and only scrap metals remained.

This story is reported in details by Schneiders at their Book 'Energie aus dem All' (in German, ISBN 3-906571-17-3). Schneiders also organized rebuilding this machine, however in smaller scale for saving money. However that unit did not work, probably because narrow canals resulted too much friction. Like often at such inventions and missing experiments it's an open question whether motor did really run autonomous. For me however it's no question, even resp. because real cause of these 'perpetuum mobile' is other kind than commonly suggested (see below).

Clem-Motor

A similar designed machine confirms this opinion, however based on quit other story.

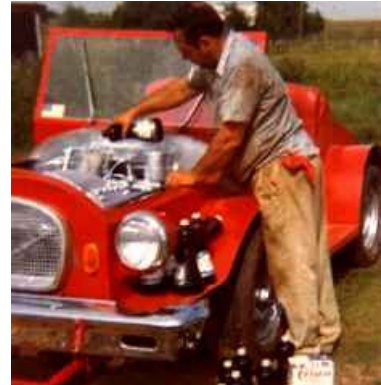


Richard Clem did work at road constructions and had strange experiences with an asphalt-pump. This unit had cone-shaped rotor within correspondingly shaped housing. Spiral canals were installed at circumference of rotor-cone and open sides of canals glided alongside of cone-shaped stationary wall (thus similar to previous Mazenauer motor). Asphalt was carried within canals by centrifugal forces to the outer end of cone with its large radius.

Strange enough, that pump did go on running, up to half an hour - after drive had been stopped! Clem did want to go to the bottom of that phenomenon and constructed corresponding machines, principles of are shown at this picture (not drawn is cone-shaped wall of housing).

Motor was installed for starting system and also a pump for oil, which he used as working medium. Oil was pressed out by centrifugal forces and redirected by nozzles, so recoil produced turning momentum of system. He clearly achieved over-unity and demonstrated this by driving his car with that motor.

In order to produce centrifugal forces, fluid has to be accelerated in turning sense. Turning momentum, resulted by recoil, can not be stronger than demanded energy-input for previous acceleration, based at all theories and experiences. So if surplus of energies really came up, reason for phenomenon must be other kind. Lots of estimations are published at literature to Clem-Motor and similar systems.



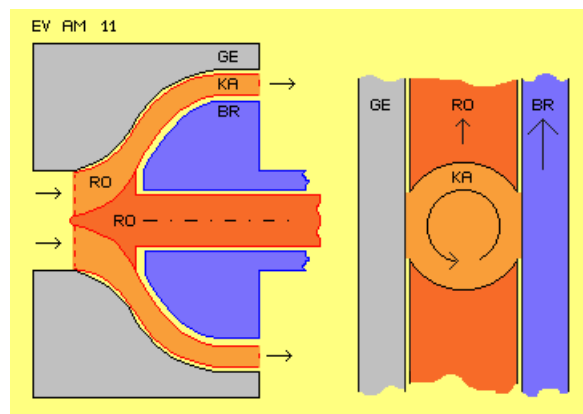
Clear sign for surplus of energy also was, Clem's oil got very hot and he had to cool it down. On the other hand boiling oil is clear hint, this design does not transform given forces at its best. If Clem-Motor did work in spite of that inadequate construction, possibility for producing energy-surplus is obvious, even within closed systems.

Like often at such inventions and experiments, that unit became no sales hit. Story got finished that very moment when Clem demonstrated clear evidence of function and offered method system to automobile producers, which seemed really interested. No further comments are necessary, everyone can think about as he likes it.

Evert-Potential-Twist-Pump

Ten years ago, I starting reading scripts and books concerning alternative physics and Free Energy. I was most impressed by Schauberger's ideas and same time I was disappointed, nothing was realized and did really work. So I wrote my 'Fluid-Technology' and made many proposals, mainly based on Schauberger's statements concerning suction and 'nature-conform' processes of movements. Besides others I described a 'Potential-Twist-Pump', its function e.g. is explained at 'Energy-Inventions'.

At picture EV AM 11 left side is shown cross sectional view through system axis and right side through a canal. At system axis is installed a cone-shaped rotor (RO, red) resp. here shape like a bell. Within rotor are installed canals (KA, light red) which are open at inner and outer sides. Outer longitudinal sides of canals are positioned opposite to stationary wall of housing (GE, grey) and inner open side of canal is positioned opposite to surface of an accelerator-rotor (BR, blue). Accelerator-rotor is turning by double speed of rotor.



Fluid thus is turning around system axis, based on rotation of rotor. By cohesive friction at wall of housing like at surface of accelerator-rotor, fluid in addition becomes twisting around longitudinal axis of its canal. At previous Mazenauer- and Clem-machines twist was initiated alongside outer wall of housing, here now twist is initiated inside and outside of canals.

I still am convinced this concept is an excellent pump. Like at previous machines, potential-twist-flow at end of canals could be redirected by nozzles, so recoil would produce turning momentum.

In order to create self-running motor, much simpler design will do - if decisive effect is realized exactly. These considerations now are presented at third part of these workouts.

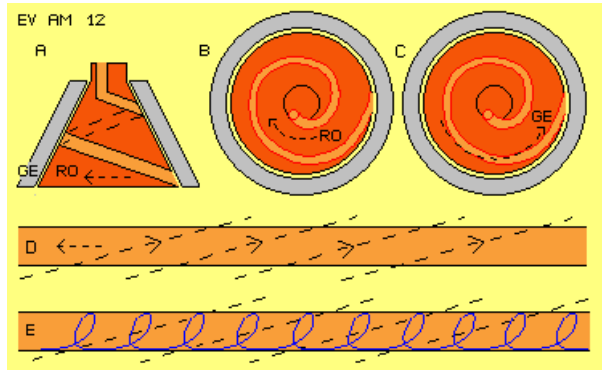
Contrary-Twist

At picture EV AM 12 at A schematic is shown cone-like rotor (RO), at its surface are installed spiral canals (light red), analogue to Clem-motor. Canals are open outside, i.e. there are gliding alongside cone-shaped inner wall of housing (GE).

At picture at B schematic is shown view top-down and one of these canals is marked. Rotor is turning clockwise, so fluid is transmitted outwards.

At picture at C is marked by dotted arrows, how one point of housing-surface moves relative to canal. Open side of canal thus is crossed by rather narrow angles.

So following motions exist: fluid is moved ahead in turning sense of rotor. Fluid wants to fly outside based on centrifugal forces. So fluid moves within space ahead-outwards. Friction at wall of housing however is nearby opposite, thus affects decelerating to fluid's previous motion. Thus fluid within longitudinal direction of canals is rolled over.



At picture at D canal is drawn as straight track, where fluid moves from right to left side (corresponding at previous spiral tracks from inside towards outside). Diagonal contrary by acute angles affects cohesion friction of wall (marked by dotted arrows).

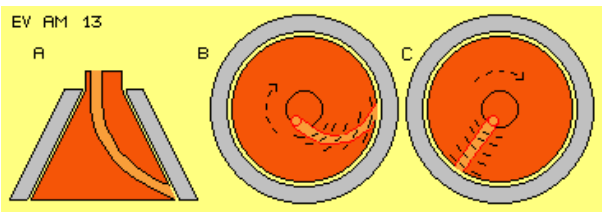
At picture at E is sketched how fluid thus is rolling by loops within canal, running ahead and some blocked back again. This does not occur only by that single loop-track, but parallel anywhere within canal.

Fluid is 'knead thoroughly' by this contrary-twist on and on. This was very advantageous at asphalt-pump for keeping tar liquid. At Clem's motor however this motion pattern produced boiling of oil. So these spiral canals of small gradients not at all are optimum for self-running motor, opposite it's astonishing over-unity did result at all.

Diagonal- and Cross-Twist

At picture EV AM 13 at A again is sketched cone-like rotor, now however canal is drawn with much larger gradient, thus similar to turbine-cone of Mazenauer-motor.

At picture at B again is sketched view top-down. By dotted circle-sectors is marked how open side of canals is cut by surface of housing. Inside, canal runs nearby cross to that wall, towards outside angles become more acute again.



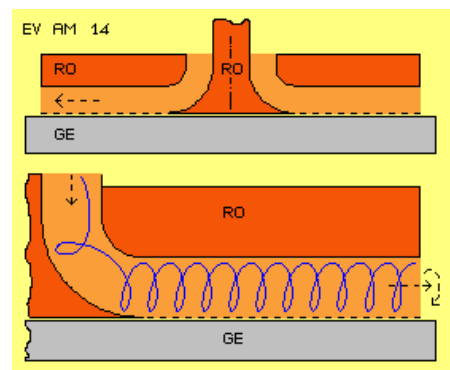
At a whole, fluid within canals is rolled over into longitudinal direction much less and twist into diagonal direction comes up. Nevertheless exists hindering momentum and again it's astonishing Mazenauer motor did produce self-acceleration until self-destruction.

These partly contrary motions are only to avoid, if canals run parallel to system axis. At picture at C is drawn canal showing straight line at surface of rotor-cone from inside towards outside. By dotted lines is marked how open side of canal is cut right angles by each point of stationary wall. Fluid moves within canal from inside towards outside and by cohesive friction at stationary wall this movement is overlaid by twist cross to its longitudinal direction.

Disc-shaped Rotor

This pattern of movements is also to achieve by much simpler disc-shape of rotor. At picture EV AM 14 upside is shown corresponding cross sectional view through system axis. Rotor (RO) practically is a round disc, through which canals (light red) show radial from inside towards outside. Canals are open at one side, here towards downside, and are gliding alongside disc-shaped surface of housing.

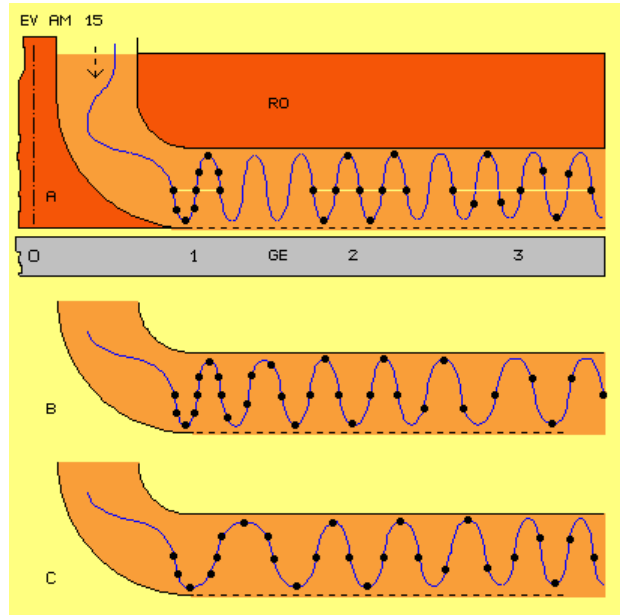
At picture downside, right canal is drawn once more by larger scale. Fluid is slinged out based on rotor's turning, so fluid wanders at spiral track ahead-outward within space. By cohesive friction at stationary wall, this movement becomes overlaid by twist cross to longitudinal axis of canal. So fluid moves at spiral wended track, like here marked by loop-shaped blue line.



With this disc-shaped flat construction, spiral movement and twist is produced same kind like at previous cones. Only lengths of ways from small to large radius are longer at cones. Just resp. only this difference of radius however results decisive effect.

Acceleration

At picture EV AM 15 section of rotor (RO) and canal (light red) is sketched once more by larger scale. At previous picture twist-flow was marked by loop-tracks. By cross-sectional view however, this motion pattern is better represented in shape of blue sinus-waves (which however are not to interpret as swinging motions but as motion towards right side inclusive turning around longitudinal axis of canal).



At this track are marked particles of fluid by black spots, e.g. nine within one twisting rotation at left side.

Twist is initiated by friction at surface of housing (GE). The longer the radius, the faster rotor moves cross to each point of stationary wall. Double radius thus will result double speed of twist.

Previous nine particles thus would spread at two revolutions at radius 2, and at radius 3 would even be spread out to three revolutions (each marked by yellow lines).

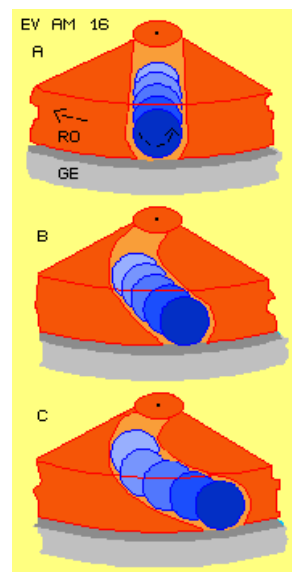
At the one hand, gaps between particles increase from inside towards outside. At the other hand, particles move steady faster towards outside. This relative 'vacuum' represents suction area, which offers long ways until next collision for molecules, which occasionally and actually were hit into this direction. Above this it's well known and approved, slower flows all times are bended towards neighbouring faster flows, as again some molecules 'disappear' into fast flow resp. here into faster twist (like explained at previous theoretical part of workout).

At this picture at B schematic is sketched, how particles wander towards right side into free spaces and thus by themselves move faster into direction of that twisting flow.

At this picture at C schematic is marked, that wandering motion towards right side naturally offers free space for particles further left inside. 'Suction' inevitably spreads into all directions like known by pressure. Here suction within canal can only affect further back inside, until its inlet area. This will mean, particles from the very beginning of canal already move by higher speed than flow without overlaying twist would show.

Decisive Effect

At picture EV AM 16 once more sections of rotor and stationary wall of housing schematic are drawn. Twisting movements within canal here are represented by separated discs. Speed of twist increased from inside towards outside, here marked from light to dark blue, so these 'discs' turn by different revolutions.



At A is sketched canal (light red) in shape of straight line. Within this canal discs stand parallel one aside of next, i.e. each particle of fluid towards outside has a faster turning neighbour, so previous described acceleration can work by optimum conditions.

At B is drawn soft bended canal, thus similar to conception of Mazenauer machine. Discs now stand some shifted one aside next, i.e. there will come up motions partly into contrary directions. Fluid must balance these differing motions by any turbulent flows, which allow optimum throughput only by phases.

At C now canal is bended much stronger, so discs cover each other only by parts. It's obvious there must come up additional motions to balance out against each other - keeping tar liquid or boiling Clem's oil. So it's obvious, radial showing canals are best for acceleration of twist motions.

This increasing rolling of fluid within canals, initiated and based on revolutions by increasing radius, only this is real cause of accelerated flows within canals (like at previous mentioned machines). The faster fluid moves, the less collisions contrary to flow occur, i.e. the better ordered and more dense flow will be. This effect of automatic acceleration will work up to sound speed.

Normally acceleration at longer lever arms demand correspondingly stronger forces. Here however fluid at outer parts of canals, based at its ordered molecular motions, by itself is moving already so fast, additional acceleration demands only relative small additional forces.

This is explanation for over-unity at these machines, based on forces and behaviour of just normal molecular movement. Heat plays quite other part than mostly assumed. Schauberger's ideas of 'implosion' however describe processes pretty well.

Side-Effect Heat

Whenever 'inexplicable' effects occur at experiments of alternative physics it's usually assumed, over-unity would come up based on environment heat. This kind of thinking is bound to idea, all known energies (like chemic, thermic, electric or mechanic) are to transform as we like it, however all times one-to-one, as law of energy-constant demands.

Here is used motion of fluid particles, so their pure mechanic motion's energy. Resulting of is mechanic turning of solid body, so output is pure mechanic motion's energy. There is no energy-transformation (only finally e.g. by coupled electro-generator). Primary however there is only 'vectorizing' from chaotic to ordered motions.

Vectors of molecular motions are not redirected by input of power. Only opportunity is offered for some particles more than usual to fly into certain direction longer distances than normal. Only these particles take part, which by coincidence actually take this direction anyway. So these particles by themselves take chance to fly some longer distance until next collision. Particles can't behave other kind. Resulting is ordered and dense flow - by progressive tendency. The closer technical flow comes to sound speed, the less 'negative' (backward) pushing collisions occur.

So it's no input of power demanded corresponding to additional kinetic energy of generated flow (like thinking by energy-transmission assumes). Also heat of environment is not demanded as source of power. It's only a question of organisation of movement's processes.

Sometimes purely passive trigger is sufficient (e.g. fluids are accelerated by moving alongside bended surfaces, e.g. within Potentialtwistpipes or veins). Or suction area must be organized continuously (like by planes or wind-power-stations or turbine-blades in general). Or a faster flow must be initiated (into which particles from calm environment or slower flow fall with accelerating effect).

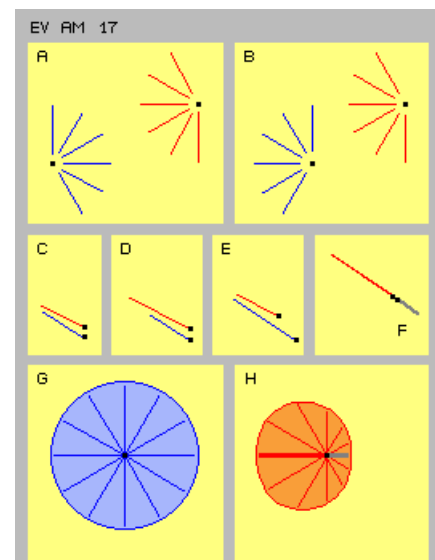
Implosion

Nevertheless, centre of tornado is rather cold. Reason for this appearance is shown at picture EV AM 17. Upside flow from right to left side is assumed. Below is an area of calm fluid resp. of flow some slower. One particle is marked by black spot at each area. Potential movements of upside particles are marked by red lines, potential movements of downside particles are marked by blue lines.

At A is shown how 'flowing' particle can meet 'resting' particle by contrary directions in principle. Both collision partners exchange directions and speeds of their motions. Flow is decelerated little bit, however nothing else is changed at a whole.

At B is shown how upside particles at its actual motions to left side could hit downside particles actually moving also towards left. Also at these situations forces and vectors before and after collision behave like billiard-balls, thus corresponding to known mechanic laws.

Interesting however are movements of situations shown at C. Two particles can fly parallel to each other, even long distances, without any exchange of forces. By common knowledge however, not all particles move by same speed. If upside particle moves faster (red longer line at D) no collision will occur, slower particle (blue shorter line at D) can move even long distances in that 'slipstream'. Upside this process was called 'disappearance' of particles into suction areas or faster flows.



Most important are 'rear-end collisions', i.e. collisions of partners moving actually into same direction or similar directions by acute angles. This situation is sketched at E: fast particle of downside area 'rams' towards backside of slower particle of upper area.

Result of that kind of collision is shown at F: upper particle takes direction (resp. corresponding acute angles) and speed of downside particle (red long line). Particle 'responsible for crash' is rejected at his track (resp. at corresponding acute angles), however only by difference between both original speeds (grey short line). Upside this process was called 'delayed return' of collision partners based at its reduced speed.

Potential movements of downside particles towards backward thus no longer are spread equally (like assumed e.g. upside at A by blue lines). Also these particles of environment now show less speed towards backside (and outside) than into forward (and inside) direction. So their braking action onto upper flow (like sketched at A) becomes weaker. Whole environment now wanders parallel to and into faster flow.

This transmission of speeds and potential directions of movements has further consequences. Within resting fluid normally exists equal spreading of directions and average speed of all molecular motions, e.g. some 450 m/s within air. This is marked at G by blue lines and light-blue circled surface represents kinetic energy, vectorially adding to null, towards outside nevertheless appearing as heat.

The more order upside flow shows, the more dominant are motion components like sketched at F resp. gathered at H. Into direction of flow, particles move by normal speed of 450 m/s, into contrary direction however e.g. only by 150 m/s. This flow thus would come ahead by sound speed (three steps ahead and one back - see below).

Naturally also within that flow occur movements into all potential directions (red lines at H), however not by same speed and also not equally spread (but preferred into longitudinal axis of flow). So by coarse comparison (because not including different frequencies) light-red surface again would represent kinetic energy - resp. point out reduced 'heat' (relative to chaotic molecular movements of environment resp. its potential motions at G).

This sketch at the other hand demonstrated, particles of ordered flows do behave less 'bulky'. Their potential area of actions is smaller than at chaotic molecular movements. Particles within fast flow can move ahead much nearer, i.e. that fluid shows higher 'density'. Above this, less collisions occur resp. these crashes occur by smaller differences of speeds, thus affect much less negative onto flow at a whole.

These are effects of 'Implosion' like often mentioned by Schauburger: at 'nature-conform' movements fluid cools down (e.g. within natural brooks) and becomes more dense (so shows stronger lifting forces). Acceleration must not be done by pressure, otherwise heat and progressive resistance comes up (that's 'wrong' movement's process of common 'explosive' techniques). Using suction and 'right' movements, acceleration comes up by itself with decreasing resistance until sound speed.

Pressure or Suction

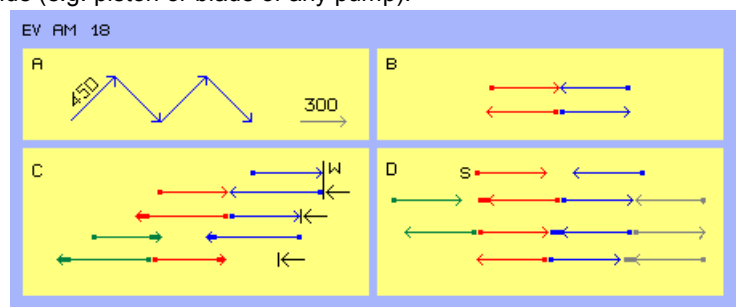
Differences between applying pressure or using suction once more are pointed out at picture EV AM 18. At A relation of molecular speed and sound speed is shown. Sound does not move straight ahead, because particles are not aligned straight line. Particles are trembling into all directions. Sound produces acceleration of particles, which can move ahead only at zigzag ways. If sound speed is assumed 300 m/s, molecular speed will be root of 2 thus some 1.4 faster, so nearby 450 m/s.

Also flow naturally comes ahead only by zigzag movements of particles. Simplistic however at the following only linear motions with frontal collisions are considered. Like shown at B, red and blue particle meet by molecular speed and after collision fly off again by that speed. These motions thus occur within 'resting' fluid.

Flow is to achieve by applying pressure, like usually done at common techniques. At B therefore schematic is drawn a wall (W) moving from right to left side (e.g. piston or blade of any pump).

If blue particle collides with wall, it's pushed back, not only with its molecular speed but accelerated by speed of wall (like marked by longer blue arrow).

Afterwards blue particle collides with a red one and both exchange speeds and directions. Red particle thus is moving fast within space towards left. There however exists normal density, so red particle soon collides with green particle. Again red and green particles exchange speeds and directions.



In the meantime, blue particle got reflected by wall. Once more thus blue and red particles collide rather soon. Also green particle will soon hit to neighbour further left. In addition, wall moves towards left in the meantime.

Particles thus move faster than molecular speed for some phases, e.g. 'heat' comes up. Fluid as a whole however does not progress correspondingly (reduced length of ways are each marked by thick lines). Ahead of wall thus particles are dammed up and all collisions occur faster and faster. So pressure comes up and increasing forces are demanded for acceleration of fluid.

So at flows it's not decisive, molecules move especially fast, but decisive are distances which are done uninterrupted into direction of flow. Within nature, flows all times come up only initiated by suction. This situation schematic is shown at D, where suction area (S) is assumed left side.

Suction means less density (all times relative to neighbouring areas, here e.g. to right side). Red and blue particle are moving by molecular speed into contrary directions and relative long time is available. After collision both fly off by same speed.

Red particle can fly long time towards left, because of that suction area green particle appears 'rarely'. So red particle is pushed back towards right side rather late. In the meanwhile, also blue particle did collide with grey particle coming from area of normal density. So blue particle flies back towards left side rather early.

Even all particles all times fly only by normal molecular speed, each next point of collision between red and blue particles is positioned some further left. At next phase, blue particle comes 'too late' at right side, thus also grey particle did move longer distance towards left until its meeting with blue colleague. These enlarged ways towards left are each marked by thick lines. So it becomes obvious, suction effect also affects back within flow (here from red towards grey, from left to right side, e.g. like mentioned already upside at plane's wing). Whole formation of particles is shifting into area of suction.

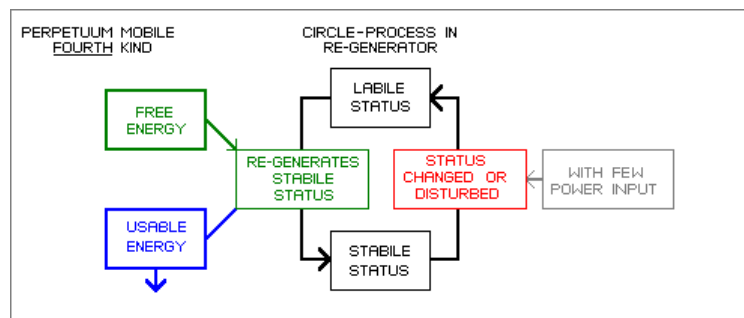
This 'natureconform' flows are 'cold', because progress-ahead is not achieved by faster speeds of molecules but only determined by lengths' of 'free' distances. The faster flow is, the longer are movements ahead and the rare are particles flying back.

From neighbouring slower flows aside, on and on particles can join into 'slipstream' of faster flow, without being kicked-off immediately. Opposite, just these new particles contribute essentially to accelerate speed of flux. De facto particles are not lined up straight, so backward flying particle can hit and push back only one partner - and new neighbour aside now can move even longer times ahead without being disturbed (i.e. increasing average of distances of motions ahead).

This shape of flux thus is not produced by pressure, but results automatic as soon as area of less density exists or flows of different speed are running one aside the other. This self-acceleration occurs all times within all spiral turning-inward pattern of motions, e.g. within small brook or small breath of wind up to continental-wide motions of air. Conditions for 'vacuum' or 'free ways' or neighbouring flows for relative collision-free progress of flux are also to organize technical, continuously by roundabouts at its best.

Perpetuum Mobile fourth Kind

No power-input is demanded for achieving these effects, fluid must only be offered opportunities for corresponding motions. This organisational 'offer' sometimes costs no efforts or at least only small forces (at actual project e.g. estimated one third to one tenth of usable energy surplus). Actually no 'surplus of energies' results: kinetic energies of all particles of resulting flow is not more than within 'resting' fluid. So there is no input of environment-heat demanded for producing this kinetic energy usable for benefits outside of 'closed system'.



When using Free Energy one may not think by old pattern of energy-transmission resp. stay within prison of energy-constant. This law is true however commonly not applied sensefully. There are many nature forces available, which one must not 'consume' in sense of transmission, but one can use by little detour and most only by side-effect can achieve certain benefit.

I defined this principle as 'Perpetuum Mobile of Fourth Kind': nature aims at stabile status (here chaotic motions of molecules). With few organisation efforts one can disturb that balanced situation (here by preferring particles with certain vector). Automatic act of recreating balance (here particles falling into resulted 'vacuum') represents

free available energy (e.g. for driving an electric generator). This autonomous working suction-turbine is fine example for that kind of using given energies.

Principles of Construction

Now (finally) principles of constructional design of this type of machines are to describe. Aim is to initiate flows within canals with increasing turning speed of twist from inside towards outside, so self-acceleration into direction of faster flows can take place. Generated strong flow afterwards is to transform into turning momentum and finally into electric current.

Like mentioned upside, canals may not be bended but should be straight. It's not necessary to construct rotor and wall of housing cone-like, much easier are even resp. disc-shaped constructional elements for resulting likely effects. Machine should not be installed at one system shaft, but power input and output should be separated, so machine is to control (and will not self-accelerate until self-destruction like Mazenauer motor).

Naturally one could use nozzles at end of canals in order to redirect flow backwards and thus to achieve turning momentum. However, masses e.g. at tornados need free exist into axial direction and vortices in general will end turning when 'covered' - or hindered at least partly by nozzles.

Above this there can't result surplus energy. If fluid is accelerated by rotation around system axis, centrifugal forces come up - however efforts for that kind of acceleration by power will be greater than effects achieved by rejection.

Essential acceleration within canals is based on kinetic energy of molecular movements via producing twist flow - so additional turning of canals around system axis will bring no additional benefits (but diverse friction losses). Wanted twisted flow is generated by relative motion at open side of canals. That motion is also to achieve, if canal is resting and even surface is gliding alongside (thus opposite to Mazenauer- and Clem-machines).

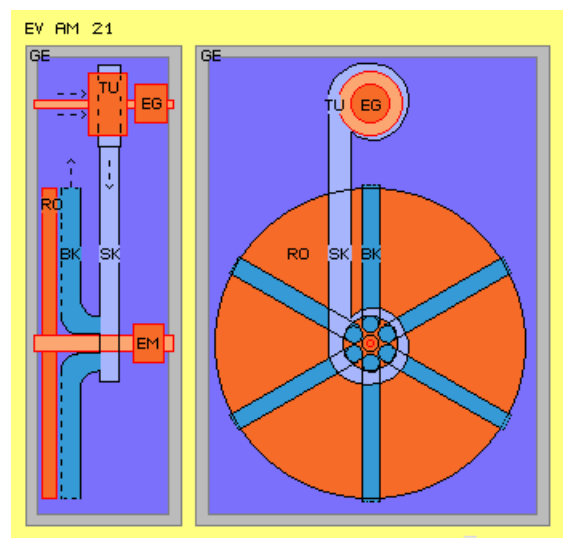
At usual techniques pressures are used preferably and effects of suction are neglected often. Any flow is not only to use by its kinetic pressure but usage of corresponding suction achieves likely results.

These principles of design schematic are sketched at picture EV AM 21 as an example, left side by longitudinal and right side by cross sectional view through axis.

Within a housing (GE, German Gehäuse) a shaft is installed and at this shaft is mounted a rotor (RO) in shape of round disk with even surfaces. Rotor is driven by an electric motor (EM).

Canals are stationary and have an open side opposite to rotating surface of rotor. Within canals comes up accelerated twist-flow (marked blue), so canals here are called 'acceleration canals' (BK, German Beschleunigungskanal). Outlet of canals end inside of housing, within which normal atmospheric pressure exist (marked dark-blue).

Towards inlet of canals, suction in shape of relative vacuum comes up. One can take 'thin air' via pipes from long distances by minimum resistance, i.e. this suction (marked light blue) affects back within a suction canal (SK, German Sogkanal). So usage of pressure difference can be done at separated axis.



Here for example, turbine (TU) for driving electric generator (EG) is positioned upside within housing. Turbine can be common type. Environmental air with its atmospheric pressure should be directed right angled towards pressure side of blades by corresponding stator fins. Same direction subpressure of suction canal should suck off air from suction side of turbine blades. Snail shell drawn here is only an example for adequate shape of construction.

Variations

Previous design is easy to build by known techniques (much easier than e.g. Mazenauer' and Clem's designs). Critical constructional element is rotor, which however is of simple shape. If air is used as medium, machine should be build rather large.

In order e.g. to install power stations at cellars it should be shaped like wardrobe, thus 200 to 220 cm long and high and maximum 65 cm deep, inclusive sound absorption. Turbine and electric generator could be placed at corner. At centre could be installed rotor with diameter of nearby 160 cm, thus effective surface of nearby 5 meter. Best efficiency is achieved near sound speed, so rotor should turn some 60 times each second resp. by 3.600 rpm.

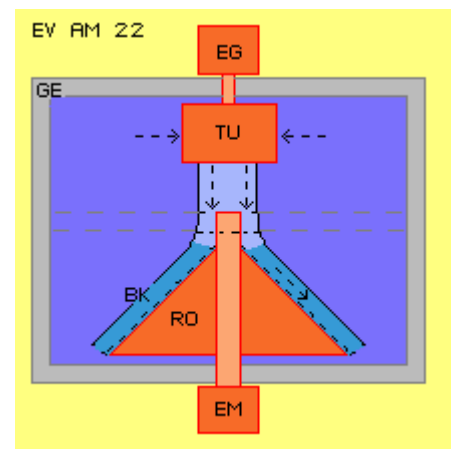
However, wanted effects will come up already by lower speeds, Mazenauer's machine did start self-acceleration already from 3.000 rpm, even circumference was much shorter and double-cone system hat to drive that pump-unit, which is totally unnecessary. So machine could well be build smaller and/or run slower.

Rotor must be strong enough to take centrifugal forces, probably build by light composite material and construction. No other strong mechanical forces will come up and rotor surface must not be totally even (however canals should show good surfaces). Drive is without problems, at starting phase some stronger power input is demanded, at running modus are to overcome only mechanical friction losses and cohesive friction of air. No special sealing between rotor and canals is necessary. Control of machine is without problem: as soon as drive of rotor is stopped, machine will slow down by friction.

Instead of air, also liquids could be uses as working medium. In order to balance gravity forces, axis of these machines should be arranged vertical. Liquids show more friction, i.e. distances to turbine should be short.

Corresponding example of design schematic is sketched at picture EV AM 22 by longitudinal cross sectional view through axis. If cone-shape would be used, effective surface between rotor and canals would be large, even machine in total is of compact size. Instead of straight shapes drawn here, naturally could be used surfaces more flux-conform, e.g. of hyperbolic shape.

Even system here is drawn at one axis, nevertheless drive- and output-unit should be separated. Apart from that, previous considerations are to apply also at machines using liquids. Additional problem could be cavitation, however should well be to control.



All other details are job of technical specialists resp. solutions are known by flux-science resp. are described comprehensively at my Fluid-Technology, e.g. how to handle fluids within pipes and tanks at its best. Here only some examples are mentioned:

Cross section of canals must not be circled-round but some long-stretched (for most long contact-surface to rotor) with wider curve into turning sense of rotor and more narrow curve at backward end. Flow at end of pipes resp. canals should never end into tank directly at its wall, but pipe must reach free inside (so secondary flow rolling round pipe comes up protecting jet from environmental pressure). Twist flow must not simply leave pipe but must be 'rolled off' (like e.g. pencil sharpener). Here e.g. flow at end of canals could be guided by fins in order to enter turbine tangentially. Flow between turbine and canals already should show twist, initiated by correspondingly shaped suction canal. However, all these details are perfectly natural.

Not perfectly ordinary is this quit new conception, essentially different to previous mentioned machines of similar functions. These machines did work, so this conception adapted perfectly to essential effect will work as sure as planes are flying and tornados are turning.

Appeal and Thanks

I beg all readers not to ask whether and where that machine is to buy or why I don't produce this motor by my own or at least offer some more technical details and papers. I can fairly acute analyse problems and phenomena and can offer fairly creative solutions, I also can fairly precise describe matter of facts and fairly impressive visualize processes. More I can not do and I want not to do. That's the point.

I thank many colleagues for hints and urging me to workout this chapter. I hope many readers did enjoy process of considerations, I hope some really do understand these fluid processes and necessities for using free energy, I hope at least one reader got will and possibilities to build an 'Evert-Auto-Motor'. That's what I would like to report about.

Evert / 07.07.2005