# Flexible Buoyancy Power Station

Epoch-making Development
Every ship is swimming - as long as the hull displaces more water than it´s weighting. That phenomenon of buoyancy is well known since Archimedes. In spite of many experiments, however, the effect of buoyancy could not be used for generating mechanical energy (respective electric power). Now however, the Swiss Rosch AG offers licences for building buoyancy power stations, using 500-kW-modules up to 100-MW-power-stations. In principle, tanks of a paternoster system are moving down and up. Upside the tanks are filled up with water, below the water is replaced by air (see sketch at picture EV AK 01 left side). It would be especially advantageous installing modules of e.g. 25 m depth within stagnant water, e.g. within a reservoir.

At the other hand, the NET-Journal March/April 2014 reported about an inspection of a prototype (see picture EV AK 01 right side), which could be suitable for use at home. The input demanded 1.66 kW and resulted an output of 11.36 kW. With an efficiency of about 7:1 the system can deliver usable energy at autonomous mode. Opposite to many failing attempts, this conception seems to work.

The inventor (unknown up to now) and the Rosch company thus would have done an epoch-making progress, realizing a pure fluid-mechanical ´Perpetuum Mobile´ first time.
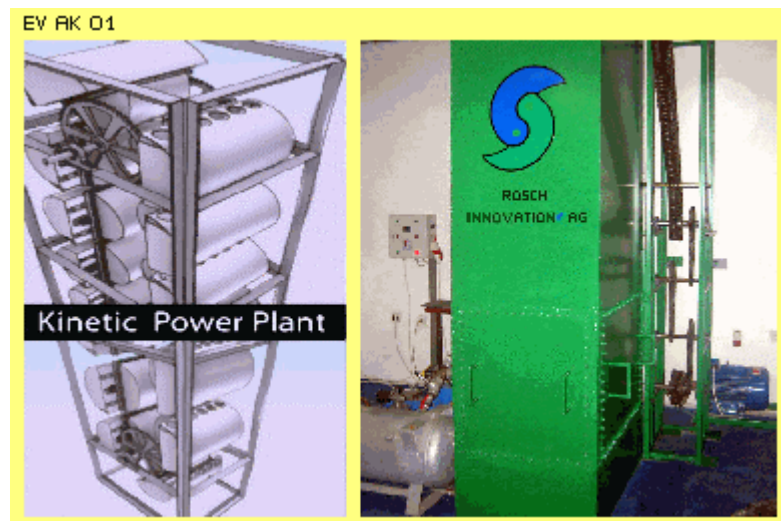
At machines with efficiency beyond 100 %, immediately comes up the question about the source of the additional energy. The answer is clear e.g. for heat-pumps: the energy is drawn off the environment. Here however the situation is more problematical, e.g. like discussed at the NET-Journal: "Based on common understanding, the gravity field can not be weakened because it´s only determined by the mass of the Earth and the gravity constant. Probably the field is coupled direct to the quant-vacuum or it´s integrated within the quantum-mechanical vacuum-energy." Also other attempts for explanations are likely nebulous. So the real source and state of gravity must be determined at first.

Gravity as Pressure Gradient
The interpretation of gravity as attraction of masses with universal effect can not fit. Finally the necessity of additional ´Dark Matter´ or the assumption of dubious ´Black Holes´ approves the misunderstanding of the real background. A logic acceptable explanation for an imaginary long-distance effect - through the alleged vacuum - was never presented. At my ´Aether-Physics and -Philosophy´ I had offered a plausible alternative, especially at part ´08. Something Moving´ (respective by the book of same name), there especially at chapter ´08.16. Nature of Gravity and Structure of Earth´. Opposite to common literature, I defined the Aether most precise. All facts and conclusions are argued comprehensive. At the following, only the results of relevance are mentioned in brief.

In reality, only one single and unique substance exists universe-wide. That´s the common medium for all physical appearances. A photon for example, is a single revolution ´screwing´ forward through the aether. The aether outside at space is crossed by radiations of all kind

from all directions all times. The numberless overlays build a hectic ´jumbled interference´ where the aether is moving at varying short sections of tracks. Opposite to the these ´chaotic´ motions, the atoms build a local unit of well ordered synchronous swinging. Only about hundred motion pattern of the chemical elements build sphere-shaped and stabile structures resisting against previous radiations respective just that common ´aether-pressure´ all around compresses and conserves these motion-units. The aether exists exclusive within whole universe. The aether differs only by the shape of local different motion-pattern which we become aware of as specific physical appearances.

At the magnetopause, at the ionosphere and in the atmosphere, the radiations increasingly are filtered or absorbed, so the hectic of aether motions becomes reduced. At the Earth crust, the atoms are positioned near each other, so the ´Free Aether´ between calms down once more. The aether between the atoms finally take the atom-internal motion character, e.g. building the grids of crystal-rocks. So the aether from outside towards the Earth (and into the Earth) becomes increasingly calmer. Opposite, also the calm motions gradually are transferred from bottom up.

At picture EV AK 02 left side, the effect is drawn schematic: upside exists the hectic swinging motions at short track-sections, merging further down into calm motions at longer track-section. A sphere-shaped atom is drawn by red colour. From upside it´s bothered by chaotic rattling motions, here represented by dark-green arrows. Below of the atom, the aether is swinging gradually more adapted to the atom-internal motions, so some less pressure is pushing upward, here represented by light-green arrows.

Specific and Earthly Gravity
The gravity field is no abstract mathematical parameter but is resulting from the characteristic of real motions within the real substance of the aether. Resulting is a gradual pressure difference onto the local motion units of the atoms, i.e. a radial push exists towards the centre of a celestial body (thus a sinking-instead of the lifting-force discussed here). The transit from the hectic of Free Aether outside at the space to the calm motions at or some

below the Earth surface depends on temporary and local conditions. That´s why exact measurements of the gravity force are differing all times.
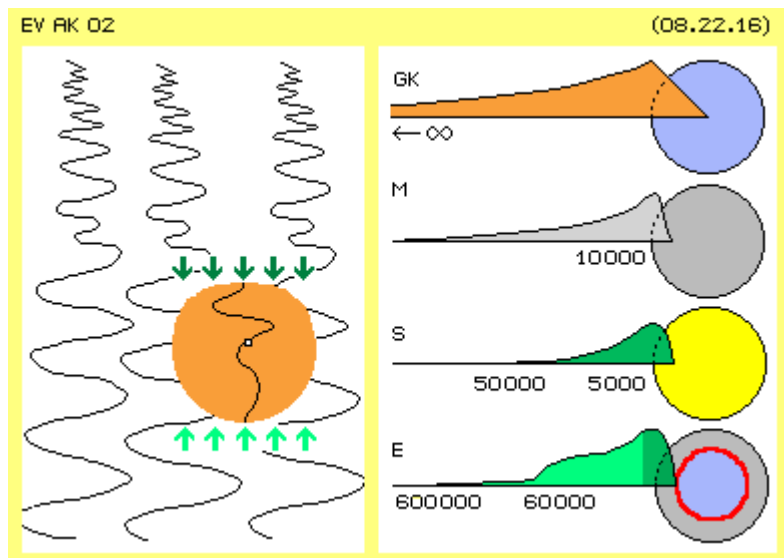
There is no universal gravity constant (GK) where attracting forces are decreasing with the square of the distance, theoretical however effecting unlimited far (see picture EV AK 02 right side). The Moon (M) has only a thin atmosphere, so the gradient of aether pressure exists only at an estimated range of 10000 km. The Sun (S) and gas-planets probably have a smooth transit from hectic to calm motions. There is no calmness e.g. like provided by the massive Earth crust. Within the Sun are assembled lots of atoms - however they do not affect mutual attraction and do not show any mass-attraction towards outside. With the ´flares´, a multiple of Earth-masses are pushed off, however they are not pulled back immediately but stay out there for weeks. The effect of gravity based on pressure-gradients could be limited to 50000 km or even only 5000 km at the Sun and gas-planets. The pressure-gradient of the Free Aether around the Earth (E) starts at the magnetopause (varying form 600000 km to 60000 km). In addition, the spreading of the gradients depends

at the momentary conditions of the ionosphere and also of the atmosphere. Below the Earth surface, there won´t exist any gradient below of few 100 km.

No universal constant attraction between (distant) masses can exist. Every celestial body has his own and individual area of gravity. The weight measured at the Earth surface can not be applied on other celestial bodies, nor it can be extended by light-years into the width of the space. I mentioned these forces based on pressure gradients because they are valid analogue with concern to the buoyancy discussed here.

Using Buoyancy within Air
By common understanding, up to now it was not possible to transfer the gravity force into usable energy. Since long times however the birds realized an advantage, since they got gliding wings. Today, this effect is used by the wings of air planes on and on (see picture EV AK 03 upside). All atoms in the atmosphere are steady moving, flying from one collision to the next and thus demanding space. Every atom same time is affected by the pressure gradient of the gravity, thus is pushed down on and on. That aether pressure results the top-down increasing density of the air. The atmospheric pressure rises correspondingly, until about 1 kg /cm^2 at the Earth surface.

When a wing is guided horizontal through the air, a relative empty area comes up at the back of the bended upside surface. The gas particles fall into that void, mainly along the upside face. The area of relative void extends forward until and above the nose (here marked by each lighter blue colour). Corresponding fast (up to about 100 km/h) the particles are moving to the rear end of the wing. No energy-input is demanded for creating the relative wind. Only the vectors of the just normal molecular motions automatically are ordered some more towards the direction of the void area. There, the particles affect less pressure onto the upper face of the wing. At the face below of the wing, still the normal atmospheric pressure is given.

The pressure gradient between both faces result the wanted lifting force. Decisive is that fact: the demanded thrust-force for pushing the air plane forward is much less than the achieved lift-force. A wing is still no perpetuum mobile, however it´s a ´benefit-surplus-machine´. No energy is drawn off the medium air. Only the spreading of the air pressure locally and temporary is manipulated that kind, a wanted effect is achieved by most few energy-input. This example for advantageous usage of gravity is described comprehensive at chapter ´05.04. Lift at Wings´ and ´05.12. A380 and Lift´ at my website.


EV AK 03 (05.04.08)
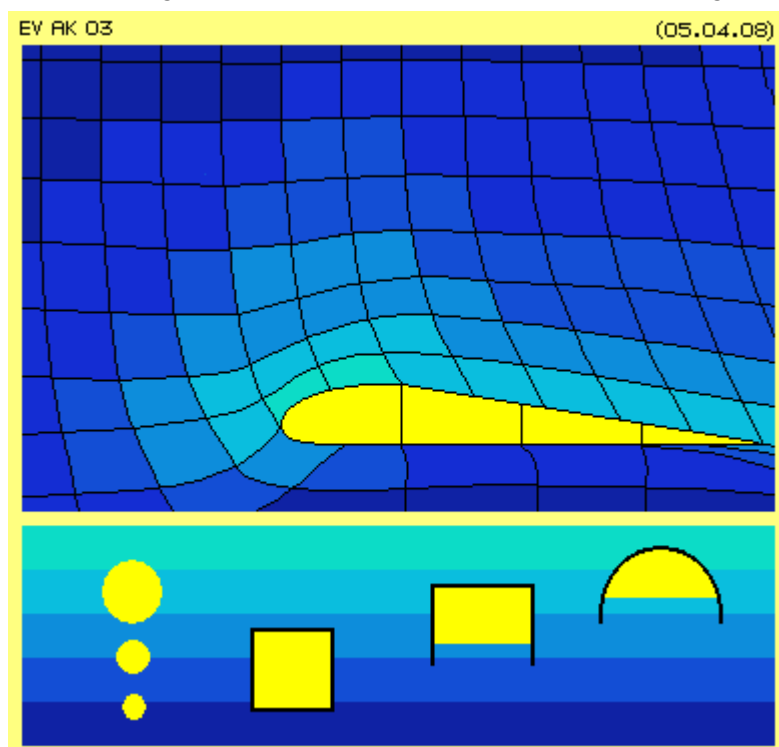
Using Buoyancy within Water
Opposite to the air, the water is not compressible. The gravity pressure respective the weight of water results previous pressure of 1 kg/cm^2 already at 10 m depth. Again, the buoyancy force comes up by the pressure difference at the upper and lower face of a body (marked by different blue colours at picture EV AK 03 below). The gradient is proportional to the height-difference. Thus the buoyancy force of a body corresponds to the volume respective to the

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weight of the water displaced, no matter which shape the (relative) light body shows. So a body, filled up by air, can be open at its face below.

At previous wing, the pressure difference comes up only if an area of relative void is generated ´artificially´. Within the water, the pressure difference exists quite natural, thus it should be easier and more effective to use it. The only problem is, putting an ´air-bubble´ into a tank down within the water.

General Conception

The general construction of a buoyancy power station is drawn schematically at picture EV AK 04 by side view. A chain (green) is running around two wheels (grey), one upside and one below. Here all wheels are assumed left-turning. For better stability, two wheels are installed at each shaft (dark-grey), so two chains are running parallel. At the chains are installed paddle-shaped tanks. Their open face are showing up when moving down, respective they are showing down when moving upward.
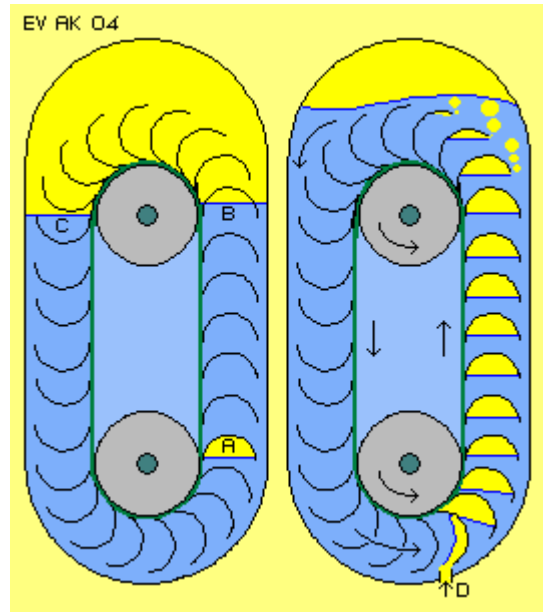
If now a tank A is filled with air (yellow), the water displaced must be pushed upward. The lifting of water (theoretical) results a higher level at the upward canal B than at the downward canal C.

By common understanding, that filling-up with air demands energy input just corresponding to the raising of the water volume. So such a system won´t work.

If air is filled into all tanks (right side at this picture), a state of imbalance comes up: the air-filled tanks are lighter than the water-filled tanks. Thus a turning momentum is achieved and the system will start turning. All the water within the canals are moving in a circuit. If now all water within the upward canal is moving up anyway, previous raising of displaced water no longer demands additional energy input. Nevertheless, by common understanding this process is still a zero-game, because pushing the air into a tank (below at D) must be done versus the static water pressure down there. For each tank, this procedure is necessary once more, demanding a power input just likely to the mechanical energy achieved by the buoyancy effect. These were the reasons for the failing of all attempts for buoyancy power stations up to now.

Patents, Licences and Open-Source

Now the Rosch AG was able to demonstrate a working prototype. At the very moment it´s not made public how previous problems were solved. It was mentioned, they use a high-performance compressor, special nozzles and a relative slow turning however most effective generator. For the rest, the machine would work corresponding to known nature laws and it could be build by many versions.

Developing an invention to a marketable product demands high investments. So it´s well to understand, the companies try to protect their knowhow by patents and to refund their expenses by selling licences. However, patents give no real protection long term. A company can make profit only by leading technology, each time only temporary. In addition, perpetuum mobile are not allowed for patents in general.

That´s why open-source-method is favoured, where many small companies can contribute within a decentralized organization. Just at the scene of Free Energy one is convinced, all people are involved and Free Energy should become available for everybody. In this spirit, I

publish my considerations and conclusions at the following and everybody may use it as he likes. By the way, nobody else can make private patents on the conceptions published here.

Flexible Tanks
At picture EV AK 05 upside at A, tanks are installed at a chain (green). The tanks are filled with water when moving down, they are filled with air (yellow) when moving up. It´s a widespread misunderstanding to believe, there would exist an imbalance. However, water within water does not weight. The fact is: at the below face of the air exists a higher pressure (see arrows) than at the upper face of the tank. That´s the only reason why air-filled tanks are raising up, based on that buoyancy.

So it´s not really necessary to fill water into the upside tanks and the water must be pushed off the tanks below. Much more economical would be flexible tanks, like sketched at B: at the upward motion they are filled with air and at the downward motion they are fold up. In general, one needs a tank like a hot-air-balloon (schematic sketched at C). When air is blown into the balloon it will be extended (right side) and the textile is fold up when moving down again. Indeed, only the upper part of the balloon would be effective. So one could install a real stack of balloons (see D). Again more effective could be balloons including one the next (see E). Thus an air-pillar is build, throughout from bottom up. At the face below of the pillar exists the maximum water pressure (see thick arrow).
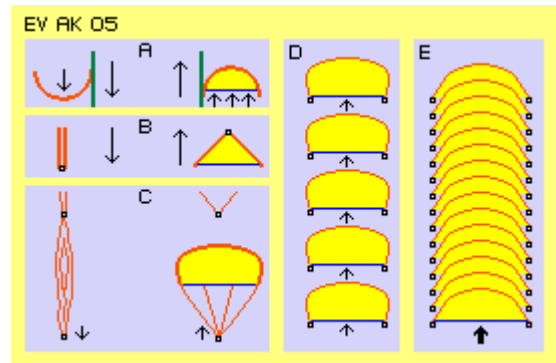
Instead of heavy metal-tanks, these balloons could be constructed by light material, e.g. by air- and water-tight textile (even handicrafts could build over corresponding negative form). However, no longer the attachment at chains can be done with files. A suitable construction is drawn schematic at picture EV AK 06.

Swivel-Frame
At A is sketched a cross-sectional view at the area of the upward moving chains (green). The bulges (red) of the balloons are extended by the air (yellow). Frames (black) are installed at the links of the chain, keeping the below edges of the balloons wide open in circled shape (see cross-sectional view at B). At C a side view at one chain is drawn and at D the cross-sectional view at the level of a frame. The frames are arranged cross to the chain and keep the chain at constant distance. Also by that view, the bulges are blown up in shape of shells and they are piled up, one above the other.

The frames are installed by pairs, each in shape of a half-circle, turnable mounted within the chain-links. The frames can be opened maximum right angle to the chain. At E is shown, both frames can swivel parallel to the chain (here downward). The bulges are folded, see red area at cross-sectional view at F. The frames (inclusive the balloon-bulges) can even swivel some towards left or right side of the chain.

This construction allows the blown-up balloons to ´float´ upward, one above the next. The buoyancy force is transferred to the chain via the frames. Over the water surface, the frames are folded. One ´empty´ balloon sticks within the next like a narrow hose, practically building a continuous band. Nevertheless, each balloon is a separated tank. Only the upside edges are connected by an elastic band, in order to keep their positions relative to each other.

At this picture at G, the housing is drawn in shape of a black rectangle. The chain (green) is moving around the upside and below wheels (grey). At right side, the frames are positioned horizontal. The balloons (here not drawn) are expanded at this side. As soon as a frame

(respective the lower edge of a balloon) reaches the water surface, the air flows off the balloon into the air-space (yellow) upside at the housing. The upside frame will sink down at the frame below (see diagonal lines). Both frames thus swivel backward (in the turning sense of the system). As the balloons inside are connected by an elastic band, one bulge after the other is pulled down into the water left side. Because the water pressure below is stronger than at a level less deep, the balloons become empty und keep tightly folded. The frames and the bulges wander down at narrow space.
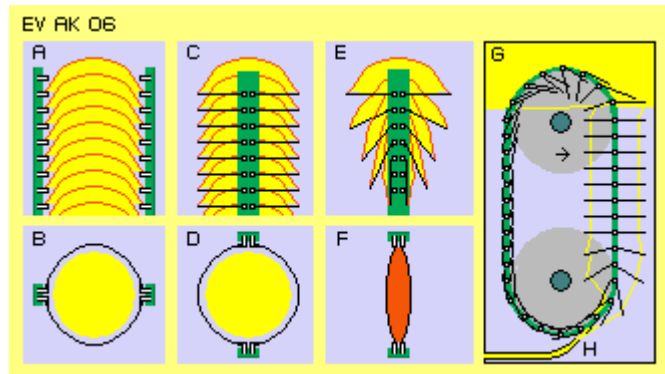
At the middle below the downside wheel, now air (yellow) starts flowing through the nozzle H diagonal upward. The outside frame swivels aside and the air is blowing up the bulge, until the air ray will blow into the next balloon. Also the inner frame will turn aside, until the maximum volume is achieved. The yellow lines mark the air pile, which is filled up layer by layer at its below sections (and same time becomes emptied at its upside section, also in layers).

Corresponding to the example of hot-air-balloons, the bulges here are drawn in shape of round shells. However, these balloons could also be build in shape of rectangle truncated cone. For example, also a textile sheet could be installed throughout between the chains with many patch pockets at their outside face. Advantageous could also be two textile sheets with U-shaped partitions between with openings aside the chain links. If air is pushed through the inlets, ´bow-shaped sausages´ would be extended and fly up, one after the other.

Water-Circuit
So there are many possibilities for building the tanks. At any case, these flexible elements allow the construction of machines with few and light material. However it´s likely important to build machines with most few volume of water moving around and to avoid motions not really necessary. At picture EV AK 07 a corresponding circuit of water is sketched, left side at A by a longitudinal view through the shaft (dark-grey) and right side at B by a cross-sectional view.

The raising air-pile (yellow) should be enclosed by most few water, e.g. maximum a quart of the air-volume. A wall should divide the upward flowing water (dark-blue) from the downward sinking water (light-blue). The frames should be guides most narrow within a pipe, here marked by thick dark-blue lines. Upside, the pipe has a rounded edge. Below, the pipe starts at the most deep point of the wheel (light-grey) respective at the air-nozzle D (red).

The water must flow down ´by itself´, thus is limited by the gravity acceleration. The Free Falling starts rather slowly corresponding to formula $s=1/2*g*t^2$: at the first tenths seconds the water can sink only to 5, 20, 44, 78 and 122 cm. After one half second, based on formula $v=a*t$, a velocity of 4.9 m/s might result. If a tank is open upside (thus without pressure top-down) and it is 1 m deep, it will be ´shot upward´ immediately. Here however, mechanical elements are moving and also the water must flow up, so probably the speed of only 2.4 m/s would make sense. For the dimensions of cross-sectional faces, at any case the given flow-speeds should be noted.

At this picture quite left, a gear for driving the generator (GA, green) is sketched. The buoyancy force affects an upward pulling force at the below ´paternoster gear wheel´. The links of the chains are rather long, e.g. 15, 20 or even 30 cm. No really round motion is possible, e.g. the chain rattles when leaving the wheel (however to avoid by suitable guiding

elements). Nevertheless, the drive of the generator should be done by a separate gear wheel and a fine chain or a V-belt (where a suitable tighter will guarantee steady drive). Here for example, a gear ration of 1:5 is sketched. At one revolution each second of the wide wheel, already suitable 300 rpm are achieved.

At the cross-sectional view right side at B, once more is shown how the raising air-pile is guided most narrow within a pipe.

Starting from the most deep point, the pipe extends funnel-shaped. The frames can open only so far as the balloon is blown up by the air flow. At this picture upside, once more is shown, how the frames and bulges collapse. Also that process could be supported by suitable guiding elements (see dark-blue lines).
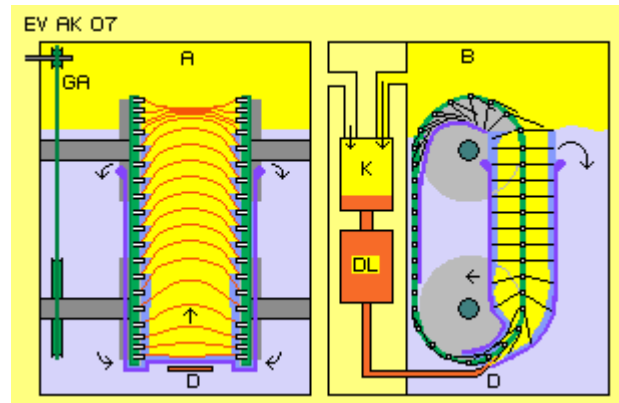
Air-Circuit
The flows of air within that machine are shown at B. For starting the system, fresh air must be condensed by a compressor K and the compressed air DL must be stored in a tank. A pipe is installed from the tank down to the wheel below and the pipe opens at nozzle D. The air exits through a small and long slot. The jet of air blows into the balloon and the outside frame swivels outward (and some later also the inner frame). The pressure within the bulge is mostly stationary, here however a relative hard jet hits onto the frame and the textile. So there should be installed some protecting elements.

Based on common understanding no usable energy can be generated, because high water pressure stands versus the compressed air. The energy for overcoming that resistance is just like the energy produced by the buoyancy, by static view. However, the situation is quite different when kinetic forces are observed.

If for example, the water pressure is 1 bar, the compressed air should show higher pressure. Using e.g. 5 bar, corresponding less air volume must flow through the nozzle. The air flows corresponding faster into the bulges and there it expands immediately. The balloon and also the surrounding water are upward accelerated. The energy expended on the compression, nearby completely is transferred into the raising of water and upward directed pressure within the balloons.

The effect of buoyancy results a usable force. The necessary input of air nearby is neutral. Aside however, also the water around the air-pile must be guided upward. The upside mentioned technique of oversized pressure starts that lifting quite below. Afterward the water is moving further up, e.g. based on its inertia. At the upside edge of the pipe, the water is even ´sucked off´ by the sinking water aside of. So energy is demanded for the production of compressed air. This energy however is nearby completely transferred into mechanical motion and thus it´s available as turning momentum at the shaft. It´s still most important to move most few water and to avoid non-productive motions. Here for example, the balloons are softly drawn out from the water without vortices or turbulences.

If one produces compressed air, losses normally are not to avoid because the air becomes heated. Here, at running mode, the compressor can take the warm air upon the water surface for input. That area should also be closed hermetic in order to use also any remaining pressure. The whole machine should be isolated to avoid these potential losses as far as possible. That sketch shows only the air circuit in general. Naturally some additional elements for controlling the process are necessary.

Performance

Over and over again, new conceptions for power station at size of mega-watts are presented, however none were realized. Much more interesting would be small decentralized units for ´use in the home´. By the example of previous sketches, following data could be relevant.

Paternoster-wheels with radius of 0.4 m are installed. The distance between the shafts and between the chains are each 1 m. Both frames could show rectangle shape of about 0.6 to 0.9 m. The air-pile within could show a cross-sectional face of about 0.5*0.8 = 0.4 m^2. At height of 1 m, the air-pile has a volume of about 0.4 m^3. So 400 liter water is displaced, resulting a buoyancy of about 4000 N. This force affects at previous radius of 0.4 m, thus resulting a turning momentum of about 1600 Nm. The circumference of the wheels is some 2.4 m. If previous mention raising-speed of 2.4 m/s is realized, the wheels will turn once each second respective 60 rpm. Based on common formula $P=M*n/9550$ a performance of P = 1600*60/9550 = 10 kW would be available.

This theoretic gross-performance could be realized within a housing of about 1.2 m width, 1.8 m length and 2.4 m height. Each further meter could generate additional 10 kW - at a rough estimate (see below). Naturally will come up losses based on mechanical friction of the gears and by turbulences within the water. Opposite, the net-expense for the compressor is most small. Previous mentioned 5 bar could also do e.g. for 25 m depth, if the construction is mounted at a pontoon within a reservoir. There the gross performance could be at scale of 250 kW. This could be extended by wider cross-sectional face of the air-pile, wider wheels and faster raising speed.

So the prototype presented by the Rosch AG could well produce the named net-performance of about 11 kW. Likely realistic might also be the modules of 500 kW performance. The special performance of the inventor was to overcome the limitations of common understanding. The special performance of the Rosch AG is to start the real construction of that buoyancy power station. Previous analyses and conclusions pointed out some important theoretic criterions. There I described some points of view in general, however, as a layman, I can not deliver technical documents. Nevertheless, experienced engineers well can deduce suitable constructions.

Important is the fact, this machine does not transfer energy from one shape into an other, like commonly known machines. So the restriction of energy-constant here is not involved. No energy is taken off, no new energy is generated. Only by smart organization of procedures, the permanent given force of gravity is redirected for generating usable effects. The generally downward-affecting gravity is turned to the upward-affecting buoyancy - and the simple trick is to push air into a tank down at the water. The gravity by itself is no abstract and mysterious working field. The gravity can show mechanical effect only because it is based also on pure mechanical movements of the real substance of aether. There are no forces of the vacuum, the space or quants. Finally all energies are each special motion-pattern of the aether - and this power station uses one of the various shapes - without consuming the motion-energies.

It´s an advantage, these machines can be build by known technologies and they allow decentralized energy supply. Like water power stations, short time after starting the system, full performance is available. Based on modular conception, immediately one can react on differing energy demands, e.g. also to stabilize existing electric nets. So hopefully many companies will take part to install these power stations and ´Free Energy´ soon will be available for everybody - at relative good conditions.

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Previous rough determination of the performance was really rough estimated. For example, a displacement of 0.4 m^3 was assumed – however that air would be compressed to 0.16 m^3 at a depth of 25 m. At this case, only 0.7 of the buoyancy force would be achieved. The previous test-version used a compressor of about 1.5 kW. This can well deliver a pressure of 5 bar, thus sufficient also for greater depths. That compressor can deliver some liter per second – however not the demanded volume of hundred and more liter each second. So the previous estimates were bound too strong at the data of the Rosch AG. Nevertheless it will soon become obvious, which performance can be achieved by which conception.

Internal Compression

At previous versions, the compressed air was filled below into the tanks and flowed off upside – and thus that air is lost for the system. Generally, the air of the tanks should build a circuit and the compression should occur within the tank itself.
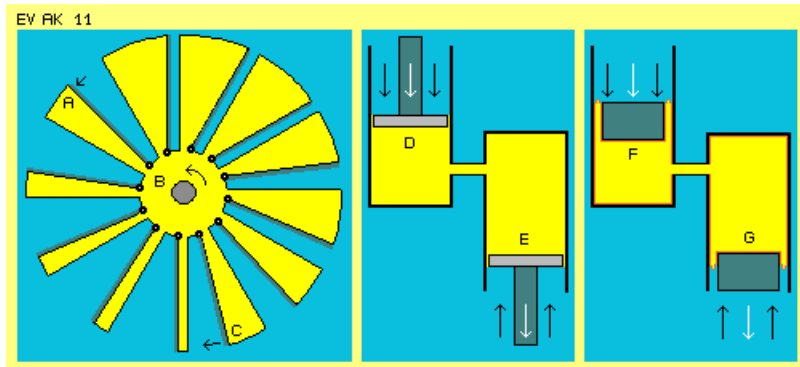
At picture EV AK 11 left side, a possible solution is shown by the example of a ´submarine mill wheel´. Twelve tanks (yellow) are installed around the system shaft (dark grey). They can take variable volumes, generally like bellows. One face (black) of the tank is fix installed, the other face (thick grey) is mounted flexible and is build by weighty material. At left side, e.g. at A, the weighty face compresses the bellow. Based on that weight and the increasing water pressure, the air-volume within the tank is minimized quite downside. Opposite at the right side, the weighty face opens the bellow, e.g. starting at C. Towards upward, based on the decreasing water pressure, the air within the tank expands, respective more and more water is displaced (corresponding to the yellow areas).

At the centre around the system shaft, a common used room B of air exists. The air is pushed off the decreasing tanks upside left and flows down to the right side, where the tank volumes become expanded. At same depth (e.g. at 9- and 3-o´clock) both tanks show different volumes. At left side, less water is displaced than at the right side and the difference of buoyancy forces affects a turning momentum at the system shaft. If e.g. 50 liter of air should be transported from A via B to C, each heavy face should weight 25 kg. The compression (respective the displacement of air by constant inner pressure) thus is done by additional weights. The net-buoyancy of the system might correspond to the installed weights.

At upside picture EV AK 11 at the centre is sketched, instead of previous ´bellow-tanks´, also common cylinders and pistons could be used. A piston is pressed down by the additional weight into the cylinder, thus compressing the air. Opposite, the cylinder volume becomes expanded, when the weight pulls the piston out of its cylinder, thus displacing water. Right side at previous picture is sketched, a piston by itself can represent the additional compression- / expansion-weight (dark grey). For example, a flexible foil (red, like a bellow) could be used for sealing between cylinder and piston.
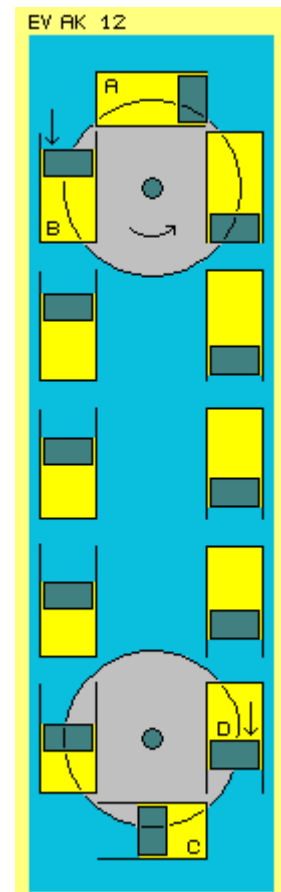
At picture EV AK 12 schematic is sketched, such (separated) cylinders could also be installed at a paternoster-system. Upside at A, the air-volume within the cylinder is expanded maximum. At B, the air becomes compressed by the weight. Based on increasing water pressure, the air below at C is compressed at its maximum. Afterward, at D, the weighty piston affects expansion. At comparable depths, the displaced water-volume right side is wider than at the left side, all times. The difference of buoyancy results a turning momentum at the wheels.

Now a patent of Heinz-Dieter Beeck (DE 10 2012 022 016 A1 at 08.05.2014) is published with such tanks of variable volumes, where the compression of tanks is also effected by weights. In comparison with upside light construction of textile balloons, that construction is much more heavy. Stronger friction losses might occur. At the other hand, the demanded compression here is much easier, as it occurs quite automatic within the tanks. The turning momentum results only of the difference of changing air compression. The performance will be some smaller than at previous calculations (which were much too optimistic). It´s most interesting, which data soon are presented by the Rosch AG (or other companies) and which conceptions finally will deliver the best results.

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SUPPLEMENT   2014 - 08 - 01

EV AK 13

The ice had broken at last: home power stations become reality! The tests with the demo-version of the Rosch Buoyancy Power Station resulted positive data. So the Austrian club GAIA (see www.gaia-energy.org) now can offer construction kits for home power stations, delivered by the Swizz Rosch AG. The units were build analogue to the version shown at picture EV AK 13 with following data: constructional volume 0.5 * 0.5 * 5 m, net-performance ca. 5 to 6 kW, energy input for the compressor about 1.5 kW, so remarkable surplus.

Based on common sciences, gravity (and thus also the lift-force of buoyancy) can not be used for generating energy, corresponding to the basic law of energy constant. Now that limitation of pure static view is disproved concretely. At motions of (or within) gases and liquids come up kinetic forces which allow additional benefits. For me since long time, every wing is a ´surplus-benefit-machine´ and that´s why also other corresponding constructions must suit for increasing benefits (see diverse proposals at my Fluid-Technology). The current buoyancy power stations now represent the decisive breakthrough, so also other solutions for using Free Energy will follow soon.

In principle, here round cylinders are installed at a paternoster system. Compressed air is filled into the side-face of the cylinders via valves at the below wheel. Obviously the production of compressed air needs much less energy than earned by the resulting buoyancy force. Obviously that demanding technology works. That first and decisive development will be followed by many improvements, for example by considerations like the following conception.

Each air bubble inserted below at the water finds automatically its way into tanks, which are open at their below side (at the lifting phase), no matter if fix or flexible tanks are used.

Upside at picture EV AK 07 for example, the compressed air was guided into the tanks through a valve standing free within the water. The production of compressed air is expensive and within narrow pipes come up remarkable friction losses. That´s why here at picture EV AK 14 an other solution is offered.

The air of normal density is guided down through a wide pipe A. Below of the below wheel, a supply-pump A is installed, e.g. in shape of an impeller like roughly sketched here. If that pump e.g. has a displacement volume of 2 liter and it is running 1500 rpm, about 50 liter are transported each second. If the inlet shows a cross-section of 50 * 10 cm, the air is sucked in with 1 m/s. If the narrow outlet shows a cross-section of 50 * 2 cm, the air will flow off with some 5 m/s. So the flow becomes accelerated from about 3.6 to 18 km/h. At the inlet, the air has normal pressure of 1 bar. At the outlet, the air is condensed only marginal. No matter at 5 or 25 m depth, the flat jet of air with its strong kinetic flow-pressure will push aside the water. Finally some later (e.g. within the tanks) the air becomes compressed by the static water-pressure, corresponding to the depth (and the air will expand until the water surface to its normal volume and normal atmospheric pressure).
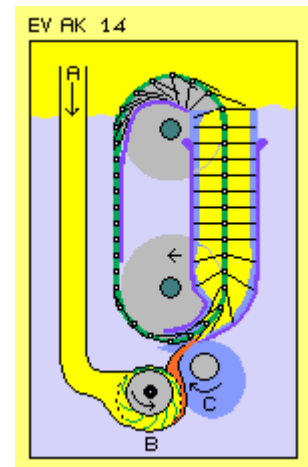
This air jet (red) is gliding along and below of a sheet and thus is protected versus the water pressure from upside. Also from below, the air jet is affected by only few side-pressure, if the neighbouring water is moving parallel. This is achieved by a water cylinder (C, dark blue). This water is rolling continuously and keeps stationary, if e.g. a fix pipe (grey) builds its centre. So there below exists a right-turning water-flow. Upside of, at the area of the below wheel, the mechanical parts and the accompanying water is moving left-turning. Nearby with no resistance, the supply pump continuously can insert its flat air jet between both synchronous movements.

So this conception needs no compressor for producing strong compressed air. The air finally is accelerated with the supply pump below and the flat air jet crosses the surrounding water by its kinetic pressure. The air by itself is moving upward into the tanks. In addition, the static water pressure is reduced via that stationary water roller. Thus a sufficient volume of air can be transported into the tanks with relative few efforts and by relative simple technique.

By the way: also these radial supply pumps are multiple-benefit-machines. At the inlet, the air particles follow the rear side of blades ´by itself´ (self-accelerating up to sound speed, based simply by according order of quite normal molecular motions). Only at the front side of the blades, the particles are pushed forward in direction of the turning sense (resulting increasing heat of the air). The data-sheets of such pumps clearly show, the energy-input nearby completely corresponds to the produced heat-energy – i.e. the accelerated transport of the air practically is for free.

Many other improvements will make these home power stations most effective and viable – and also large scale power plants will feed very reasonable electricity into existing nets – for thanks of the pioneer performance of the Rosch AG und GAIA-club – and the decades long engagement e.g. of Schneiders, their congresses, workshops and their NET-Journal. These autonomous working buoyancy power stations mark a great step for the whole Free Energy community – and hopefully a world a little bit better.

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