

EH₂ESS

Electric Hydrogen Energy Supply Systems

**For renewable clean
Energy**

**Report
GYRO-VACU-ENERGY-
MACHINE**

Hoofdstraat 292
2171BS Sassenheim
Tel. 0252-221027
WWW.EH2ESS.COM

for a clean world

Stichting EH2ESS International

Electro-Chemical Research & Development Centre

Hoofdstraat 292
2171 BS Sassenheim
Tel. : 0252 - 22 10 27
Fax.: 0252 - 22 58 01
e-mail: info@eh2ess.com

Fortisbank 89.07.31.152
K.v.K. 28095616
V.A.T. 8121.10.584
WWW.EH2ESS.COM

ENERGY FROM VACUUM by K.W. van de Wall

ABSTRACT

First and foremost, turning a HYDROGEN GAS economy into a success requires a new, clean and inexhaustible source of energy.

EH₂ESS has found that in a spectacular physical source of energy, namely: vacuum.

New natural mechanics has helped us along the way.

The spectacular thing is the fact that nobody has ever thought of using the phenomenon of Vacuum in this way before.

Our world is real, concrete, not abstract, but this does not mean that imagination is not allowed. It is exactly our imagination, our expressive capacity, that allows new thoughts and ideas to form and progress to be achieved.

INTRODUCTION

In order to establish a vacuum in the atmosphere in which we live, we have developed an aerodynamic machine using various techniques:

- Mechanical structure, bearings and housing
- Metallurgical and gluing techniques
- Molecular mechanics
- Aerodynamics and gyroscopics

The machine consists of 5 symmetrical, identical spoilers.

The spoilers, 2 on the inside and 3 on the outside, rotate in opposite directions and pass each other 6 x per rotation, in other words, $2 \times 3 = 6$ 'bumps' during a rotation (see drawing 1).

The radius (curvature) of the spoiler uses a power curve, as a result of which the spoiler is equilateral on the chord line.

As a result of this changing flow line, existing aerodynamic theories are changed or no longer apply.

The angle of incidence is the angle between the undisturbed flow and the chord of the spoiler.

material : two cylinders rotating in opposite directions with 5 spoilers

'e' : the energy of the spiral

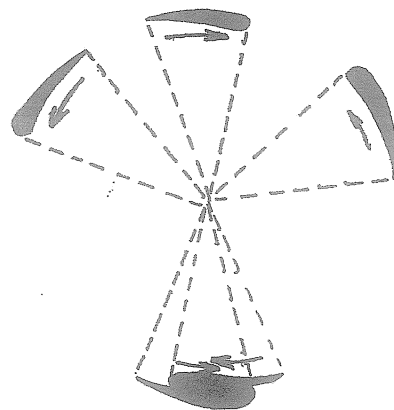
Vy : centrifugal force

Vf : lateral force

Vx : lifting force of the rotation

Vz : molecular resilience

Vv : vacuum force



EXPERIMENT

Where does the Gyro-Vacu-Energy machine get its energy?

To produce energy from this machine, the vacuum that is created is converted into a rotational movement.

Our prototype works as follows:

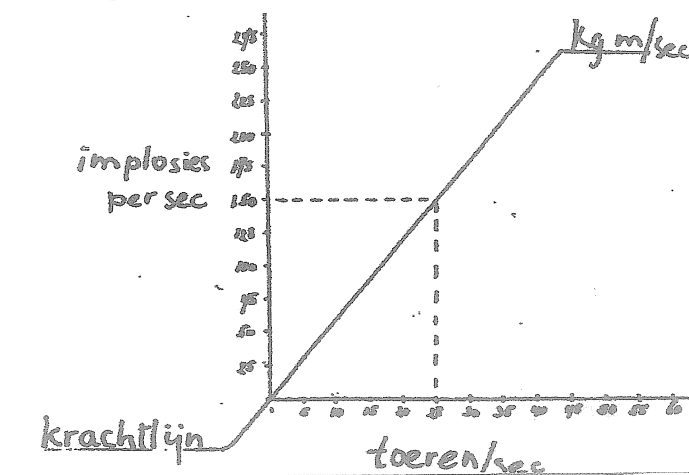
When an inside spoiler passes an outside spoiler, a difference in molecular structural composition is created: a vacuum.

After this the atmospheric pressure returns.

The result of this is that an implosion occurs.

In each rotation, 6 implosions are created.

The smaller and narrower the space between the two passing spoilers, the more powerful the implosions (see graph).



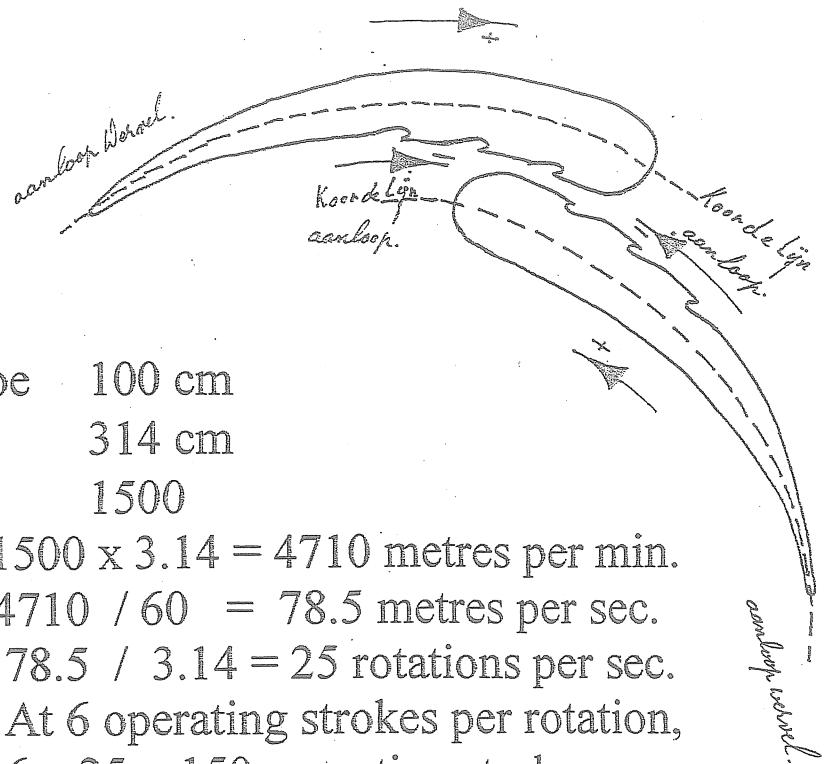
The speed of the rotation is 75 m per second,
the diameter of our prototype is 100 cm.

Rotation: 1500 revolutions per minute.

This results in $6 \times 1500 = 9000$ implosions per minute or 150 implosions per second (150 operating strokes).

RESULTS

Technical details



- Diameter of prototype 100 cm
- Circumference 314 cm
- Number of rpm 1500

$$1500 \times 3.14 = 4710 \text{ metres per min.}$$

$$4710 / 60 = 78.5 \text{ metres per sec.}$$

$$78.5 / 3.14 = 25 \text{ rotations per sec.}$$

At 6 operating strokes per rotation,

$$6 \times 25 = 150 \text{ operating strokes per sec.}$$

- Operating stroke: each time the spoilers pass each other is called a operating stroke
- Each spoiler has 15 drawing chambers of 2 cm^2 each, which mean that an operating stroke will have $30 \text{ drawing chambers} \times 2 \text{ cm}^2 = 6 \text{ cm}^2$ underpressure
- Per rotation: $2 \times 3 = 6$ operating strokes
- In other words $6 \times 60 \text{ cm}^2 = 360 \text{ cm}^2$ underpressure
- For each cm^2 , 2 millibars of vacuum is created, in other words, grams of underpressure per cm^2
- This results in $360 \times 2 \text{ g} = 720 \text{ grams of underpressure per rotation.}$

The speed of the spoiler is 78.5 m/sec.

$$78.5 / 3.14 = 25 \text{ rotations per sec. } 25 \times 720 \text{ g} = 18000 \text{ g} = 18 \text{ kgf}$$

Definition of 1 watt

1 watt = moving 0.1 kg through 1 metre in 1 second

This means that 18 kg are moved 3.14 m in 1 second

$$18000 \text{ g} / 3.14 = 5750 \text{ watts per sec.}$$

This means that the Gyro-Vacu-Energy machine generates 5.75 kWh

CONCLUSION

The Gyro-Vacu-Energy machine is an open atmospheric machine, similar to a jet engine.

It was not developed just like that; a lot of work was put into it for at least a quarter of a century. Many hurdles were taken in this process and progress was made one step at a time to achieve a permanent, clean source of energy using a natural phenomenon, the well-known vacuum (underpressure).

The Gyro-Vacu-Energy machine can be built relatively easily and with guidance it can also be produced very well in countries with less technical background and knowledge.

This phenomenal machine will change the world for the better.

The unrestrained consumption of fossil fuels will turn out to be the greatest technological blunder of the 20th century.

This is not only because of the 'exhaustion' and 'running out' of these mineral resources and fuels, but even more because of the fact that CO₂ (greenhouse effect) and NO_x (toxic to humans and nature) are produced when hydrocarbons are burnt openly in the atmosphere we live in .

We will not go into more detail on these climatic and health issues here; enough is being written and said about these at the moment.

One of the few negative aspects is the noise. Implosions create a rather shrill sound, comparable to a siren.

Thankfully, a solution is available for this, for instance, in the form of anti-sound. This can be reduced to zero in a relatively simple manner with a very limited amount of energy.

FRAME OF REFERENCE

MECHANICS

Kinematics – Study of motion – Rotation

- angular acceleration of lift
- double rotation
- triple rotation
- frequency of rotation (rpm)
- linear velocity during rotation
- lift acceleration
- centrifugal acceleration
- implosion acceleration

$$F = \frac{m \cdot v^2}{r}$$

$$x(t) = vt + x(2)$$

$$x(t) = vt + x(3)$$

$$n = \frac{\omega}{2\pi}$$

$$v = 2\pi r \cdot n = \omega \cdot r$$

$$F_L = \frac{mv^2}{r}$$

$$a_c = \frac{v^2}{r}$$

$$N_s = \frac{v^2}{r} = \text{kg m/s}$$

DYNAMICS

Forces and movement

- Newton's law
- centrifugal force
- coefficient of friction
- impact force
- angular momentum

$$\Sigma = m \cdot a$$

$$F_c = \frac{mv^2}{r}$$

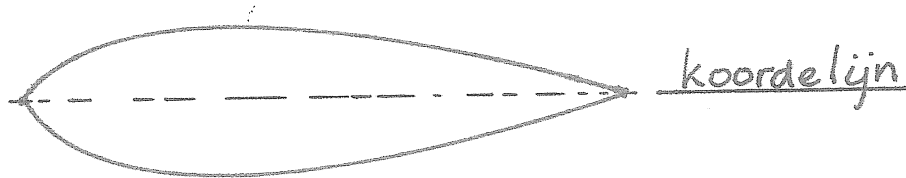
$$\mu = \frac{F_{W \cdot \max}}{F_N} = f$$

$$I = F \cdot \Delta t$$

$$M = J \cdot \alpha$$

AERODYNAMICS

Lifting force of the circular movement with an equilateral chord line



ENERGY

- work

$$W = F \cdot s \cos \alpha$$

- power

$$P = \frac{W}{t}$$

- efficiency

$$\eta = \frac{P_{\text{geleverd}}}{P_{\text{toegevoerd}}}$$

- law of work and mechanical energy

$$V_1 + U_1 = V_2 + U_2$$

IMPLOSION IMPACT (force)

- amount of movement

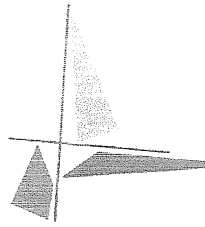
$$p = m \cdot v$$

- impact implosion

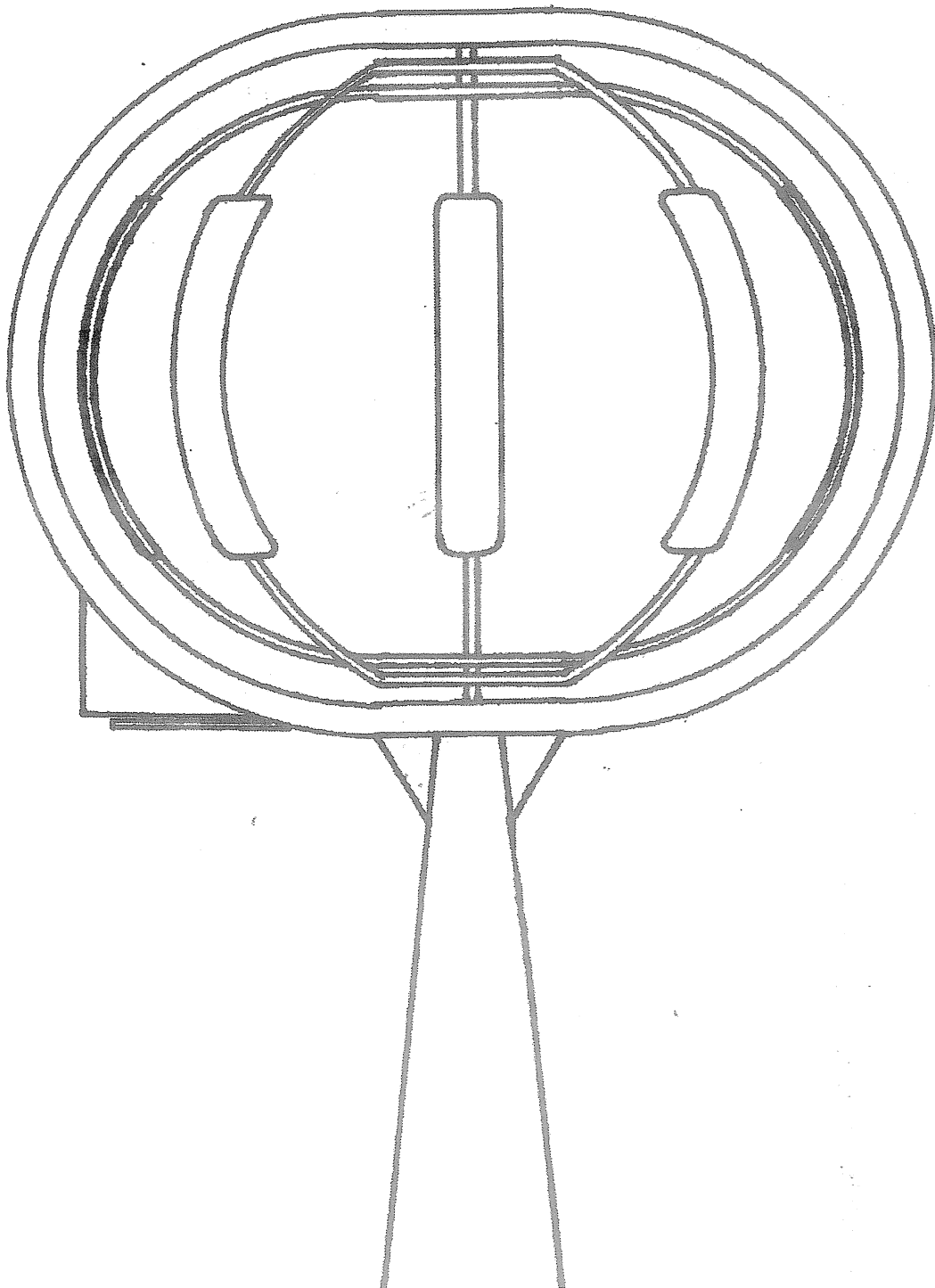
$$I = F \cdot \Delta t = \text{kg} \cdot \text{m/s}$$

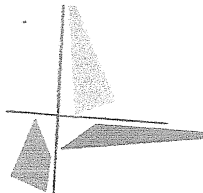
- law of conservation of momentum

$$\sum m \cdot v = \text{constant}$$



Benelux-Bureau voor Tekeningen of Modellen
BEWIJS VAN INSCHRIJVING





Benelux-Bureau voor Tekeningen of Modellen

BEWIJS VAN INSCHRIJVING

01 Inschrijvingsnummer

36753-00

Nummer en dagtekening (dag en uur) van het depot

81544-00 20.07.2005, 23.59

Datum inschrijving

14.03.2006

02 Vervaldatum

20.07.2010

03 Naam van de deposant

Karel William van de Wall

04 Adres (straat en nummer) van de deposant

Wilhelminastraat 15

05 Postcode, plaats en land van de deposant

2382 HD Zoeterwoude,
Nederland.

08 Afbeelding van de tekening of het model

Zie afbeelding(en)

11 Vermelding van het voortbrengsel gevolgd door de aanduiding van de klasse(n) en onderklasse(n)

Energiegenerator (kl 13-01).

12 Beschrijving van de kenmerkende eigenschappen van het nieuwe uiterlijk van het voortbrengsel; in voorkomend geval, vermelding van de onderdelen van de tekening of het model waarop de kleuren betrekking hebben

Bolvormige rotor op voet met 5 halve draairingen; deze zijn in het midden breed en vleugelvormig.

14 Vermelding van de naam van de werkelijke ontwerper van de tekening

VAN DE WALL Karel William

Publicatiedatum van de inschrijving

06/2006

Kenmerken van de deposant of de gemachtigde

EH2ESS KW/CP

Den Haag, 21/06/2006

Edmond Simon
Directeur

The VacUnergy ROTOR: ENERGY FROM VACUUM

An innovative machine that generates energy from a vacuum

In addition to wind, sun, water and other 'natural' forces, 'vacuum' is also a natural phenomenon that can be used as a source of energy.

The energy that can be extracted from this is inexhaustible and clean, just like the sources mentioned above, but it does not depend on sun and wind.

Stichting EH2ESS has developed a machine that can generate energy from vacuum: the VacUnergy ROTOR. The idea itself was conceived and registered as long as 25 years ago. Now, after many years of thinking, calculations, research and development work, the prototype of the VacUnergy ROTOR is finally finished.

The machine consists of a rotor with 5 blades that are aerodynamically shaped and rotate in opposite directions. When this rotor is powered up and reaches a particular speed, a vacuum is created at several places, after which 150 implosions occur per second. The forces from these implosions are transferred to the vertical spindle, as a result of which a generator is powered. In this way clean energy is created.

The entire project is managed by Stichting EH2ESS and they can therefore also issue licences. One of the objectives of the foundation is the promotion of hydrogen technology in general and the applications of it for economic use in particular.

Unfortunately, a large amount of electrical energy is required for the production of hydrogen, making it too expensive and too polluting with the current generating methods. As a result, the foundation has been looking for cleaner and cheaper methods to generate this electricity. With the VacUnergy ROTOR, a solution to this problem is within reach.

The VacUnergy ROTOR will be able to help people become more independent, as was the case for cars, washing machines, fridges, etc. in the last century. This is because the VacUnergy ROTOR (in combination with fuel cells) could make it possible for each house/company – in other words, every economic unit – to have its own 'energy plant' in the future.

VacUnergy Rotor

Some formulas and elaborations of

- forces that act on the rotor machine
- power to be obtained from the vacuum forces

Centrifugal force

$$F_c = 0.011 \times m \times R_z \times N_r = N$$

m = mass of the blade

R = radius

N_r = rpm

Lateral forces

$$F_{lat} = \frac{1}{2} \rho \times V^2 \times A \times 0.9 = N$$

ρ = density of air

= 1.2 kg/m³

A = flow surface area

Power from Vacuum

$$P = A \times F_v \times F_x \times f = kWf$$

P = Power/kW

F_v = g underpressure / cm²

F_x = no. of implosions / sec.

f = friction

The hydrogen economy: an introduction

As a foundation for research and development of permanent, clean energy supplies we are looking for the best combination of electrolysis, fuel cells and storage options to use our energy carrier 'hydrogen' for heating and electricity in a decentralised form.

The simple fact is that each economic unit or cluster of units will have to provide its own energy in the future.

We have come to the conclusion that a hydrogen economy will never be established if a useful, cheap and clean source of energy, which will also contribute to the possibilities for the said decentralisation, is not found.

This is because the production of hydrogen gas requires a large amount of energy.

Combustion of hydrocarbons and biogas, wind / solar / water power, nuclear energy, etc. all generate more or less clean results, although some are more expensive than others, but none of these production methods is suitable for decentralisation.

The fact that a large, inexhaustible source of energy exists in the world but has never been used is not yet widely known. 'Vacuum' can be generated from atmospheric pressure, using gyroscopic technology and aerodynamics. To do this, a mechanical device was developed: the Vacuum rotor.