

Input of electricity

## **DE WATERDRAAK - Energie uit Water?**



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## WaterDraak Stap 1 Opzet van stapsgewijs PoP-onderzoek → ontwikkeling demo 10 kW Stroomregeling V-A-Hz-R UIT + debieten STOOM Drijfgasvia kern va

## Calculus of the Proof of Concept: Plasmolyses turns Water into Fuel

300

301

3000

Plasmatron has fixed Amperage of:

6 Ampere

Start-up voltage from the grid of:

220 Volt Starting power amounts to:

The device on the outside remains handwarm, so efficiency is estimated at:

After development of plasma Voltage falls with:

Heating of 90 ml of water to 3000 °C

10

300

301

to

to

to

90% Steady state power amounts to:

85% 1,12 kWh

0,11 kWh

0,16

kWh

J/mol

25.000

1.32 kWh

kJ/ka/°C KWh/kJ 1/3600 kWh is 290 4,19 0,000278 0,09 0,03 1389 is 0.03 0,000278 is 2699 1.41 0.10 0,000278

Bond Energy one liter of water 1000 18

1 kg water contains 1000 gram/18 gram = 55.5 mol water (source: Wikipedia)

Bonding Energy of H<sub>2</sub>O Bonding energy of H-OH

Bonding energy of O-H bond Total

kJ/mol

493,4 424,4 917,8

55,6 27.411

kJ/ltr

23.578 50.989

0,000278 0,000278

7,6 6,5

kWh/ltr

kJ/kg

1389

55,6

1,27 kWh

kWh

0,69

0,59

## Wikipedia:

from

from

from

The bond energy is an average calculated from the sum of the bond-dissociation energies of all bonds in a molecule.[3] For example, an HO-H bond of a water molecule (H-O-H) has 493.4 kJ/mol of bond-dissociation energy,

and 424.4 kJ/mol is needed to cleave the remaining O-H bond.

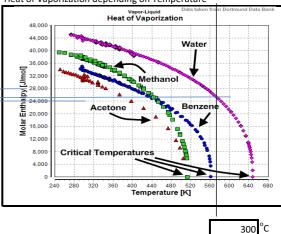
Hydrogen bond-dissociation energy in water is about 23 kJ/mol.<sup>[4]</sup>

(this portion is not taken in consideration)

First step of Proof-of-Principle research programme

Water-Plasma torch melts Tungsten

Heat of Vaporization depending on Temperature



90 ml water delivers 0,11 minus 0,16 plus

1,27

1.23 kWh

A. (still under radar)

B. (still under radar)

www.hho-heating-systems.com/

Plasmolyses:

www.httcanada.com

Watergas.NU and Watergas.EU promote the application of 'watergas'-technology in industry. In the past five years we have developed a network of watergas companies.

'Watergas' = 'gas of water'

Another way to harvest the power of water is with Plasma Technology.

Most companies struggle with the fact that watergas (aka 'HHO') can't be not proven with mainstream physics.

Currently we know of 5 companies, like (see blue bar) have developed house-heating systems fueled with water! These Water-Heating Systems have COP's of at least 20.

Mainstream Physics can explain Plasma Technology and is proven technology. Currently we know several companies, offering plasma gasification for Waste2Energy! This calculation shows that Water-Plasmatech reaches a COP of at least 10.