Energy & Mass

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Abstract: *The Energy means Potential Energy in our day today life. Enormous Potential Energy is available in the Gravitation but it hardly of great use, except remarkable use in hydroelectric Plants running through rain water harvesting to filling the dams. The petroleum products, oils, eatables, heat, ocean waves and winds volcano etc are the sources of Potential & alternate energies*
Keywords: *Temperature Coefficient, Kinetic Energy &, E= mC^2.*

I. Introduction

1. Horse Power : when a horse pulls a mass of 550 lbs from a well one foot in one second = one Horse Power Potential Energy to work done.
2. When one gm of water is heated in between 15.5 ^{0}C to 16.5 then one Calorie = mass * specific heat * temperature rise to take heat energy or to liberate heat energy.
3. When an electromagnet lifts a mass of 550 lbs from a well one foot in one second = 746 Watt Electric Energy.
4. The rise of temperature expands the metal and fall of temperature contracts them.

When a body / machine / vehicle at rest it needs more energy readable on ammeter and fuel indicator to give the momentum till the speed is attained and more speed or less speed, the accelerator controls them: wherein when the said body / machine / vehicle is stopped then its switched off or the fuel is closed, even then, the said body / machine / vehicle running for some time or to some distance due to the momentum to exhaust: i.e. momentum gained = momentum exhaust -4 and the momentum exhaust is called the Kinetic Energy which cannot be more than the mother source of Potential Energy,, m= mass , V= speed, C= velocity of light = 300000 km per second , ^{0}C = temperature , t = temperature , S= specific heat, the details are as under:-

II. Description

1- It is clarified that Albert Einstein Atomic Energy E= mC^2 indicates the Potential Energy   (1)
2- Potential Energy heat energy in calorie =mass * specific heat & temperature m*s*t   (2)
3- Potential Energy = mass * velocity   (3)
4- Kinetic Energy = ½ mass * velocity^2 (4)
5- The pattern of E= mC^2 is twice the Kinetic Energy   (5)
6- Potential Energy > Kinetic Energy when the velocity =1   (6)
7- Potential Energy = Kinetic Energy when the velocity =1.41   (7)
8- Potential Energy < Kinetic Energy when the velocity >1.41   (8)
9- Velocity of light doesn't come in Relativity Theory of Einstein even then he defied it by putting the velocity of light^2 which is more serious wrongful decision   (9)
10- However E= mC^2 doesn't come in Heat Energy at (2) calorie nor in Kinetic Energy   (10)
11. E= mC^2 is in the pattern of twice the Kinetic Energy   (11)

III. Observations

An Apparent increase in mass due to Speed

One of the consequences of Special Relativity is that mass appears to increase with speed. The faster an object goes: the " heavier" it seems to get. This statement of Einstein of Special Relativity states that as the speed increases, the mass the mass also increases. It is not accepted because appears don't confirming the truth. For example when a rider of a motor cycle runs his motor cycle inside a spherical dome along it horizontally and vertically, the centrifugal force acts against the gravitation. An aero plane runs very fast on the approach road (ground) before flying in the sky to attain the speed about 900 km per hour. The speed makes an object "lighter" instead of "heavier". Therefore it is also not acceptable and may be wrong.

Expansion & contraction joints -Linear Temperature Coefficient
load =F (kg), area of cross section = A (Cm^2). increase in length=dl (cm) due to load or temperature, length=l (cm)

t= temperature (^{o}C), dt=increase in temperature (^{o}C),

Take a steel rod and load it with tensile load (A)

Stress=Load / Area = F/A (cm^{2}) (B)

Strain = increase in length / length = dl / l (C)

Take an identical steel rod and increase its temperature (D)

Due to temperature expansion = increase in length/ length = dl / l (E)

The Strain due to load shown in (C) and Strain due to temperature shown in (E) are equal (F)
because the identical metallic rods are taken in both these cases.

Linear temperature Coefficient shows increase in length /length * increase in temperature =dl/l*dt (G)

In equation (G) it is seen that Strain due to temperature is inversely proportional to the temperature increase hence it conveys that increase in temperature decrease the temperature Strain and therefore it is unacceptable and wrong.

Therefore it is suggested that find the maximum Strain within the elastic limit and correlate it with the temperature Strain and note temperature. The said both experiment should be performed at the same temperature. The maximum Strain & intermediate Strains due to temperature can be calculated with respect maximum Strain & intermediate Strains due to load and the maximum load to indicate the maximum temperature safe to a building.

The RCC slabs and beams have 2 cm & 3 cm concrete cover below the reinforcing bars or rods on ceilings which in case of fire hazards are insufficient and hurriedly can increase the temperature of the reinforcing bars or rods to the maximum elastic limit thereby demolishing the building. If the antilever type slabs and beams are used in buildings then they shall be stronger in fire hazards than the said slabs and beams because their reinforcing bars / rods are provided at the top of roof with a cement concrete cover 2 cm and 3 cm and temperature hazards shall take more time to resist fire hazards. The columns shall build by fire resistant bricks. It is also suggested that the students while performing the experiment of Modulus are required to note the temperature of the hall also.

IV.   Conclusion

In view of the above facts & figures it is clarified that temperature coefficient is wrong and absolute correct value of expansion and contraction joints can be known of a gap in joints. E= mC^{2} not accepted therefore wrong. In view of Einstein, the fast speed or velocity makes an object "heavier" is wrong because velocity makes the object "lighter". The velocity works anti-gravitation. One form of energy can be turned in other form of energy. The intense heat is turned into light but the light cannot be turned into heat except to alternate energy.