

International Journal of Scientific Research in Science, Engineering and Technology Print ISSN: 2395-1990 | Online ISSN: 2394-4099 (www.ijsrset.com)

doi: https://doi.org/10.32628/IJSRSET

# A Procedure to Use Saline Water

## Shivam Pandey

Department of Computer Science and Engineering, Chandigarh University, Punjab, India

## **ABSTRACT**

#### Article Info

Volume 9, Issue 5 Page Number : 63-65

#### Publication Issue:

September-October-2022

## Article History

Accepted: 01 Sep 2022 Published: 10 Sep 2022 Only 3% of the world's water supply is currently available, so I tried to combine water extraction and supply technologies to make use of the plentiful sea water for domestic and drinking purposes. One machine will extract water, while another will supply it to households. We may use this to filter the water for drinking as well as to extract water for all daily duties like washing clothes, dishes, cars, and taking baths. I made an effort to affix a purifier that would get rid of the saltiness and other impurities in seawater. I next used the Ion Electro Sorption method. I will install hydro machines, submersible pumps, and motors along the coast to make sure that every home has access to at least one sea valve. Additionally, I will build underground pipelines that span the entire circle region. This will help us a lot in finding a solution to the water crisis. I essentially had to construct a full sea plant employing hydro machines, submersible pumps and motors, and underground sea water pipes in order for every local residence to have access to one sea valve. I want to make extensive use of the equipment so that I can genuinely gain from them.

**Keywords :** Research Paper, Water, Reverse Osmosis, Electro sorption, Filter Sheet, Ion, Equipment

## I. INTRODUCTION

I can use submersibles and other tools to get water out of the sea. Water is promptly pumped into the underground pipelines that deliver it to every dwelling within a set radius as soon as it is drawn from the sea. But before I can accomplish that, I need to install pipes all over the circle area. I'm adding water to every device in absolutely vast amounts, and the setups will be enormous. According to the theory I used, liquids quicken under force and lose their driving force in the end, were driving force changes into coercion. Electric submersible pumps, which run upright continuous period centrifugal pumps, are used to do this.

In HSP, the electric stepper machine is a pneumatic stepper rather than a galvanically stepper, with the unbolted padlock mixing the ability liquid with the formed fluid substantive surface unconnected or the padlock circle holding the power liquid unconnected formed liquid. The driving pole is automatically integrated on the drive base and connected to the fuel delimiter.

This is a crucial part of spiral course drives that are connected



Figure 1

After collecting water with the help of HSP, we use a RO filter on a large scale to purify the water.

The reverse osmosis (RO) method of water filtration removes ions, unwanted chemicals, and larger particles from waste water using a partially permeable membrane. As a result, the dirty particles are trapped on the pressured side of the membrane while the pure water is allowed to pass to the other side.

From the other side the water now moves to the next process. In the next process I set up an Ion Electro sorption Technique. For this I used a Charged carbon electrode

Water is passed through a charged carbon electrode that adsorbs the opposite charged ions. water with low ions/salts remains.

After that I collect water in a container. In this water can purify by setting different layers of purifying sheets or paper that can be replaced manually by a normal person again and again when required as it will show the red light when they need to be changed.

The point now arises is now regarding filter sheets that what type of sheets and materials will be used? The solution to this problem is to we will use the plastic sheet of thin plastic which will have a net like apparatus like as shown in Figure 1.3

#### II. METHOD TO BUILD

- 1. First of all, I need to establish a HSP which is used to get saline water from the sea or ocean.
- 2. The outlet of HSP will be connected to The Purification Machine which is based upon (RO principle).
- 3. After Purifying water, the out supply from Purification machine will be connected to Ion Electro sorption Technique.
- 4. Now the water will be stored in a container which has filter sheets inside them.

#### IMAGE OF STEP OF CONSTRUCTIONS

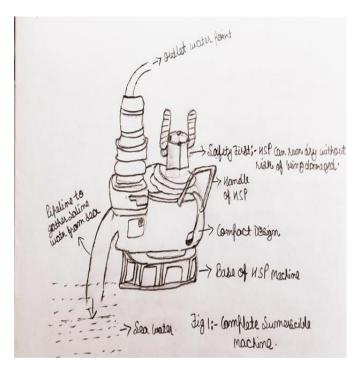


FIGURE 1.2

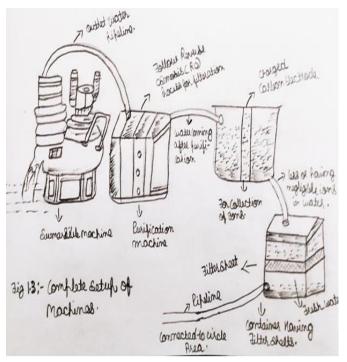


FIGURE 1.3

#### III. RESULT

The equipment that the inventive technique creates can force sea water into our residence through a valve, which we can use to clean, flush the toilet, wash cars, wash clothing, and carry out any other unneeded chores that don't require drinking water. The equipment that the inventive ways build has the potential to save a lot of drinking water.

#### IV. DISCUSSION

Many previous concepts were less successful than expectations because the machines were employed singly rather than in combination. But now, I integrated the two technologies to produce pure water without endangering nature or its innate rules.

### V. CONCLUSION

The optimization strategy, which also offers some unrealistic methods, seems to be a breakthrough in the use of extremely basic and simplest structures to solve complex machine structure problems. In order to

utilize sea water effectively, my goal was to design and merge two distinctive machines. I had already used reverse osmosis to remove the salinity from the water, which is necessary before transferring it to pipes.

### VI. REFERENCES

- [1]. Research on Ion Electro sorption
- [2]. Research on Filter Sheet or Paper
- [3]. Research On Reverse Osmosis Process

## Cite this article as:

Sh