Most frequently asked questions about the Ener-Tec® Paraffin Control System

1.

Why do I need the Paraffin Control System?

Paraffin deposits can cost an oil well thousands of dollars per month (depending on the size and production rate) due to reduced production. The restriction of flow from the paraffin buildup means consistently less barrels per day until it is cleaned. With cleaning you have the cost of pigging, hot oiling, or chemicals, plus the cost of disposal of paraffin. All these with the added cost of labor and downtime add up to a large cut in the potential profits of your oil wells.

The Ener-Tec Paraffin Control System prevents paraffin deposition, which increases production, minimizes cost and eliminates maintenance. The most critical part is that the Ener-Tec Paraffin Control System, unlike chemicals, is NON-POLLUTING.

After the initial installation there will be no down time, chemicals, pigging, hot oiling, or other cleaning required. There may be exceptions where cleaning may be necessary, but it will be at long intervals between times.
2.

What does the Paraffin Control System do?

The Paraffin Control System induces an electromagnetic flux energy (frequency) into the fluid and pipe which polarizes the molecules, forming a stabilized fluid condition. The paraffin flows with the oil and does not build up on the inner walls of the pipe.

3.

How does the Paraffin Control System remove and prevent scale and paraffin deposits?

After passing through the Paraffin Control System, the forces generated within the oil is greater than the forces which hold the paraffin molecules to themselves or the piping surface. As the charged paraffin molecules pass the uncharged molecules, the uncharged molecules release and travel through the pipe with the charged molecules. The end result is a clean, maintenance-free, paraffin-free system.

4.

How long does it take to see results after installing the Paraffin Control System?
When installing the Paraffin Control System on an application containing paraffin, the rate of removal depends on the thickness of the paraffin, the hardness, the flow rate, plus other criteria. However, normally you will see results of paraffin removal within a few days to a couple weeks.

5.

What type of oil will the Paraffin Control System work on?

We have found that the Paraffin Control System works on all types of oils.

6.

What expenses are involved in using the Paraffin Control System?

The greatest expenditure is actually the price of the unit itself. Ener-Tec utilizes the latest in electronic components in an effort to minimize the amount of energy required to operate the system. Your only cost is the electrical consumption, which will run approximately $10.00 per month.

7.

At what distances is the Paraffin Control System effective?
The Paraffin Control System has been proven effective in pipe line applications in distances to 45 miles, and on oil wells to a depth of 7,000 feet when installed above ground. This is not the limitations of the Paraffin Control System however. These are just the longest and deepest applications we have to date.

8.

What size Paraffin Control System do I install?

Size selection is based on the existing pipe size, flange, and pressure rating. The system will replace a piece of pipe, so every specification should match existing pipe.

Note: We do not recommend a drop in the pipe size.

9.

What is the delivery time on a Paraffin Control System?

Ener-Tec maintains an inventory on all standard size systems. If, for some reason, the unit is not in stock, or if is an odd size, allow 3-4 weeks for delivery.
Note: All equipment meets API standards.

10. Who installs the Paraffin Control System?

The system is installed by the purchaser. Ener-Tec, Inc. pre-wires and pre-assembles the system as completely as possible in an effort to facilitate ease of installation.

11. How long does it take to install the Paraffin Control System?

Installation time will vary depending upon the size of the system. The average installation takes approximately one to two hours.

12. Does all the oil have to flow through the Paraffin Control System?

Yes, all the oil must pass through the treatment chamber in order to reach the complete saturation point, or polarization.
13.

How much flow is required for the Paraffin Control System to operate?

Due to the unique design and electrical performance, the flow rate is not critical. Since the electromagnetic flux field travels at the speed of light, flow rate is insignificant.

14.

Does the Paraffin Control System restrict the flow?

No, the system does not restrict the flow. There are no internal components within the treatment chamber. All energy is generated externally, and emitted into the flow at a predetermined frequency and \textit{gauge} strength (measurement of the magnetic field.)

15.

What happens to the pipe and equipment once the scale and paraffin is removed?

The pipe will remain clean and free of scale or paraffin buildup for as long as the Paraffin Control System is installed and has power running to it.
16. Are chemicals required when using the Paraffin Control System?

No, all chemicals are discontinued when the system is installed.

17. What is the pressure rating on the Paraffin Control System?

Each system is designed and manufactured to the end users specifications. Pressure rating, flange specifications, and pipe wall thickness must be specified when ordering the equipment.

18. What effect does the Paraffin Control System have on electrolysis?

Laboratory tests show that the Paraffin Control System reduces and/or eliminates electrolysis by stabilizing the electrical charges in the fluid.

19. How does the cost of the system compare with conventional
treatment methods?

The system has proven to have a very fast return on investment, ranging from a few days to a couple weeks, or occasionally a month or two, depending on the severity of the problem.

20.

How does the Paraffin Control System compare with other units on the market?

The only competition known is the permanent magnetic types. These systems only work under certain flow rates, they have very little polarization capabilities, and must be removed, recharged, or replaced often.

21.

What maintenance is required with the Paraffin Control System?

The Paraffin Control System is constructed of high-quality, solid state electronic components which enable it to operate for a virtually indefinite amount of time. It is self monitoring, self cleaning, and requires no maintenance.
22.

Are there areas or applications where the Paraffin Control System will not work?

We have not found an area or installation where the equipment would not perform.

23.

Does the Paraffin Control System have to be mounted in a certain direction?

The Paraffin Control System may be mounted vertically, or at any angle without affecting the operation. The flow through the unit is critical, and the system will be stamped with either an arrow, or be marked "inlet and outlet" indicating the direction of flow of the liquid through the system.

24.

What are the temperature limitations for the Paraffin Control System?

The standard Paraffin Control System is manufactured to operate at temperatures at or below 200°F. If higher temperature systems are required, please specify the temperature ratings when ordering.
25. Will the induction field cause a temperature rise to the oil?

There will be a slight temperature rise due to the flux energy exerted within the oil flow, but it will be insignificant.

26. Does the Paraffin Control System cause pollution?

Since the Paraffin Control System works off DC electromagnetic flux field, nothing is added to, or taken away from the oil, therefore the system is completely non-polluting and offers no problems as to EPA approval.

27. What electrical codes will the system meet?

The Paraffin Control System will meet any electrical code, including the explosion-proof codes. The electrical code must be specified when ordering the equipment.
28.
What effect does the system have on cathodic protection?

Since the system balances and neutralizes electrostatic charges, the cathodic protection will be enhanced.

29.
Does the system effect the pour point or viscosity of the oil?

Not a measurable amount.

30.
Are custom lengths available?

There are times that existing flanges (spool pieces) exist with a distance between flanges different than our standard lengths. Ener-Tec, Inc. will manufacture a special system to accommodate any installation. We recommend calling before ordering to check on the feasibility of the special size.

31.
What is the warranty policy of the Paraffin Control System?

Ener-Tec products are guaranteed for a period of 5 years from the date of installation. If, for some reason, you decide not to keep the Paraffin Control System, send it back to Ener-Tee at no charge.

32.

Is the system resistant to water and/or moisture?

Yes, we meet NEMA rating for moisture and water-proof standards.

33.

Is the system effective in salt water applications?

Yes, we have found that the system is effective in preventing buildup in salt water injection for water lift oil wells.

34.

What welding procedures are followed during fabrication?
API welding codes are followed, and X-RAY is done whenever the customer specifies it. We are in the process of changing over to X-RAYING 100% of our welding.

35.

How is the equipment shipped?

Due to the weight, all equipment must be shipped by truck line, or air freight, F.O.B. manufacturer. All equipment is boxed or palletized for shipment.

If you have any other questions about the Paraffin Control System from Ener-Tec®, Inc., please contact us. Thank you for your interest in our products.