TUBE & PIPE CLEANING

- This PDF/printable version is displayed here for your convenience, in case, you have to collect below mentioned information from your colleague.

  If you have all informations, please visit http://www.pressurejet.com/Enquiry.aspx?Id=3 and send it to us.

1 Question: Have you ever used tube & pipe cleaning hydro jetting pump / equipment? If yes, please let us know the make, flow rate, pressure etc...

Question Explanation: This question is very important to let us know your understanding / knowledge about this product. It is essential for us to open right communication.

2. Question: Please inform the name of equipment.

Question Explanation: Please inform the name of equipment. e.g. boiler, heat exchanger, evaporator, condenser etc.

3. Question: Tube inner diameter

Question Explanation: This technical detail is essential and customer will have to furnish, as different Tube cleaning nozzles are available to suit different Inner Diameter tubes. Suppose Tube Inner Diameter is 16mm. In this case, we may select 12.7 mm Outer Diameter nozzle but 12.7 mm nozzle may not be effective for 32 mm ID tube as it may require 20mm Outer Diameter nozzle. In other words, all different size pipe Inner Diameter may require different nozzles. Therefore, to select right nozzle, we need Tube Inner Diameter.

4. Question: Tube Thickness

Question Explanation: Water impact to remove the scale ultimately works as momentum (Velocity X Mass). Whether the tube will withstand that momentum of water or not is very essential to calculate and for that tube / pipe thickness should be informed.

5. Question: Is your tube straight, spiral, blind & /or open?

Question Explanation: Normally, tube-cleaning accessories are available for straight tube. However, larger diameter tubes with bigger radius, tube cleaning is also possible. Please furnish information with dimensions to select appropriate model and accessories.

6. Question: Material of construction of Tube

Question Explanation: This is general question and answer is also easily available to calculate the tube strength. We can also supply machines for graphite tube, Copper tube, Steel tube etc…

7. Question: No. of tubes & time available to clean these tubes

Question Explanation: This is also very important to calculate the sizing of the equipment i.e. pump flow, pressure, nozzle type etc. For example, You can assume that 17 lpm / 350 kg/sq. cm/ 15 hp pump can clean tube “A” within 15 minutes and only 4 tubes may be cleaned in 1 hour. Now, if 20 tubes are to be cleaned in 1 hour, then probably 30 lpm / 500 kg/sq. cm/ 40 hp pump may require. Therefore these specifications are very important to select the right pump.

8. Question: Approx. Waterjet Pressure at which Tube will be cleaned.

Question Explanation: Many a time, customer knows this detail. If he/she knows or guess, then, he / she should inform to select right High PressureJet Pump. You should appreciate that manufacturer can help client to select right pump model but it is joint responsibility of customer and manufacturer to select right pressure.

9. Question: Approx. Flow rate of water, to clean the Tube.

Question Explanation: Many a time, customer knows this detail. If he/she knows or guess, then, he / she should inform to select right High PressureJet Pump. You should appreciate that manufacturer can help client to select right pump model. However, it is joint responsibility of customer and manufacturer.

10. Question: Approx. Scale Thickness

Question Explanation: To select nozzle type, pressure & flow of the High Pressure WaterJet pump and nozzle Outer Diameter, it is essential to have this information.

11. Question: Is scale loose, little hard, hard or very hard?

Question Explanation: To imagine and select the flow and pressure, it is most essential to inform the scale type. We understand that you may not be aware of exact hardness of the scale type. At the same time, it is very essential to know that how hard the scale is.

In this circumstance, you may please send us the sample of the scale or piece of tube and inform the existing method. To remove the scale, we have no option, except to guess the flow rate and pressure of the pump. It depends on the experience of the manufacturer for the right selection.

Hard and very hard scale always needs chemical circulation to make the scale loose. It is essential where pump pressure is less, otherwise with UHP machine even very hard scale can be removed.

To check your scale type, please apply following methods in ascending order.

· If scale can be removed by rubbing with the thumb, then it is considered to be loose scale.

· By rubbing an iron rod of approx. 8 mm diameter and 15 cm length, while holding it loosely with two fingers and a thumb of a hand, if scale is being removed slowly, then it is considered to be little hard scale.

· While hammering the scale with an iron rod of approx. 8-10 mm diameter and 15-20 cm length and if it is being removed very slowly & very little, then it is considered to be hard scale.

· While keeping the rod of approx. 10-12 mm diameter and 25-30 cm long on the scale and hammering it with iron hammer, if scale is being removed slowly, then it is considered to be Very hard scale.

12. Question: Brief about existing cleaning method, frequency & details of tools used, existing pump details, if any.

Question Explanation: Option: Existing method.
1. Acid Cleaning
2. Acid circulation and thereafter cleaning with brush
3. Water circulation.
4. Acid / descaling chemical circulation and thereafter high pressure WaterJet cleaning.