

**INDENT No. 6684-725 Dated 07/11/12**

**Design, manufacturing, supply, installation & commissioning of three tank portable work station for cleaning sinter Bronze capsules of pneumatic circuit of electric locomotives.**

**1. Designing of portable Autoklenz system.**

**(i) Pre Cleaning Tank:** It should be made from SS: 304/16 grade steel. Tank should be provided heater & controls for the same. Additional inlet and outlet port for water inlet & draining should also be provided. – 01 No.

**(ii) Ultrasonic Cleaner:** For generating ultrasonic waves for through cleaning of filter dipped in metaklenz solvent. – 01 No.

**(iii) Post Cleaning:** S.S. 304/16 Grade for washing away the solvent including inlet & outlet port for fresh water & used water. – 01 No.

**(iv) Blow Gun with retractable hose:** For blowing the filter element inside out. – 02 Nos.

**(v) S.S. Mesh Basket :** For carrying the filter elements in the ultrasonic tank in symmetry. – 01 No.

2. Installation of complete above unit with movable option at the desired location in the cleaning area.
3. Connecting air supply (Inlet) for the retractable hose for blowing the filters by providing S.S. Ball valves at pre & post cleaning locations.
4. Connecting water inlet and draining connection for pre & post cleaning tank.
5. Connecting the ultrasonic control panel by carrying out necessary wiring for the same to connect the heaters and pizo electric transducer device.
6. Commissioning of the Autoklenz system by checking all the parameters (Electrical as well as mechanical)
7. Demonstration of complete one cycle of cleaning process by using Metaklenz cleaning agent.

**Technical specification**

**Electric Supply:** 230 V AC, 50 Hz, 1Phase

**Ultrasonic Frequency:** 35 + Khz.

**Ultrasonic Power:** 500 Watts.

**Tank Material:** SS 316/16 Grade Argon welded with rounded corners size 20" X 8" X 6".

**Transducers:** PZT Sandwich type Transducers, made in U.K. are fitted at sides (5 on each side) of S.S. Tank with welbond technique for generating frequencies required.

**Generator:** Auto tuning solid state generator fitted in built with tank having selector switch for tuning purpose.

**Heater:** SS Pipe with porcelain immersion heater.

**Temp control:** By thermostate 30 ° C-110 ° C.

**Drain :** ½" BSP S.S. ball valve.

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