#### MTC

The Technique named as Mechanical Tube Cleaning is a drilling technique in which, Drilling Bits with rotating rigid shaft, drills along with tubes at a power of 400 RPM to 2000 RPM.

The shafts are driven by pneumatic pressure (for rigid shaft) and electricity (for flexible shaft). This technique is used at conditions where hard scaling is found in tubes. It is impossible to dean Hard scaling & Choked tubes by HYDRO-JET Technology, whereas Mechanical Tube Cleaning gives 100% results in case of any type of scaling or chocking of tubes.

Through a water flushing and rotary drilling action, the Drill system is the fastest and most effective way to remove difficult deposits from the inside of heat exchanger tubes, chemical reactors, condensers, reboilers, and absorber. It can effectively clean hard deposits such as silica, coke, calcium, Sulphur, bauxite, asphalt, oxides and baked-on hard polymers. Completely blocked tubes can be restored to 100% of the original tube I.D.

#### About Us

The Mechanical Tube Cleaning has been introduced in India & Gulf Region by Gulachi ENGINEERS PVT LTD, India.

THIS TECHNIQUE WAS INTRODUSED IN2017 AND TILL 2023 WE HAVESUCESSFULLY CLEANED APPROX 1MILLION METER LENGTH OF TUBE

This technique is totally developed and it is highly customizable to serve our clients and give them best solution for Tube Cleaning.

#### Step 01

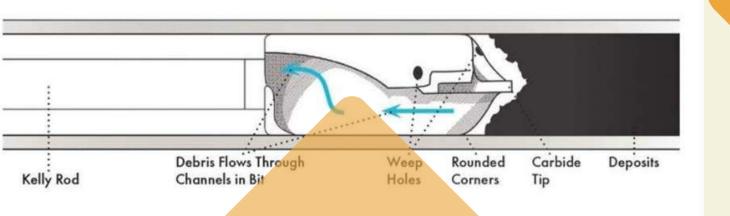
Designing the Tool and Equipment as per conditions

### Step 02

Cleaning of Tubes with customized MTC System

#### Step 03

Post Tubes Inspection with applicable techniques like RVI, ECT, RFT, MFL, IRIS, ECA



# Mechanical Tube Cleaning

Gulachi

#### **Features**

#### Safe & Reliable:

This is one of the safest techniques with minimum HS preparation required.

#### Portable:

All equipment's are portable as compared to HYDRO JET, each item is under 50KG weight

#### Works at Low Air Pressure:

Air Pressure Required for Drilling equipment is 7-10 bars.

#### Less Manpower:

Maximum 4 manpower is required with one team/equipment

#### **MTC - RIGID SHAFT**

**MTC - FLEXIBLE SHAFT** 

MTC - WET

MTC - DRY

MANUAL

#### **SEMI-AUTOMATIC**

**FULLY AUTOMATIC** 

HORIZONTAL/VERTICLE

ID 6" TO 68"

### LENGTH UP TO 35 METERS

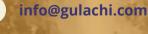
This technique is the fastest technique for cleaning choked tubes and tube with hard scaling. Where other technique is simply not efficient to clean the tubes, Mechanical Tube Clean is 100% assured way and give total appreciative result

### **NO TUBE DAMAGE**

Specialized engineers designed the specific Bits according to Dimension and Material composition of the tube to be cleaned. We keep all aspects in checklist like, scale composition, Hardness of bit in ration with tube material. The side blades of the bits are designed as per the inner arc of the tube, so that the edge of Bit just moved parallel to inner arc of tube and does not contact perpendicularly. A feature long shanks to ensure that the axis of the bit and the axis of the tube are in complete alignment thus resulting no damage to tubes.

### **Contact Us**







www.gulachi.com

INDIA|OMAN|GCC



#### MLTC SIMPLE SIX STEPS

- 1. Mobilization
- 2. Blanketing
- 3. Connection
- 4. Desludging
- 5. Separation & Recovery of Oil
- 6. Ventilation & Demobilization

#### **Benefits**:

- Reduction of tank cleaning time (2-4 times)
- 95% recovery of hydrocarbons
- Close to elimination of off-site material disposal
- Safe no-man entry process (few people for less time under less extreme conditions)
- Build in ESD and personnel safety feature
- Designed to meet codes
- Process performed with well trained and highly qualified labour
- Minimized accident risk
- No need for any modifications to Tank

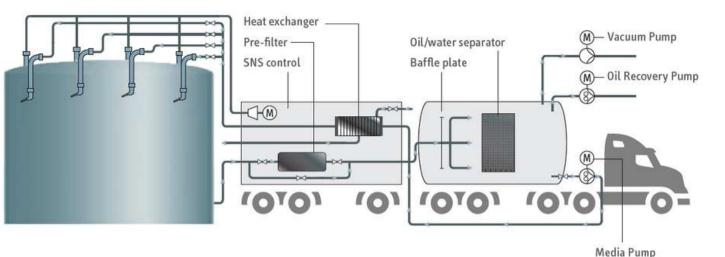


### CONTACT US FOR MORE INFO

Email: autotank@gulachi.com www.gulachi.com

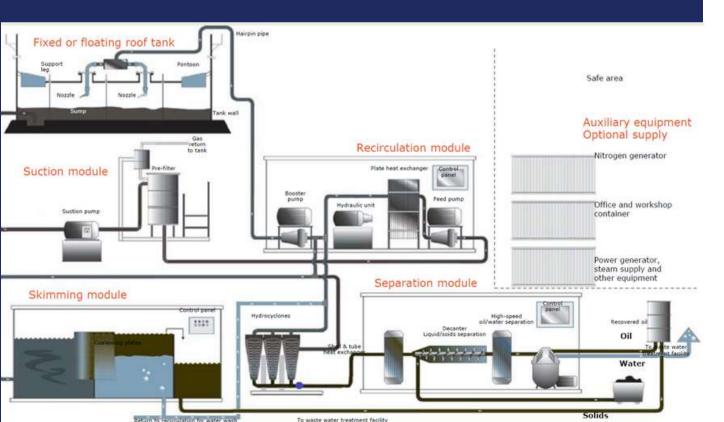
## MAN-LESS TANK CLEANING

NON-MAN ENTRY CLEANING SYSTEM



### Systems Application

- Crude/HFO/Black Oil tank cleaning
- Fixed and floating roof tanks
- This system is applicable for any tank bottom construction types such as cone up, cone down, flat, etc.
- Applicable on any Tank Size



### MLTC TECHNIQUE

#### **Equipment Brief**

- Mobile & Fully Integrated process system
- Combining automated, non-man entry tank cleaning and oil recovery
- Modular, Mobile and Flexible
- High Cleaning efficiency and operational reliability
- Cost effective
- Endorsed/approved by International oil companies

#### Features

- Fully Automated System minimize manpower requirement
- Industry best HSE process minimize
  worker exposure
- Significant reduction of tank turnaround time
- Higher degree of predictability extends beyond cleaning period
- Omitting of normal time-consuming cleaning steps (Degassing, stripping, etc.)
- Increased utilization of storage capacity
- Potential reduction of investments in storage capacity
- Very high recovery of crude oil from sludge
- Reduction of disposal costs of polluting streams
- Reduction in overall project risk due to less exposure, less manpower, shorter duration
- Reducing VOC emissions