

INSTRUCTIONS FOR THE REMOVAL OF FILTER TUBES IN IWF FILTERS

1. For ease of disassembling the IWF filter, it is recommended that an overhead chain fall be used, preferably mounted on a track, to permit lifting and side motion.
2. Loosen and remove all hex nuts (Part 6300) and stud bolts (Part 5000) attaching the cover to the shell.
3. Install eyebolt in 3/4" threaded cover lift fitting on top of filter. Lift cover from the shell assembly.
4. The tube sheet (Part 803) supporting all of the filter tubes is equipped with lifting eyes. Attach suitable bridle or lifting bar to eyes for attachment to lifting hook on chainfall. If one eyebolt is furnished in the center of the tube sheet, attach lifting hook of chainfall to the single eyebolt.
5. To lift the tubenest, (consisting of the tube sheet, filter tubes, and mounting hardware) clear of the filter shell, a clearance of at least 54" is required.
6. If it is not possible to move the tubenest to one side and lower it to the floor, tube inspection and possible replacement can be done on a platform laid on the top of the filter shell flange.
7. Lower the tubenest to the working area and maintain a distance of 3"- 4" off of the floor. A suitable 3" high supporting piece placed under one or more rows of tubes allows access to the other tubes for removal and inspection. Examination of the filter tubes starts with the outermost row and work inwards.
8. To remove a tube assembly from the tube sheet, loosen and remove the upper hex nuts (Part 6321) from the suspension rod (Part 7693/94). While supporting the tube assembly by the lower tube closure plate (Part 7672) loosen and remove the second hex nut (Part 6321). The tube assembly can be carefully lowered to the floor for inspection.
9. The upper filter tube (Part 11010) can be easily removed from the suspension rod (Part 7693/94). To remove the second or lower filter tube (Part 11010/13), it may be necessary to back off on the setscrew (Part 6959) and raise the tube spider (Part 7666). Removal of the tube spider is only necessary when the lower tube will not pass over the tube spider.
10. Remove and discard all tube gaskets (Part 7023). Carefully inspect the filter tubes for cracks or plugging. Replace as necessary.
11. Reassemble the tubenest in the same manner as it was disassembled. Do not reuse tube gaskets. Be careful to ensure the tubes are properly positioned by raising the tube assembly by the closure plate (Part 7672) until the tube gasket (Part 7023) and upper filter tube (Part 11010) enter the recess in the underside of the tube sheet. The recess is approximately 1/4" deep to accept the tube gasket and upper filter tube.
12. Locate the tube clamp (Part 7674) over the suspension rod (Pat 7693/94) and center. Thread the first hex nut (Part 6321) onto the suspension rod. Ensure the gaskets and filter tubes are properly seated and tighten the hex nut to a torque value of 80 ft-lbs. Thread the second nut onto the suspension rod and tighten against the first nut.
13. Inspect and replace, if necessary, the two-shell/cover gaskets.
14. On filters having all 48" long filter tubes assemblies, the tube sheet may be replaced in any position relative to the shell flange. On filters having with a combination of 48" and 42" tube assemblies, be careful that the tubenest is reassembled in the same manner as originally found on the disassembly procedure. It is customary to have a locating pin for such reassembly or have the tube sheet properly marked by the workmen before disassembly.
15. The filter tubes have substantial strength for filtration services. They will not, however, withstand abuse or shock. Handling the filter tubes with care is essential.