

Water Softener Servicing

Water Softener Contract Service Options

With time raw water conditions change and the performance of a water softener will decline and regular service is essential to ensure that a water softener continues to perform in an efficient, cost effective and reliable manner and that your down-stream processes are protected from the damaging effects of hardness slippage.

We offer a range of cost effective contract service options which can be tailored to your needs to ensure that your water softener remains operating as it should and extending its serviceable life.

As a service contract customer you will be given preferential treatment for break-down and call-out service.



A) Performance Service Option

The Performance Service reviews all the operational aspects of the unit to:

- identify and compensate for changes in the raw water character
- ensure the regeneration cycle is correct and that all the water softener's valves and controls operate as they should
- establish the quality of treated water and ensure there is no brine carry over at the end of the regeneration cycle
- check the unit's electrical safety
- carry out a fault finding review, resolving any easily rectifiable faults during the service and reporting others requiring further action

What we do

- 1) Review the recent system performance with the client / water treatment consultant and check any log books of system running data.
- 2) Test raw water and treated water hardness and review operational settings and theoretical capacity. Adjust settings as necessary to compensate for increases in hardness and / or slippage. NB Any adjustments to increase the capacity between regeneration will only be made after consultation and with due regard to the age of the resin bed and variations in the raw water hardness.
- 3) Inspect the overall condition of the unit and associated pipework and valves for leaks and general condition and solve minor faults where practical and appropriate.
- 4) Inspect unit for electrical safety
- 5) Brine system checks (where practical and appropriate):
 - a) Check the quality of salt being used
 - b) Review the measured brine volume (adjusting settings as necessary)
 - c) Clean the brine system
 - d) Cure brine line leaks
- 6) Test any duplex change-over systems and the associated volume meters.
- 7) Complete a full test regeneration on each stream:
 - a) Check correct regeneration initiation and full automated cycling
 - b) Check backwash cycle function
 - c) Check brine draw and displacement / slow rinse cycle operation
 - d) Check the operation of the brine valve air-check assembly
 - e) Check fast rinse cycle and carryout and monitor conductivity / chlorides and hardness to ensure complete brine removal is being achieved
 - f) Check brine refill cycle and refill volume
 - g) Adjust cycle times as appropriate to ensure optimal performance
- 8) Leave the unit in service with all valves in the correct operating position
- 9) Complete an engineer's report and leave a copy with the Client having discussed our findings and detailing any follow actions which are required.

What's covered and what isn't

A Performance Service is a scheduled visit involving inspection, measurement, assessment and review of the operation of the unit. It does not include the provision or replacement of parts. It does not cover breakdown repair. If during the course of a Performance Service visit we identify faults which can quickly and easily be rectified at the time without the need for parts we will do so at no additional cost. If a more extensive repair is required or one requiring parts we will discuss this with you to either arrange a call-back or, if we are in a position to effect a repair immediately, to obtain your approval to proceed. This additional work is outside of the Performance Service and will be subject to an additional charge to cover the time and parts involved.

B) Major Service Option

During a Major Service we strip and inspect the water softener multiport valve, replace routine service parts and carry out functional tests to verify the unit operates as it should. Unlike the Performance Service it includes the provision and replacement of some parts but rather than carrying out a full automatic regeneration cycle on each stream, a shorter functional test of the regeneration cycles is carried out. A Major Service will:

- Replace specified wear and tear parts in the water softener control valve
- functionally test the regeneration cycle and assess that all the water softener's valves and controls operate as they should
- identify and compensate for changes in the raw water character and establish the quality of treated water
- check the unit's electrical safety
- carry out a fault finding review, resolving any easily rectifiable faults during the service and reporting others requiring further action

What we do

- 1) Review the recent system performance with the client / water treatment consultant and check any log books of system running data.
- 2) Test raw water and treated water hardness and review operational settings and theoretical capacity. Adjust settings as necessary to compensate for increases in hardness and / or slippage. NB Any adjustments to increase the capacity between regeneration will only be made after consultation and with due regard to the age of the resin bed and variations in the raw water hardness.
- 3) Inspect the overall condition of the unit and associated pipework and valves for leaks and general condition and solve minor faults where practical and appropriate.
- 4) Inspect unit for electrical safety
- 5) Brine system checks (where practical and appropriate):
 - a) Check the quality of salt being used
 - b) Review the measured brine volume (adjusting settings as necessary)
 - c) Clean the brine system
 - d) Cure brine line leaks
- 6) Test any duplex change-over systems and the associated volume meters
- 7) Strip multiport service valve, as appropriate and replace specified parts
- 8) Complete a functional test on the regeneration cycle on all streams.
- 9) Leave the unit in service with all valves in the correct operating position
- 10) Complete an engineer's report and leave a copy with the Client having discussed our findings and detailing any follow actions which are required.

What's covered and what isn't

A Major Service is a scheduled visit to replace routine wear and tear parts, fault find and review of the operation of the unit. It includes the provision of certain specified parts. It does not cover breakdown repair. If during the course of a Major Service visit we identify faults which can quickly and easily be rectified at the time without the need for additional parts we will do so at no additional cost. If a more extensive repair is required or one requiring additional parts we will discuss this with you to either arrange a call-back or, if we are in a position to effect a repair immediately, to obtain your approval to proceed. This additional work is outside of the Major Service and will be subject to an additional charge to cover the time and parts involved.

C) Combined Service Option

A Combined Service combines all the aspects of both the Performance and Major Service options into a single service visit.

D) Minor Service Option

This option is generally offered for smaller units and covers many of the elements of a Performance Service but rather than carrying out a full automatic regeneration cycle on each stream, a shorter functional test of the regeneration cycles is carried out.

E) Resin Condition Assessment - Service Upgrade Option

The resin bed is at the heart of water softener and with time it is prone to fouling and breakdown which can result in loss of softening capacity either as a result of reduced exchange performance or physical loss of resin. This degradation process is gradual and because of the difficulty and cost of accessing the resin bed we have not included a resin condition assessment as part of our standard service options. We would, however, recommend that the resin condition is assessed every few years and we therefore offer it as an additional chargeable upgrade option to either a Major or Combined Service visit. When we contact you to arrange a scheduled Major or Combined Service visit we will discuss with you whether you wish to purchase a resin condition assessment at the same time.

During a Resin Condition Assessment we will:

- 1) Remove the top of the softener vessel
- 2) Drain the water from the vessel
- 3) Measure the resin free-board
- 4) Sample and inspect the bed resin looking for:
 - a) Physical condition
 - b) Bed fouling with sediment
 - c) Bed channelling, clumping and compaction
 - d) Loss of resin depth
- 5) Remove the top 5 - 10% of the resin bed (which will be the most damaged and chemically fouled portion)
- 6) Replace this resin and make-up any other losses to restore the bed depth and free-board to the correct height.
- 7) Review the backwash settings in light of the resin condition.