

RBC SERVICES UPDATE

RBC Services
Division of McNish Corporation

Phone: 630-264-5241 Fax: 630-892-7951

RBCs - A CHECK-UP FOR LONGER LIFE

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The doctor is in! And while you won't have to turn your head and cough, we can answer your questions, correct any possible problems and enhance the process of your current equipment.

Should your effluent permit change to include requirements not provided for in the original plant design, far less funding would be necessary for only those unit processes required. You can upgrade and expand the RBC facility for a fraction of the cost of changing to an alternate form of process.

Today's RBCs are of very high quality – from both a manufacturing and application standpoint. Replacing your current RBCs and upgrading operations with proper aeration and load cells can provide a life of 20 to 30 years without changing the classification of your facility.

For a bit of history, the first RBC was recognized in Europe in 1900. The U.S. RBC industry didn't kick off until 1969, with the opening of a plant located in Pewaukee, Wisconsin. In the next 4 years, there would be four U.S. companies producing RBCs, three of which became the major players.

Of course, there were four different designs of RBCs back then as well. Only one of those four original manufacturers exists today, but producing a different RBC design. (Two of the original designs still exist today, but are being produced and sold by other companies.)

In the years to follow, additional designs were made by other companies, to bring a total of nine different designs. Most of them failed to endure however, and only two main designs exist today - one of which is produced by Walker Process (one of the original four), and the one by Siemens.

Believe it or not, there are still some 9,000 RBCs in operation. The process does very well, as most of you know, and requires relatively little effort to maintain. A lot more work is involved at any form of activated sludge facility - work at nights and weekends, with a lot more lab. activity.

Most every treatment plant is designed for a life of 20 years. This was mainly considered by the designing engineer who estimated the anticipated growth of the community, which has been an industry standard for decades.

The life expectancy of the equipment itself however, is another story. With RBCs, the life depends on how well they have been maintained and the degree of weight control available.

In most every case of support structure, media or shaft problems, the direct cause is the excess weight of the biomass growth. This is the reason load cells and aeration are so critical to successful RBC operations and longevity of the equipment.

While there are still new RBC plants being built, the majority of RBCs in operation today are 15 to 20 years old. If well maintained with an ability to control weight, RBCs are capable of operating to 30 years and longer.

Retrofitting current RBCs with load cells and aeration, even on an RBC that's 10 or 15 years old or more, will allow you to monitor and control biomass weight. This will present the opportunity for your existing equipment to keep operating well into the future.

The cost of a complete protection system is far less than replacement media or one new RBC. Should you even consider replacing just the media on your RBC, chances are, it will still cost more than a complete new unit, particularly when you add in the labor and crane costs for the project. And, you still have the old shaft to think about.

Just replacing the media gives no guarantee of longevity. It's the load cells and aeration that can offer that guarantee - even for an old RBC.

We have the experience and can provide all the assistance and equipment to help your RBCs last as long as possible - without the major expense.

- ❑ **If you have concerns or questions about how a protection system will fit in with your RBCs - give me a call.**
- ❑ **If you're thinking of replacing media, shafts or an RBC, you'll want some background and information about your equipment - give me a call.**
- ❑ **If you'd like to know about the history of your particular RBC equipment or its manufacturer - give me a call.**

There can be longer life for your RBCs. We can help to make it the best and as trouble-free as it can be. Our background *is* RBC life and operations. Let us prescribe what will make your life with RBCs as easy as possible.

My first prescription for *you* is:

Take time to laugh a little every day.

If you ever have any questions regarding your RBC plant operations, please don't hesitate to give me a call. **We are here to serve you.**