

## Heat Exchangers

Heat Exchangers in many manufacture facilities are very crucial in everyday operations. Heat Exchangers are designed to transfer temperature from one form to another. And while transferring temperature, the Heat Exchanger, over a period of time will collect lime , scale and rust on the waterside of the Exchanger. With, **Dynamic Descaler**, you do not have to dismantle or remove the unit from your operations. You may want to install the **Dynamic Descaler** in your water supply such as your cooling tower, chiller, or your closed loop water system. Doing this procedure, you will eliminate down time in your everyday operations while cleaning out your Exchanger.

If you just intended to clean out the Heat Exchanger, you still do not have to dismantle or remove the Exchanger from your operations

## Instructions for Dynamic Descaler Cleaning

1. By-Pass Heat Exchanger from operation.
2. Remove the existing water in the exchanger. This **MUST** be done, to insure proper results.
3. Disconnect the Water In/Out connections from Exchanger.
4. Attatch the necessary hoses to the In/Out connections on the Exchanger to a circulating pump. Refer to our Chart for necessary circulation time and the amount of **Dynamic Descaler** to be used.
5. Once the circulation has been completed, flush the Exchanger with water to remove any insolubles.

**Please Refer to the Charts on the Following Pages for Proper Amount of **DYNAMIC DESCALER** to be used, and the Circulation Times.**

**Please note:** Calculations on Amount and Circulation Times may vary for each System.

**Please Feel Free to Call Our Office with any Questions!**

**1-800-388-5818**

# Quantity & Circulation - Calculation Chart

## HEAT EXCHANGERS 4" Through 8" Diameter

### » 4" Diameter

4 Foot Length	1 Gal. Circulate for 45 Min.
6 Foot Length	1 Gal. Circulate for 45 Min.
8 Foot Length	1.5 Gal. Circulate for 45 Min.
10 Foot Length	2 Gal. Circulate for 1 Hr.
12 Foot Length	2 Gal. Circulate for 1 Hr. 45 Min.
16 Foot Length	3 Gal. Circulate for 1 Hr. 45 Min.
8 Foot Length	3 Gal. Circulate for 1 Hr. 45 Min.
20 Foot Length	3 Gal. Circulate for 1 Hr. 45 Min.
24 Foot Length	3.5 Gal. Circulate for 1 Hr. 45 Min.
30 Foot Length	4 Gal. Circulate for 2 Hr.
40 Foot Length	5 Gal. Circulate for 2 Hr.

### » 5" Diameter

4 Foot Length	1 Gal. Circulate for 45 Min.
6 Foot Length	1.5 Gal. Circulate for 45 Min.
8 Foot Length	1.5 Gal. Circulate for 45 Min.
10 Foot Length	2.5 Gal. Circulate for 1 Hr. 45 Min.
12 Foot Length	2.5 Gal. Circulate for 1 Hr. 45 Min.
16 Foot Length	3.5 Gal. Circulate for 1 Hr. 45 Min.
20 Foot Length	4.5 Gal. Circulate for 1 Hr. 45 Min.
24 Foot Length	5 Gal. Circulate for 1 Hr. 45 Min.
30 Foot Length	7 Gal. Circulate for 1 Hr. 45 Min.
36 Foot Length	8 Gal. Circulate for 1 Hr. 45 Min.
40 Foot Length	9 Gal. Circulate for 2 Hr.

### » 6" Diameter

4 Foot Length	1 Gal. Circulate for 45 Min.
6 Foot Length	1 Gal. Circulate for 45 Min.
8 Foot Length	2 Gal. Circulate for 1 Hr. 45 Min.
10 Foot Length	3 Gal. Circulate for 1 Hr. 45 Min.
12 Foot Length	4 Gal. Circulate for 1 Hr. 45 Min.
16 Feet Length	5 Gal. Circulate for 1 Hr. 45 Min.
20 Foot Length	6 Gal. Circulate for 1 Hr. 45 Min.
24 Foot Length	7.5 Gal. Circulate for 1 Hr. 45 Min.
30 Foot Length	11 Gal. Circulate for 1 Hr. 45 Min.
36 Foot Length	14 Gal. Circulate for 1 Hr. 45 Min.
40 Foot Length	15 Gal. Circulate for 1 Hr. 45 Min.

### » 8" Diameter

4 Foot Length	2 Gal. Circulate for 45 Min.
5 Foot Length	2 Gal. Circulate for 45 Min.
6 Foot Length	3 Gal. Circulate for 45 Min.
8 Foot Length	4 Gal. Circulate for 1 Hr. 45 Min.
10 Foot Length	6 Gal. Circulate for 1 Hr. 45 Min.
16 Foot Length	8.5 Gal. Circulate for 1 Hr. 45 Min.
20 Foot Length	11 Gal. Circulate for 1 Hr. 45 Min.
24 Foot Length	15 Gal. Circulate for 1 Hr. 45 Min.
30 Foot Length	18 Gal. Circulate for 2 Hr. 45 Min.
36 Foot Length	23 Gal. Circulate for 2 Hr. 45 Min.
40 Foot Length	25 Gal. Circulate for 2 Hr. 45 Min.

# Quantity & Circulation - Calculation Chart

## HEAT EXCHANGERS 12" Through 24" Diameter

### » 12" Diameter

4 Foot Length	5 Gal. Circulate for 1 Hr. 45 Min.
6 Foot Length	7 Gal. Circulate for 1 Hr. 45 Min.
8 Foot Length	10 Gal. Circulate for 1 Hr. 45 Min.
10 Foot Length	14 Gal. Circulate for 1 Hr. 45 Min.
12 Foot Length	17 Gal. Circulate for 1 Hr. 45 Min.
16 Foot Length	23 Gal. Circulate for 1 Hr. 45 Min.
20 Foot Length	28 Gal. Circulate for 2 Hr. 45 Min.
24 Foot Length	34 Gal. Circulate for 3 Hr. 45 Min.
30 Foot Length	44 Gal. Circulate for 3 Hr. 45 Min.
36 Foot Length	52 Gal. Circulate for 3 Hr. 45 Min.
40 Foot Length	54 Gal. Circulate for 3 Hr. 45 Min.

### » 16" Diameter

5 Foot Length	11 Gal. Circulate for 1 Hr. 45 Min.
6 Foot Length	16 Gal. Circulate for 1 Hr. 45 Min.
8 Foot Length	19 Gal. Circulate for 1 Hr. 45 Min.
10 Foot Length	23 Gal. Circulate for 2 Hr. 45 Min.
12 Foot Length	29 Gal. Circulate for 2 Hr. 45 Min.
16 Foot Length	41 Gal. Circulate for 3 Hr. 45 Min.
20 Foot Length	52 Gal. Circulate for 3 Hr. 45 Min.
24 Foot Length	60 Gal. Circulate for 3 Hr. 45 Min.
30 Foot Length	80 Gal. Circulate for 4 Hr. 45 Min.
36 Foot Length	95 Gal. Circulate for 4 Hr. 45 Min.
40 Foot Length	110 Gal. Circulate for 4 Hr. 45 Min.

### » 20" Diameter

6 Foot Length	24 Gal. Circulate for 2 Hr. 45 Min.
8 Foot Length	31 Gal. Circulate for 2 Hr. 45 Min.
10 Foot Length	39 Gal. Circulate for 3 Hr. 45 Min.
12 Foot Length	49 Gal. Circulate for 3 Hr. 45 Min.
16 Foot Length	64 Gal. Circulate for 3 Hr. 45 Min.
18 Foot Length	74 Gal. Circulate for 4 Hr. 45 Min.
20 Foot Length	79 Gal. Circulate for 4 Hr. 45 Min.
24 Foot Length	95 Gal. Circulate for 4 Hr. 45 Min.
30 Foot Length	115 Gal. Circulate for 4 Hr. 45 Min.
36 Foot Length	145 Gal. Circulate for 4 Hr. 45 Min.
40 Foot Length	155 Gal. Circulate for 4 Hr. 45 Min.

### » 20" Diameter

5 Foot Length	27 Gal. Circulate for 3 Hr. 45 Min.
6 Foot Length	34 Gal. Circulate for 3 Hr. 45 Min.
8 Foot Length	49 Gal. Circulate for 3 Hr. 45 Min.
10 Foot Length	55 Gal. Circulate for 3 Hr. 45 Min.
12 Foot Length	65 Gal. Circulate for 4 Hr. 45 Min.
16 Foot Length	90 Gal. Circulate for 4 Hr. 45 Min.
20 Foot Length	115 Gal. Circulate for 4 Hr. 45 Min.
24 Foot Length	135 Gal. Circulate for 4 Hr. 45 Min.
30 Foot Length	175 Gal. Circulate for 4 Hr. 45 Min.
36 Foot Length	215 Gal. Circulate for 5 Hr. 45 Min.
40 Foot Length	235 Gal. Circulate for 5 Hr. 45 Min.