

Dynamic Descaler®

Heat Exchangers

Heat exchangers in many manufacturing facilities are very crucial in everyday operations. Heat exchangers are designed to transfer heat in the form of kinetic energy from one liquid to another. And while transferring heat, 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 a system which will inject ***Dynamic Descaler*** into your water supply on a regular basis for your cooling tower, chiller, or your closed loop water system. This procedure will eliminate downtime in your everyday operations while cleaning out your exchanger.

If you intend to clean only the heat exchanger, you still do not have to dismantle or remove the exchanger from your operations.

Cleaning instructions:

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 the exchanger.
4. Attach the necessary hoses to in/out connections on Before After the exchanger to a circulating pump. Refer to chart on the following pages for the recommended circulation time and the amount of ***Dynamic Descaler*** to use.
5. Once the circulation has been completed, flush the exchanger with water to remove any insolubles.

Please refer to the Chart on the following pages for the proper amounts of ***Dynamic Descaler*** to use and the recommended circulation times.



Dynamic Descaler®

Heat Exchangers

QUANTITY & CIRCULATION TIMES - CALCULATION CHARTS

4" Diameter	
Length (ft)	Gallons/Circulation Time
4	1 Gal. / 45 Min.
6	1 Gal. / 45 Min.
8	1.5 Gal. / 45 Min.
10	2 Gal. / 1 Hr.
12	2 Gal. / 1 Hr. 45 Min.
16	3 Gal. / 1 Hr. 45 Min.
18	3 Gal. / 1 Hr. 45 Min.
20	3 Gal. / 1 Hr. 45 Min.
24	3.5 Gal. / 1 Hr. 45 Min.
30	4 Gal. / 2 Hr.
40	5 Gal. / 2 Hr.

5" Diameter	
Length (ft)	Gallons/Circulation Time
4	1 Gal. / 45 Min.
6	1.5 Gal. / 45 Min.
8	1.5 Gal. / 45 Min.
10	2.5 Gal. / 1 Hr. 45 Min.
12	2.5 Gal. / 1 Hr. 45 Min.
16	3.5 Gal. / 1 Hr. 45 Min.
20	4.5 Gal. / 1 Hr. 45 Min.
24	5 Gal. / 1 Hr. 45 Min.
30	7 Gal. / 1 Hr. 45 Min.
36	8 Gal. / 1 Hr. 45 Min.
40	9 Gal. / 2 Hr.

6" Diameter	
Length (ft)	Gallons/Circulation Time
4	1 Gal. / 45 Min.
6	1 Gal. / 45 Min.
8	2 Gal. / 1 Hr. 45 Min.
10	3 Gal. / 1 Hr. 45 Min.
12	4 Gal. / 1 Hr. 45 Min.
16	5 Gal. / 1 Hr. 45 Min.
20	6 Gal. / 1 Hr. 45 Min.
24	7.5 Gal. / 1 Hr. 45 Min.
30	11 Gal. / 1 Hr. 45 Min.
36	14 Gal. / 1 Hr. 45 Min.
40	15 Gal. / 1 Hr. 45 Min.

8" Diameter	
Length (ft)	Gallons/Circulation Time
4	2 Gal. / 45 Min.
5	2 Gal. / 45 Min.
6	3 Gal. / 45 Min.
8	4 Gal. / 1 Hr. 45 Min.
10	6 Gal. / 1 Hr. 45 Min.
16	8.5 Gal. / 1 Hr. 45 Min.
20	11 Gal. / 1 Hr. 45 Min.
24	15 Gal. / 1 Hr. 45 Min.
30	18 Gal. / 2 Hr. 45 Min.
36	23 Gal. / 2 Hr. 45 Min.
40	25 Gal. / 2 Hr. 45 Min.

12" Diameter	
Length (ft)	Gallons/Circulation Time
4	5 Gal. / 1 Hr. 45 Min.
6	7 Gal. / 1 Hr. 45 Min.
8	10 Gal. / 1 Hr. 45 Min.
10	14 Gal. / 1 Hr. 45 Min.
12	17 Gal. / 1 Hr. 45 Min.
16	23 Gal. / 1 Hr. 45 Min.
20	28 Gal. / 2 Hr. 45 Min.
24	34 Gal. / 3 Hr. 45 Min.
30	44 Gal. / 3 Hr. 45 Min.
36	52 Gal. / 3 Hr. 45 Min.
40	54 Gal. / 3 Hr. 45 Min.

16" Diameter	
Length (ft)	Gallons/Circulation Time
5	11 Gal. / 1 Hr. 45 Min.
6	16 Gal. / 1 Hr. 45 Min.
8	19 Gal. / 1 Hr. 45 Min.
10	23 Gal. / 2 Hr. 45 Min.
12	29 Gal. / 2 Hr. 45 Min.
16	41 Gal. / 3 Hr. 45 Min.
20	52 Gal. / 3 Hr. 45 Min.
24	60 Gal. / 3 Hr. 45 Min.
30	80 Gal. / 4 Hr. 45 Min.
36	95 Gal. / 4 Hr. 45 Min.
40	110 Gal. / 4 Hr. 45 Min.

20" Diameter	
Length (ft)	Gallons/Circulation Time
6	24 Gal. / 2 Hr. 45 Min.
8	31 Gal. / 2 Hr. 45 Min.
10	39 Gal. / 3 Hr. 45 Min.
12	49 Gal. / 3 Hr. 45 Min.
16	64 Gal. / 3 Hr. 45 Min.
18	74 Gal. / 4 Hr. 45 Min.
20	79 Gal. / 4 Hr. 45 Min.
24	95 Gal. / 4 Hr. 45 Min.
30	115 Gal. / 4 Hr. 45 Min.
36	145 Gal. / 4 Hr. 45 Min.
40	155 Gal. / 4 Hr. 45 Min.

24" Diameter	
Length (ft)	Gallons/Circulation Time
5	27 Gal. / 3 Hr. 45 Min.
6	34 Gal. / 3 Hr. 45 Min.
8	49 Gal. / 3 Hr. 45 Min.
10	55 Gal. / 3 Hr. 45 Min.
12	65 Gal. / 4 Hr. 45 Min.
16	90 Gal. / 4 Hr. 45 Min.
20	115 Gal. / 4 Hr. 45 Min.
24	135 Gal. / 4 Hr. 45 Min.
30	175 Gal. / 4 Hr. 45 Min.
36	215 Gal. / 5 Hr. 45 Min.
40	235 Gal. / 5 Hr. 45 Min.

30" Diameter	
Length (ft)	Gallons/Circulation Time
6	52 Gal. / 4 Hr. 45 Min.
8	70 Gal. / 4 Hr. 45 Min.
10	85 Gal. / 4 Hr. 45 Min.
12	105 Gal. / 4 Hr. 45 Min.
16	145 Gal. / 4 Hr. 45 Min.
18	160 Gal. / 4 Hr. 45 Min.
20	175 Gal. / 4 Hr. 45 Min.
24	215 Gal. / 5 Hr. 45 Min.
30	275 Gal. / 5 Hr. 45 Min.
36	325 Gal. / 6 Hr. 45 Min.
40	355 Gal. / 6 Hr. 45 Min.

36" Diameter	
Length (ft)	Gallons/Circulation Time
6	75 Gal. / 4 Hr. 45 Min.
8	105 Gal. / 4 Hr. 45 Min.
10	125 Gal. / 4 Hr. 45 Min.
12	155 Gal. / 4 Hr. 45 Min.
16	215 Gal. / 5 Hr. 45 Min.
18	250 Gal. / 5 Hr. 45 Min.
20	265 Gal. / 5 Hr. 45 Min.
24	325 Gal. / 6 Hr. 45 Min.
30	395 Gal. / 6 Hr. 45 Min.
36	480 Gal. / 6 Hr. 45 Min.
40	530 Gal. / 6 Hr. 45 Min.

40" Diameter	
Length (ft)	Gallons/Circulation Time
6	90 Gal. / 4 Hr. 45 Min.
8	115 Gal. / 4 Hr. 45 Min.
10	140 Gal. / 4 Hr. 45 Min.
12	170 Gal. / 5 Hr. 45 Min.
16	230 Gal. / 5 Hr. 45 Min.
18	270 Gal. / 6 Hr. 45 Min.
20	300 Gal. / 6 Hr. 45 Min.
24	350 Gal. / 6 Hr. 45 Min.
30	450 Gal. / 6 Hr. 45 Min.
36	550 Gal. / 7 Hr. 45 Min.
40	630 Gal. / 7 Hr. 45 Min.

48" Diameter	
Length (ft)	Gallons/Circulation Time
4	90 Gal. / 4 Hr. 45 Min.
6	125 Gal. / 4 Hr. 45 Min.
8	165 Gal. / 4 Hr. 45 Min.
10	195 Gal. / 5 Hr. 45 Min.
16	330 Gal. / 6 Hr. 45 Min.
18	390 Gal. / 6 Hr. 45 Min.
20	450 Gal. / 6 Hr. 45 Min.
24	525 Gal. / 7 Hr. 45 Min.
30	650 Gal. / 7 Hr. 45 Min.
36	775 Gal. / 7 Hr. 45 Min.
40	875 Gal. / 7 Hr. 45 Min.