Model 2 / Model 2R - Max Inlet Water Levels

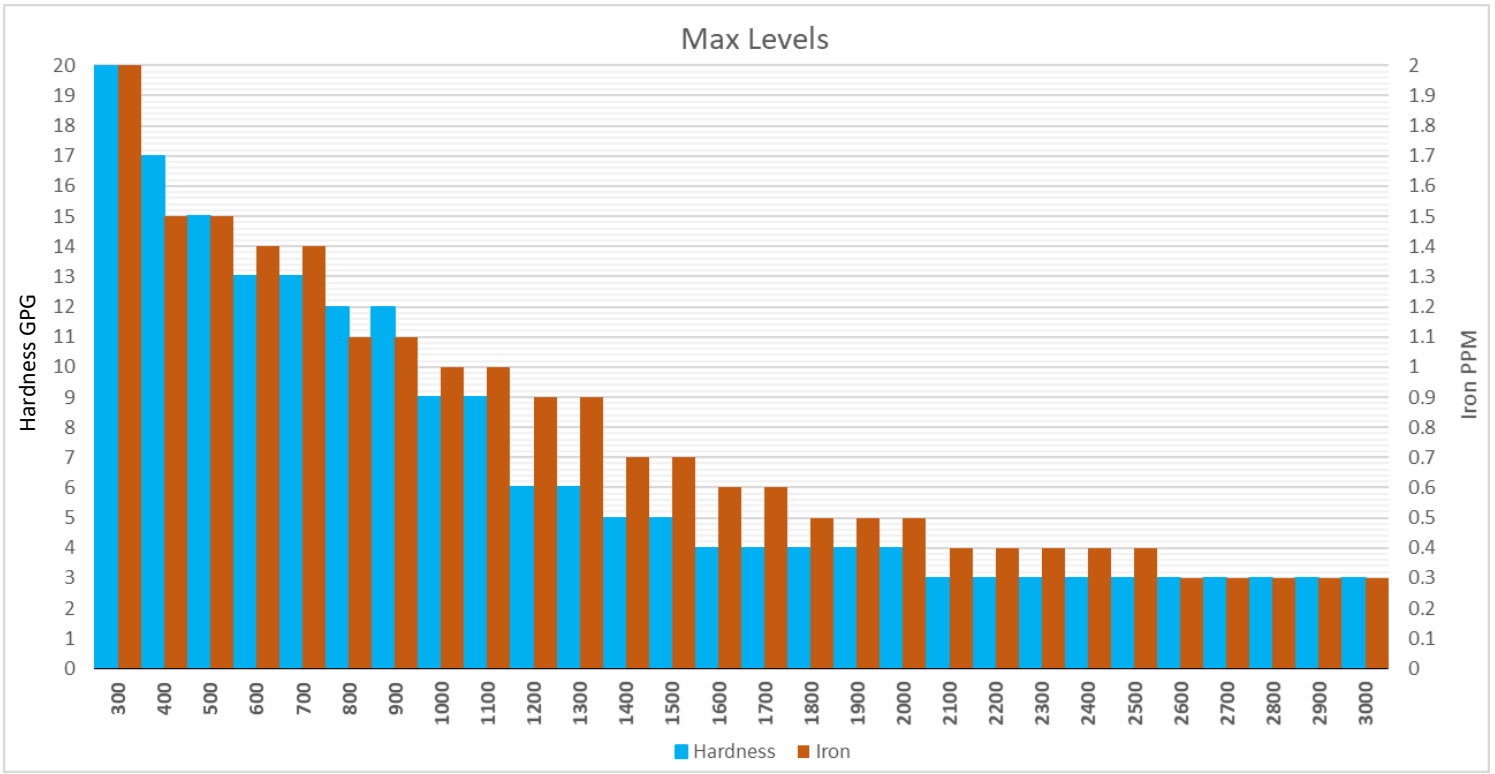
REVISIONS				
ECR	REV	DESCRIPTION	DATE	APPROVED
1414	01	Initial release	10/21/2020	JRD
1417	02	Updated graph and Max Levels chart, added Max Allowable Inputs Chart	11/6/2020	BT
1420	03	Added instructions page	11/18/2020	BT
1424	04	Added Model 2R ranges	1/11/2021	BT

Max Levels

	TDS	Hardness	Iron	
Up to Model 2R	300	20	2	
	400	17	1.5	
	500	15	1.5	
	600	13	1.4	
	700	13	1.4	
	800	12	1.1	
	900	12	1.1	
	1000	9	1	
	1100	9	1	
	1200	6	0.9	
	1300	6	0.9	
	1400	5	0.7	
	1500	5	0.7	
Up to Model 2	1600	4	0.6	
	1700	4	0.6	
	1800	4	0.5	
	1900	4	0.5	
	2000	4	0.5	
	2100	3	0.4	
	2200	3	0.4	
	2300	3	0.4	
	2400	3	0.4	
	2500	3	0.4	
	2600	3	0.3	
	2700	3	0.3	
	2800	3	0.3	
	2900	3	0.3	
	3000	3	0.3	

Max Allowable Inputs

Bacteria	3.0E-01 cfu/ml
Slime Forming Bacteria	< 50 CFU/mll
Sulfate Reducing Bacteria	< 5 CFU/ml
Iron Bacteria	< 8 CFU/ml
TOC	< 3 mg/l
Tannins	< 10 alpha units
pH	5-9
Chlorine	4 ppm
Chloramine	4 ppm
Chromium Hexavalent	30 ppb
Lead	150 ppb
Nitrate	30 mg/l
Nitrite	3 mg/l
Silica	30 mg/l
Silt	SDI < 5
Turbidity	1 NTU
Trihalomethanes (THMs)]	.45 mg/l
Fluoride	7.8 mg/l
Arsenic	50 ppb
Chloroform	300 mg/l
PFOS	16000 ppt
PFOA	8000 ppt



Stage 2 Contract Engineering, LLC.

Part Number: 5313

Description: Model 2 Max Inlet Water Levels

Drawn By: BT **Date:** 10/22/2020

Approved By: BT **Date:** 10/22/2020

Use Of Max Inlet Water Levels Chart

This chart is made to assure proper set up of your device

You must have a laboratory water test completed on inlet water!

Step 1 – Identify TDS , Hardness (in grains per gallon) , and Iron Levels from your water test

Step 2 – Find TDS range on Max Levels Chart; an inlet water reading of 545 TDS will be taken from the 600 column (see example 1)

Step 3 – Determine if you need pretreatment – if your hardness OR iron levels are above chart values then pretreatment is required

Step 4 – Determine from your water test if there are any other contaminates in the water that are over the max allowable limits from the Max Allowable Limits Chart. There are limits for the device no matter what the Inlet TDS is. (See example 2 - a turbidity reading of over 1 NTU, OR a silica reading over 30 mg/L would require pretreat).

Max Levels

	TDS	Hardness	Iron	
Up to Model 2R	300	20	2	
	400	17	1.5	
	500	15	1.5	
	600	13	1.4	
	700	13	1.4	
	800	12	1.1	
	900	12	1.1	
	1000	9	1	
	1100	9	1	
	1200	6	0.9	
	1300	6	0.9	
	1400	5	0.7	
	1500	5	0.7	
	1600	4	0.6	Up to Model 2
	1700	4	0.6	
	1800	4	0.5	
	1900	4	0.5	
	2000	4	0.5	
	2100	3	0.4	
	2200	3	0.4	
	2300	3	0.4	
	2400	3	0.4	
	2500	3	0.4	
	2600	3	0.3	
	2700	3	0.3	
	2800	3	0.3	
	2900	3	0.3	
	3000	3	0.3	

Max Allowable Inputs

Bacteria	3.0E-01 cfu/ml
Slime Forming Bacteria	< 50 CFU/mll
Sulfate Reducing Bacteria	< 5 CFU/ml
Iron Bacteria	< 8 CFU/ml
Tannins	< 10 alpha units
pH	5-9
Chlorine	4 ppm
Chloramine	4 ppm
Chromium Hexavalent	30 ppb
Lead	150 ppb
Nitrate	30 mg/l
Nitrite	3 mg/l
Silica	30 mg/l
Silt	SDI < 5
Turbidity	1 NTU
Trihalomethanes (THMs)]	.45 mg/l
Fluoride	7.8 mg/l
Arsenic	50 ppb
Chloroform	300 mg/l
PFOS	16000 ppt
PFOA	8000 ppt

Note: Model 2R Range stops at 1500 TDS

Example 1 – Inlet Water TDS 545 ; reading is over 500 and less than 600, so Max Hardness allowed is 13 grains per gallon Max Iron allowed is 1.4 mg/l

Example 2 – Turbidity over 1 NTU OR Silica over 30 mg/l ; These are items that will require pretreat