

Model 2/2R/QUAD - Max Inlet Water Levels

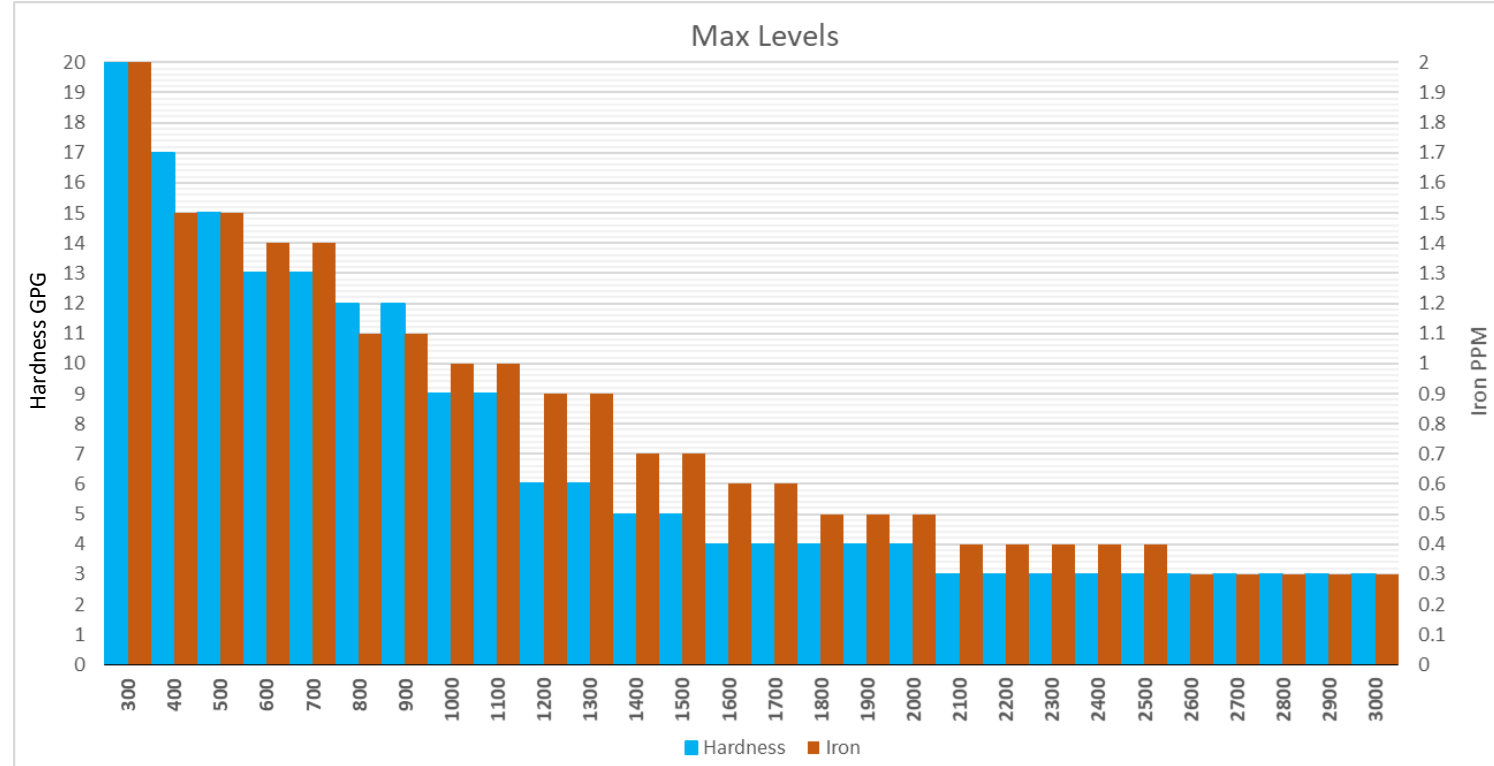
REVISION HISTORY				
ECR	REV	DESCRIPTION	DATE	APPROVED
1414	01	Initial release	10/21/2020	JRD
1417	02	Updated graph and Max Levels chart, added Max Allowable Inputs Chart	11/06/2020	BT
1420	03	Added instructions page	11/18/2020	BT
1424	04	Added Model 2R ranges	01/11/2021	BT
1455	05	Added Aluminum to table	09/29/2021	BT
1479	06	Added Barium and note on QUAD	11/18/2021	BT
1484	07	Updated Max Bacteria	03/15/2022	BT

Max Levels

	TDS	Hardness	Iron	
Up to Model 2R	300	20	2	Up to Model 2 & QUAD
	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	
	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	5.3E+05 CFU/mL
Slime Forming Bacteria	< 50 CFU/mL
Sulfate Reducing Bacteria	< 5 CFU/mL
Iron Bacteria	< 8 CFU/mL
TOC	< 3 mg/L
Tannins	< 10 alpha units
pH	5-9
Chlorine - Model 2/2R Only *	4 ppm*
Chloramine – Model 2/2R Only*	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)]	0.45 mg/L
Fluoride	7.8 mg/L
Arsenic	50 ppb
Chloroform	300 mg/L
PFOS	16000 ppt
PFOA	8000 ppt
Aluminum	0.05 mg/L
Barium	10 mg/L



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

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***QUAD units MUST have pretreat sediment (≤ 10 um) & carbon filters installed**

Using Max Inlet Water Levels Chart

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 contaminants in the water that are over the max allowable limits from the Max Allowable Inputs 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 pretreatment).

NOTE: Model 2R range stops at 1500 TDS

This chart is made to assure proper setup of your device

		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 & QUAD	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/ml
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

Example 1 – Inlet Water TDS 545: reading is over 500 and less than 600, so max Hardness allowed is 13 grains per gallon and max Iron allowed is 1.4 mg/L.

Example 2 – Turbidity over 1 NTU OR silica over 30 mg/L – these are items that would require pretreatment.