



What are Projections

Keys to Proper Projections

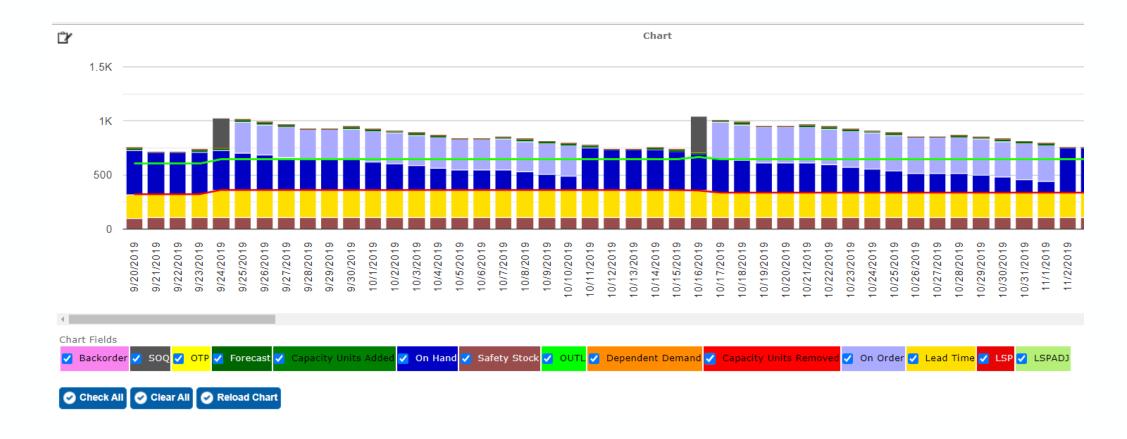
Understanding Projections

Calculating Projections

Projecting for Success



Order Item Detail





Projections Grid

On Hand	On Order	OUTL	Econom Order Cycle	ОТР	Vendor Order Cycle	LSP	LSPADJ	SS	LT	SOQ	Backord	Receipt Quantity	Forecast	On Hold	On Reserve	Balance	Delay Days	Dependent Demand Units	
404.66	0	605	0	604.789	0	321.575	0	101.297	220.277	0	0	0	20.67917	0	0	404.66	4		404.66
383.980	0	605	0	604.789	0	321.575	0	103.095!	220.277	0	0	0	0	0	0	383.980	3		383.980
383.980	0	605	0	604.789	0	321.575	0	104.894	220.277	0	0	0	0	0	0	383.980	2		383.980
383.980	0	605	0	604.789	0	321.575	0	106.692	220.277	0	0	0	20.67917	0	0	383.980	1		383.980
363.301	0	646	0	646.147	0	362.9336	0	108.490	254.443	283	0	0	20.67917	0	0	363.301	0		363.301
342.6226	283	646	0	646.147	0	361.1354	0	108.490	252.644	0	0	0	20.6791	0	0	625.622	21		342.622
321.943!	283	646	0	646.147	0	361.135	0	108.490	252.644	0	0	0	20.6791	0	0	604.943	20		321.943
301.2643	283	646	0	646.147	0	361.135	0	108.490	252.644!	0	0	0	20.67917	0	0	584.264	19		301.264
280.585	283	646	0	646.147	0	361.1354	0	108.490	252.644	0	0	0	0	0	0	563.585	18		280.585
280.585	283	646	0	646.147	0	361.135	0	108.490	252.644!	0	0	0	0	0	0	563.585	17		280.585
280.585	283	646	0	646.147	0	361.135	0	108.490	252.644	0	0	0	20.67917	0	0	563.585	16		280.585
259.906 ⁻	283	646	0	646.147	0	361.1354	0	108.490	252.644	0	0	0	18.8809	0	0	542.906	15		259.906
241.025	283	646	0	646.147	0	361.1354	0	108.490	252.644!	0	0	0	18.88093	0	0	524.025	14		241.025
222.1447	283	646	0	646.147	0	361.1354	0	108.490	252.644	0	0	0	18.88093	0	0	505.144	13		222.144
203.263	283	646	0	646.147	0	361.1354	0	108.490	252.644	0	0	0	18.8809	0	0	486.263	12		203.263
184.382	283	646	0	646.147	0	361.1354	0	108.490	252.644!	0	0	0	0	0	0	467.382	11		184.382
184.382	283	646	0	646.147	0	361.1354	0	108.490	252.644	0	0	0	0	0	0	467.382	10		184.382
184.382	283	646	0	646.147	0	361.1354	0	108.490	252.644	0	0	0	18.8809	0	0	467.382	9		184.382
165.5014	283	646	0	646.147	0	361.1354	0	108.490	252.644!	0	0	0	18.88093	0	0	448.501	8		165.501
146.620	283	646	0	646.147	0	361.135	0	108.490	252.644!	0	0	0	18.88093	0	0	429.620	7		146.620
127.739!	283	646	0	646.147	0	361.1354	0	108.490	252.644	0	0	0	18.88093	0	0	410.739	6		127.739
391.8586	0	646	0	646.147	0	361.1354	0	108.490	252.644!	0	0	283	18.88093	0	0	391.858	5		391.858
372.9776	0	646	0	646.147	0	361.135	0	108.490	252.644	0	0	0	0	0	0	372.977	4		372.977
372.9776	0	646	0	646.147	0	361.1354	0	108.490	252.644	0	0	0	0	0	0	372.977	3		372.977

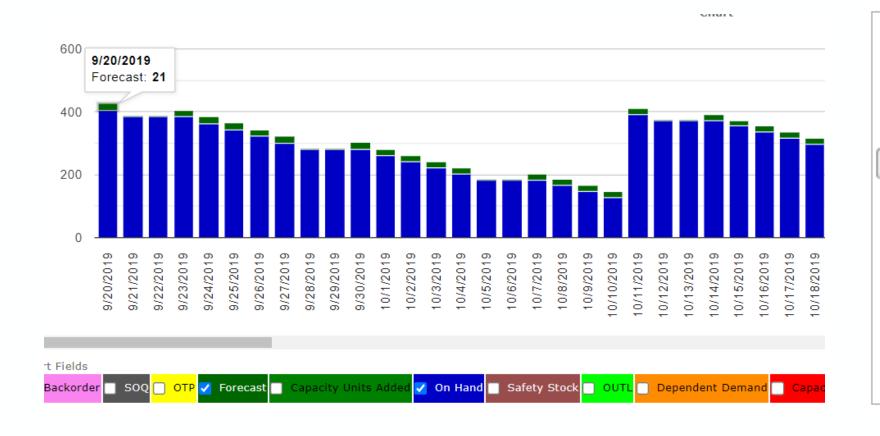


7 Essential Elements

- 1.Demand Forecast
- 2.Lead Time Forecasting
- 3. Order Cycle Optimization
- 4. Safety Stock & Service Level Management
- 5.Demand Planning & Replenishment
- 6. Special Orders
- 7. Order Constraints Validation



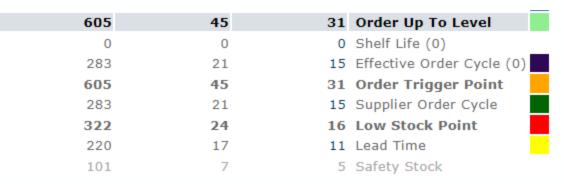
Demand Forecast

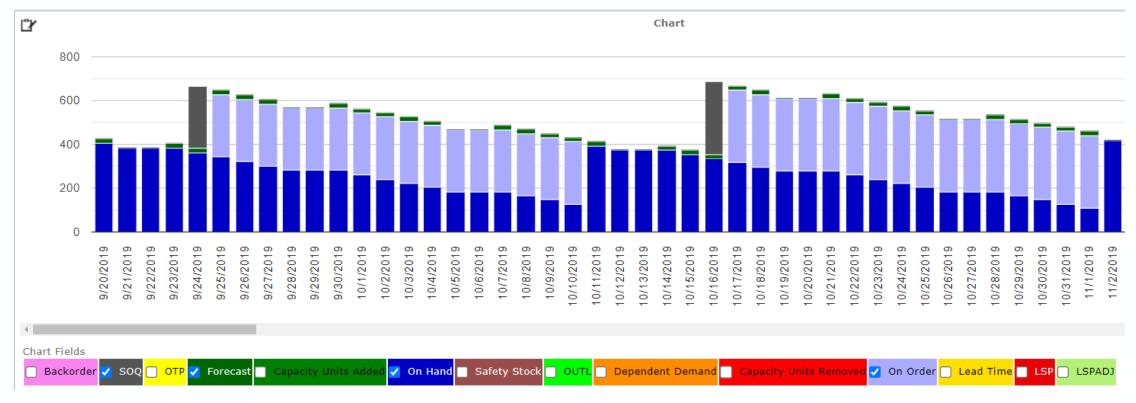






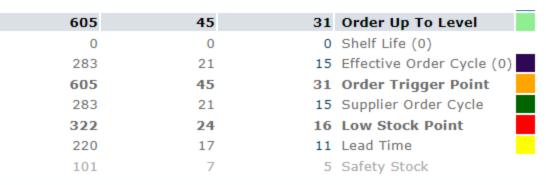
Lead Time

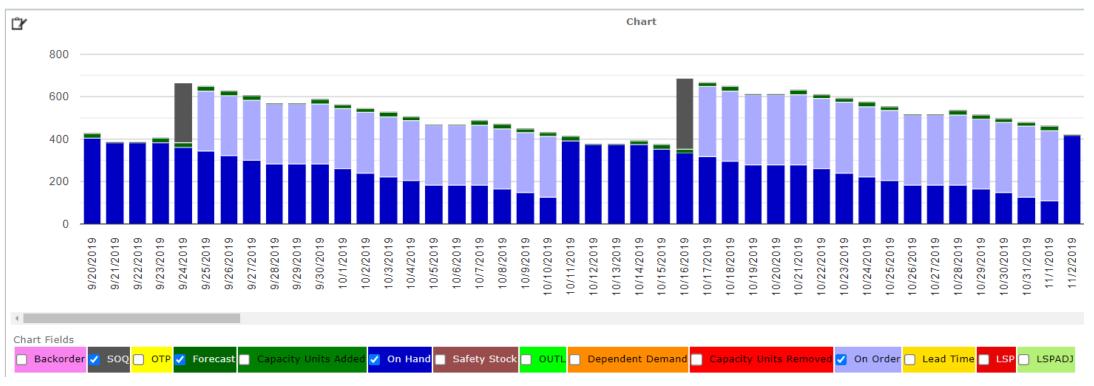






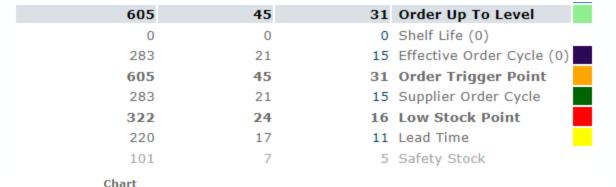
Order Cycle

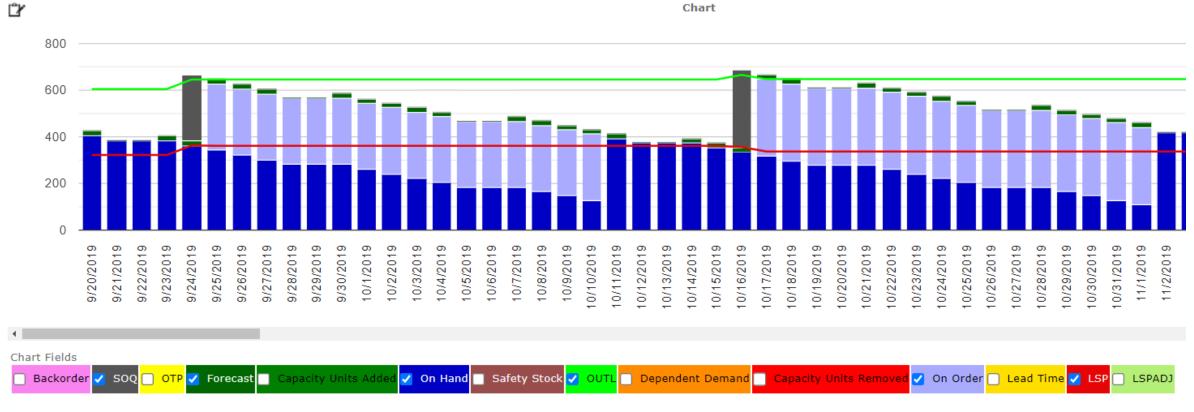






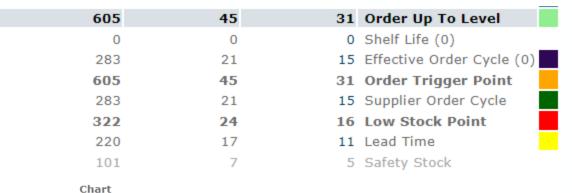
Safety Stock

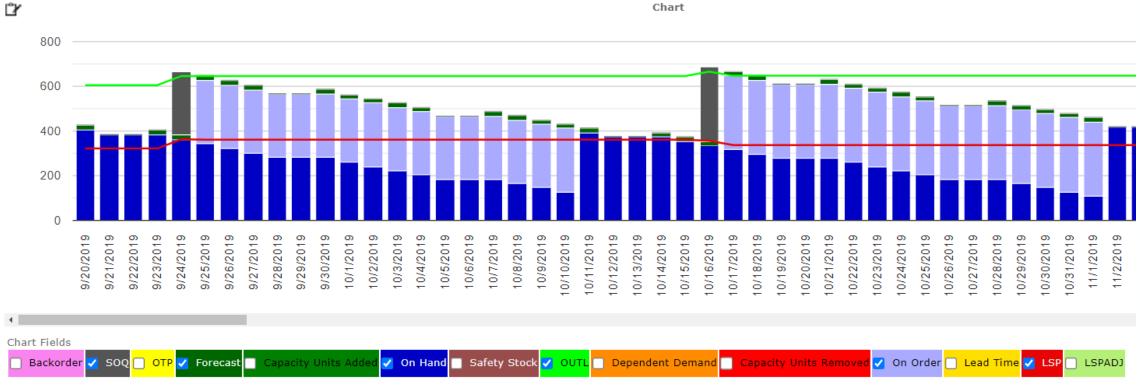






Demand Planning & Replenishment







Calculating SOQ

SOQ grid is the result of our projections

Projections are used to calculate the selling days, calendar days, and units needed.

Units	Cal Days	Sell Days	.00 00.
201	15	11	soq
0	0	0	Capacity
0	0	0	Maximum Qty (0)
0	0	0	Precision
0	0	0	Warehouse Multiple (0)
1	0	0	Buying Multiple (1)
0	0	0	Minimum Qty (1)
0	0	0	Days Adjusted (0)
0	0	0	Special Orders
0	0	0	Event (0)
0	0	0	Fwd Buy (0)
200	14	10	Need
405	29	21	Balance
405	29	21	On Hand
0	0	0	On Order
0	0	0	Backorder
0	0	0	Reserved
0	0	0	Held Qty (0)
605	45		Order Up To Level
0	0		Shelf Life (0)
283	21	15	Effective Order Cycle (0)
605	45		Order Trigger Point
283	21		Supplier Order Cycle
322	24	16	Low Stock Point
220	17	11	Lead Time
101	7	5	Safety Stock



Order Building

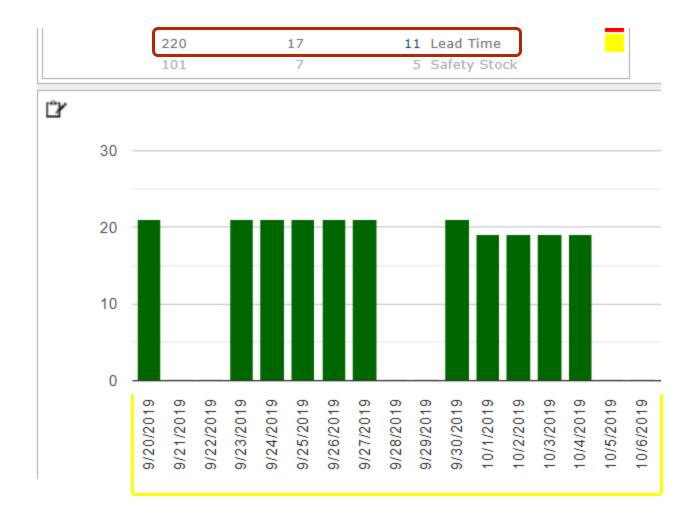
- Projections are used to calculate all the components in the order build.
- OUTL is the amount of inventory we need to buy up to.
- System calculates Lead Time, Effect Order Cycle, and Safety Stock in that order.

Units	Cal Days	Sell Days	.00 •.0
201	15	11	soq
0	0	0	Capacity
0	0	0	Maximum Qty (0)
0	0	0	Precision
0	0	0	Warehouse Multiple (0)
1	0	0	Buying Multiple (1)
0	0	0	Minimum Qty (1)
0	0	0	Days Adjusted (0)
0	0	0	Special Orders
0	0	0	Event (0)
0	0	0	Fwd Buy (0)
200	14	10	Need
405	29	21	Balance
405	29	21	On Hand
0	0	0	On Order
0	0	0	Backorder
0	0	0	Reserved
0	0	0	Held Qty (0)
605	45	31	Order Up To Level
0	0	0	Shelf Life (0)
283	21	15	Effective Order Cycle (0)
605	45	31	Order Trigger Point
283	21	15	Supplier Order Cycle
322	24	16	Low Stock Point
220	17	11	Lead Time
101	7	5	Safety Stock



Lead Time

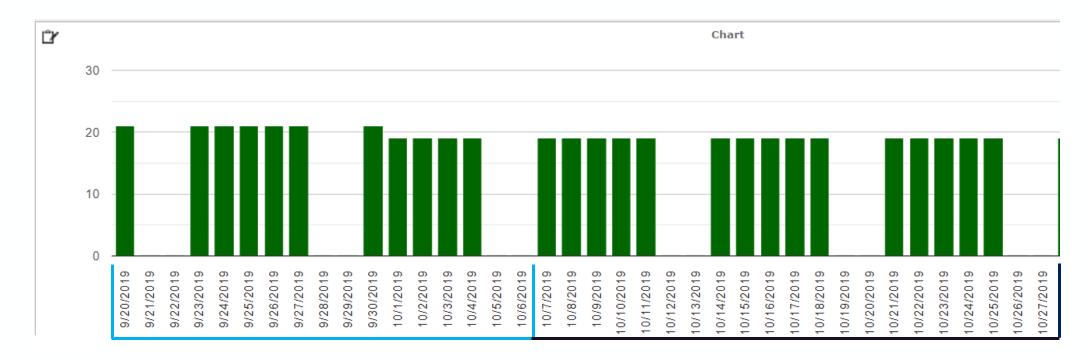
- 11 Selling Days
- 17 Calendar days
- 220 Total Units





Lead Time + Effective Order Cycle

60	5 45	31	Order Up To Level
	0 0	0	Shelf Life (0)
28	3 21	15	Effective Order Cycle (0)
60	5 45	31	Order Trigger Point
28	3 21	15	Supplier Order Cycle
32	2 24	16	Low Stock Point
22	0 17	11	Lead Time
10	1 7	5	Safety Stock

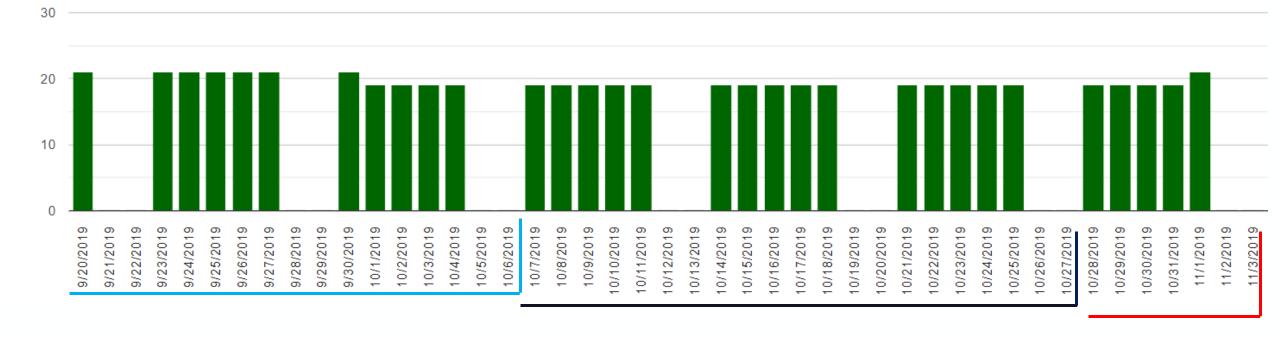




Lead Time + Effective Order Cycle + Safety Stock

605	45	31	Order Up To Level
0	0	0	Shelf Life (0)
283	21	15	Effective Order Cycle (0)
605	45	31	Order Trigger Point
283	21	15	Supplier Order Cycle
322	24	16	Low Stock Point
220	17	11	Lead Time
101	7	5	Safety Stock

Chart

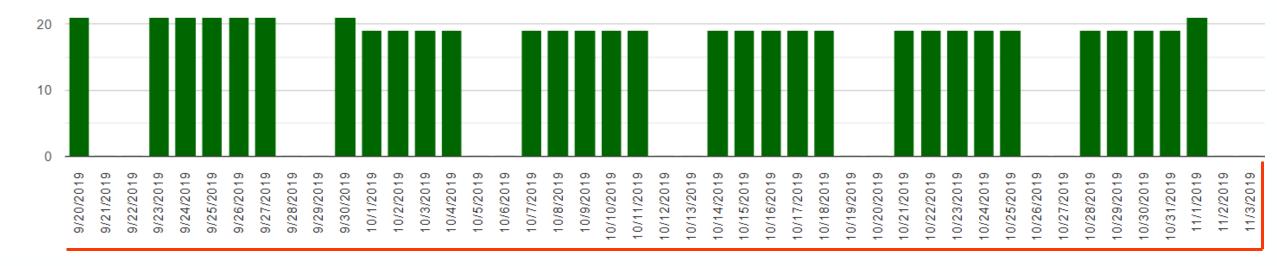




Order Up To Level

30





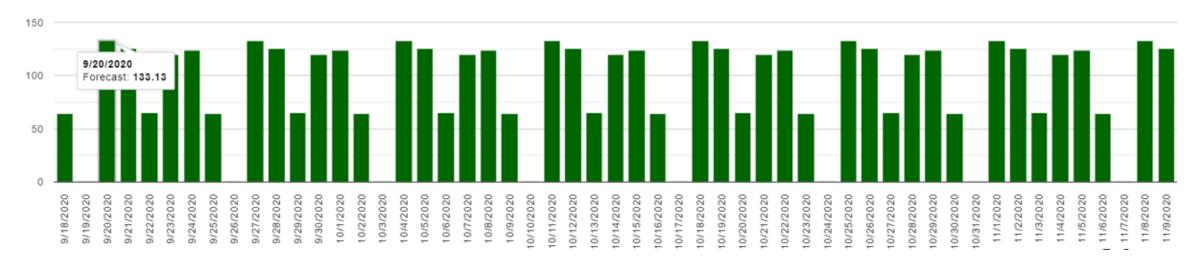


Daily Forecast

Date	Units	
Sun 13	133.13	
Mon 14	125.93	
Tue 15	65.25	
Wed 16	119.45	
Thu 17	124.25	
Fri 18	64.53	

Daily seasonalized forecast in the item projections







Projections Grid

Item Number	Order Id	On Hand	On Order	OUTL	Economic Order Cycle		Vendor Order Cycle	LSP	SS	LT	SOQ	Backorder	Receipt Quantity	Forecast	On Hold	On Reserve	Balance	Delay	Dependen [.] Demand Units		Days On Hand
00892008	5006815	31	400	356	0	356.20706	0	230.27979	32.623015	197.65678	0	0	0	64.529157	0	0	431	2		31	0
00892008	5006815	0	400	356	0	356.20706	0	230.27979	32.623015	197.65678	0	0	0	0	0	0	400	2		0	0
00892008	5006815	190	210	356	0	356.20706	0	230.27979	32.623015	197.65678	0	0	190	133.12762	0	0	400	1		190	1
00892008	5006815	266.87237	0	373	0	372.75313	0	188.05278	62.125522	125.92726	110	0	210	125.92726	0	0	266.87237	1		266.87237	3
00892008	5006815	250.94510	0	373	0	373.48055	0	184.70034	0	184.70034	130	0	110	65.246030	0	0	250.94510	1		250.94510	3
00892008	5006815	185.69907	130	504	0	504.32577	0	371.19815	62.963632	308.23452	190	0	0	119.45431	0	0	315.69907	2		185.69907	2
00892008	5006815	196.24476	190	504	0	504.32577	0	371.19815	62.963632	308.23452	0	0	130	124.25104!	0	0	386.24476	1		196.24476	2
00892008	5006815	71.993715	190	356	0	356.20706	0	230.27979	32.623015	197.65678	100	0	0	64.529157	0	0	261.99371	3		71.993715	1
00892008	5006815	197.46455	100	356	0	356.20706	0	230.27979	32.623015	197.65678	0	0	190	0	0	0	297.46455	2		197.46455	2
00892008	5006815	197.46455	100	356	0	356.20706	0	230.27979	32.623015	197.65678	0	0	0	133.12762	0	0	297.46455	1		197.46455	2
00892008	5006815	164.33693	0	373	0	372.75313	0	188.05278	62.125522	125.92726	210	0	100	125.92726-	0	0	164.33693	1		164.33693	2
00892008	5006815	248.40966	0	373	0	373.48055	0	184.70034	0	184.70034	130	0	210	65.246030	0	0	248.40966	1		248.40966	3
00892008	5006815	183.16363	130	504	0	504.32577	0	371.19815	62.963632	308.23452	200	0	0	119.45431	0	0	313.16363	2		183.16363	2
00892008	5006815	193.70931	200	504	0	504.32577	0	371.19815	62.963632	308.23452	0	0	130	124.25104!	0	0	393.70931	1		193.70931	2
00892008	5006815	69.458272	200	356	0	356.20706	0	230.27979	32.623015	197.65678	90	0	0	64.529157	0	0	269.45827	3		69.458272	-1
00892008	5006815	204.92911	90	356	0	356.20706	0	230.27979	32.623015	197.65678	0	0	200	0	0	0	294.92911	2		204.92911	2
00892008	5006815	204.92911	90	356	0	356.20706	0	230.27979	32.623015	197.65678	0	0	0	133.12762	0	0	294.92911	1		204.92911	2
00892008	5006815	161.80148	0	373	0	372.75313	0	188.05278	62.1255221	125.92726	220	0	90	125.927264	0	0	161.80148	1		161.80148	2
00892008	5006815	255.87422	0	373	0	373.48055	0	184.70034	0	184.70034	120	0	220	65.246030	0	0	255.87422	1		255.87422	. 3
00892008	5006815	190.62819	120	504	0	504.32577	0	371.19815	62.963632	308.23452	200	0	0	119.45431	0	0	310.62819	2		190.62819	2
00892008	5006815	191.17387	200	504	0	504.32577	0	371.19815	62.963632	308.23452	0	0	120	124.25104!	0	0	391.17387	1		191.17387	2
00892008	5006815	66.922830	200	356	0	356.20706	0	230.27979	32.623015	197.65678	90	0	0	64.529157	0	0	266.922830	3		66.922830	. 1
00892008	5006815	202.39367	90	356	0	356.20706	0	230.27979	32.623015	197.65678	0	0	200	0	0	0	292.39367	2		202.39367	. 2
00892008	5006815	202.39367	90	356	0	356.20706	0	230.27979	32.623015	197.65678	0	0	0	133.12762	0	0	292.39367	1		202.39367	2
00892008	5006815	159.26604	0	373	0	372.75313	0	188.05278	62.125522	125.92726	220	0	90	125.92726	0	0	159.26604	1		159.26604	2
00892008	5006815	253.33878	0	373	0	373.48055	0	184.70034	0	184.70034	120	0	220	65.246030	0	0	253.33878	1		253.33878	. 3
00892008	5006815	188.09275	120	504	0	504.32577	0	371.19815	62.963632	308.23452	200	0	0	119.45431	0	0	308.09275	2		188.09275	2

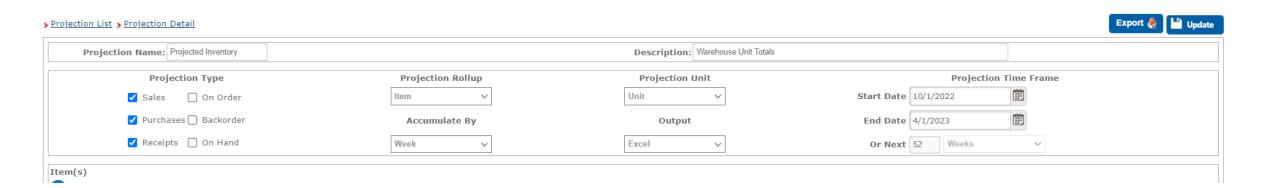


Projections Grid Calculation

Item Number	Order Id	On Hand	On Order	OUTL	Economic Order Cycle	ОТР	Vendor Order Cycle	LSP	SS	LT	SOQ	Backorder	Receipt Quantity	Forecast	On Hold	On Reserve	Balance	Delay	Dependen Demand Units	Available On Hand	Days On Hand
00892008	5006815	31	400	356	0	356.20706	0	230.27979	32.623015	197.65678	0	0	0	64.529157:	0	0	431	2		31	0
00892008	5006815	0	400	356	0	356.20706	0	230.27979	32.623015	197.65678	0	0	0	0	0	0	400	2		0	0
00892008	500681	3	56.00	200	4.50	255 20705	3.50	Order	Up To L	evel	^		190	133.12762	0	0	400	1		190	1
00892008	500681	_	0.00		0.00				ife (3.00				210	125.92726-	0	0	266.87237	1		266.87237	. 3
00892008	500681	1	125.93		1.00					Cycle (0.00)		110	65.246030	0 0	EO Da		1		250.94510	3
00892008	500681		56.21		4.50				Trigger		7		0	119.45431	o U.	50 Da	y ss	2		185.69907	2
00892008	500681		125.93		1.00				r Order				130	124.25104!	0	0	386.24476	1		196.24476	2
00892008	500681		30.28		3.50				ock Po	,			0	64.529157	0	0	261.99371	3		71.993715	1
00892008	500681		197.66		3.00		2.00	Lead Ti	me (DO	W)			190	0	0	0	297.46455	2		197.46455	2
00892008	500681		32.03		0.49		0.49	Safety		,			0	133.12762	0	0	297.46455	1		197.46455	2
00892008	500681		32.62		0.50		0.50	Safety	Stock M	inimum			100	125.92726	0	0	164.33693	1		164.33693	2
00892008	500681		32.62		0.50		0.50	- '	Stock M				210	65.246030	0	0	248.40966	1		248.40966	3
00892008	5006815	103.10303	130	JU4	v	304.36311	v	211.12012.	02.703032	JUU.2J4J2	200	v	0	119.45431	0	0	313.16363	2		183.16363	2
00892008	5006815	193.70931	200	504	0	504.32577	0	371.19815	62.963632	308.23452	0	0	130	124.25104!	0	0	393.70931	1		193.70931	2
00892008	5006815	69.458272	200	356	0	356.20706	0	230.27979	32.623015	197.65678	90	0	0	64.529157	0	0	269.45827	3		69.458272	1.1
00892008	5006815	204.92911	1: 90	356	0	356.20706	0	230.27979	32.623015	197.65678	0	0	200	0	0	0	294.92911	2		204.92911	2
00892008	5006815	204.92911	90	356	0	356.20706	0	230.27979	32.623015	197.65678	0	0	0	133.12762	0	0	294.92911	1		204.92911	2
00892008	5006815	161.80148	3: 0	373	0	372.75313	0	188.05278	62.125522	125.92726	220	0	90	125.92726	0	0	161.80148	1		161.80148	2
00892008	5006815	255.87422	2. 0	373	0	373.48055	0	184.70034	0	184.70034	120	0	220	65.246030	0	0	255.87422	1		255.87422	3
00892008	5006815	190.62819	9: 120	504	0	504.32577	0	371.19815	62.963632	308.23452	200	0	0	119.45431	0	0	310.62819	2		190.62819	2
00892008	5006815	191.17387	7: 200	504	0	504.32577	0	371.19815	62.963632	308.23452	0	0	120	124.25104!	0	0	391.17387	1		191.17387	2
00892008	5006815	66.922830	200	356	0	356.20706	0	230.27979	32.623015	197.65678	90	0	0	64.529157	0	0	266.92283	3		66.922830	. 1
00892008	5006815	202.39367	7. 90	356	0	356.20706	0	230.27979	32.623015	197.65678	0	0	200	0	0	0	292.39367	2		202.39367	2
00892008	5006815	202.39367	7: 90	356	0	356.20706	0	230.27979	32.623015	197.65678	0	0	0	133.12762	0	0	292.39367	1		202.39367	2
00892008	5006815	159.26604	0 4	373	0	372.75313	0	188.05278	62.125522	125.92726	220	0	90	125.92726	0	0	159.26604	1		159.26604	2
00892008	5006815	253.33878	3: 0	373	0	373.48055	0	184.70034	0	184.700345	120	0	220	65.246030	0	0	253.33878	1		253.33878	3
00892008	5006815	188.09275	120	504	0	504.32577	0	371.19815	62.963632	308.23452	200	0	0	119.45431	0	0	308.09275	2		188.09275	2



Projections Export





Dashboard

▼ Open Order Alerts

Past Due 17
Short Shipments 2
Orders to Expedite 31
Suspended Orders 0
All Open Orders 82
Open Order Items 470



Orders

Due for Service	<u>27</u>
Scheduled	<u>0</u>
Forward Buy	<u>0</u>
Event	<u>0</u>
Transfer	<u>0</u>
Uncalculated	<u>0</u>
Schedule Conflict	<u>0</u>
All Orders	94

▼ Low Stock Alert

"A" Low Stock Point	<u>0</u>
Low Stock Point	<u>7</u>
Out Before Delivery	<u>11</u>
Unresolved Capacity	0
Backorder	<u>0</u>
Holiday Calendar	<u>0</u>

▼ Demand Exceptions

Demand High	<u>15</u>
Demand Low	<u>2</u>
Trending Up	<u>11</u>
Trending Down	1
Missed Service	<u>63</u>
Infinity Check	<u>4</u>

▼ Item Alerts

Out of Stock	<u>51</u>
Overstock on Order	<u>9</u>
Overstock	<u>82</u>
New Items	<u>46</u>
No Forecast	224
Simulated Profiles	<u>42</u>
New Seasonal Profiles	0

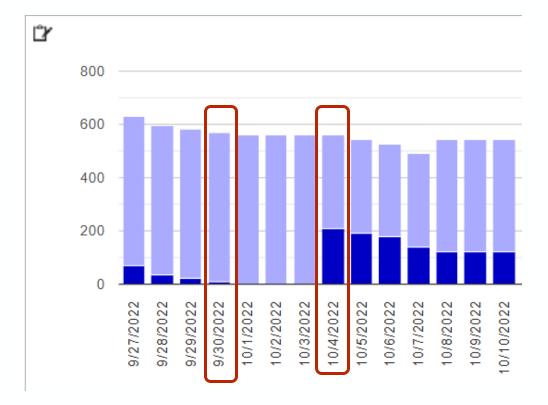


Orders to Expedite

Past Due 17 Short Shipments 2 Orders to Expedite 31 Suspended Orders 0 All Open Orders 82 Open Order Items 470

▼ Open Order Alerts

On Order	Projected Out of Stock Date
630.00	
7420.00	
2040.00	
408.00	
210.00	9/30/2022
440.00	





Dashboard

Open Order Alerts

Past Due 17
Short Shipments 2
Orders to Expedite 31
Suspended Orders 0
All Open Orders 82
Open Order Items 470



Orders

Due for Service	<u>27</u>
Scheduled	<u>0</u>
Forward Buy	<u>0</u>
Event	<u>0</u>
Transfer	<u>0</u>
Uncalculated	<u>0</u>
Schedule Conflict	<u>0</u>
All Orders	94

"A" Low Stock Point 0
Low Stock Point 7
Out Before Delivery 11
Unresolved Capacity 0
Backorder 0
Holiday Calendar 0

▼ Low Stock Alert



Demand Exceptions

Demand High	<u>15</u>
Demand Low	<u>2</u>
Trending Up	<u>11</u>
Trending Down	<u>1</u>
Missed Service	<u>63</u>
Infinity Check	<u>4</u>



▼ Item Alerts

Out of Stock	<u>5</u>
Overstock on Order	9
Overstock	82
New Items	46
No Forecast	224
Simulated Profiles	42
New Seasonal Profiles	<u>(</u>











