1	2	3	4	5	6	7	8	9	10	11	12	13	14

Aggregate Mixing Plant Example Using Red Lion Controls Hardware

Gravel

Sand

Concrete

Water

Water Flow Meter

Plant Water

E3-ISOTC-10

NT5008 Switch

Loadcell

Loadcell

Loadcell

Loadcell

Loadcell

Loadcell

E3-MIX20884-1

Loadcell

Loadcell

Aggregate Mixing Hopper

Concrete Mix VFD Control Panel with A/C

ST-IPM-8460 Controller CPU

NT5008 Switch

Flex Edge DA70 – SCADA and Data Collection

Air Vibrator

Control and Management Office

RLC Concrete

Mixer Motor and Mixer Gear Drive System

10 Cubic Yard Concrete Truck

All drawings are notations are examples only. Customer is responsible for fit and function of their end system.

Page Title	Concrete Plant Layout & Control	Project		Drawing	Aggregate Mixing Plant Using Red Lion Hardware	Drawing No.		Edited	9 Aug 2024	Scale	1:1
		Client				James D. Jolly		Created	9 Aug 2024	Page	1 of 3

24 VDC power supply

2

3

2

3

2

3

2

3

2

3

2

3

2

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is responsible for fit and function of their end system.

| Page Title | Control Device Power | Project | | | Drawing | Aggregate Mixing Plant Using Red Lion Hardware | Drawing No. | | Edited | 9 Aug 2024 | Scale | 1:1 | |
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Operations

1	Concrete order comes in vial sales ticket with mix specifics and cubic yards request
2	The Concrete Mix number is entered into the webpage display from the DA70 to include thee amount of cubic yards
3	The recipe data is pulled from the CSV file on the SD card according to the cubic yards and then sent to the ST-IPM-8460 Controller
4	The gravel, sand, and concrete are dropped into the aggregate hopper one at a time automatically
5	Note: if necessary we can interface to an existing scale as long as it support one of our drivers in crimson
6	Once all materials are in the Aggregate mixing hopper then it is dropped into the main mixer along with the preset number of gallons of water
7	The mix is stirred until as such time as deemed necessary
8	The main mixer is then put into reverse and the entire mix is sent into the concrete truck
9	After the batch complete is done, the totals of all materials used are pulled from the current inventory being monitoried by the DA70
10	All Plant processes including water, compressed air, even plant security with gate monitoring and motion cameras will run the ST-IPM-8460 being monitoried.
11	Roughly this same process could be done for Asphalt or a "chip" plant.

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| Page Title | Process | Project | | Drawing | Aggregate Mixing Plant Using Red Lion Hardware | Drawing No. | | Edited | 9 Aug 2024 | Scale | 1:1 |
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