



Instrument Scales Contracting Services Company

شركة خدمات موازين الصك للمقاولات



**Weighbridges
Weighing Scales & Systems**



Construction & Industrial Works

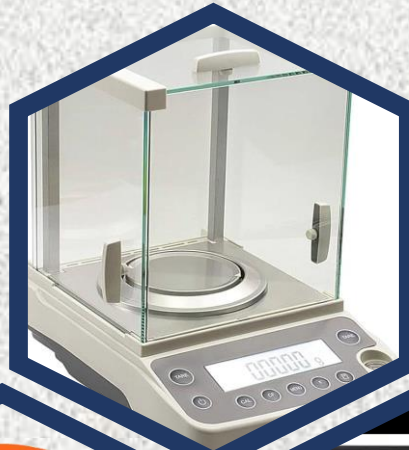
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C.R No: 2051242754 VAT No: 311374807400003

WEIGHBRIDGES, WEIGHING SCALES & SYSTEMS DIVISION

**Pallet
Scale**



**Laboratory
Scale**



**Truck
Scale**



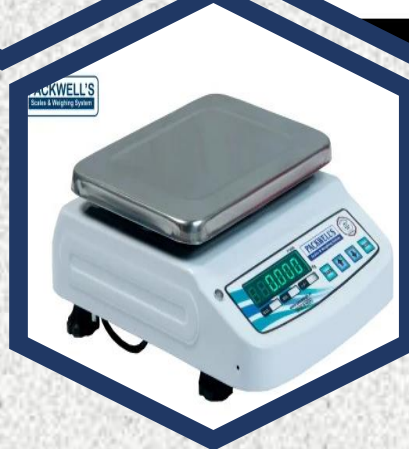
**Weight
Indicator**



**Crane
Scale**



**Table Top
Scale**





PIT TYPE WEIGHBRIDGE 100T CAPACITY



**CALIBRATION USING
TEST WEIGHT**



CALIBRATION SERVICES



**MAINTENANCE AND
CALIBRATION SERVICES**



SOFTWARE SYSTEM

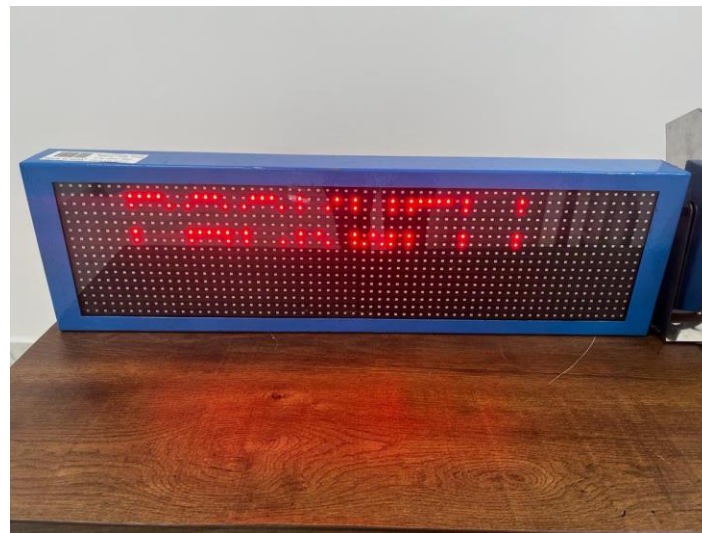
WEIGHBRIDGE – TRUCK SCALES



WEIGHBRIDGE COMPLETE AUTOMATION AND CONTROL SYSTEM



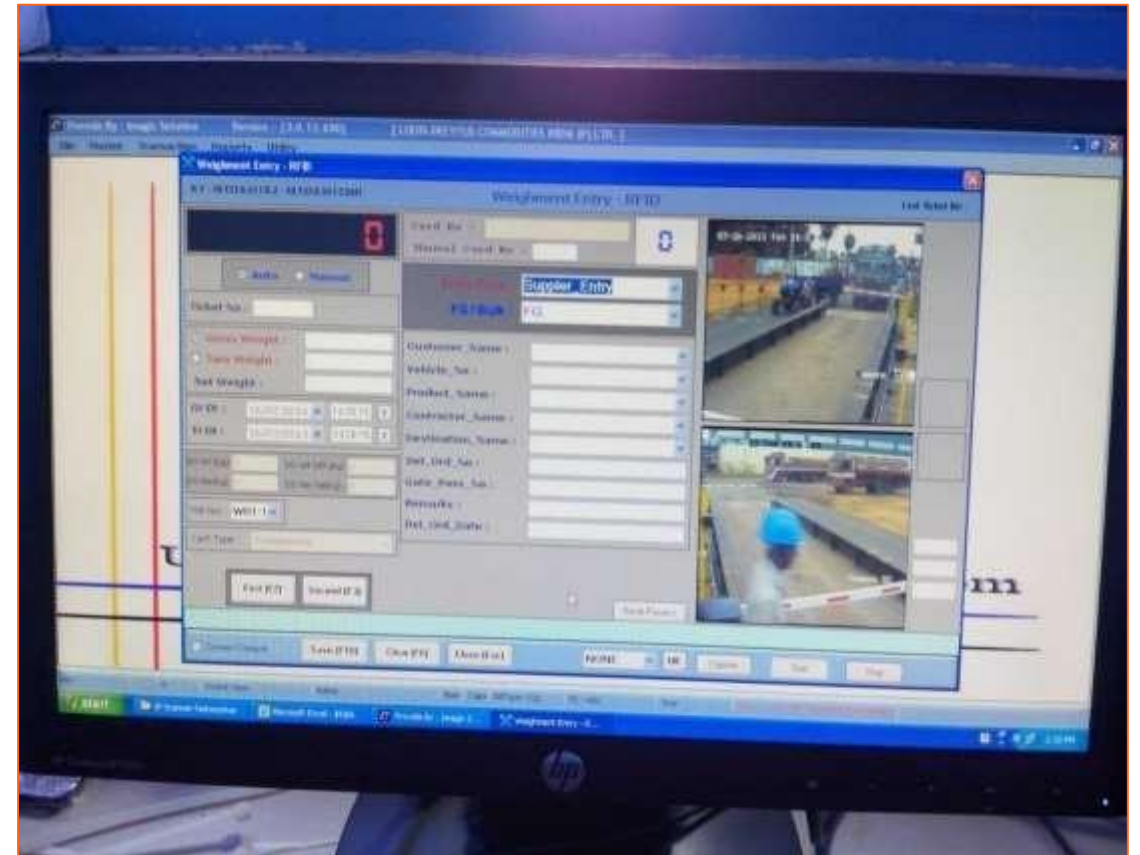
WEIGHING SCALES AND INDICATORS





FULL AUTO SOFTWARE

WEIGHBRIDGE AUTOMATED PIT LESS TYPE





Project Definition

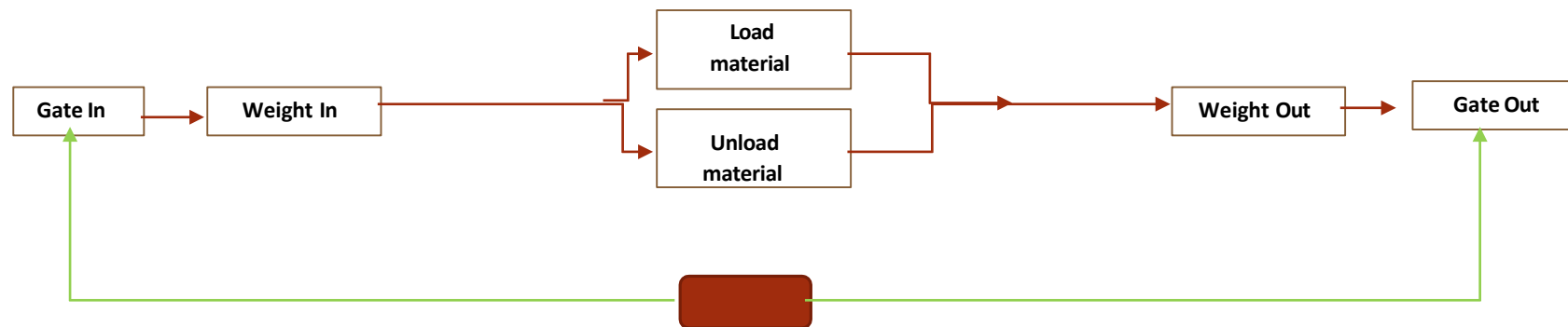
The Weighbridge RFID Automation Solutions is intended to implement In-plant Automation. following modules to be implemented based System:

Installation and Configuration of Requested Modules

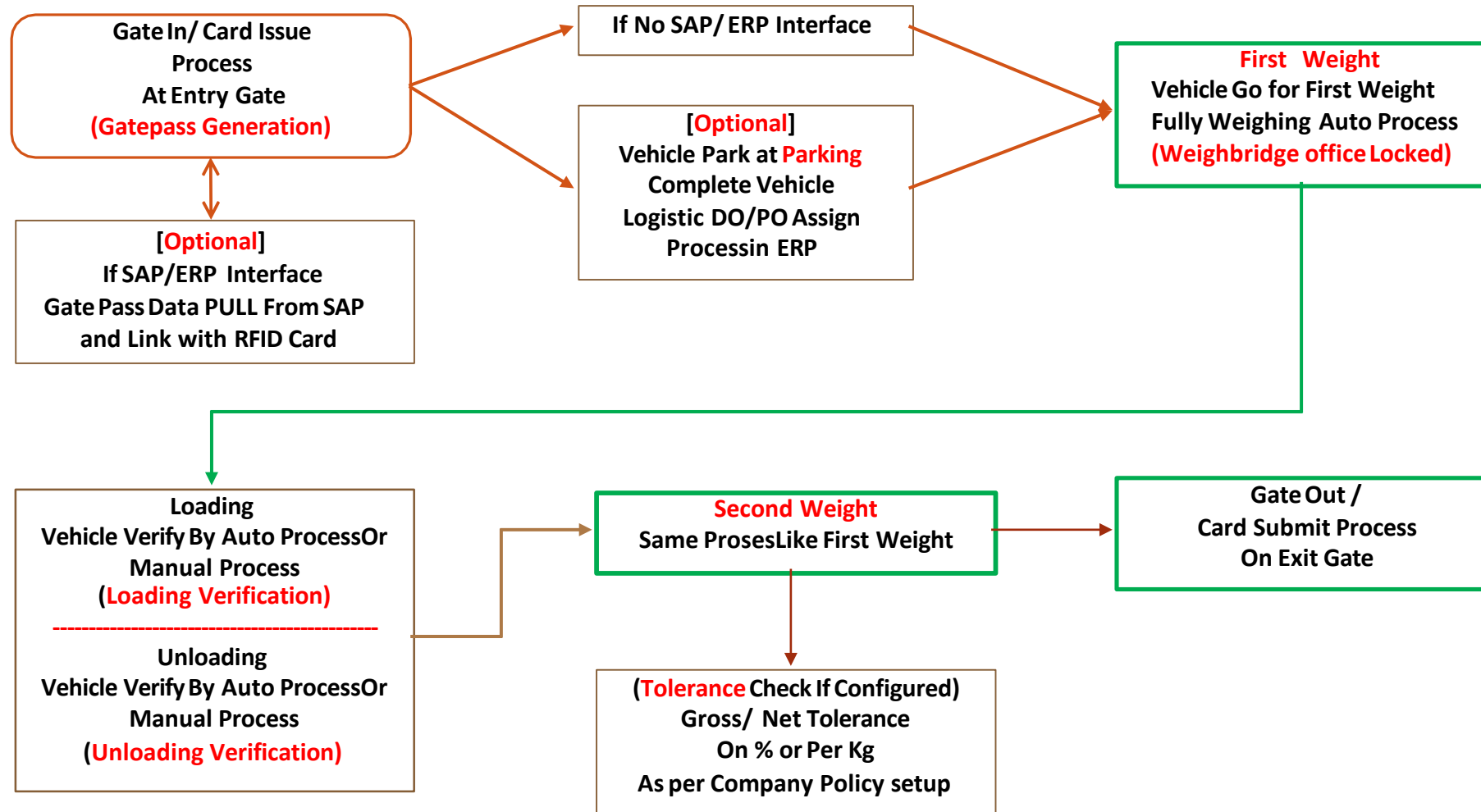
- Gate In/ Card Issue
- Weight In– first Weight
- Loading / Unloading
- Weight Out – Second Weight
- Gate Out / Card Submit

Unmanned Weighbridge Solutions: Aimed at speeding up throughput of vehicles[Trucks], improving security and extending weighbridge operational periods, together with improving and simplifying data collection and distribution. Our Technologies employed include Ethernet communication for remote access, LAN, automatic vehicle recognition systems, smart card or key readers, wireless interfacing

Unmanned Weighbridge Process Systematically



Flow Process



Gate In

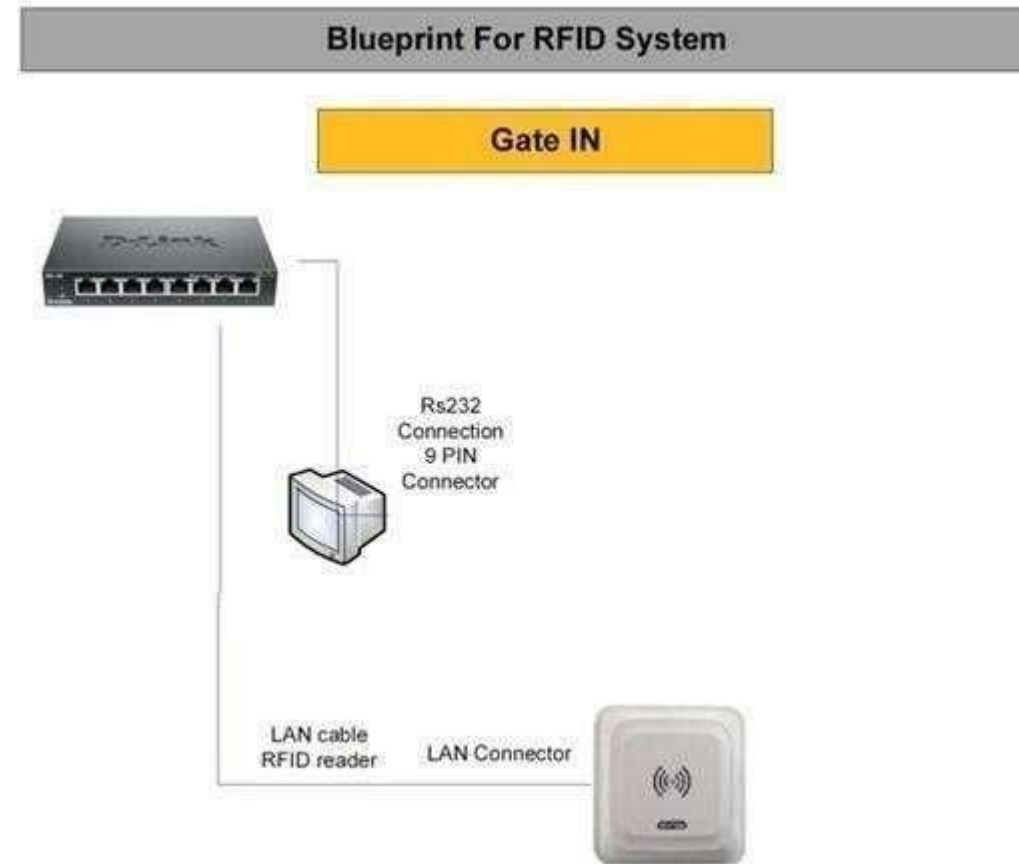
RFIDReader	Boom Barrier	LED Display	Trafficlight	Sound System	IPCamera	PositionSensor	Lot Control Panel	RFIDReader
2	2	1	Set	1	2	3	1	1

{Gate Pass Generation Process}

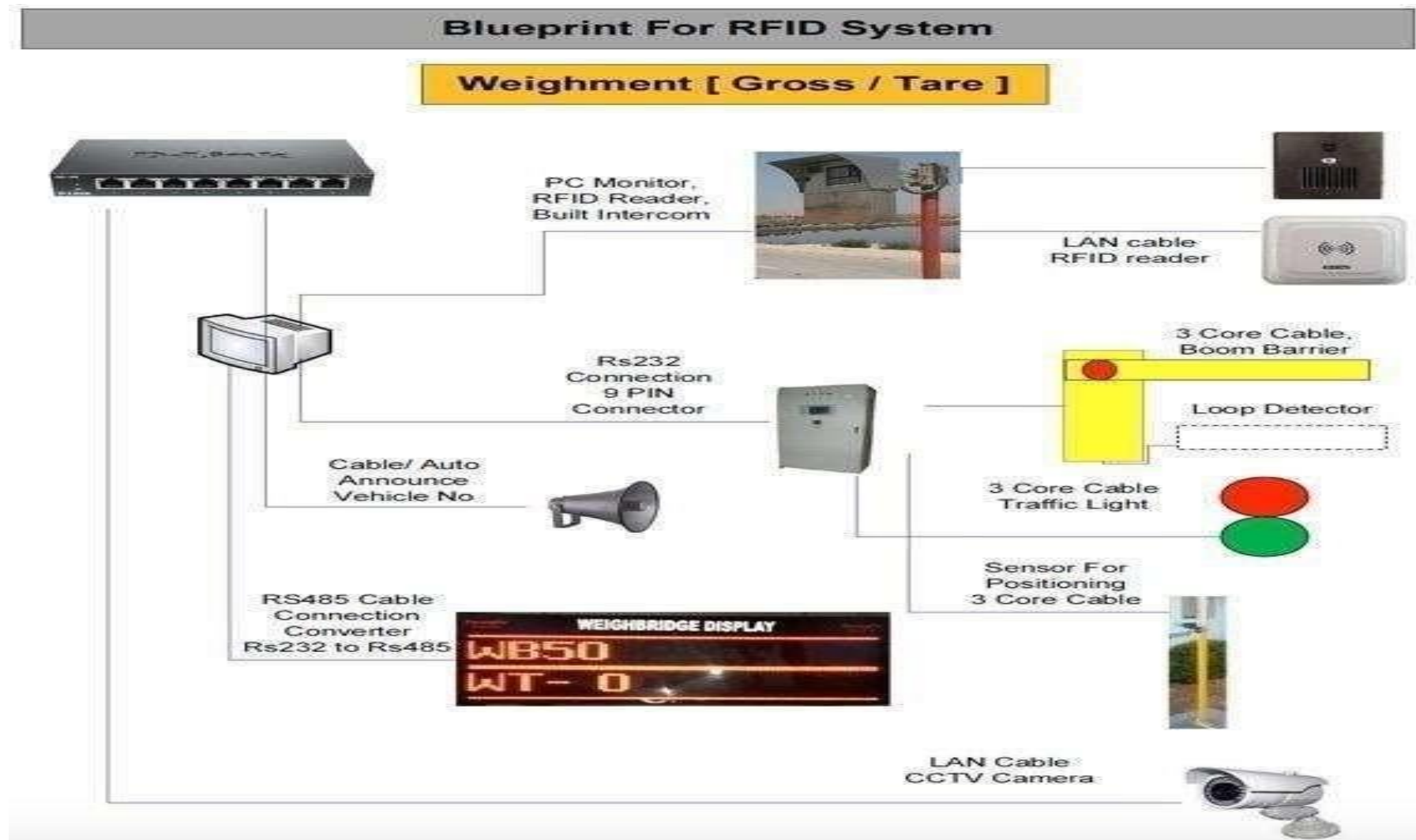
- Vehicle [Truck] reach AtEntry Gate,
- Driver GiveRequireDocumentto Security Officer/GateIn Staff
- Gate in staff Open GateIn Screen in RFID softwareand Enter RequireDetail, {
If ERP/SAPInterfacethenenter GatePass no an PULL Data FromERP/SAPAutomatically}
- Punch RFID Cardon RFIDReader
- Click On SaveButton And SaveVehicleDataand GenerateGate Pass In RFIDSystem
- Deliver RFIDCard ToDriver with his Document.

Note:-

- WeConfigure Typeof Process Like(FG, RW, PO, DO, IN, OUT,Coal, SALT,TRIP, Other}
- Weuse type of Vehicle: Truck, Bulk, Flatbed Truck, Tanker
- We Interfacesystem With ERP/SAP



Weight In



{First Weighment Process} :-

- Vehicle Reach on Weighbridge for weight in / First Weight
- Driver tap RFID Card on RFID Reader, the system Verify RFID Card and Vehicle in Database, If Valid Card then Open Entry Barrier,
- Driver Drive the Vehicle and Stop in Proper Position on Weighbridge (VPS system Take Care for Vehicle Positioning on Weighbridge),
- Outdoor LED Remote Display Show vehicle number & Live Weight on Screen.
- PA/ Sound system announce vehicle number and Other Related Instruction for Driver,
- IP Camera capture Vehicle Front/Back Image automatically and save timestamp
- Traffic Light On as per Process and Guide to Driver
- RFID System Check All Scenario Acceptable then Save Vehicle Stable Weight (if SAP/ERP Interface then Weight Update on that)
- After Save Weight Open Exit Boom Barrier, Green Light ON indicate to Driver weighment process completed and PA system Announce Instruction to go head.
- Driver move to loading / Unload Process

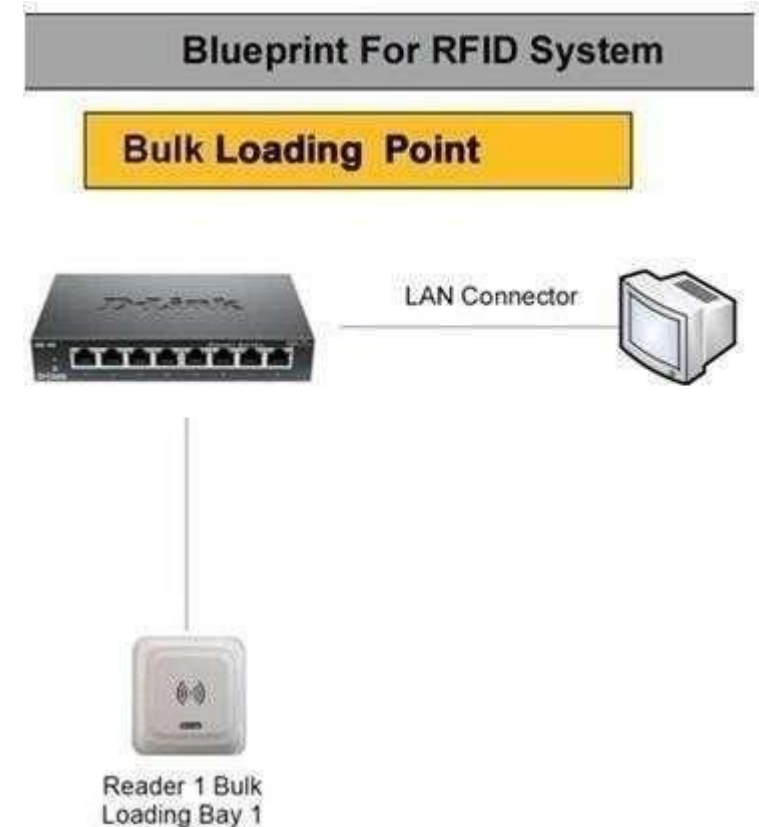
Note:-

- If Set Vehicle Auto Tolerance Check then RFID system check it and process it (it set as per company Policy)

Loading / Unloading

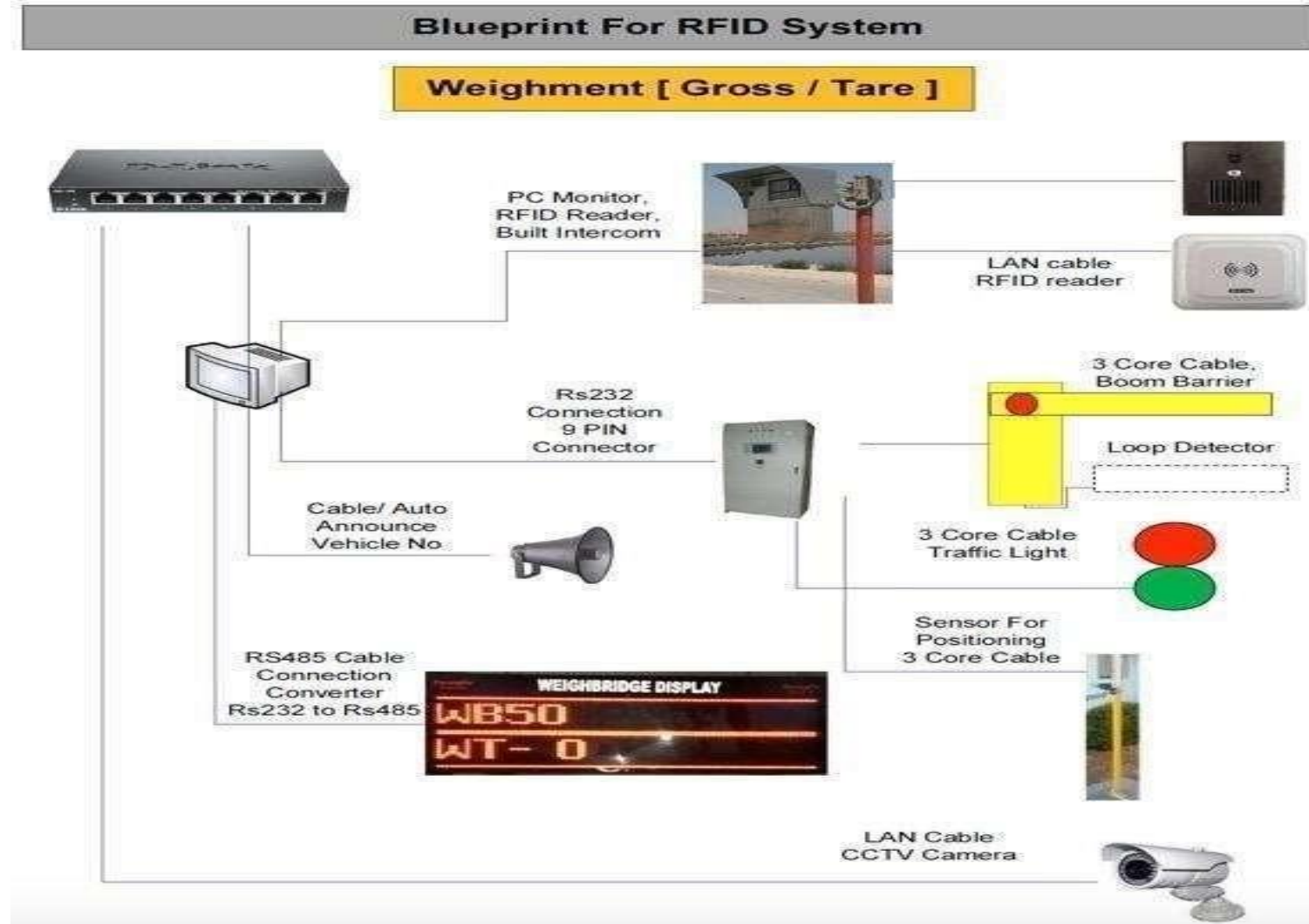
{Loading / Unloading Process}

- Vehicle Reach Loading/Unloading point, ○ Facility To Two Type Of Verification:
- Auto Verification : Driver Punch RFID Card on RFID Reader, if Valid Card and Valid Weighing then Green Light on, Driver go for Load/Unload Good
- Manual Verification by Staff: Loading Staff Check Vehicle First Weight Image on Screen and Verify it by Click on Screen
- Once Verification Completed System Store Time Stamp and Allow to Next Step
- Optional: On system We Can Configure in system Loading/Unloading is Mandatory, if not Verify it will not allow To Second Weight
- *If SAP/ERP Interface then Timestamp Data PUHS.*



RFID Reader	Boom Barrier	LED Display	Traffic Light	Sound System	IP Camera	Position Sensor	lot control Panel
2	2	1	6	1	2	3	1

Weight Out





{Second WeighmentProcess}

- Follow sameas the process weight in

Note:-

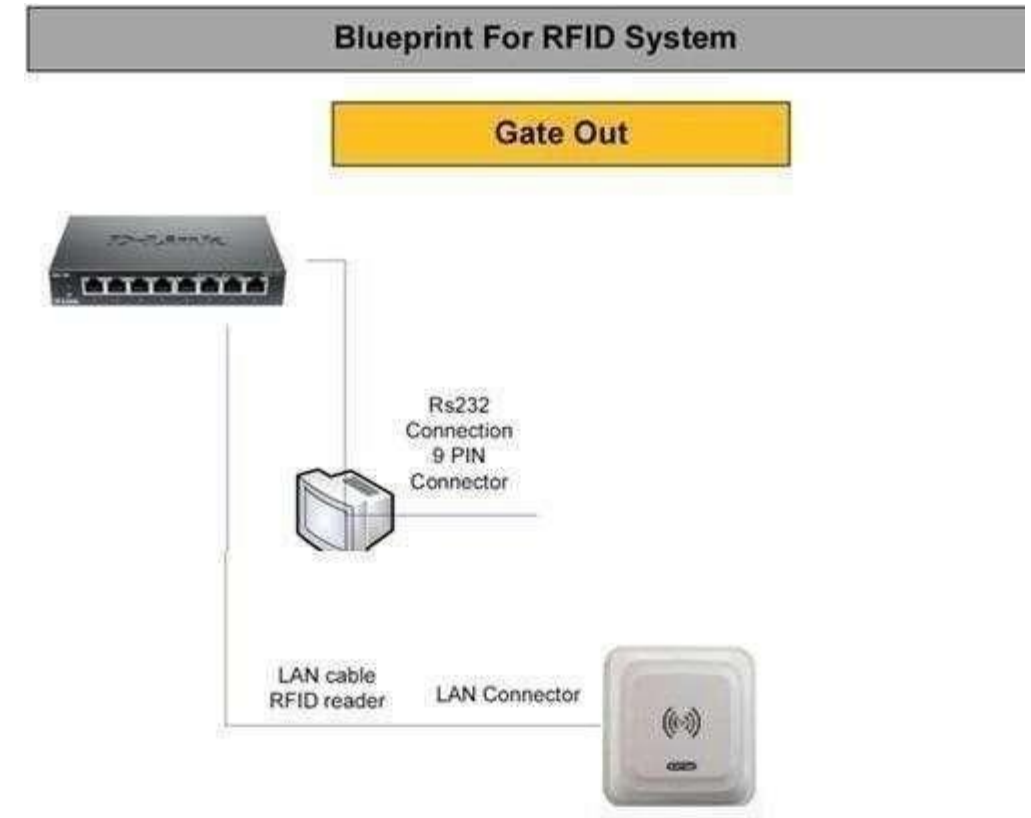
- Configure: Check Gross / Net Weight Toleranceof As per ProducttypeBased and Company Policy
- If vehiclenot under tolerancethen they ask to weighbridgecommand center officer to advise
- PA System AnnounceToleranceInstruction
- Driver Re-Verify Vehicleto Security or Authorized Person, oneallow then System Allow to Second Weight

Gate Out

{Gate Out Process}

- After complete Both Weight driver move to gateout
- Driver return RFID card to gate officer
- Officer tab RFID Card gate out Screen and print the final out print
- Driver sign off document
- RFI D card Free For New Vehicle

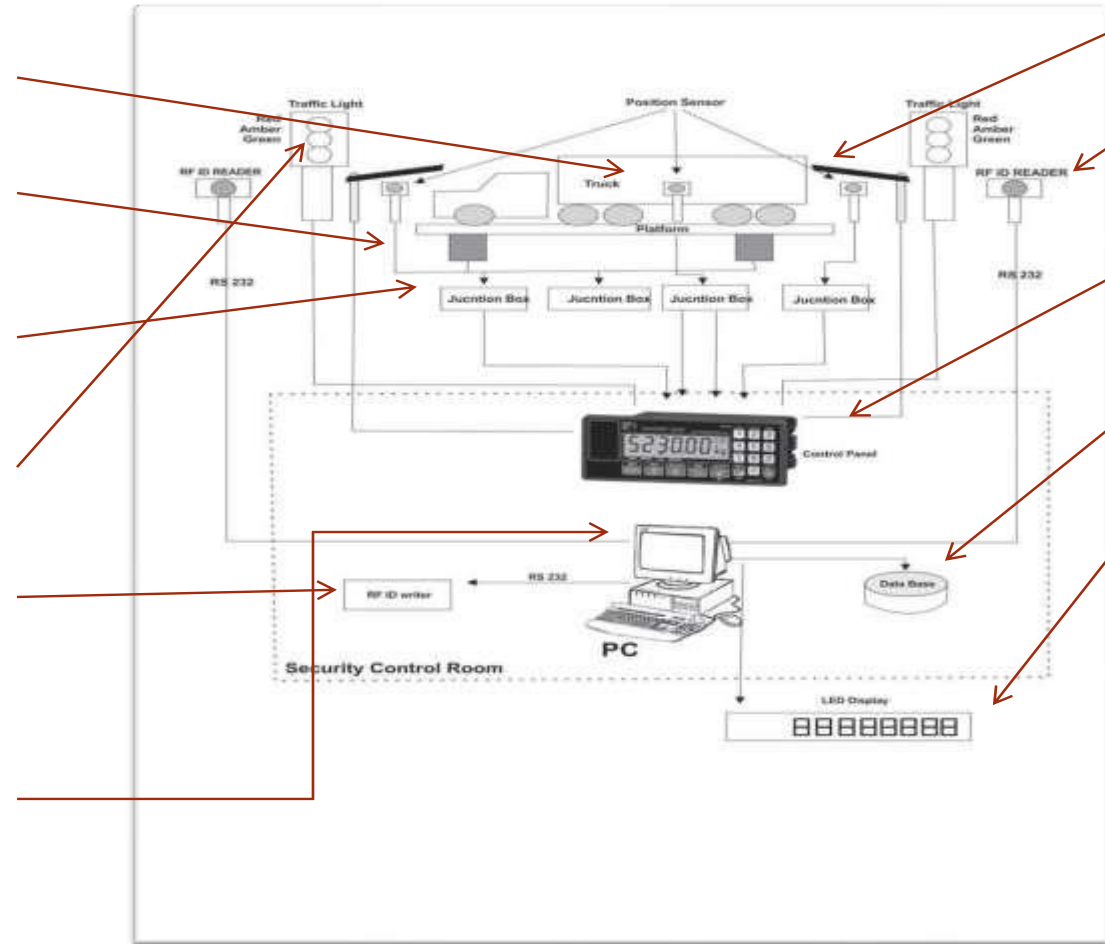
- If SAP/ERP Interface then Vehicle Out Data PUSH To SAP/ERP.



Flow Chart of Unman Weighbridge.

- Truck
- Photo Sensor
- Junction Box
- CCTV Camera
- RFID Reader

PC



Barrier Gate

RFID Reader

Unmanned Indicator

Database

Weight Display

Sound Secker



Project Deliverable

User Acceptance Test Case

Software data reconcile with ERP accuracy 100% (optional)

Software user interface follow requirement

Online Web Based Reporting with Dashboard

Hardware accuracy 100%

Training material

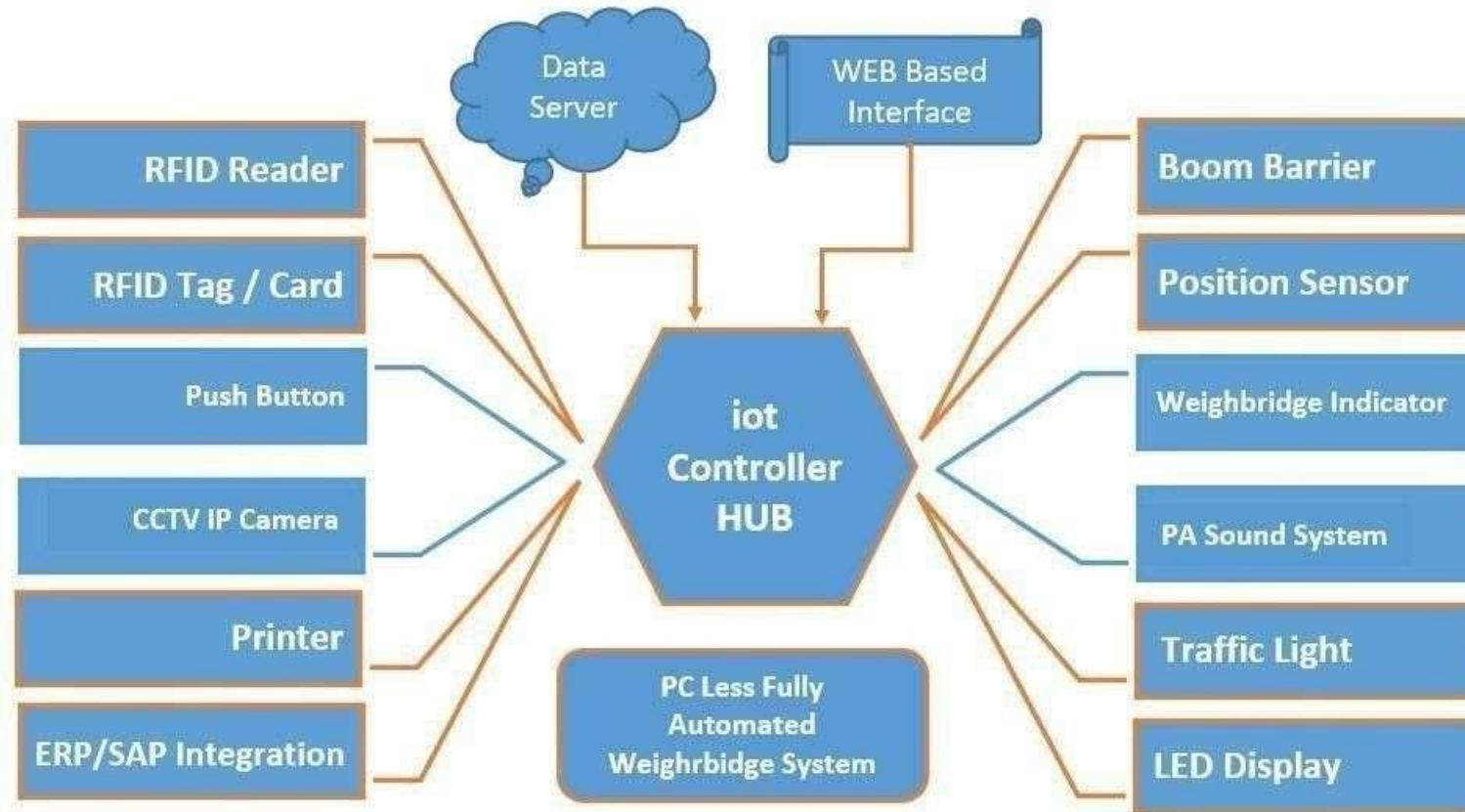
Troubleshooting material

Software handbook

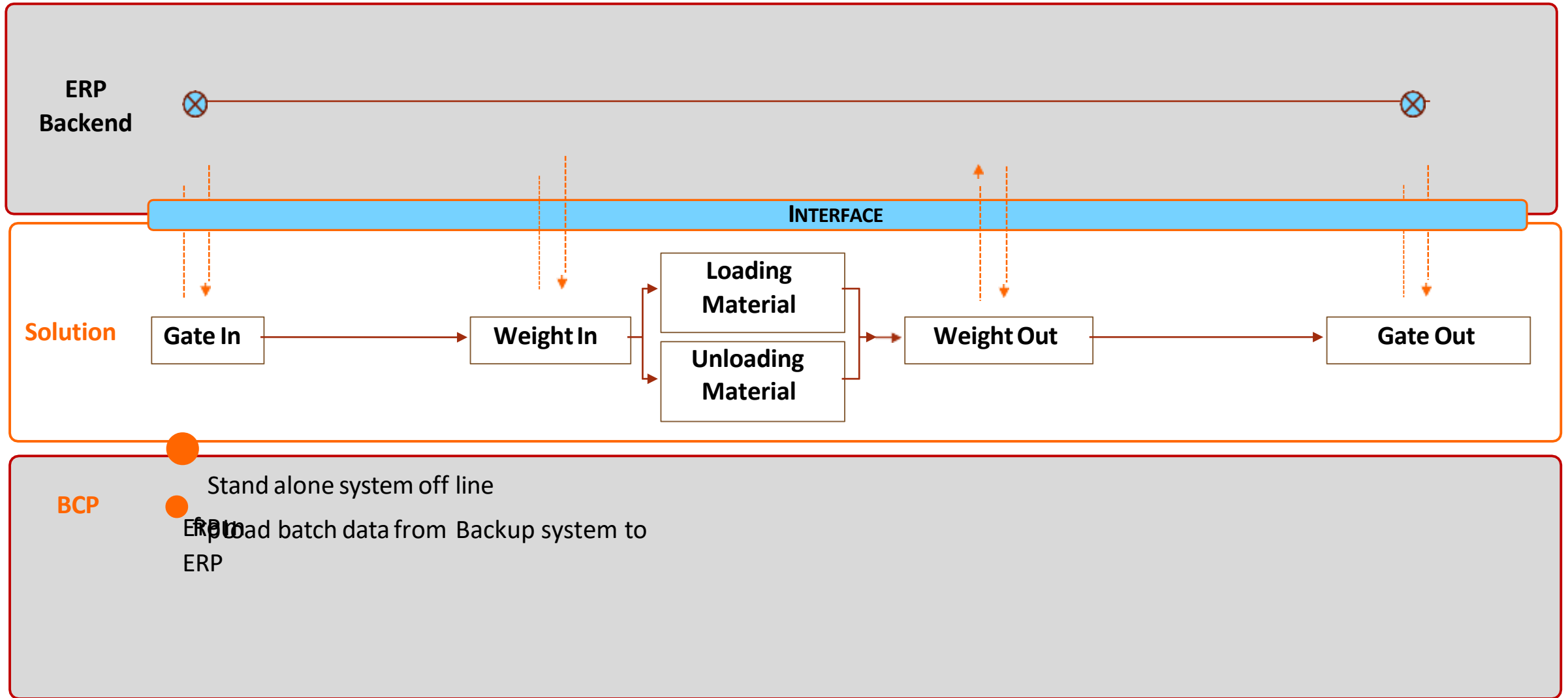
IOT Controller

- IOT Controller is a part of Weighbridge Automation System, it will Manage All Process of Automation Without PC,
- IOT Hub Direct Connect To Server Utility and Manage All Process
- Web Based Application with Dashboards Report and Operation

RFIDReader
1



SAP / ERP Interface



Instrument & Technology

RFID

Use UHF RFID Reader(up to 5 mtr Range) OrHF RFID Reader(up to 200 mm Range)
Use RFID WindshieldTag / RFID Fix Tag / RFID Card / HF RFID Card/ Hybrid RFID Card

AccurateIdentify Vehicle With RFID Tag/ Card{Increase Accuracy}



lot Controller hub

lot ControllerHub (Network based) Working PC Less AtWeighbridge LocationandConnected All Hardware Like Boom Barrier, Traffic Light, PAAAlert System, LED display, Vehicle Positioning Sensor, RFIDReaderAt Weighbridge, Camera etc.
lot Hub Connect Direct to Server and Save Vehicle Data Automatically on Server
Remove PC from Weighbridge Office and Reduce Cost PC Cost and Maintenance Cost

Boom Barrier

Make Secure Weighbridgeat Weighbridge, Avoid Drier Mistake, allowto Go headafter Successful weightSave on Server

LEDDisplay

LED Display View Vehicle Numberand Live Weight to Driver, driver Confirmweight and Vehicle Number his self, increase visibilityandsecurity

PA SoundAlert system

PA System Announce InstructionforDriver, alsoitwill announce Vehicle Number for Verification.

Traffic Light

Drivercomfortable/Use to with Traffic Light to understandprocess,like Red toStop, Go Green like that, make Easyweighing AutoProcess

CCTVIP Camera

IP Camera Auto Capture Vehicle Image at the Time of WeightSave, it will use IF anyQuery After Weightsave to Verifyit

Vehicle Positioning Sensor

Align Vehicle InPosition on Weighbridge,if not Proper Alignment not Allow to Save, insure to Vehicle Position On Weighbridge.

System Benefit's



Secure Weighment without any Manual Intervention

No need to operator, to operate weighbridge, Working 24/7 Without Takerest,

Reduce Weighment Time, it will Take Approx 30 to 40 Sec per Vehicle

If truck is not in proper place weighment is not further proceed. (Avoid Faulty Condition)

No need to supervise truck position in proper place or not. (System Will Manage Auto)

Wait to Stable Weight)

Supervisor get report for audit trail data, if any one modify weighment data.

CCTV photo capture facility capture truck real timephoto for security purpose.

Denied manual entry mistakeby operator.

Set Auto check Point for DO/PO Weight and allow that pre-defined Qty weight only.

Pre-set weighbridge for truck weighment

Pre-set weight variance % for check point in truck out time

Operating Cost Saving,

Optional : No need PC / Computer on Weighbridge Office { **iot Hub Manage System** } Reduce PC Cost and PC Maintenance

Truck weighment is securely & weighment proper weight.(System Till

CONSTRUCTION DIVISION



Construction

And

Industrial Works



General Contracting and Construction Works



At **Instruments Scales Contracting Services Company**, we've always been dedicated to exceeding our clients' expectations in the construction and Industrial works industry. Now, we're excited to announce an expansion of our services to better serve your evolving needs. Our new offerings includes Designing, Fabrication, Erection, Supply and Installation works, Asphalt road work, Curb Stone, Road Tiles and New Jersey Barrier Installation, expert in all types of Fences installations, top-notch Waterproofing and Insulation solutions, Roofing & Flooring systems.

Our Range of Services

Road Construction Works

- Asphalt Work
- Curb Stone and Road Tiles
- New Jersey Barrier
- Road Sign Boards
- Road Marking

Excavation and Back Filling

- Excavation process
- Back Filling

All Types of Fencing Systems

- Chain Link Fence
- Welded Mesh Fence
- High Security Fencing System
- Palisade Fencing System

Water Proofing and Insulation Works

- Water Proofing
- Tanks and Roofs Insulation
- Cement Insulation For Swimming Pools
- Polystyrene Thermal Insulation
- Foam Insulation

Ramp and Parking Shades

- Ramp Work
- Parking Shades

Bridge Anchorage and Tensioning

- Anchorage
- Hydraulic Jacks and Pump
- Single/Multi Strand Couplers
- Grout Pumps and Agitators

Designing, Fabrication and Erection Works

- Structural Designing
- Fabrication
- Portable Pre Fabricated Offices
- Pre Fabricated Buildings
- Erections of Iron Structures

Flooring Systems

- Industrial Flooring
- Epoxy Floors

Roofing Systems

ROAD CONSTRUCTION WORKS



AsphaltWorks



CurbStone and Road Tiles

New JerseyBarrier



ROAD CONSTRUCTION WORKS



Road Marking



Road Sign Boards

WATER PROOFING AND INSULATION WORKS

Tanks And Roofs Insulation



Water Proofing

Cement Insulation

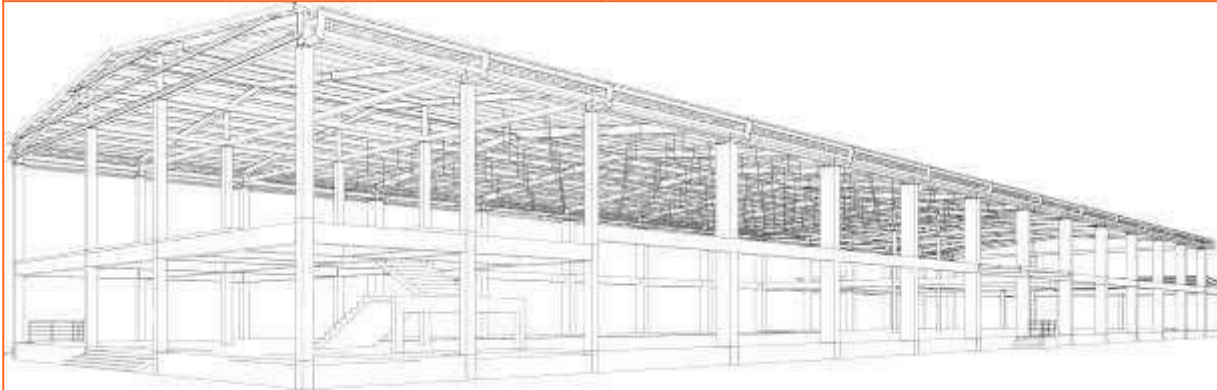


Foam Insulation



Polystyrene Thermal Insulation

DESIGNING, FABRICATION AND ERECTION WORKS



Structural Designing

Fabrication

DESIGNING, FABRICATION AND ERECTION WORKS



Portable Pre Fabricated Offices



Pre Fabricated Steel Buildings

EXCAVATION AND BACK FILLING



Excavation

Back Filling



RAMP AND PARKING SHADES



Ramp Construction



Parking Shade

ROOFING SYSTEMS



FENCING PRODUCTS



Welded Mesh Fence



Chain Link Fence

FENCING PRODUCTS



High Security Fencing System



Palisade Fencing System

FLOORING PRODUCTS



Industrial Flooring



Epoxy Flooring

BRIDGE ANCHORAGE AND TENSIONING



Anchorage



Single/Multi Strand Couplers



BRIDGE ANCHORAGE AND TENSIONING



Hydraulic Jacks and Pumps



Grout Agitator



Grout Pumps

BRIDGE AND BUILDING SUPER STRUCTURES

(Post-Tensioning and Pre-Tensioning)



CONTACT US



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