



GURUDU
SERVICE

www.gurudu-group.com

COMPANY

Gurudu Group was founded in 2010 and by a group of Engineers from Multinationals of the Automotive and Aviation sector, with strong experience in industrial automation and maintenance projects. He started his work offering programming of PLC, Robot, Electrical Projects, Line Simulation, Virtual Commissioning, Mechanical Projects and Pneumatic Projects. Experience in industry started to stand out in the market for offering solutions that meet the production, maintenance and design. With the passage of time and through market acceptance it has established partnerships with Siemens, Rockwell, Macomb Community College, Mitsubishi, Atlas Copco, RedLion.

Located: USA: 2764 Pleasant Road | Fort Mill | SC 29708.
Brazil | Av. Coreia do Sul, 501 | Piracicaba/SP |
Condomínio Clip Mall | Salas 2 e 3.



Knowledge Beyond the Skills



GURUDU
SERVICE

COMPANY

Currently offers solutions and projects for the Automotive sector.

It has specialized service sectors:

- Field Programming PLC, IHM, Robot and Supervisory.
- BIW Projects, Process Simulate/Design, Comissioning Simulate, Offline Programming(Robô, PLC and IHM), Layout Simulate.
- Electrical, Hydraulic and Pneumatic Project
- Electronic Components Technical Assistance.
- Maintenance and Operational Training
- AGV system.
- Electrical installation.

Thinking about minimizing the response time in maintenance emergencies, it has a Help Desk sector, where it operates Online at the customer's PLC, for rapid fault diagnosis



Knowledge Beyond the Skills



TEAM

Team of Engineers and Technicians extremely:

- International experience;
- Directly trained in manufacturers;
- Experience in Project Management;
- Experience in Automotive Lines (BodyShop , Paint Shop, Assembly, Stamping , PowerTrain;
- Experience in the main standards such as GCCS2, VAAZ, Integra, Next Gen , DCP, V8 DBS;
- Fluency in English, German and Spanish and Portuguese.



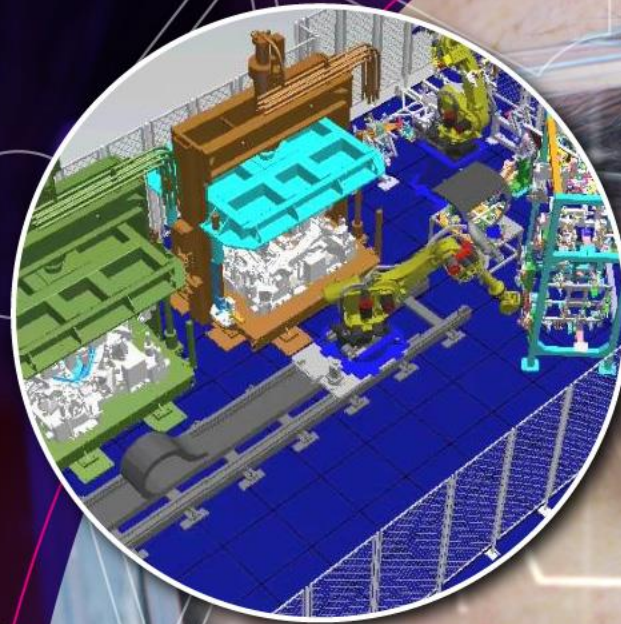
Knowledge Beyond the Skills

GURUDU
SERVICE

SIMULATION

Team of highly skilled Engineers and Technicians in Process Simulation:

Using Tecnomatix Siemens (Process, Design and Commissioning Simulate) makes its comprehensive portfolio for digital manufacturing solutions, which digitizes manufacturing and the process of transforming innovative ideas and raw materials into real products. Using Tecnomatix, we maximize the synchronization between Product Engineering, Production Engineering, Production and Service Operations, optimizing production efficiency and making innovations in all its processes.



Knowledge Beyond the Skills



BIW PROJECTS

With more than 10 years of experience in the sector, where we execute all types of BIW projects. For virtually all types of auto parts. We are able to offer you the complete process from Design to Process Design and offline line program (OLP).

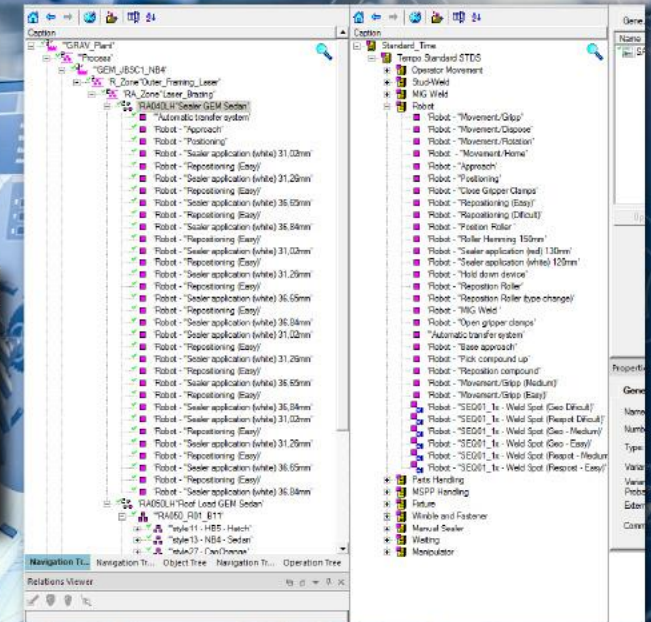
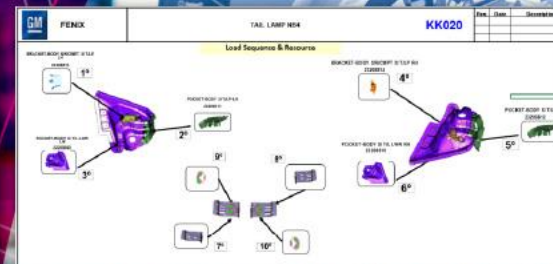
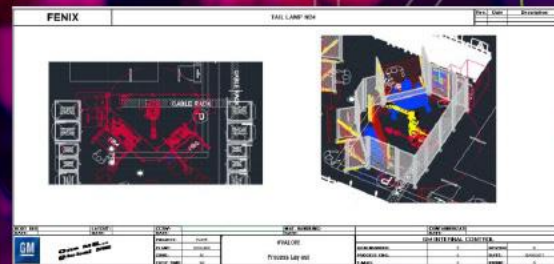
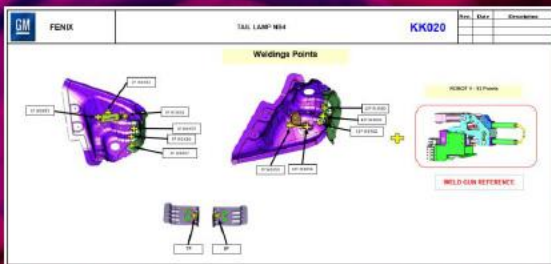
- **Process Design & Cycle Time Studies;**
- **System Layout (Factory Cad);**
- **Robotic Simulation (Process Simulate);**
- **Offline Program (OLP);**
- **Virtual Comissioning (VCx).**



Knowledge Beyond the Skills

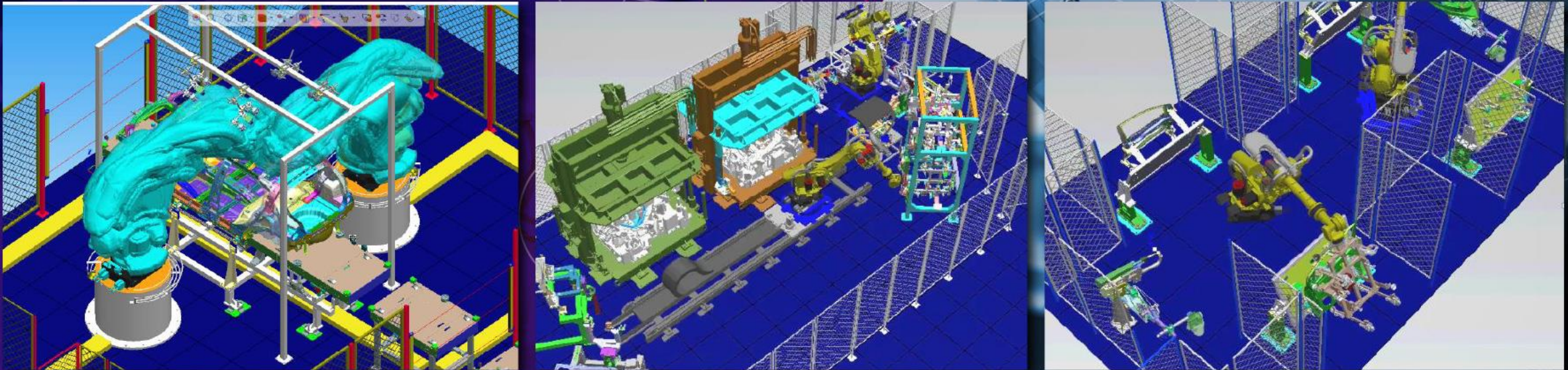


PROCESS DESIGN & CYCLE TIME



- Entendimento do Processo;
- Time Graph;
- Gantt Chart, Chart NAV and AV;
- Documentation for Field Installation;
- Execution of the work in Tecnomatix Process Design.

ROBOT SIMULATION

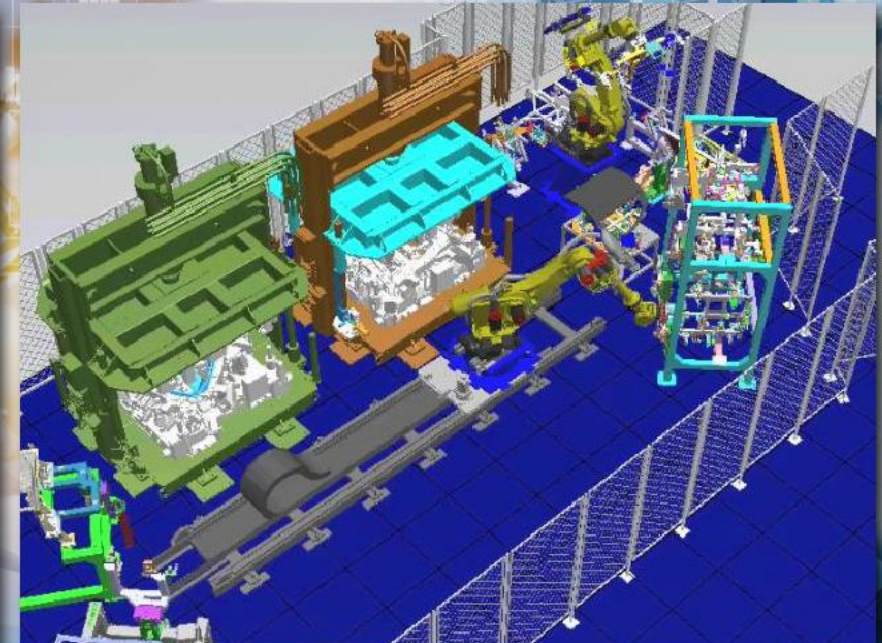
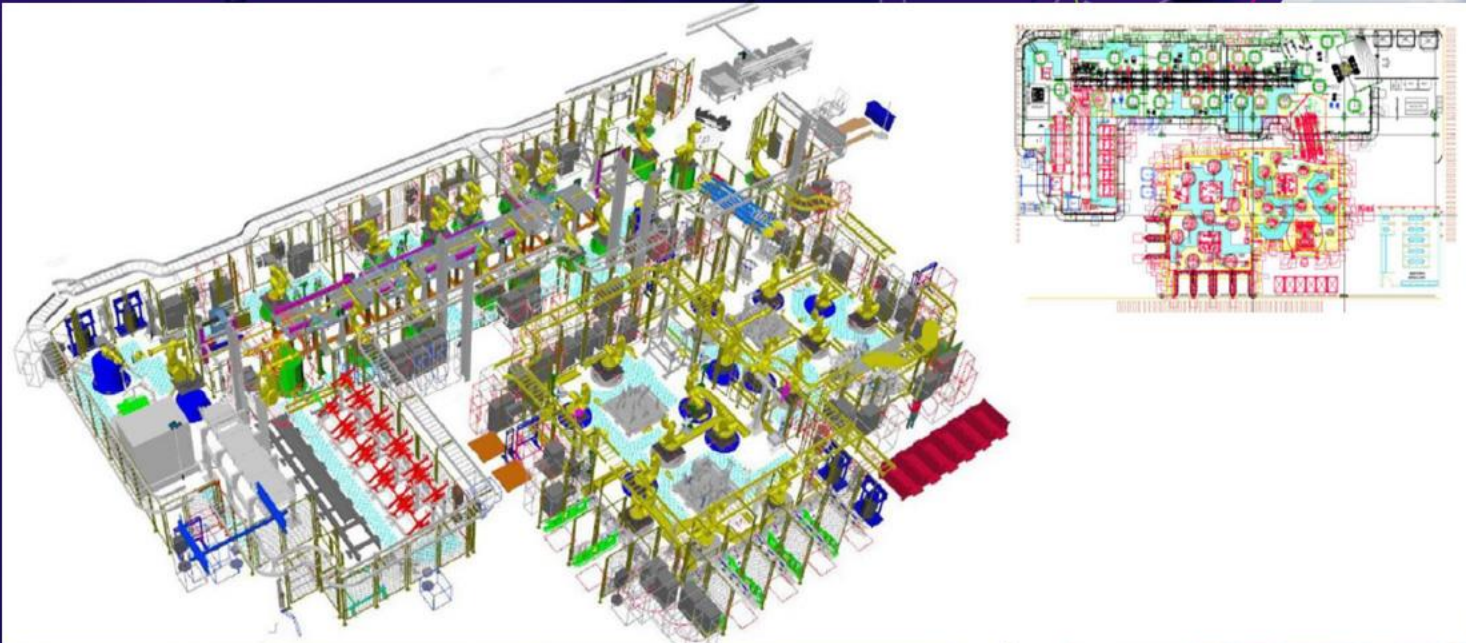


- Robot Trajectory Analysis;
- Validation of access to resources and tools;
- Cycle Time Validation;
- Joint Analysis of Robots;
- Volume of movements;
- Complete simulation of cell maintenance access;
- Robots OLP Program Generation;
- Interference zones analysis.

Knowledge Beyond the Skills



ROBOT SIMULATION



Connect...

56265145155
23231646548
78456494245

21561545314
56265145155
23231646548
78456494245
23611684843
97654297569



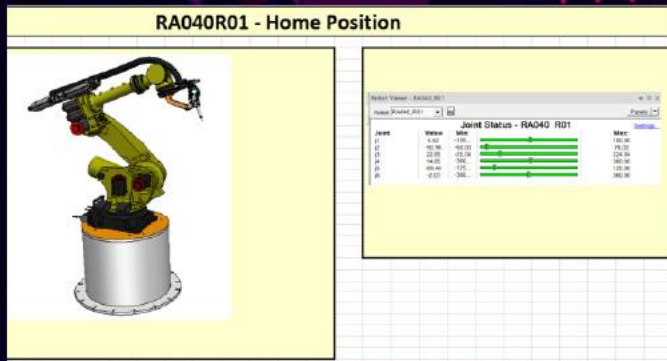
GURUDU
SERVICE

Knowledge Beyond the Skills




PROGRAMMING OFFLINE (OLP)

RA040R01 - Home Position

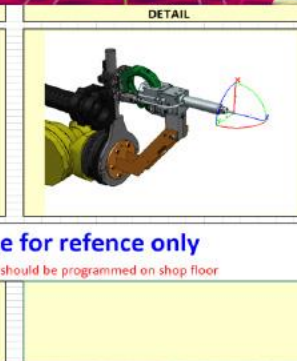


Joint	Value	Unit	Min	Max
J1	0.00	deg	-180.00	180.00
J2	0.00	deg	-90.00	90.00
J3	0.00	deg	-90.00	90.00
J4	0.00	deg	-90.00	90.00
J5	0.00	deg	-90.00	90.00
J6	0.00	deg	-90.00	90.00

RA040_R02 - UTOOL 1




DETAIL



TCP/RTCP Value for reference only
Attention: The TCP and RTCP should be programmed on shop floor

Parameter	Value	Unit	Min	Max
X	0.0000	m	-0.0500	0.0500
Y	0.0000	m	-0.0500	0.0500
Z	0.0000	m	-0.0500	0.0500

RA040_R01 - Uframe on Part(COMMON)



Uframe value for reference only
Attention: The Uframe should be programmed on shop floor

Parameter	Value	Unit	Min	Max
X	0.0000	m	-0.0500	0.0500
Y	0.0000	m	-0.0500	0.0500
Z	0.0000	m	-0.0500	0.0500

```
STYLE11.S - Bloco de notas
Arquivo Editar Formatar Exibir Ajuda
/PROG STYLE11
/ATTR
OWNER          = victorm;
COMMENT        = "";
PROG SIZE      = 0;
CREATE         = DATE 2018-05-14 TIME 15:32:30;
MODIFIED      = DATE 2018-05-14 TIME 15:32:30;
FILE_NAME     = STYLE11;
VERSION       = 0;
LINE_COUNT    = 35;
MEMORY_SIZE   = 0;
PROTECT       = READ_WRITE;
TCD: STACK_SIZE = 0;
TASK_PRIORITY = 50;
TIME_SLICE   = 0;
BUSY_LAMP_OFF = 0;
ABORT_REQUEST = 0;
PAUSE_REQUEST = 0;
DEFAULT_GROUP = ",,,";
CONTROL_CODE = 00000000 00000000;
/APPL
SPOT : TRUE ;
SPOT WELDING EQUIPMENT NUMBER : 1 ;
/MN
1: | TEMPLATE 4 ;
2: | STYLE XX Carried Disp ;
3: | ***** ;
4: | ;
5: | RESET ERR HANDLER PRX ;
6: | R[160:FFR PROCESS LBL]=0 ;
7: | ;
8: | ECHO STYLE AND OPTION ;
9: | GO[1:ManualStyle] = 11 ;
10: | ECHO OPTION ;
11: | CALL S11Pounce ;
12: | ;
```

- Robot trajectory creation;
- Generate offline program;
- Field Installation Support;
- Documentation for Field Installation;
- Redução no tempo de startup.

BODY SHOP P LINE

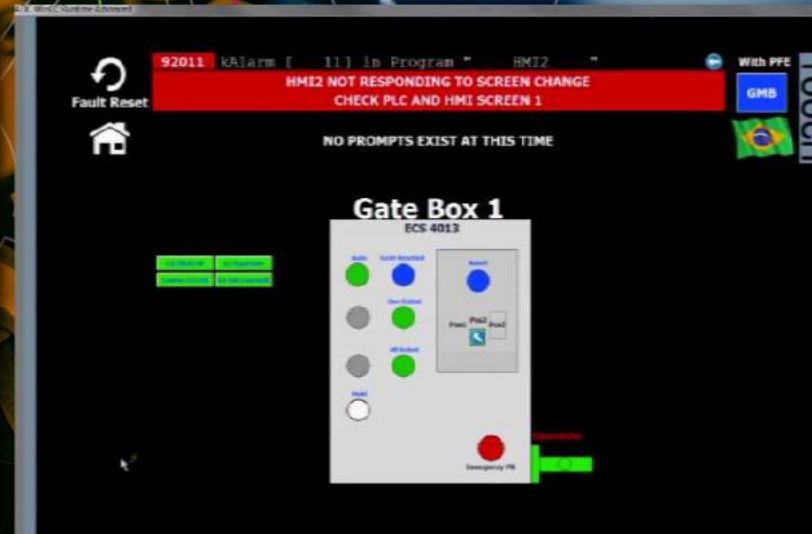
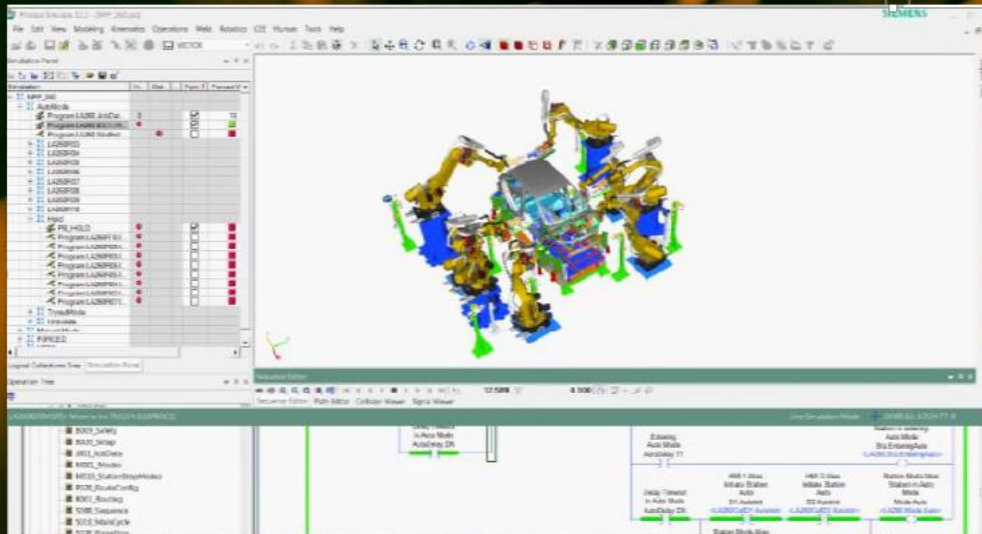


- **BODY Shop expertise;**
- **Robot Trajectory Analysis;**
- **Validation of access and tools;**
- **Cycle Time Validation;**
- **Joint Analysis of Robots;**
- **Volume of movements;**
- **Complete simulation of cells;**
- **Robots OLP Program Generation;**
- **Interference zones analysis.**

Knowledge Beyond the Skills



VIRTUAL COMMISSIONING



- Valid PLC logic;
- Reduces Startup time;
- Reduz o tempo de Integração;
- Czech PLC Logic, OLP, Cable Path;
- Pneumatic Design and Process Sequence.

Knowledge Beyond the Skills



LAYOUT

The System Layout illustrates the relationship of the tooling with all equipment and installations

- Overview
- Integration Plan
- Tools and Equipment Configuration
- Drive Perimeter
- Application of Panels and Compartments
- Layout of Pipes and Utilities
- Operator movement validation
- Robot Path Validation



ELECTRICAL INSTALLATION



Electrical installation expertise, considering a group of 18 electricians, 3 supervisors, 2 site manager and 3 planning engineers GURUDU have performed works in different areas in the automotive industry (Paint Shop, Final assembly, Body Shop, Stamping Shop, Casting process.

Knowledge Beyond the Skills



AGV AUTOMATED GUIDED VEHICLE



1-AGV LC1000



2-AGV LCH1200



1-LGV LS1000



4-AGV DC2T



5-AGV BD500

Partnership with Brazilian company located in Paraná state, Selettra company provide to us all kind of automated guided vehicle (AGV) based in the business of our customer



6-AGV MD500



7-AGV HYBRID

Knowledge Beyond the Skills



AGV AUTOMATED GUIDED VEHICLE

LG1000

The Selletrack stand alone vehicle model offers a wide range of applications and is ideal for single unit logistical transport. With automated indexing, it eliminates the action of process operators, which reduces the delivery cycle time.

Programmed in a learning mode, its configuration is simple and fast, streamlining its implementation.

SPECIFICATIONS

Load capacity : 1000kg

Tara: 380kg

Friction force: 50kgf

Rated speed : 30m / min

Ground clearance : 25mm

Minimum turning radius : 1m to 90°

Voltage: 24V

Orientation: Magnetic tape

Dimensions: 1750x570x325mm

Emergency stop button

Category 3 security scanner



AGV AUTOMATED GUIDED VEHICLE

DC2T

The Selettrack DC2t stand alone vehicle model is designed for use in production processes. Its customization is made according to the needs of each customer, being able to withstand high load capacities. Its implementation is done together with a software manager, which allows high levels of control and precision, as well as intercommunication between vehicles.

SPECIFICATIONS

Load capacity: 2500kg

Tara: 700kg

Friction force: 50kgf

Rated speed: 30m / min

Ground clearance: 35mm

Stopped accuracy: 10mm

Orientation: Magnetic tape

Emergency stop button

Category 3 security scanner



AGV AUTOMATED GUIDED VEHICLE

LCH1200

The Selettrack LCH1200 stand alone vehicle model is considered a collaborative product, since its ergonomics make it easy to interact with the operator. Its indexing is done manually and has the capacity to carry various logistics trains. Its programming is easily elaborated through an advanced touch panel, thus being able to configure deliveries in diverse workstations.

SPECIFICATIONS

Load capacity: 1200kg

Tara: 450kg

Friction force: 350kgf

Rated speed: 20m / min

Ground clearance: 25mm

Stopped accuracy: 20mm

Orientation: Magnetic tape

Emergency stop button

Category 3 security scanner

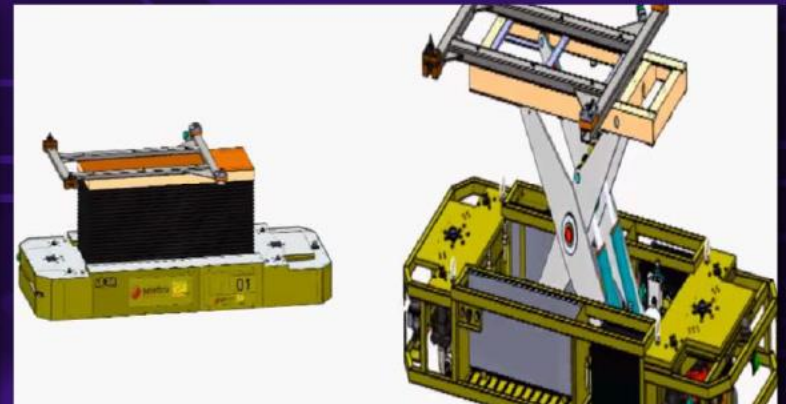


Knowledge Beyond the Skills

GURUDU
SERVICE

AGV AUTOMATED GUIDED VEHICLE

Knowledge Beyond the Skills



PROGRAMMING

- **Electrical Project (On Eplan and Cad) of machines and equipment**
- **PLC and HMI programming;**
- Siemens: S5, S7 and TIA Portal
- Rockwell: PLC 5, SLC 5000, Micrologix, Compact Logix and Logix
- Mitsubishi
- Omron
- Panasonic
- Unitronics
- **Drivers and Inverters Programming;**
- Emerson
- Siemens
- Rockwell
- Mitsubishi
- SEW
- Danfoss
- **Assembly of Panels**
- **Machine Adequacy to Standard NR 12**



Knowledge Beyond the Skills



SERVICE

- Technical support for PLC maintenance ("on demand" or contract);
- Specification of equipment and process
- Consultancy in Engineering and Projects for end user, managing all the stages of the project of the quotation until the final delivery ;
- Product Logic and Sizing Training
- Route diagram Step;
- Elaboration of work logic;
- Integration between Mechanical and Electrical Engineering
- Technical support in PLC and HMI programming
- PLC and HMI Programming Training
- Pneumatic, Hydraulic and Vacuum Project (Plan A and P)
- Maintenance team onsite
- Consulting of maintenance concept

Knowledge Beyond the Skills



CUSTOMERS

Knowledge Beyond the Skills



CONTACT

Diego Araujo
Sales Director

+55 11 99869 6991
+1 (864) 561 5342

diego.araujo@gurudu-group.com

Knowledge Beyond the Skills





GURUDU SERVICE

 /guruduservice

 @gurudu_service

 /gurudu_service

www.gurudu-group.com