LEDEFI
SOLUÇÕES INDUSTRIAIS

CASE

AUTOMATION OF AUTOMOTIVE SPRINGS FORGING

Automotive Sector

MAIN BENEFITS OBTAINED

Better operational safety and efficiency

Process digitalization, sending data to the cloud

WHERE

Service performed with partner company, for automotive springs manufacturer in Brazil.

WHEN

2021 / 2022

CLIENT AND CONTEXT

PROCESS

Coil spring heating for reduction mill

CONTEXT

Modernization project including the purchase and integration of new equipment to the existing process.

Programming of automatic sequences and manual commands of Furnace, Walking Beam, Conveyor and Spring Stacker.

NEEDS AND CHALLENGES

PROJECT NEEDS

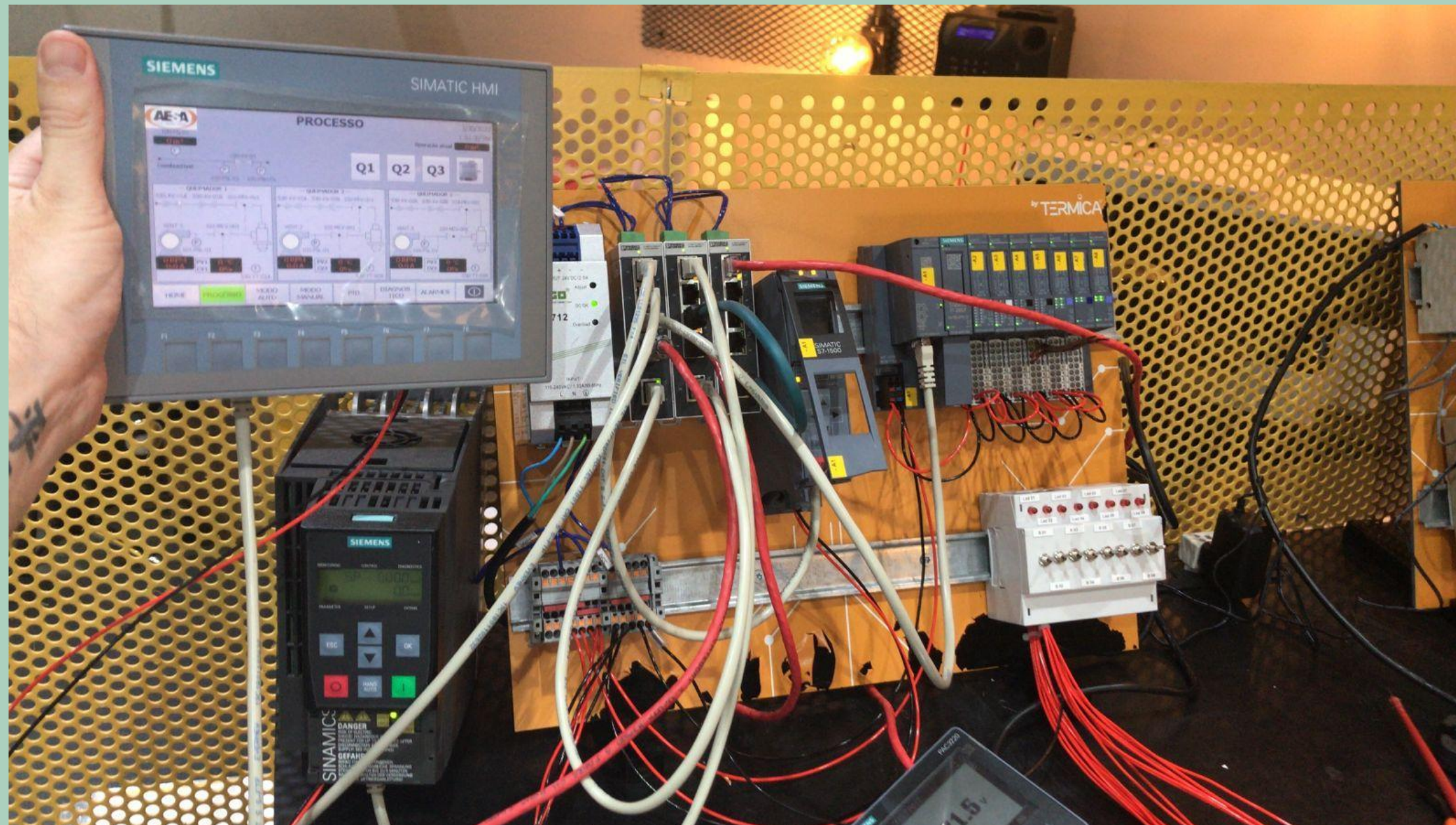Increase of production capacity, with automated processes and standardized quality control.

PROJECT CHALLENGES

Software development including several equipment, with different functions and automatic sequences, but interacting with each other and with overlapping safety interlocks.
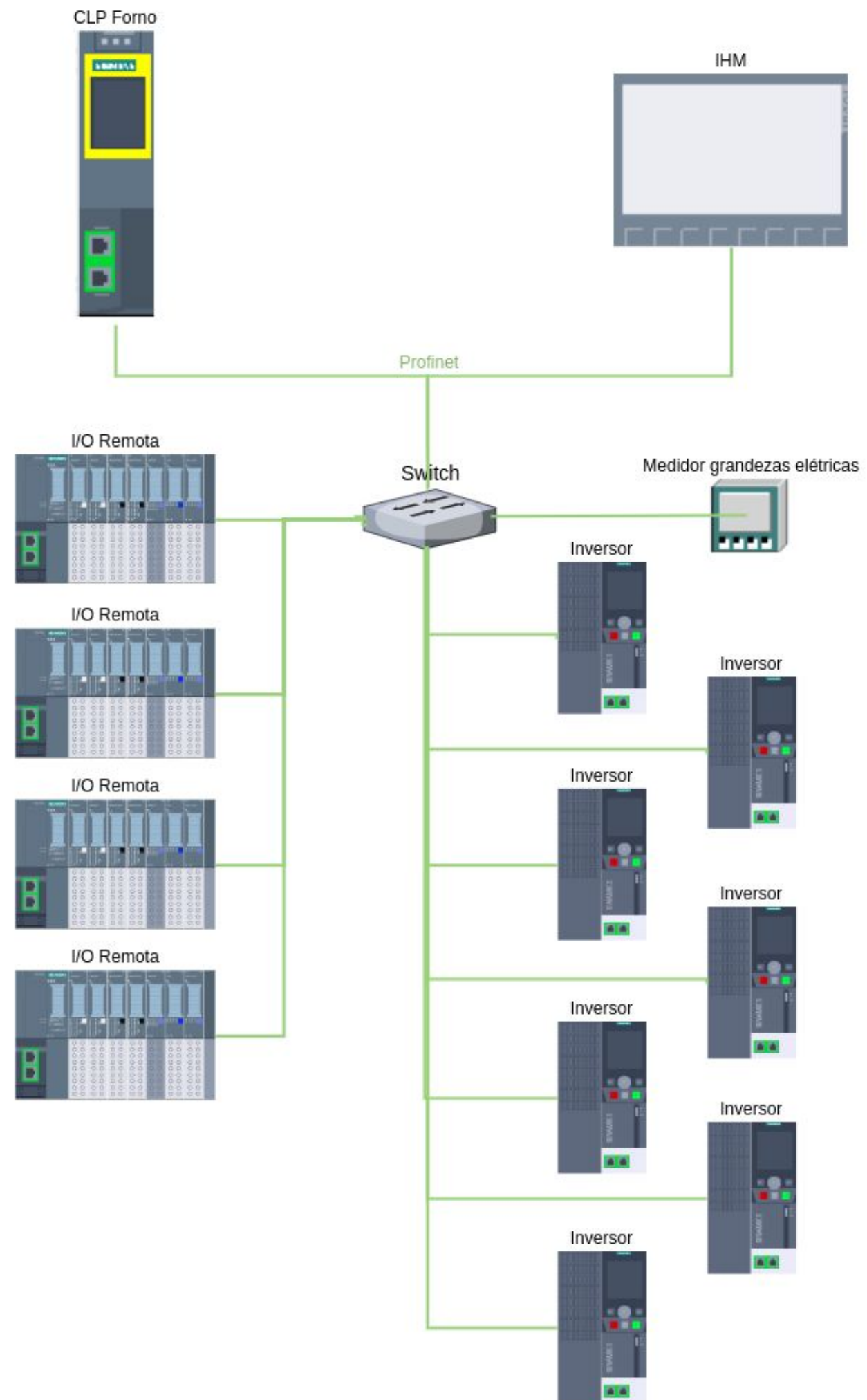
SOLUTIONS DELIVERED

- Siemens PLC and HMI programming

- Validation through simulation tests, aiming to reduce commissioning time

Arquitetura de Automação

CLP Forno

IHM

Profinet

I/O Remota

Switch

Medidor grandezas elétricas

I/O Remota

Inversor

I/O Remota

Inversor

Inversor

I/O Remota

Inversor

Inversor

Inversor

Inversor

Inversor

DELIVERABLES

- PLC AND HMI PROGRAMS VALIDATED THROUGH SIMULATION

- PLC INTEGRATION TO CLOUD SYSTEM OF PARTNER COMPANY

- REMOTE SUPPORT DURING COMMISSIONING

- SOFTWARE DOCUMENTATION

Technologies & brands

- Siemens PLC's S7-1500 Safety and ET200SP, HMI and drivers

- Integration to cloud system through OPC UA communication

WHERE ELSE CAN IT BE IMPLEMENTED?

In all kinds of industries aiming to automate its processes, integrating new equipment and technologies to improve operational efficiency and safety, and sending data to cloud systems.
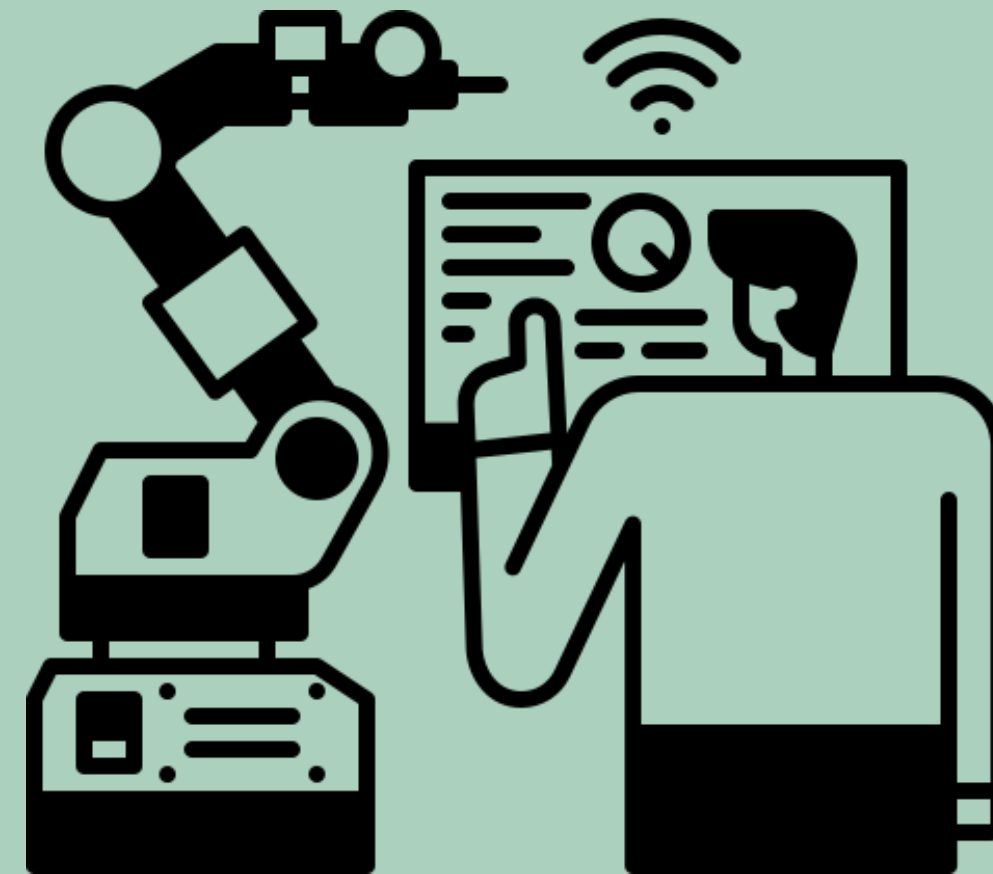
ADDRESS

Itajai (SC, Brazil)

WHATSAPP

+55 47 98858-2917

E-MAIL

challenges@ledefi.com.br

LEDEFi

SOLUÇÕES INDUSTRIAIS

Please contact us to receive other cases that may

be applied to your challenge.

WHAT IS YOUR
CHALLENGE?