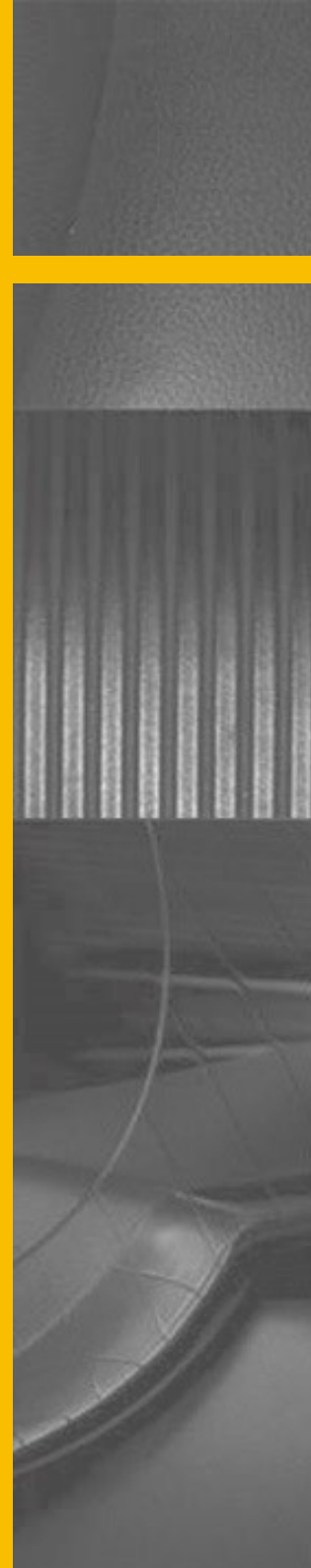




# **AGME Automated Assembly Solutions**

**Automotive assembly technologies**



# AGME Automated Assembly Solutions

## Core Competencies

Forming + Assembly + Control



PRESSING

RADIAL  
RIVETING

HANDLING

CLINCHING

WELDING

GREASE  
APPLICATION  
SYSTEMS

MARKING

QUALITY  
CONTROL

ASSISTANCE

# AGME Automated Assembly Solutions



Founded in 1948  
Design, Engineering & Manufacturing  
Experts in Special Assembly Machines and high  
quality forming machinery  
ISO 9001:2015 certification  
7 million euros turnover  
Location in Europe (Eibar-Spain)



Multidisciplinary team of 55 people  
Extensive Technical & sales network across  
**Europe, Asia and America**  
Our main clients are in complex automotive  
component industries

# AGME General Presentation



Highly skilled and experienced team

- ✓ 30 Mechanical and Electrical Engineers
- ✓ 18 Specialized Technicians
- ✓ 25 distributors providing the best Sales & Technical Support worldwide

In-house design and production: from concept to installation

- ✓ Solid Edge / CATIA V5 / eplan
- ✓ Machining capacities: lathes, milling machines and grinders

Commissioning on site and at customer locations



# **AGME** - Your Global Partner for Automatic Assembly Equipment



# AGME – Automated Assembly Solutions

Assembly, handling, automation, riveting, rolling over, flaring, flanging, pressing, tube endforming, clinching, forming, punching, ultrasonic welding, greasing, control, testing, marking, connectivity ...

... **All from one**



Automatic or semi-automatic assembly lines with as many workstations as necessary

# AGME Standard Machines



Radial Forming



## STANDARD MACHINERY

- AGME radial riveting machines to get riveted heads up to 30 mm diameter.
- Orbital servo riveting machine
- CNC flexible riveting centers
- Electric presses
- Hydraulic presses
- Toggle presses
- Manual presses
- Quality assurance systems

# AGME Standard machines



## FLEXIBLE RIVETING CENTERS CNC riveting



# AGME Riveting head units

## RA-UC

### Radial riveting head unit

From the RA-4 UC up to the RA-30 UC  
Wide range of models



Radial Forming



## SRA-15 / SRA-23

### Orbital servo riveting heads

Versatile servo riveting with maximum capacity: from 5  
to 23 mm riveted head diameter



# AGME Electric Presses



- ✓ For more demanding pressing precision, control and flexibility
- ✓ Multiple working modes and control functions
- ✓ Modular and compact design
- ✓ Electric press with CE certification
- ✓ High energy saving, safer and cleaner
- ✓ Wide variety of applications: joining, insertion, pressing, bending, riveting, flaring, punching, clinching, testing, marking...

# Special Purpose Machines – Bespoke Machines



Highly automated and equipped assembly machines adapted to your technical specifications.

**SPECIAL MODULES**

**ROTARY TRANSFERS**

**LINEAR TRANSFERS**



# Applications – Automotive Components



airbags, shock absorbers, car seats (recliners, cushions, seat tracks, sliders, back...), wipers, hinges, locks, closures systems, suspension arms, stabiliser links, transmission arms, air cooler, motor cover, jacks, tube end forming and crimping, head gaskets, wheel hubs, silent blocks insertion, gear box components, ball socket joints, steering rods, electric windows, safety belt, door panels, air condition systems ...



Metallic Components

Plastic Components

**AUTOMOTIVE**



# AGME - Applications



## Hardware

Locks, knobs, tracks for drawers and furniture, metal fittings for PVC windows, bathroom and kitchen furniture hinges, rotating or swivel wheels components

## Electric appliances

Axial connections boxes, switches, TV connectors, Battery components, TV tuners, magneto thermic switches, electrical motors brushes, contacts, electrical household appliances thermostat ...



## Other industries

Rotating brush, skis, knives, spatulas, oil bomb parts, pyrotechnics, raccords, munitions, washing machines plastic parts , supports, plastic brackets ...

**ELECTRIC APPLIANCES**



**VARIOUS**



**HARDWARE**



**METAL FITTINGS**



# Technology for Metal Joining and Special Processes

## Forming processes

- Radial riveting, CNC riveting, Multi-Axis riveting
- Pressing, stamping, crimping, hollow out
- Flaring / roll over, flanging, tubendforming
- Bending ....



## Other processes

- Screwing, welding, punching
- Fluids application System (grease, silicone, glue,...)
- Feeding, handling, control and checking
- Marking machines



# AGME Special Purpose Machines

## Special modules:

### Assembly, forming and special operations

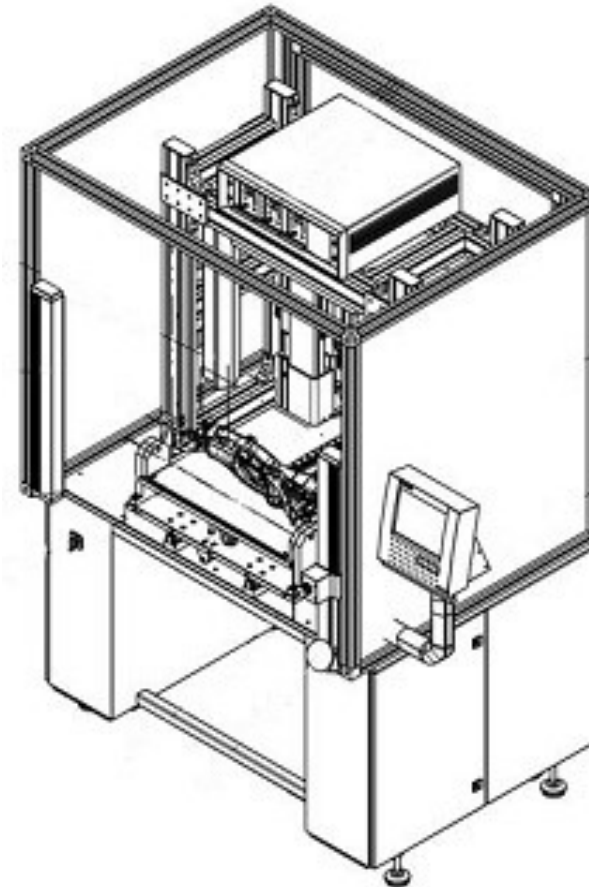
- Vertical or horizontal riveting with two confronted riveters
- Components insertion modules
- Tubendforming machines, tube crimping machines
- Screwing machines
- Rolling over special machines
- Control machines



# AGME Special Purpose Machines



## Special modules



# Special modules

Automated insertion of screws



# Special assembly Modules



## Housing of the EV battery

- Clinching of the screws
- Flaring of the nuts
- Marking of the housing

# Special assembly modules



**EV battery housing**  
Nuts and screws clinching

# Special assembly modules



**EV battery inverter housing**  
Screws clinching

# Special assembly modules



**EV battery inverter housing**  
Support riveting



# Special assembly Modules



Battery housing clinching

# AGME Special Purpose Machines

## Rotary transfers

### Assembly, forming and Special operations

- Riveting dial transfers
- Screwing rotary transfers
- Nuts insertion rotary transfers
- Components measuring machines



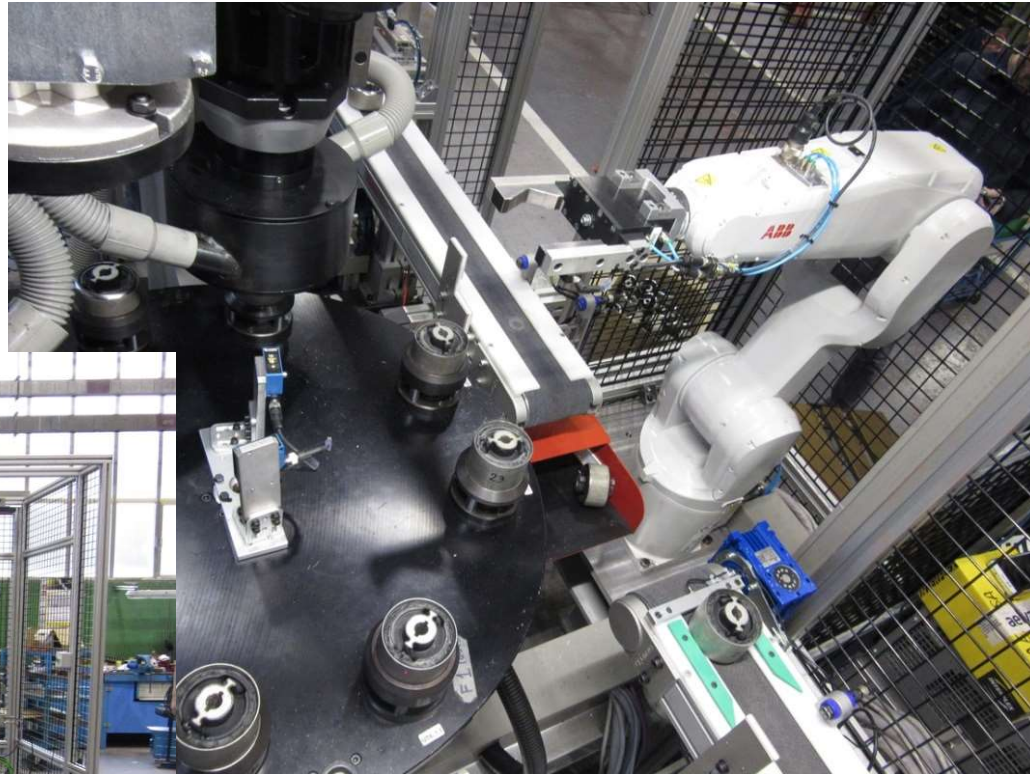
# Special assembly rotary transfers



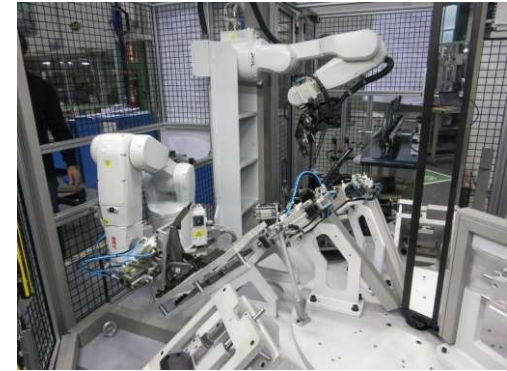
**Sun roof sliding system**  
CNC riveting

# Special assembly rotary transfers

**Vibration control systems**  
Hydro-bush rolling over



# Special assembly rotary transfers



## Hand brake

Final assembly and control

# Special assembly rotary transfers



**Hand brake support**  
Punching and preassembly



# Special assembly rotary transfers

## Metal housing

### Clinching

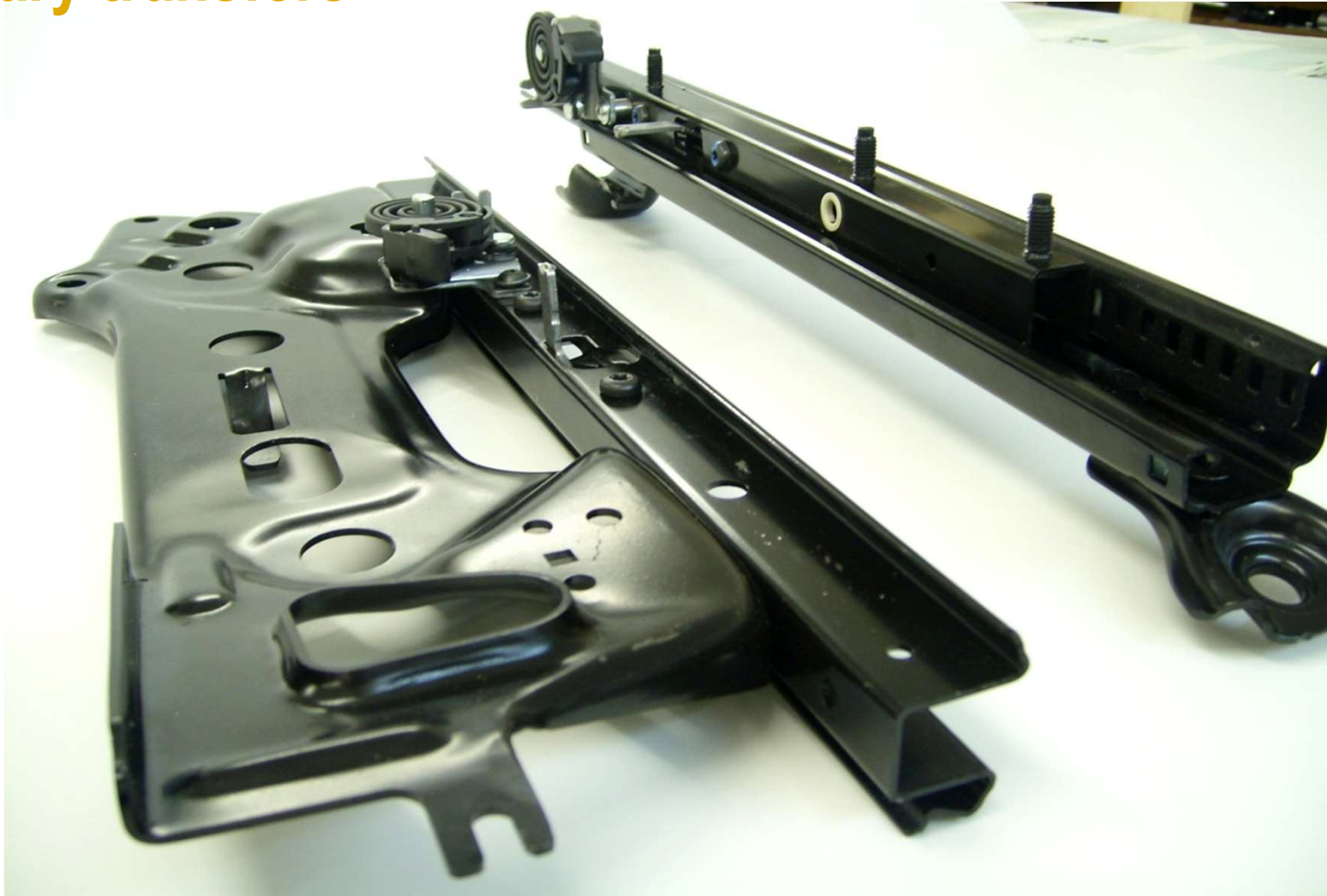


# Special assembly rotary transfers



**Electric braking system housing**  
Assembly and control of the spring

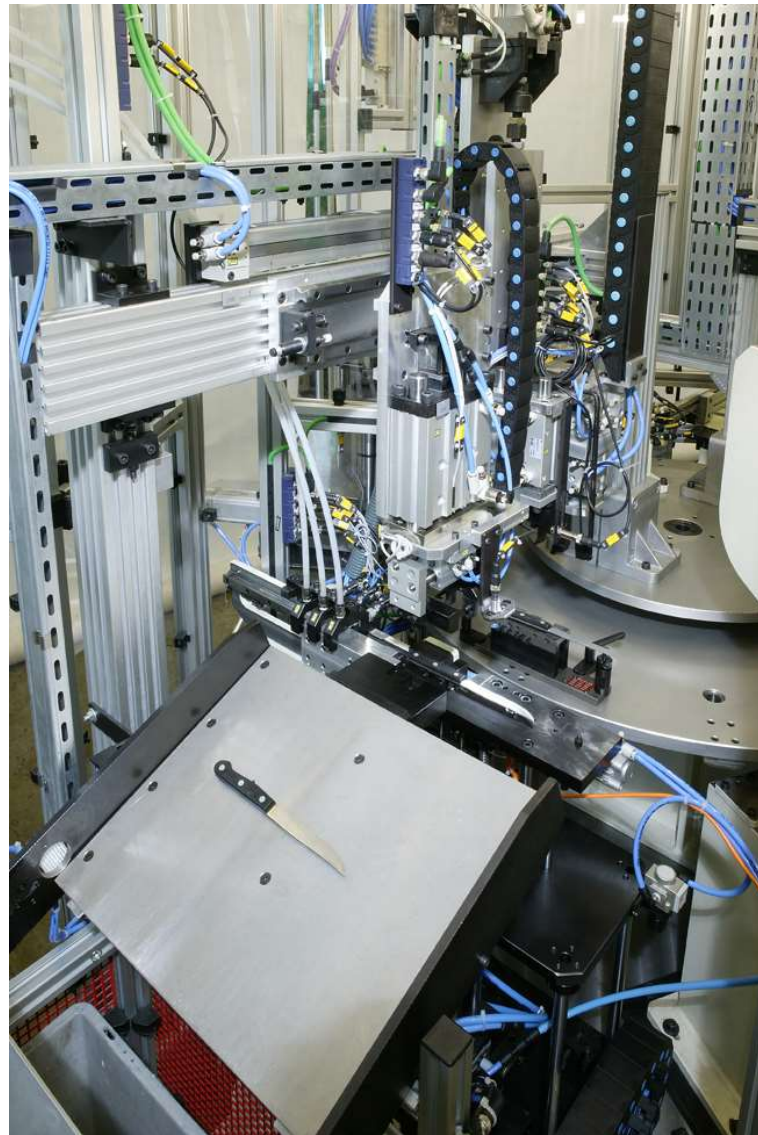
## Rotary transfers



Seat tracks assembly

# Rotary transfers

# AGME Special Purpose Machines



Suitable for small room



## Linear transfers

### Linear transfers. Assembly, forming and other special processes

- Seat cushion assembly linear transfer
- Shock absorbers assembly special machine
- Hinge assembly line
- Hand brake assembly line
- Suspension arms assembly line



# AGME Special assembly line



## Hand brake sub-assembly

Feeding, loading, screwing,  
handling, riveting, control,  
clinching, greasing, inserting,  
unloading

# AGME Special assembly line



**Seat tracks**  
Automated assembly line



# AGME Special assembly line



## Seat tracks

Automated pre-assembly

## Linear transfers

# AGME Special Purpose Machines



Bushings automatic insertion into suspension arms

# AGME Special Purpose Machines



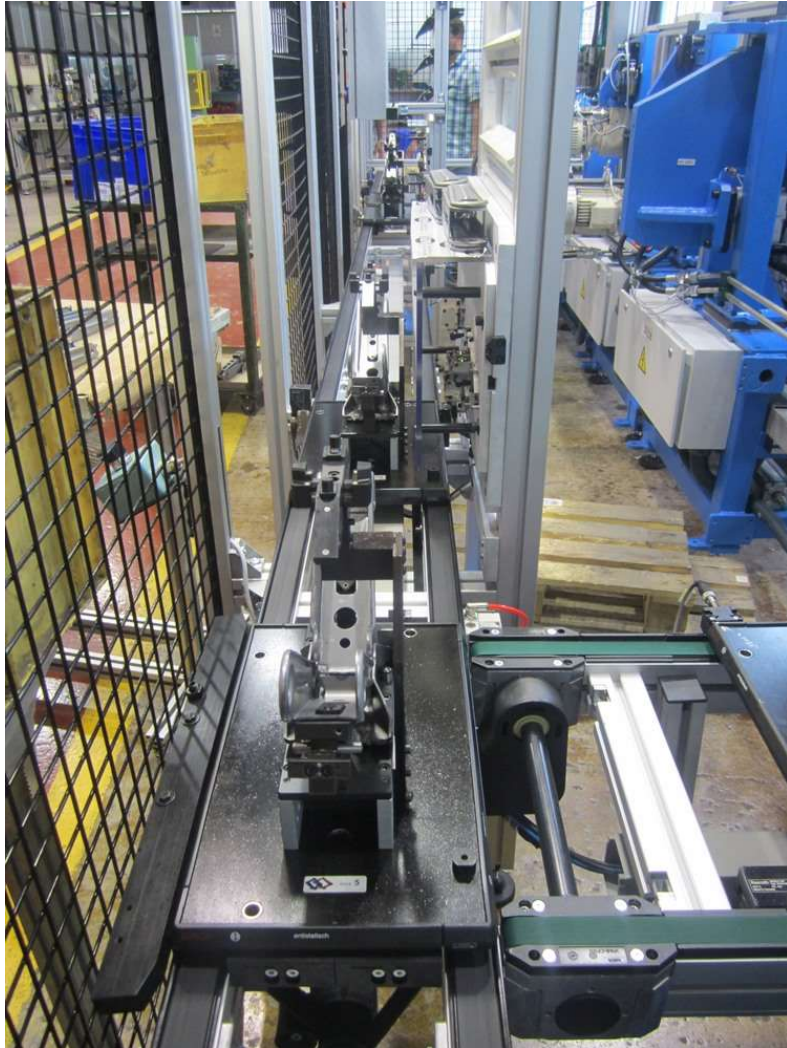
## Steering column

Tube reduction

Machining: die cutting, drilling, turning

## Linear transfers

# AGME Special Purpose Machines



Jack assembly

# AGME – Automated Assembly Solutions

Assembly, handling, automation, riveting, rolling over, flaring, flanging, pressing, tube endforming, clinching, forming, punching, ultrasonic welding, greasing, control, testing, marking, connectivity ...

... **All from one**



Automatic or semi-automatic assembly lines with as many workstations as necessary



**Thank you very much for your attention**  
**Your Global Partner for Automatic Assembly Equipment**

**AGME Automated Assembly Solutions**

Apalategi Kalea, 7 - Apdo. de correos 263

20600 Eibar (Guipúzcoa) – Spain

Tel: +34 943 121 608

e-mail: [sales@agme.net](mailto:sales@agme.net)

[www.agme.net](http://www.agme.net)