

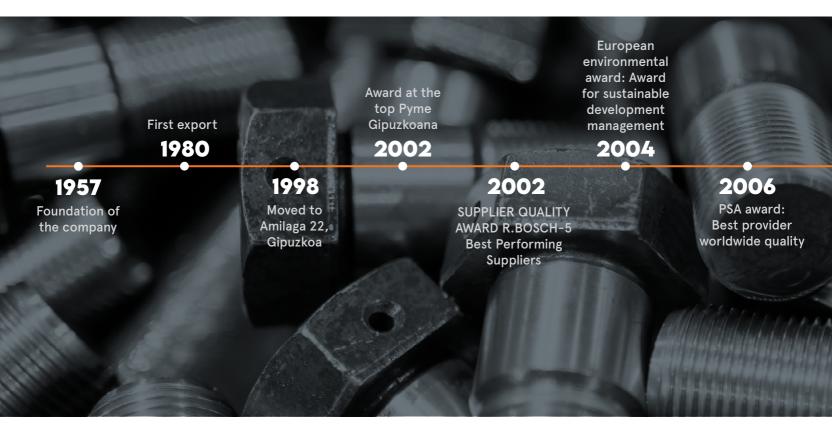
THE BEST SOLUTION FOR **COLD FORGING**. THE BEST PARTNER FOR YOU.



Metagra is a company specialized in cold forging, with more than five decades of experience as a supplier of components for automotive industry.

Our determination to advance technologically has made us a benchmark as a worldwide provider of parts for automotive industry. This had led us to earn numerous awards and recognitions, emphasizing in particular our selection as Robert Bosch Tier1 Preferred Supplier, which bear witness to the quality of our work.

### OUR BROAD COVERAGE AREA AND WIDE EXPERIENCE ARE OUR BEST GUARANTEE

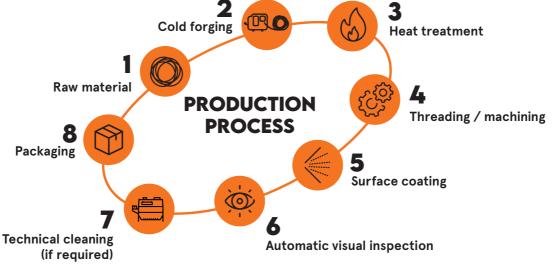


### STEERING PARTS BRAKE ACTUATION

At Metagra we make a detailed study of each project, offering solutions for cold forging, threading or machining with the aim of optimizing the manufacturing process or improving its costs, being able to participate in defining the design of the component (co-design) if the customer so wishes.

We also deal with the external management of the different treatments (thermal, coatings, etc.) to offer a completely finished product that meets the needs of your project. We are totally committed to quality of our products. Our determination to achieve constant improvement and development means that from day to day, we are matching our quality control systems.







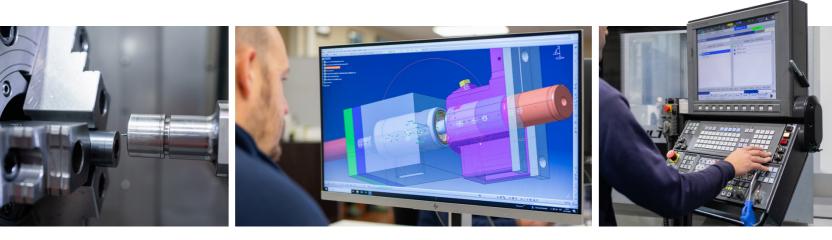


### **RAW MATERIAL**

Metal wire in steel
Stainless steel (A2-70)
\*Other materials under request: to be studied on a case-by-case

#### **COLD FORGING**

 Up to 7 stations, 6 to ø45 mm (Mexico: up to ø36 mm) and own tooling design / workshop)



#### **OUR ADDED-VALUE - EXPERTISE**

Our cold forging process allows to manufacture screws and parts of special sizes, with the best possible speed and minimal loss of raw material. We are specialists in technical parts for critical applications with 100% unitary camera control. We provide co-engineering to optimize the part design for cold forging technology. We reduce costs by changing from machining and/or sintering processes to cold forging technology. Sustainability: We implement actions to reduce environment pollution.

#### LICENSE



### SUPPLY CHAIN DETAILS MAKE THE DIFFERENCE

#### **RAW MATERIAL**

Drawn wire from:

- Carbon steel
- Stainless steel

#### **HEAT TREATMENT\***

- Annealing
- Quenching & tempering
- Inductive hardening
- Case hardening

### **COLD FORGING**

- Up to 7 stations machines
- Prototyping\*

#### SURFACE TREATMENT\*

- Zinc plating
- Zink nickel plating
- Lamellar zink flake coating
- Special coatings (to study if needed)

#### THREADING

- External & internal threading
- Screw pointing
- Knurling

### SECONDARY OPTIONS\*

- Vibrating
- Shotblasting
- Patch
- Plastic injection

#### MACHINING

- Turning
- Customized machining center
- (tailor-made solution for project)
- Fine-turning

### **ASSEMBLY OPERATION\***

- Mechanical pressing
- Manual-automatic assembly

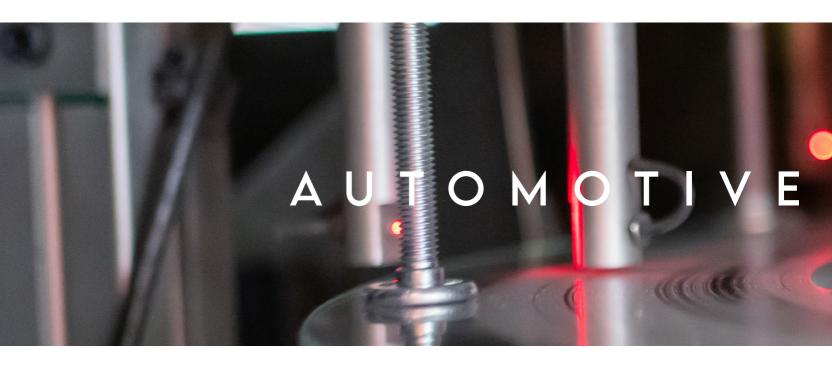
### **TECHNICAL CLEANING**

• Fullfilment of required level of cleanliness

### **100% UNITARY CONTROL/PACKAGING**

- 100% control of parts
  - / dimensions
  - / cracks
  - / damage to thread (360°)
  - / heat treatment presence (Eddy current)
- Odette system (EDI)
- KLT boxes

### <sup>6</sup><sup>7</sup> COMPONENTS



At Metagra we are specialized in cold forging of metal parts particularly for the automotive industry. Cold forging plays a crucial role in manufacturing, providing numerous advantages such as improved material properties, cost-effectiveness, and precision in producing intricate parts. As we continue to grow and evolve in this field, staying updated with the latest technologies and industry trends will be key to maintaining a competitive edge.

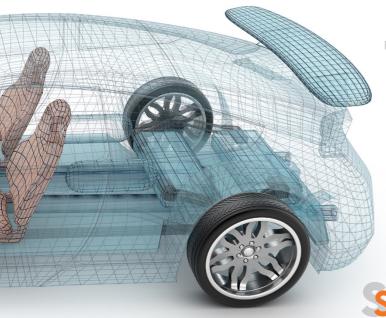
### S T E F E R ING P AP A RT S

### BRAKESES ACTUATION OF

### SPECIALIST

We also work with the most modern specialized machinery, as we are constantly evolving and growing, and we are pioners in working with a cold forging machine with 7 strokes.

Furthermore, at Metagra we machine forged steel components that we manufacture ourselves by using cutting-edge technology (robotized cells), so as to offer a complete and specific solution tailor-made for each project.



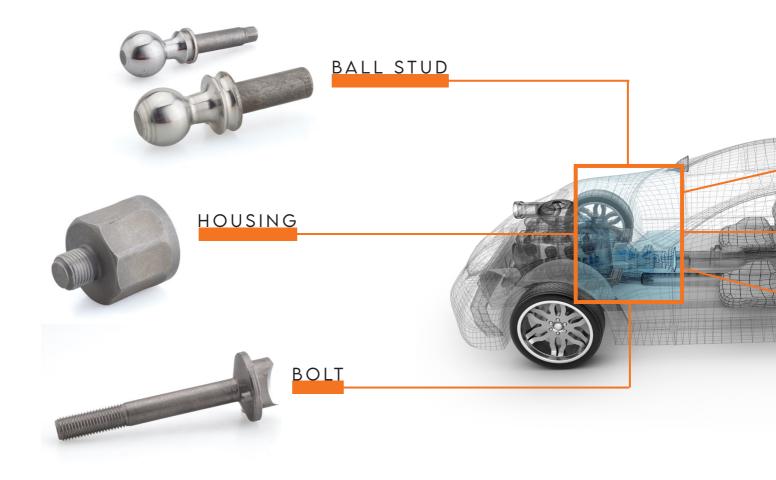
### TECHNICAL PARTS

### SUSPENSION ON



Our broad experience and work philosophy allow us to offer a service of exceptional quality in all the components we make.







### experience

### PAR TS

### KEY COLLAR





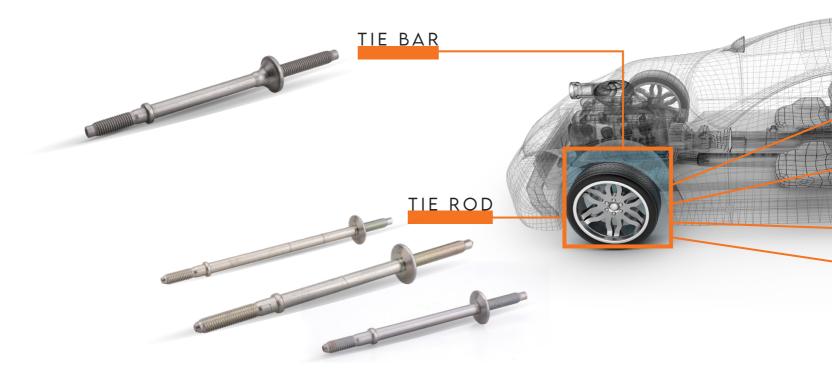






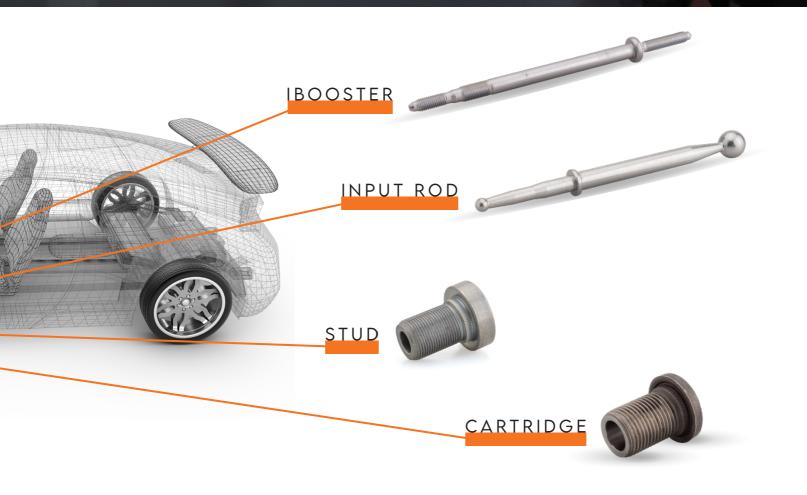
Our nature as an innovative company leads us to examine and plan each project, each component, to adapt perfectly to the requirements of every single customer.





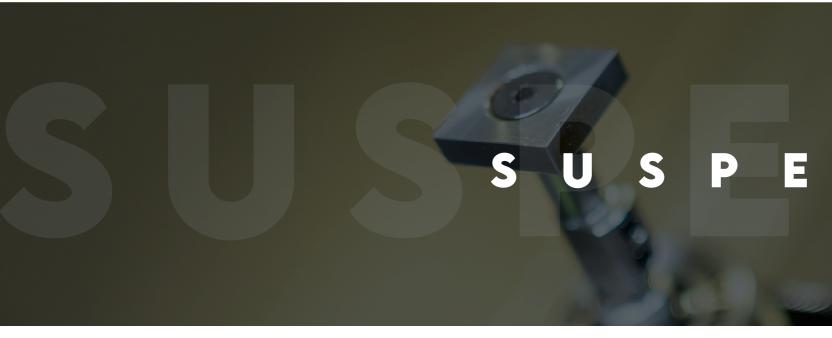


# A C T U A T I O N





We are committed to your project down to the smallest detail, and we ensure quality and effectiveness, analyzing and co-designing each component that will be produced.



INNER SLEEVE





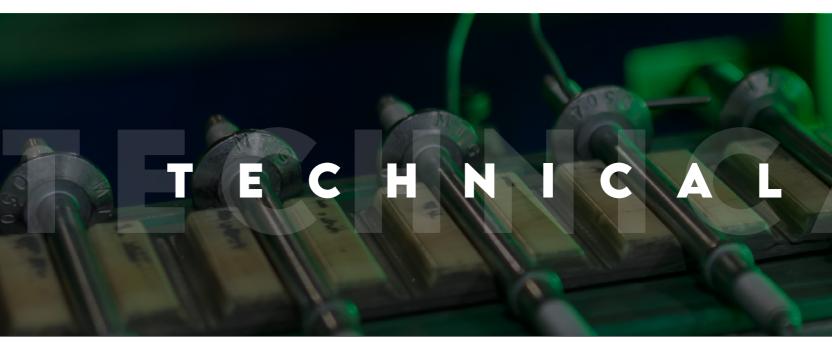
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INNER TUBE



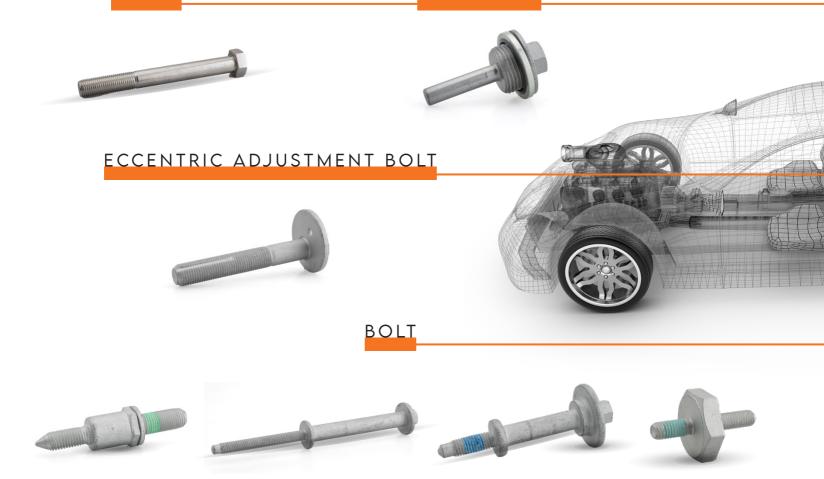


We are always working to take a step forward in the cold forging sector, facing our challenges and completing ever more complex and specialized projects.



SCREW

CAR (PLUG)









### KNURLED BOLT





## <sup>16</sup> <sup>17</sup> OUR GOALS



### WE TAKE PART IN A GLOBAL WORLD

We have presence in both Europe and America, thanks to our factories in Spain and Mexico. That allows us to work worldwide with no limits and turning into a global partner for the main leaders brands in automotive sector accross the world.



### WE FOCUS ON THE ENGINEERING STRENGTH

We want customer to take advantage from our engineering knowledge, implementing our know-how to their projects, helping them to improve the design and the part cost.

Also we always have ready for studying and testing the most complicated parts.



### WE EMPHASIZE THE QUALITY STANDARDS

We ensure our demanding quality standards are met in every single process. By doing that, our products guarantee maximum cleanliness and fulfil our commitment to the customer.

The perfect combination of our skills and experience allows us to develop our work succesfully in Europe, Asia and NAFTA, increasing our market challenges and achieving new and exciting goals.

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**SPAIN** 

MEX





TE ACOMPAÑAMOS EN LA TRANSFORMACIÓN DIGITAL <u>DE TU EMPRESA</u>

Expertos en la implantación y optimización de las soluciones empresariales Microsoft















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