

## **Profile of the company and contact details**

Name of the company	AGADE srl		
Field of activity	Powered wearable robotics (exoskeletons)		
Number of employees	20	Year established	2020
Contact languages	English & Italian		
The Company's website	<a href="https://agade-exoskeletons.com/">https://agade-exoskeletons.com/</a>		

### **Brief description of the company:**

AGADE is a startup and spinoff of Politecnico di Milano, specialized in the development and commercialization of active industrial exoskeletons, battery powered wearable robots designed to reduce human fatigue in physical demanding industrial fields, such as manufacturing and logistics. The company was founded in 2020 and it's backed by leading European deep tech investors. AGADE is currently testing on field its beta models, and by 2023 it aims at releasing the full version of AGADEXO, a shoulder active exoskeleton for industrial uses. AGADEXO uses the AGADE patented technology as it's actuation systems, a motor/spring hybrid mechanism developed to reduce at minimum the power consumption of the whole device, enabling lightweight and powerful active exoskeletons.

### **What we are looking for:**

We are looking for a supplier for high performance coil extension spring. In our application we use a metal coil spring which is intensively loaded and has to withstand an high number of cycles. For this reason, we are looking for metal coil spring manufacturers that can produce this part for us with high performance materials. In particular we are looking for suppliers which are capable of producing metal coil extension springs using the following high-performance materials for high cycle life:

- Suzuki Garphyttan OTEVA 90 or similar
- EN 1027-2 VDSiCrV
- ASTM A 231 or ASTM A232
- 51CrV4
- Chrome Vanadium spring steels
- Alternative high fatigue life spring wires

We normally use wire diameters between 2 and 3 mm.

### **Type of partnership considered:**

- Development of the component
- Testing
- Production