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## Cobomanip

The Cobomanip assists the operator during handling operation. It is designed as a standard a force generator more than a robot driven in position control mode. In the entire workspace it will assist or oppose to the movements of the operator according to the task definition and the requested assistances. One may therefore consider two distinct operating modes:

- Movements in free space: the Cobomanip is a perfect balance with 3 or 4 dofs. It behaves like if the load is handled in a zero-gravity area.
- Constrained movements: motors (one for each dof) apply counteracting torques to limit the manipulator movements into specific directions.
- All the frictions are compensated with motors situated in the frame of the cobot.

COBOMANIP provides assistances to keep the attention of the operator focused on the main task using virtual guides to constrain the movement within a specific part of the workspace. Concepts for such constraints applied to teleoperation tasks are proposed in two distinct types:

- The operator cannot enter a specific area of the workspace. The movement is possible until a boundary is reached.
- Assistance to guide the operator. Movements of the operator are limited to those allowed by a mechanism attached to the robot.



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## Key Features

- 3D graphic supervision with SCORE software
- Safe to users
- Workspace radius 4m
- Load capacity 100kg
- Internet communication

## Possible Applications

- Manufacturing tasks involving carrying heavy loads

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## Access information

<b>Corresponding infrastructure</b>	Commissariat à l'Energie Atomique Interactive Robotics Lab
<b>Location</b>	Plateau de Saclay, Boulevard Thomas Gobert, 91120 Palaiseau, France
<b>Unit of access</b>	Working day

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## Technical specifications

<b>Load capacity</b>	100kg
<b>Interface</b>	Internet
<b>DoF</b>	4



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## Additional information

<http://www.sarrazin-technologies.com/news/cobotic-zero-gravity-arm-2/>