

x-stk.com

Applied Automation



Bringing the sense of touch to industrial robots

The OptoForce sensor received **Universal Robot+ Certification** proving its perfection in the production environment.



UNIVERSAL ROBOTS+
Certified

- Plug and play installation with UR robots
- High resolution
- Adaptors for UR, KUKA and ABB
- Robust and durable
- Low weight - only 260g
- Mechanical overload protection



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Available Applications



Presence Detection

The OptoForce Force Torque Sensor along with the OptoForce Move application fine tunes the UR's protective stop function, so even the smallest counterforces - even forces smaller than 10 N - can be perceived.



Centerpointing

It is easy to find the center point of an object with the OptoForce Center Point solution, even if the object is moved away from the original position.



Handguiding

It is possible to move the UR robot by hand on all 6 axes or locking the movement of any selected axes for precise positioning. This is an easy-to-use OptoForce solution to guide the robot in a fast and precise way.



Path Recording

Using the Path Recording function of the OptoForce Hand Guide Toolbar, you can create a program within minutes and any complex path can be easily recorded.



Polishing (plastic and metal)

With this solution, you can remove the parting lines of plastic objects fast and easy. With the OptoForce polishing application high quality polishing is possible, even with forces under 10 Newtons.



Box Insertion

The OptoForce Force Box Insertion solution helps you insert for example a radio or a battery inside the device body fast and easily.



Pin in the Hole

With this solution you can precisely fit or insert mating parts with very high tolerances. The OptoForce Pin in the Hole solution helps to position and place any pin into a hole in a fast and precise way.



Stacking/Destacking

A force controlled application which allows you to stack and destack products without knowing the exact thickness and the height of the stack. Stacking products into pallets with force control is also possible with our solution.



Palletizing

A force controlled application which allows you to stack products into pallets which are traditionally hard to work with like flexible cardboard boxes.



Metal Part Sanding

Force controlled metal sanding, gives the robot the ability to precisely remove excess material from the machined surface. In addition to saving time and cost, it also reduces the health impacts to machine operators.