Add precision and consistency to your screw driving and tightening applications

If precision and consistency are the keys to your project’s success, then a robot may be the answer. Increase the quality and consistency of your products by reducing the risk of over tightening and always having the correct tension, no matter the project. A robot will consistently and repeatedly follow exact processes and pre-defined workflows with miniscule deviation.

It requires superhuman abilities to repeat the same movement over and over again for many hours with exactly the same precision and speed. That’s why the repeatability of +/- 0.1 mm (.004 in) of UR robot arms is perfect for automating quick-precision handling.

For screw-specific applications, the end joint on the UR3 offers infinite rotation. Combined with the unique force control allows it to be placed directly into a screwing application without the need for a costly torque-controlled screw driving tool.

• The UR robot can be used to run most screw driving applications automatically. The space-saving robot can also be reprogrammed quickly and used with different machines, making it the perfect choice for small-volume productions or changing workflows and operational set-ups.

• Relieve workers from ergonomically unfavorable, repetitive work and reduce the risk of injuries. With robot arms from Universal Robots you can free up your work force in order to do more important tasks.

• Taking a robot out of its safety cage allows unmatched automation flexibility. If the robots come into contact with a person, our patented technology limits the forces at contact. The robots can also be programmed to operate in reduced mode when a human enters the robot’s work area and resume full speed when the person leaves.

• Easy programming and a short average set-up time make Universal Robots’ robot arms ideal even for small-volume productions, where rearranging large-scale facilities wouldn’t be lucrative.

• All Universal Robots’ robot arms are certified IP-54. They will need protection when working in corrosive liquid environments.