## Economa Engineering from Austria introduces SCARAFLEX® safe motion to the market

Vienna, May 2022

Introducing a product that combines in one many of the things manufacturers often wish they had for their industrial applications: More safety. More flexibility. And that ideally in combination with an **EPSON robot**.

Equipped with decades of experience in the field of robot applications and a close partnership with EPSON, **Economa Engineering** from Vienna has, after nearly four years of development, successfully introduced an innovative safety feature to the market, which will forever change the production area – meet **SCARAFLEX**<sup>®</sup>, an innovation made in Austria.

"We have released the Scara robot from its cage", remarks engineer Thomas Hrach, owner and director of Economa Engineering.

"Manufacturers know this problem all too well: handling processes in automation (like pick & place, joining or assembly) need space to ensure a safe working environment – every square foot incurs costs, nonetheless, the principle of safety is crucial and must be paramount", he summarises.

And that's exactly where **SCARAFLEX**<sup>®</sup> excels: The newly developed safety feature for EPSON Scara robots makes fenceless robot applications possible for the first time. As a result, it solves two problems (wasted space and a lack of safety) in one.

**SCARAFLEX**<sup>®</sup> works because it ensures safety: Soft **sensor pads** envelop the Scara robot and continuously measure the air pressure inside a measuring chamber (these air-tight sensory pads were developed by Blue Danube Robotics and individually adapted to EPSON Scaras). If the inner air pressure changes, for example, when touched by a person, **SCARAFLEX**<sup>®</sup> will stop the robot instantly – before a collision can even occur.

The **SCARAFLEX**<sup>®</sup> **Speedguard** (a patented development by Economa) offers added safety: it is a 3-axis sensor system that continuously measures the speed of the robot on the X, Y and Z axis. If a defined maximum speed is exceeded in the application, the **SCARAFLEX**<sup>®</sup> **Speedguard** will also trigger a stop.

The **SCARAFLEX**<sup>®</sup> safety flange forms the mechanical interface between the robot and a gripper and/or vacuum cup. It is a certified, spring-loaded component, which also triggers an immediate stop of the robot in the event of a collision.

Every manufacturer who relies on Scara robots in their manufacturing not only benefits from the speed and attractive pricing of EPSON Scaras, but can also expand their range of use by choosing **SCARAFLEX**<sup>®</sup>.

**SCARAFLEX**<sup>®</sup> can be installed quickly and existing robots can be retrofitted with it (also readily in combination with proven EPSON features such as image processing, etc.) – in just 30 minutes, a Scara robot is **safe in motion**. The application can be quickly and easily deinstalled when it is no longer needed.

For more information about SCARAFLEX®, visit www.scaraflexcom.

Economa Engineering is an automation specialist in southern Vienna. Over their decade-long history, this family-owned and family- operated company has focused on developing high-tech solutions. Economa currently employs a workforce of 25 at its location in Vienna.