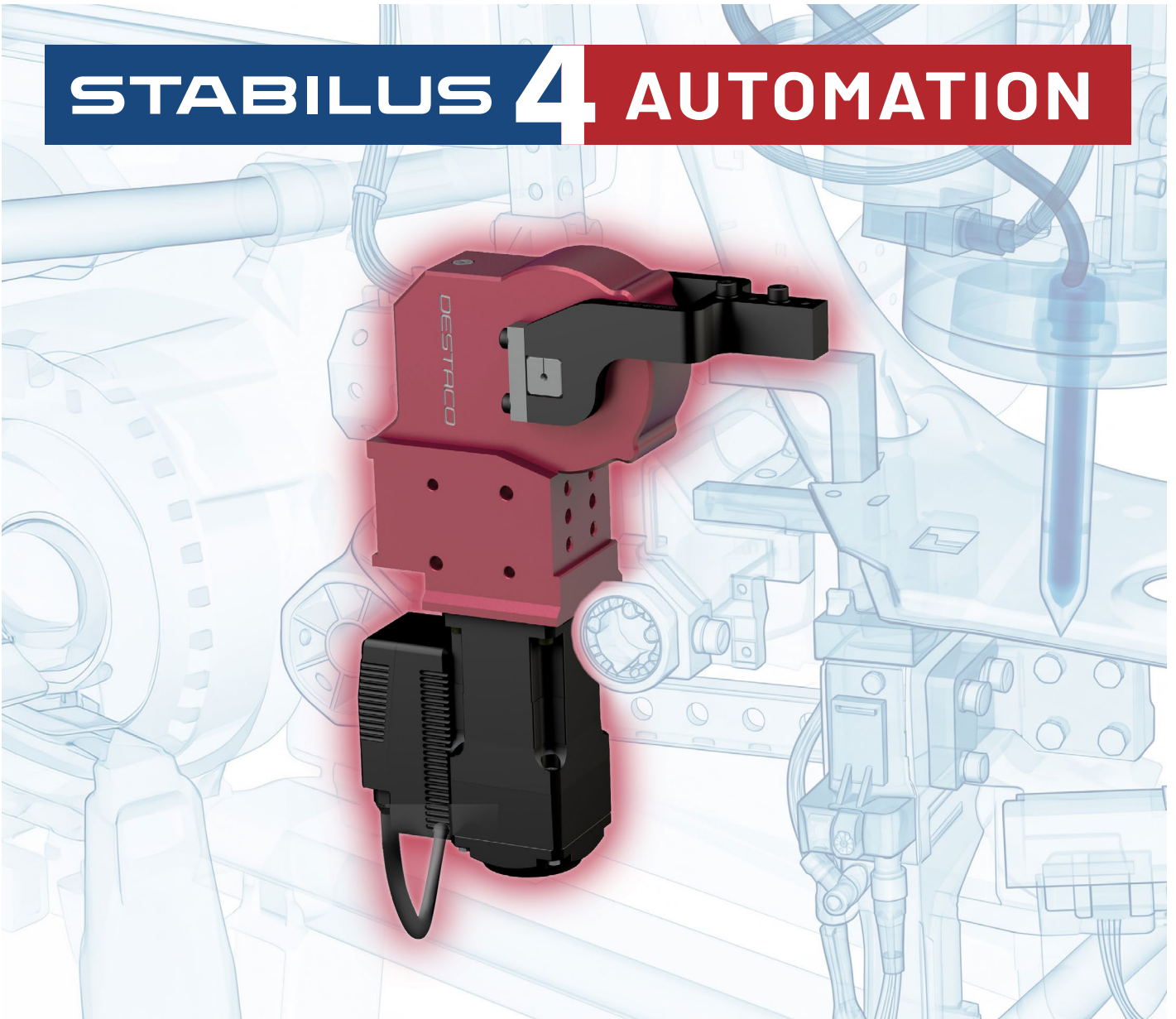


STABILUS

YOUR MOTION. OUR SOLUTION.

STABILUS 4 AUTOMATION



ELECTRIC SMART CLAMPS AUTOMATION AT AN INFLECTION POINT

ADVANCED MOTION CONTROL KNOW-HOW

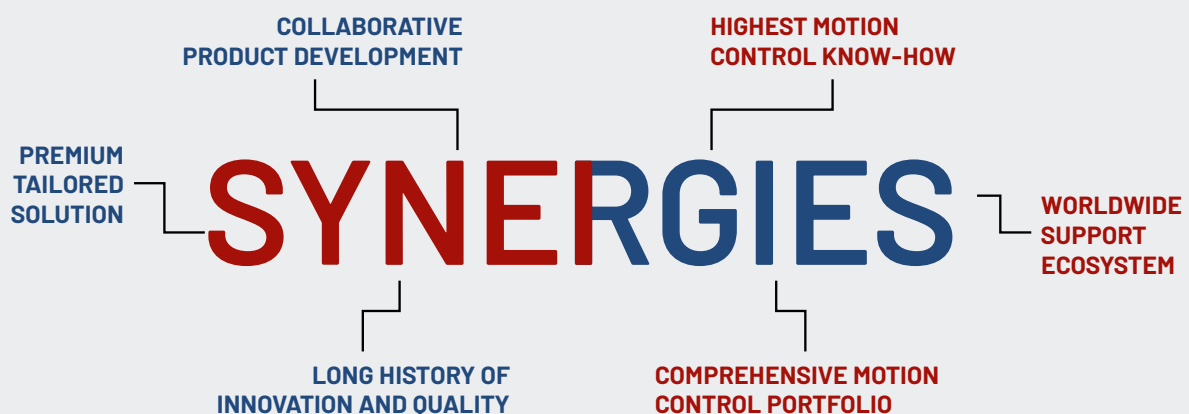
INCREASE VALUE. BOOST PERFORMANCE. REDUCE OPERATING COSTS.

STABILUS 4 AUTOMATION

Stabilus4Automation represents cutting-edge expertise in motion control. Customers benefit from comprehensive solutions from a single source, supported by a globally connected team of experienced application experts across a wide range of brands and industries.

Selected Stabilus expert brands combine their versatile, high-quality components with decades of application knowledge. Together, they enable the six synergies of Stabilus4Automation—offering developers and users a unique portfolio of advanced automation solutions that can be easily integrated worldwide from a single source.

[Learn more about Stabilus4Automation here >](#)



OUR ELECTRIC SOLUTIONS FOR AUTOMATION

COMPARISON AT A GLANCE

	ELECTRIC	PNEUMATIC
Efficiency	✓ 80–95%	✗ 20–30%
Positioning	✓ Freely programmable	⚠ mostly 2-point
Force Control	✓ Dynamic	⚠ Limited
Infrastructure	✓ Power only	✗ Compressed air network required
Industry 4.0	✓ Native	⚠ Retrofitting required
Initial Investment	⚠ Higher	✓ Lower
High Force Density	⚠ Limited	✓ Very good

With its portfolio of electric products, the Stabilus Group offers significant advantages over traditional pneumatic solutions.

This enables us to provide fully electric and scalable automation solutions from a single source.

DESTACO ERDH (ELECTRIC ROBOHAND PARALLEL GRIPPER)

Electric parallel gripper from the Robohand series with 4 programmable sensors and integrated speed and force control. No compressed air supply required at the robot; the integrated backlatch locking mechanism maintains gripping force even without power > **clean, streamlined robot installation with just a single cable to the PLC.**

[Learn more here >](#)



STABILUS POWERISE

The electrically adjustable linear actuator replaces passive gas springs, for example on flaps and doors, **enabling precise positioning, variable speed profiles, and intelligent control for automotive and industrial applications.**

[Learn more here >](#)

DESTACO SMART CLAMP

The 92W Electric Power Clamp replaces pneumatic clamps with smart, air-free electric clamping solutions featuring integrated control > **flexible workpiece clamping in multiple positions, no external sensors required, and up to 85% lower energy costs and CO₂ emissions compared to pneumatic systems.**

[Learn more here >](#)

EVOLVING AUTOMATION IN BODY-IN-WHITE AND BEYOND

HOW ELECTRIC SMART POWER CLAMPS OPTIMIZE PRODUCTION EFFICIENCIES

AUTOMATION AT AN INFLECTION POINT

Global manufacturing is undergoing a profound transformation. Electrification, flexible platforms, and shorter product lifecycles are reshaping how body in white (BIW) and general industrial production lines are designed and operated. Traditional pneumatic systems have long been the backbone of clamping in welding and assembly, but they also bring complexity, energy consumption, and limited data visibility.

To stay competitive, manufacturers need automation solutions that are flexible, data enabled, and energy efficient, and solutions that evolve with production requirements instead of limiting them. Destaco's 92W Series Electric Smart Power Clamps respond directly to this need, providing a new foundation for evolving automation strategies while optimizing operational efficiency.

FROM PNEUMATIC TO ELECTRIC: A STRATEGIC SHIFT

Pneumatic clamps are proven and familiar. However, as plants modernize and move toward smarter, electrified infrastructures, the drawbacks of pneumatics become increasingly visible:

- Compressed air generation is energy intensive and a significant source of CO₂ emissions.
- System complexity increases with air preparation, distribution, and leakage management.
- Process control and data availability are limited, hindering predictive maintenance and optimization.

The 92W Series represents the electrified evolution of Destaco's pneumatic power clamps. By replacing air with electricity and intelligence, manufacturers gain tighter control over motion, improved energy efficiency, and access to the real time data required for modern production optimization and Industry 4.0 initiatives.

ELECTRIC SMART POWER CLAMPS 92W: BUILT FOR EVOLVING PRODUCTION

The 92W Series Electric Smart Power Clamps are designed for use in any application where precise positioning and reliable clamping are critical—particularly in BIW welding and assembly, but also in fixture and testing environments, and in harsh industrial conditions. Typical markets include:

- Automotive and e mobility
- General industrial manufacturing
- Aerostructure
- Food and packaging

Two mechanical sizes—compact and heavy duty—enable coverage across a wide spectrum of applications, from tightly packed robot arms and fixtures to more robust, high force stations. A consistent mounting pattern shared with Destaco pneumatic power clamps simplifies the migration path and provides a direct bridge from existing equipment to modern electrified solutions.



KEY FEATURES THAT ENABLE SMARTER AUTOMATION

1. PLUG & PLAY INTEGRATION

The 92W Series offers true Plug & Play capability. Standardized interfaces and daisy-chainable connections reduce cabling and simplify integration. Fast startup minimizes commissioning time and supports lean project schedules.

- Daisy-chain connection for fewer cables and cleaner routing
- Consistent mounting patterns simplify retrofits
- Two control and drive options (e.g., 400 V and 48 V) provide integration flexibility

2. CONTROLLED MOTION AND INFINITE POSITIONING

Unlike traditional clamps with fixed positions and opening angles, the 92W Series enables smooth motion and virtually infinite stroke positions.

- Adjustable opening speed supports cycle time optimization
- Clamping can start at any angle
- Opening angles up to 225° with standard clamp arms
- Infinite opening positions allow multiple applications with one clamp design

This flexibility helps optimize robot paths, improve ergonomics, reduce interference, and adapt quickly to new variants or models.

3. INTEGRATED SENSING AND TOLERANCE COMPENSATION

The 92W Series integrates intelligence directly into the clamp:

- Integrated part present control detects sheet metal parts without external sensors, reducing hardware and wiring complexity
- Self-adjustment and tolerance compensation accommodate material variations, eliminating shims and manual adjustments

These functions improve robustness, ensure consistent weld quality, and reduce rework and scrap.

4. PERFORMANCE AND PREDICTIVE MAINTENANCE

Electric smart clamps combine performance with predictive maintenance capabilities:

- Controlled, repeatable motion protects tooling and parts
- Constant torque with soft open/close motion reduces mechanical stress and extends component life
- Predictive maintenance supports planned interventions instead of unplanned downtime
- Quick restart after emergency stops minimizes recovery time

The generated device data also supports proactive maintenance and plant-wide monitoring systems.

5. ENERGY EFFICIENCY AND CO₂ REDUCTION

By eliminating compressed air at the point of use, electric smart clamps reduce energy consumption and support CO₂ reduction.

- Reduced compressed air demand lowers overall energy consumption
- Electrical power is easier to monitor and optimize than compressed air
- Energy-efficient operation supports sustainability and decarbonization goals

For manufacturers with ambitious environmental targets, replacing pneumatic clamps with electric solutions like the 92W Series is **a practical step toward greener operations.**

6. ENABLING FLEXIBLE, FUTURE READY MANUFACTURING

The 92W Series supports flexible manufacturing through:

- Electrification without reliance on plant air infrastructure
- Software-definable behavior for opening angles, speeds, and torque
- Built-in sensing with part present control and position feedback

This allows manufacturers to reprogram and repurpose clamps for new models without redesigning entire stations, supporting modular tooling, flexible welding cells, and high-mix/low-volume production.

OPTIMIZING EFFICIENCIES ACROSS THE VALUE CHAIN

DESIGN AND ENGINEERING



Because the 92W Series shares mounting patterns with existing pneumatic clamps, engineers can design for today and plan for tomorrow:

- Common interfaces shorten design cycles.
- Electric and pneumatic variants can be interchanged where needed.
- Infinite positioning and adjustable dynamics reduce the need for unique clamp variants for each station.

COMMISSIONING AND RAMP UP



Plug & Play connectivity, daisy chain wiring, and fast start up reduce commissioning time and complexity.

Adjustable speeds and positions can be fine tuned during ramp up based on actual cycle time and interference analysis, without mechanical rework.

OPERATION AND MAINTENANCE



During operation, the 92W Series supports:

- Optimized cycle times via adjustable motion profiles.
- Stable quality through integrated part present control and tolerance compensation.
- Reduced maintenance requirements and predictive maintenance planning.
- Quick restart capability after emergency stops.

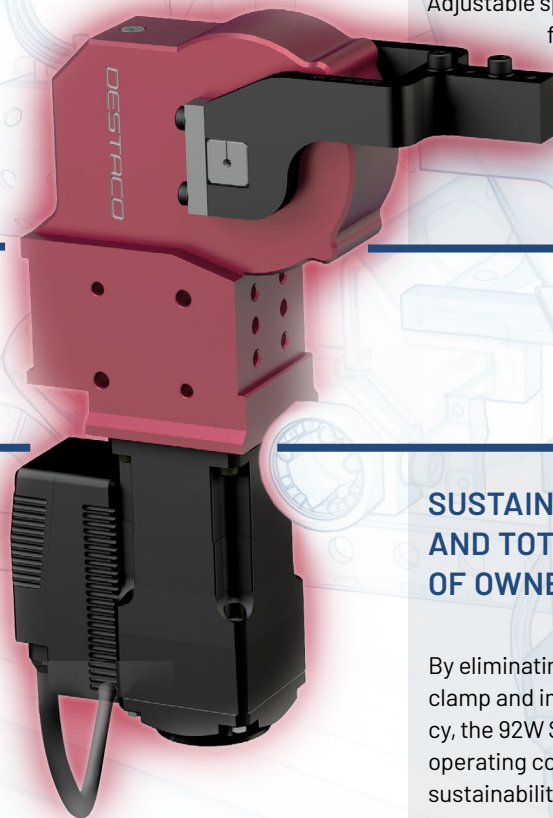
This translates into higher overall equipment effectiveness (OEE), fewer stoppages, and a more predictable production environment.

SUSTAINABILITY AND TOTAL COST OF OWNERSHIP



By eliminating compressed air use at the clamp and improving energy efficiency, the 92W Series contributes to lower operating costs and helps plants meet sustainability targets.

Lower hardware complexity, reduced need for external sensors, and minimized mechanical shimming also decrease lifecycle costs.



APPLICATIONS BEYOND BODY IN WHITE

While the 92W Series was designed with BIW and welding applications in mind, its capabilities are equally valuable in:

- Assembly lines requiring precise positioning and holding of components.
- Fixture and testing stations where repeatable clamping and integrated sensing enhance reliability.
- Harsh environments where robust, sealed, and controlled motion is essential.
- Industrial, aerospace, and food & packaging operations seeking to move away from pneumatics and toward smarter, electric automation solutions.

In each case, the same core value proposition applies: evolving automation solutions that deliver higher flexibility, more data, and optimized efficiencies.

AUTOMATING TOMORROW WITH SMART ELECTRIC CLAMPING

Destaco's 92W Series Electric Smart Power Clamps embody the evolution of clamping technology for modern production lines. By leveraging electric actuation, integrated intelligence, and flexible control, they address key challenges facing manufacturers today:

- The need to adapt quickly as production requirements evolve.
- The demand for higher energy efficiency and CO₂ reduction.
- The push toward data driven, predictive maintenance and quality assurance.
- The expectation for Plug & Play, flexible, and scalable automation solutions.

As manufacturers across automotive, industrial, and other sectors continue their transition toward fully digital, electrified, and flexible factories, technologies like the 92W Series will play a central role. They do more than replace pneumatic clamps—they enable a new way of thinking about clamping as a smart, connected element of the production ecosystem.

CONCLUSION

Evolving automation and production demands require more than incremental upgrades; they require foundational technologies that combine flexibility, intelligence, and efficiency. Destaco's 92W Series Electric Smart Power Clamps provide a practical, future ready path from traditional pneumatic systems to modern, data enabled, energy efficient clamping.

By optimizing efficiencies at every stage—from design and commissioning to daily operations and maintenance—the 92W Series helps manufacturers "automate tomorrow" today and stay ahead in an increasingly competitive industrial landscape.

CONTACT US TODAY TO SECURE LONG-TERM EFFICIENCY GAINS!



VISIT OUR WEBSITE >
AND DISCOVER HOW
STABILUS4AUTOMATION
CAN TAKE YOUR APPLICATIONS
TO THE NEXT LEVEL.

Fill out our contact form –
it's quick, easy, and connects you directly
with the right contact person.

- Personalized consulting
- Technical expertise under one roof
- Global presence, local strength