

ELECTRIC EA30



## The third dimension

ELECTRIC for articulating roller forming  
3-Axis Servo-Technology

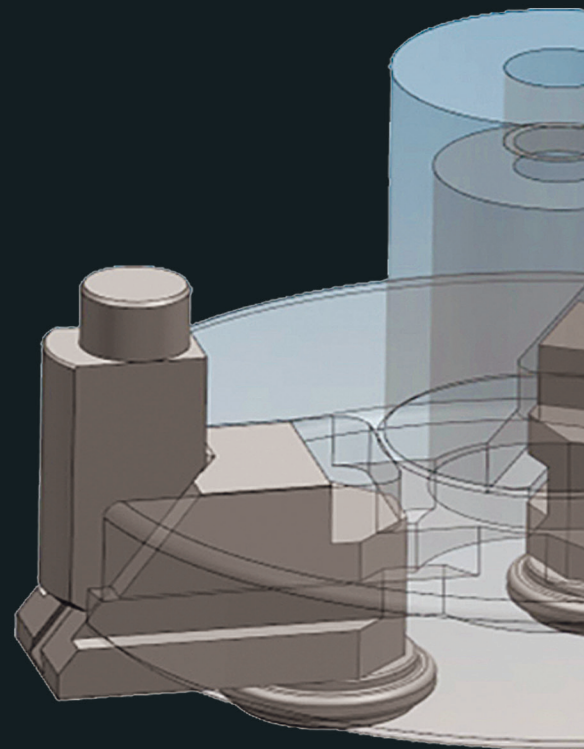
**BalTec**

# Highest productivity

thanks to innovative technology

## APPLICATIONS

- Axial roller forming
- Radial roller forming
- 3D forming
- Crimping
- Press & forming
- and much more



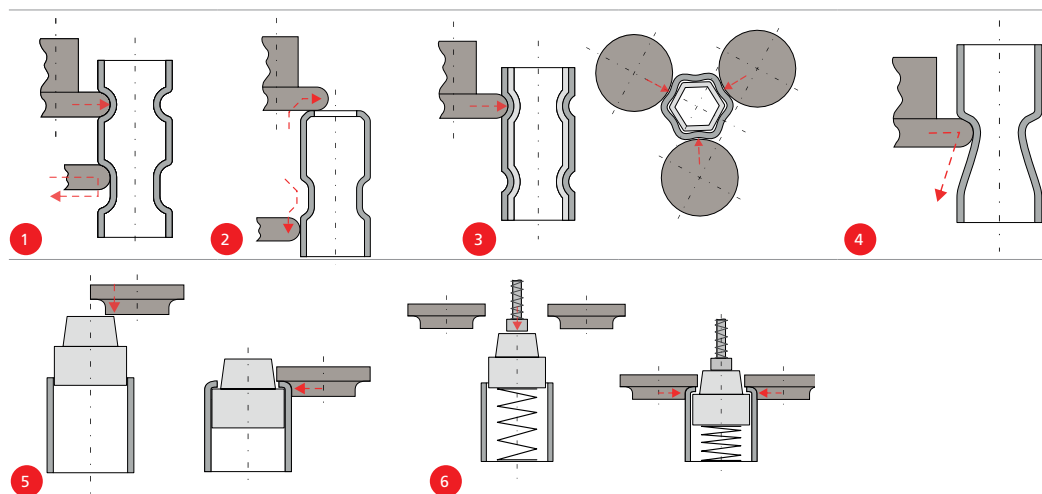
## Capabilities & Advantages

### THE ARTICULATING ROLLER FORMING ELECTRIC EA30 IS BALTEC'S LATEST INVENTION.

With three individually programmable servos, ELECTRIC EA30 can form several different profile shapes in a single cycle. These include traditional roller forming, articulating roller forming, 3D articulating roller forming, and crimping. What makes the ELECTRIC EA30 so unique is the servo-controlled radial motion, which delivers significantly higher precision and control than conventional solutions that require manual adjustment of a mechanical stop.

Important arguments for this innovative technology are undoubtedly the great flexibility in forming, the three freely programmable axis (axial, radial, and rotary axis), the availability of the process data of each forming process, and a significant reduction of the cycle times compared to conventional, mechanical solutions when performing several forming steps on the same component. The unit's slim design is also ideally suited for integration into fully automated production lines with limited space or as a stand-alone work cell for small batches.

### EXAMPLES OF POSSIBLE 3D PROFILE SHAPES



1 + 2

Axial & radial articulating roller forming

3

Crimping

4

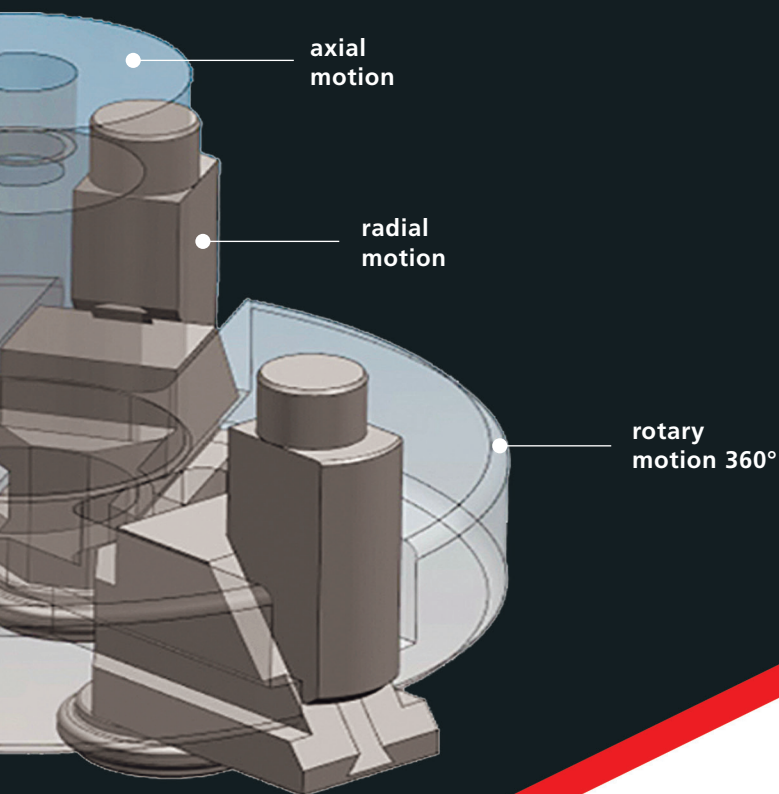
3D profile shapes

5

Work piece insert, then forming

6

With integrated downholder, Work piece insert / Setting + Forming in one Stroke

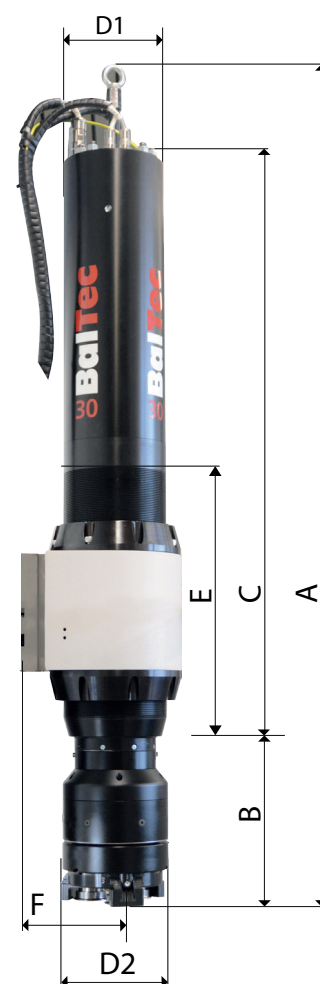


### EA30 – KEY FEATURES

- Three axis, servo-controlled, stroke Z, rotation M, articulated infeed R
- HPPi PC-Software based on Windows 10
- Process data acquisition of all axis
- Direct force measurements in axial & radial motion via 2 coaxial load cells (DMS)
- UDP communication module, including interface to customer network
- Safety standard PLe/SIL 3
- Force range axial axis: 3.0 to 30 kN
- Linear stroke: max. 200 mm, servo-controlled
- Axial feed speed: max. 180 mm/sec, servo-controlled
- Rotational speed: max. 800 rpm, servo-controlled
- Axial path measurement by two independent measuring systems, monitoring each other

### PROCESS MODULE & ROLLER HEAD FOR ARTICULATING ROLLER FORMING

- Process module: Roller head with 3 rolls
- Force range radial axis: up to 30 kN total over all 3 rolls
- Radial feed speed: up to 10 mm/sec, servo-controlled
- Radial stroke (radius): 10 mm
- Radial path measurement by a rotary encoder in the roller head



### DIMENSIONS EA30 IN MM

	Flange-mount	Wall-mount
A	1510	1510
B	265	265
C	1020	1020
D1	180	180
D2	180	180
E	455	455
F	<b>230</b>	<b>180</b>

**Who we are**

With its headquarter in Pfäffikon (Zurich), Switzerland, the core competence of BalTec group is in manufacturing machinery for joining technology, focusing on the radial riveting process, orbital riveting, roller forming, and joining. As early as 1968, BalTec (still known as Bräcker) had already produced radial riveting technology, a process well-known in various industries. Today we are the global leader in riveting and cold-forming technology. BalTec has direct operations in 7 countries with approximately 70 direct employees, and over 40 sales partners represent BalTec around the globe.

**What we offer**

We firmly believe that the high level of quality and customer satisfaction provided by BalTec can only be achieved by a strong local presence. Our technology and service centers provide worldwide support to machine builders, process development and testing for end users while defining the most suitable process. BalTec employees or our trained representatives close to your location provide this competent and personal support.

**Where do we aim to go**

Our position as technology leader defines our focus for the future. We continuously strive to improve this position and our offerings to provide optimal and sustainable solutions to our customers in conjunction with joining technologies. We have created a new benchmark in process monitoring with process control and process data management systems with integrated and intuitive machine control. A capability that allows the customer to achieve a clear cost advantage.

**We are BalTec**

Our strongest asset? Beyond any doubt, it is our committed and motivated employees, of which many have gained a wealth of experience over many years. Together, we pursue a single goal with absolute dedication: customer satisfaction. Arrange an appointment and take advantage of our experience.

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Joining is our business – worldwide

**BalTec**