

EKF GmbH

FORMING TECHNOLOGY



figure shows

WS-400 e-drive end forming

The new electrically powered axial forming machines of the WS-series with self-sufficient and spindle-free SERVO-LINEAR-DRIVE

FAST . STRONG . CLEAN



Pulsatingly different - axial forming redefined

3-axes axial forming machines with multiple tool changer and servo linear drives.

- Tube end forming applications:
- expanding ○reducing ○rolling ○calibrating ○punching
 - cutting ○crimping ○beading ○stamping ○kneading
 - interlocking tubes out- and inside ○interlocking shafts

- Multiple operations:
- e.g. reducing ○expanding ○crimping ○rolling tube ends in connection with simultaneous ○punching ○embossing ○flatening ○kneading ○hammering

Industries

- automotive, road / non-road, agriculture
- supply technology / household- and sanitary technology
- hydraulics and pneumatics / mechanical engineering
- aircraft and aerospace industry
- shipbuilding
- rail technology
- medical technology
- plant technology
- energy sector

Competence centre for forming technology

- development and design of axial forming tools
- manufacturing and testing of tools
- delivery and commissioning of the tools at customer`s production site
- delivery of spare parts

Axial forming machines / types

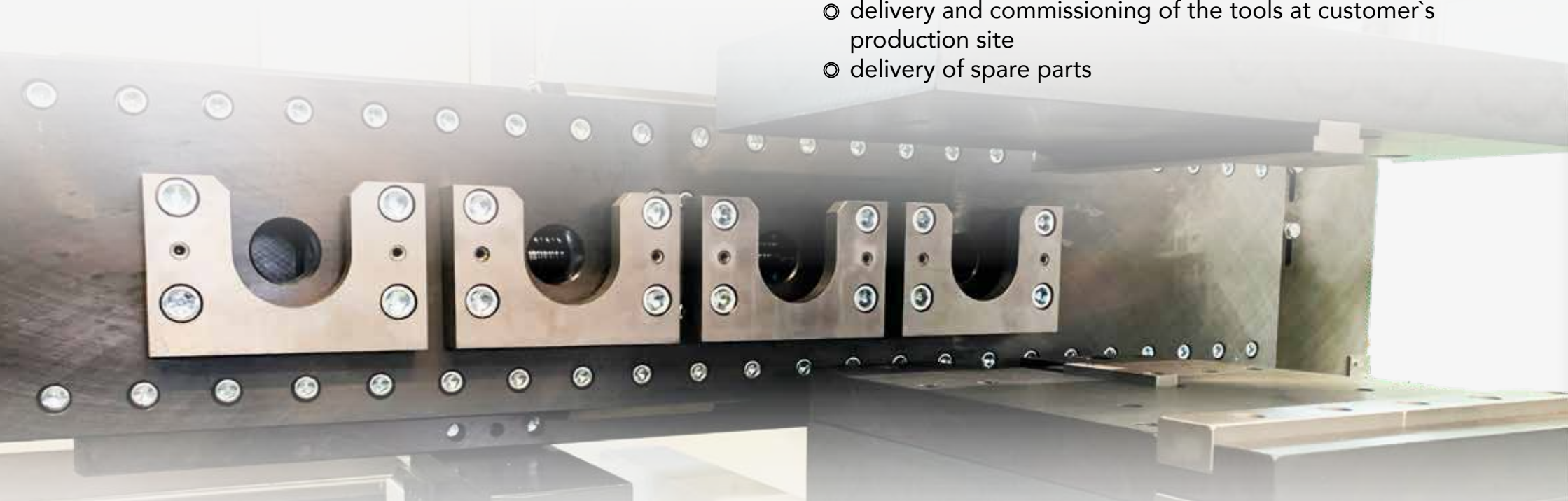
Special equipment

- central lubrication of linear axis
- minimal lubrication of tools/parts
- circulation lubrication of tools/parts
- mirrors for safety light systems
- 2nd working axis on the operator side
- parts query
- tool changer expandable

Cycle times

- Determined cycle time with 80 mm travel for the forming axis and 60 mm travel for the clamping axis WS-400 e-drive
- 1 forming process about 3 seconds
 - 2 forming processes about 5 seconds
 - 3 forming processes about 7 seconds
 - 4 forming processes about 9 seconds

line	type	forming force	holding power	tube Ø max	tooling
SMART	WS-080 e-drive	60 KN	80 KN	about 70 mm	8x
	WS-100 e-drive	80 KN	100 KN	about 70 mm	8x
	WS-140 e-drive	120 KN	140 KN	about 70 mm	8x
ECO	WS-300 e-drive	200 KN	300 KN	about 150 mm	4x
	WS-400 e-drive	300 KN	400 KN	about 150 mm	4x
POWER	WS-600 e-drive	500 KN	600 KN	about 250 mm	6x
	WS-800 e-drive	700 KN	800 KN	about 250 mm	6x



BENEFITS AT A GLANCE

Unique selling point

multiple operations possible in one process e.g. by pulsating movements

Costs & time

very short cycle times,
V-max axes 390 mm/sec.

Compatibility

existing forming tools can be used

Interfaces

industry 4.0 capable

Autocorrect

measurement of the component

Quiet drives

low noise emission

Process safety

high forces,
overload protection

Controlled axes

forming & clamping axis both
repeatably controllable down
to 0,01 mm

Maintenance

maintenance interval
3 years or 20.000 hours

Energy

energy efficient, clean &
environmentally friendly

EKF GmbH

Am Erzweg 10
D-66839 Schmelz

Tel.: +49 6887 90 14 0
Fax: +49 6887 90 14 20
Email: info@ekf-schmelz.de
www.ekf-schmelz.de

Industries

Forming technology
Exhaust technology
Car-Body technology
Chassis technology
Medical technology
Food technology
Subcontracting

ABOUT US

We are a medium-sized family-owned company which is able to look back on a 30-year corporate history in the year 2018. Being an efficiently, economically sound company, EKF develops, manufactures and supplies machines, toolings and devices of highest quality.

How does our customers benefit from the fact that we exist?

We love what we do! This is reflected in the quality of our products. Our highly motivated team is at your side from the creation of offers through construction to production. We provide you with a complete product portfolio. With our 360° view for your project, your product is guaranteed to succeed. Planning security, cost transparency, quality promise and adherence to delivery dates - from the beginning!

We analyse your requirements, define new processes and show budget-dependent alternatives to develop the best possible solution together with you.

We provide you with the opportunity to produce your product with high quality at low cost. Our tools ensure the high quality of your end products economically. Our high quality standard is reflected in an increase of productivity and a minimal wear to tools.

For more information:

Exhaust technology & Crimping technology

find at: www.ekf-schmelz.de