



# Always cuts a good figure: the biege ma Radial model series.

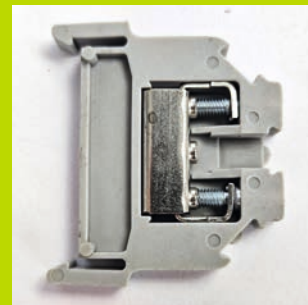
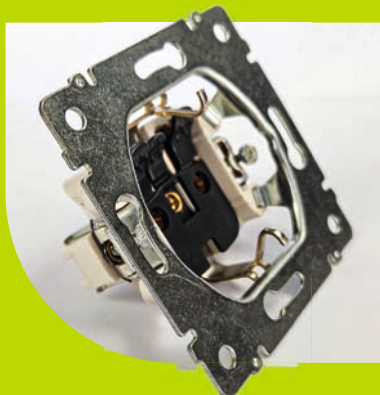
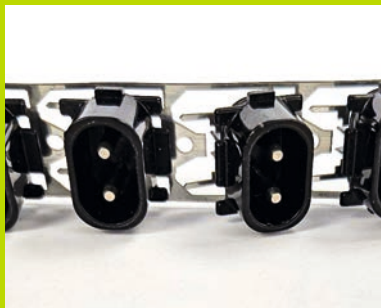
Our automatic stamping and bending machines in the radial series have exactly what a good production line needs: reliability and effectiveness. For every use. For all tasks.

The BIEGEMA GmbH & Co. KG is developer and manufacturer of universal stamping and bending machines to fabricate two- and three-dimensional sheet metal and wire parts as well as hybrid components. Combined with modern control and drive technology as well as integrated solutions for process monitoring, tools of old Finzer-standard or new, state-of-the-art tools can be combined with other peripheral units for

welding, tapping, laser marking and much more as well as feeding units.

The product program comprises stamping and bending machines with mechanical gripper feeder or servo feeders, stamping units and bending modules in radial or linear design.

The machines are used in various industrial sectors, such as automotive, electrical or construction industry.



# More **efficiency** in the workflow: **FMS-Q 80 RS**

Small machine, powerful performance. This compact stamping-bending machine processes strip materials up to 50 mm width and 1.5 mm thickness as well as wires up to a diameter of 4 mm with a production speed of up to 400 parts/minute. The machine optionally has one 80 kN stamping unit and can be optionally equip-

ped with mechanical precision gripper feeder or an electronic feeder.

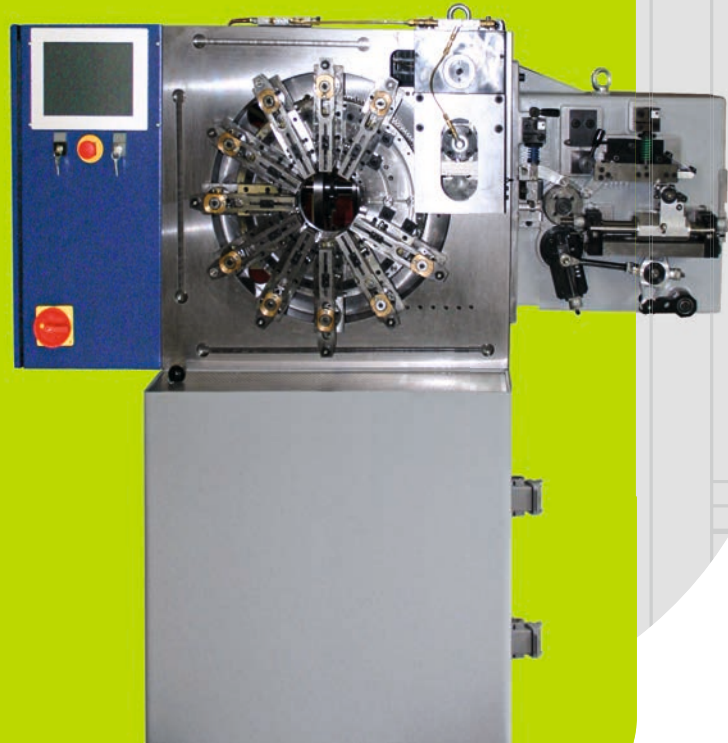
The variable arrangement of up to 11 bending slides on the central plate allows an economical manufacturing process of your products that is optimally adapted to the requirements.

In addition to this the integrated quick-change system also allows you to change tools in just 30 minutes.

**Interested? We're looking forward to your contact!**

## Technical Specifications

- Stamping-bending machine with a production output of up to 400 parts/min depending on the tool and part design
- Processing of strip material up to 50 mm width and 1.5 mm thickness as well as wires up to  $\varnothing$  4 mm
- Precision gripper feeder or programmable servo feeder
- Stamping unit with 80 kN (5/10/12 mm stroke)
- Quick-change system equipped with up to 11 low-maintenance, positively controlled bending slides (bending force 12/22 kN at 44 mm stroke) with working and return cam
- Servo drive with drive power of 4 kW
- B&R-control system with Powerlink-interface, IPC with touchscreen and tool monitoring



# More diversity in all tasks: FMS-Q 120 RS

In comparison to the FMS-Q 80 RS, the versatile stamping and bending machine FMS-Q 120 RS can be equipped with up to two gripper feeders or optionally up to two electronic feeders. Strip materials up to 50 mm width and up to 1.5 mm thickness as well as wires up to a diameter of 4 mm can be processed with up to 500 parts/minute.

Optionally it is possible to equip the machine with up to two stamping units with a stamping force of 80 kN.

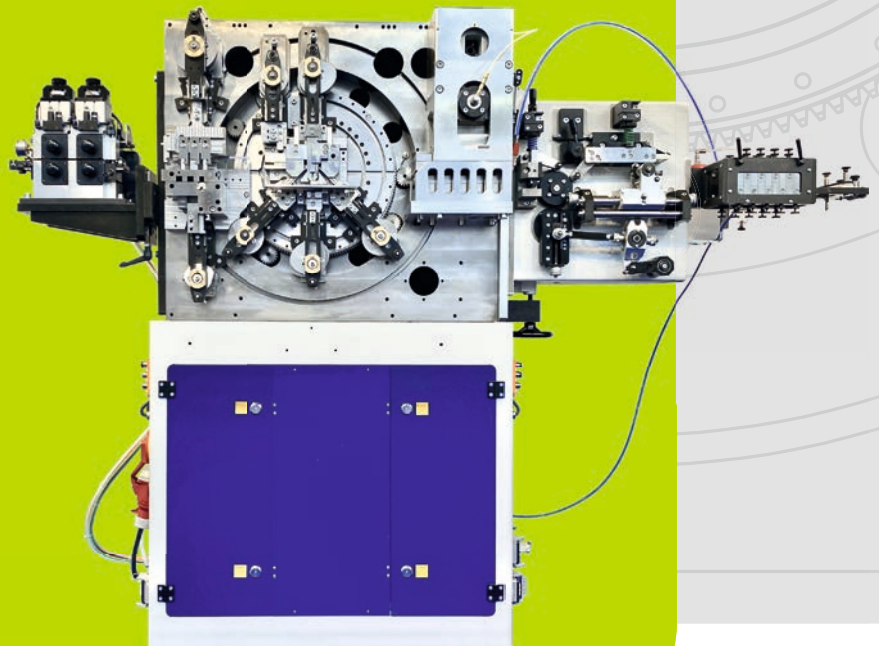
The variable arrangement of up to 11 bending slides on the central plate allows an economical manufacturing process of your products that is optimally adapted to the requirements.

In addition to this the integrated quick-change system also allows you to change tools in just 30 minutes.

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## Technical Specifications

- Stamping-bending machine with a production output of up to 500 parts/min depending on the tool and part design
- Processing of strip material up to 50 mm width and 1.5 mm thickness as well as wires up to  $\varnothing$  4 mm
- up to two precision gripper feeders or programmable servo feeder
- up to two stamping units up to 80 kN (5/10/12 mm stroke)
- Quick-change system equipped with up to 11 low-maintenance, positively controlled bending slides (bending force 12/22 kN at 44 mm stroke) with working and return cam
- Servo drive with drive power of 4 kW
- B&R-control system with Powerlink-interface, IPC with touch-screen and tool monitoring



# More **power** with high performance: FMS-Q 250 RS

The stamping and bending machine for the really strong. With the FMS-Q 250 RS you are able to process strip materials up to 120 mm width and up to 2.5 mm thickness as well as wires up to a diameter of 6 mm. The production speed is up to 280 parts/minute. Depending on the requirement the integrated stamping unit with a stamping force of

250 kN can be equipped either with a stroke of 15 mm or 20 mm.

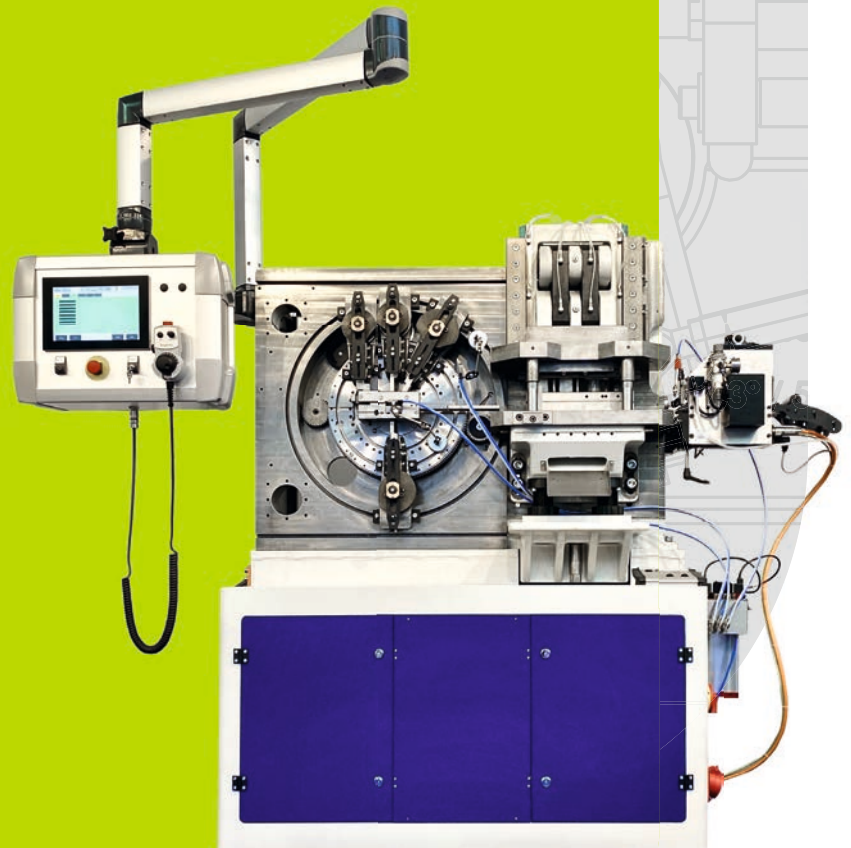
The variable arrangement of up to 11 bending slides on the central plate allows an economical manufacturing process of your products that is optimally adapted to the requirements.

In addition to this the integrated quick-change system also allows you to change tools in just 30 minutes.

**Interested? We're looking forward to your contact!**

## Technical Specifications

- Stamping-bending machine with a production output of up to 280 parts/min depending on the tool and part design
- Processing of strip material up to 120 mm width and 2.5 mm thickness as well as wires up to  $\varnothing$  6 mm
- Precision gripper feeder or Programmable servo feeder
- Stamping unit with 250 kN (15/20 mm stroke)
- Quick-change system equipped with up to 11 low-maintenance, positively controlled bending slides (bending force 30/50 kN at 45 mm stroke) with working and return cam
- Servo drive with drive power of 15 kW
- B&R-control system with Powerlink-interface, IPC with touch-screen and tool monitoring



# Technical Specifications

## and selection table

### Caractéristiques techniques et tableau de sélection

Radiale Baureihen Radial series Séries radiales		SI- Einheiten	British or American Units	FMS-					
				Q 80	Q 120	Q 250	Q 350	Q 400	Q 700
Produktionsgeschwindigkeit Production rate continuously Vitesse de production		Teile/min	Parts/min	30 – 500	30 – 600	25 – 360	25 – 150	18 – 180	15 – 180
Standardlackierungen Standard colour Couleur standard	Sockel/Hauben, machine base/hoods, Socles/carters	RAL	RAL	7035/ 5003	7035/ 5003	7035/ 5003	7035/ 5003	7035/ 5003	7035/ 5003
<b>Bandrichtwerke SSU</b> Strip straightening units SSU Redresseurs de bande SSU	<b>Anbauseite</b> Positioning side Côté montage	<b>Bandbreite/ -dicke</b> mm/mm	<b>Strip/Width -thickness</b> in/in						
SSU-R 12	rechts, right, droite	12/0.5	0,48/0,02	•	•	•	•	•	•
SSU-L 12	links, left, gauche	12/0.5	0,48/0,02		•	•			
SSU-R 24	rechts, right, droite	24/0.4	0,95/0,02	•	•	•	•	•	•
SSU-L 24	links, left, gauche	24/0.4	0,95/0,02		•	•			
SSU-RL 50	rechts/links, right/ left, droite et gauche	50/1.5	2,00/0,06	•	•	•	•	•	•
<b>Drahtrichtwerke WSU</b> Wire straightening units WSU Redresseurs de fil WSU	<b>Anbauseite</b> Positioning side Côté montage	<b>Draht-ø</b> mm	<b>Wire-ø</b> in						
WSU-RL 1,5	rechts/links, right/ left, droite et gauche	0.5 – 1.5	0,02/0,06	•	•	•	•	•	•
WSU-RL 3,5	"" "" ""	1.5 – 3.5	0,06/0,14	•	•	•	•	•	•
WSU-RL 6,0	"" "" ""	2.0 – 6.0	0,08/0,24			•	•	•	•
<b>Mechanischer Einzug MFU</b> Wiederholgenauigkeit ± 0,01mm Mechanical feeding unit MFU Amenage mécanique MFU	<b>Anbauseite</b> Positioning side Côté montage	<b>Einzug- länge/ Bandbreite</b> mm/mm	<b>Feeding- length/Strip width</b> in/in						
MFU-R 60/30	vorne und hinten f+b front and back f+b avant et arrière f+b	60/30	2,4/1,2	f+b	f+b	f+b			
MFU-R 100/50	rechts, right, droite	100/50	3,9/2,0	•	•				
MFU-L 100/50	links, left, gauche	100/50	3,9/2,0		•	•			
MFU-R 200/50	rechts, right, droite	200/50	7,9/2,0	•					
MFU-R 250/50	rechts, right, droite	250/50	9,8/2,0	•					
MFU-R 250/60	rechts, right, droite	250/60	9,8/2,4			•	•	•	•
MFU-R 250/110	rechts, right, droite	250/110	9,8/4,3			•	•	•	•
MFU-R 300/60	rechts, right, droite	300/60	11,8/2,4			•	•	•	•
MFU-R 300/110	rechts, right, droite	300/110	11,8/4,3			•	•	•	•
MFU-R 400/60	rechts, right, droite	400/60	15,7/2,4			•	•	•	•
MFU-R 400/120	rechts, right, droite	400/120	15,7/4,7			•	•	•	•
<b>Grundwerkzeuge BT</b> Basic tools BT Outillages de base BT									
BT 13/42 SS	<b>Einfach-Schieber</b>	13/42	3000/1,7	•	•				
BT 15/60 SS	Single slider	15/60	3350/2,4			•			
BT 30/45 SS	Coulisseau simple	30/45	6700/1,8				•	•	•
BT 13/42 DS	<b>Doppel-Schieber</b>	13/42	3000/1,7	•	•				
BT 15/60 DS	Double slider	15/60	3350/2,4			•			
BT 30/45 DS	Coulisseau double	30/45	6700/1,8				•	•	•
<b>Hintere Steuerwelle RCS</b> Rear cam shafts RCS Arbres de commande arrières RCS				<b>Anzahl möglicher Standardschieber</b> Amount of possible standard sliders Nombre maximale de coulisseaux standards					
RCS 13/42				2	2				
RCS 15/60						2			
RCS 30/45							2	2	2

Radiale Baureihen Radial series Séries radiales	SI- Einheiten	British or American Units	FMS-						
			Q 80	Q 120	Q 250	Q 350	Q 400	Q 700	
<b>Elektronischer Walzeneinzug*</b> Electronic roller feeder* <i>Amenage à galet NC*</i>		<b>Material- breite/Vor- schublänge</b> mm/mm	<b>Material width/ Feed length</b> in/in						
BRF 080 T		80/∞	3,15/∞	•	•	•	•	•	•
BRF 140 T		140/∞	5,51/∞	•	•	•	•	•	•
<b>Elektronischer Zangenvorschub*</b> Electronic linear feed* <i>Amenage electronic*</i>									
EZ 90-680		50/90	1,96/3,54	•	•	•	•	•	•
EZ 150-1000		50/150	1,96/5,90	•	•	•	•	•	•
<b>Stanzeinheiten PU</b> Press units PU <i>Unités de découpe PU</i>		<b>Stanzkraft/ Hub</b> kN/mm	<b>Stamping- force/Stroke</b> lbf/in	<b>maximale mögliche Positionierungen/Anzahl</b> maximal possible positions/numbers <i>Nombre maximale de positions</i>					
PU 80/5		80/5	18.000/0,2	1/1	3/2	1/1			
PU 80/10		80/10	18.000/0,4	1/1	3/2	1/1			
PU 80/12		80/12	18.000/0,5	1/1	3/2	1/1			
PU 80/5 L		80/5	18.000/0,2						
PU 80/10 L		80/10	18.000/0,4						
PU 80/12 L		80/12	18.000/0,5						
<b>Pressemodule PM</b> Press modules PM <i>Modules de presse PM</i>		<b>Stanzkraft/ Hub</b> kN/mm	<b>Stamping- force/Stroke</b> lbf/in						
PM 250/15		250/15	56.000/0,6			•			
PM 250/20		250/20	56.000/0,8			•			
PM 350/18		350/18	78.500/0,7				•		
PM 400/20		400/20	90.000/0,8					•	
PM 400/25		400/25	90.000/1,0					•	
PM 700/20		700/20	157.000/0,8						•
PM 700/25		700/25	157.000/1,0						•
<b>Schnellwechsellplatten QCP</b> Quick-change plates QCP <i>Plateaux de changement rapide QCP</i>	<b>bei PU-Anbau</b> acc. PU-Mounting <i>pour montage PU</i>								
QCP 80 R				•					
QCP 80 R R	rechts, right droite			•					
QCP 120 R					•				
QCP 120 R R	rechts, right droite				•				
QCP 120 R L	links, left, gauche				•				
QCP 120 R RL	rechts, links, right/left, droite et gauche				•				
QCP 250 R						•			
<b>Einfachhub-Biegeschlitten FU</b> Single stroke forming unit FU <i>Charlot de cambrage à course simple FU</i>		<b>Biegekraft/ Hub</b> kN/mm	<b>Bending- force/Stroke</b> lbf/in						
FU 8/30		8/30	1.800/1,2	•	•				
FU 12/45		12/45	2.700/1,8	•	•				
FU 22/40		22/40	5.000/1,6	•	•				
FU 40/25		40/25	9.000/1,0	•	•				
FU 30/50		30/50	6.700/2,0			•			
FU 50/45		50/45	11.200/1,8			•			
FU 40/65		40/65	9.000/2,6				•	•	•
FU 60/55		60/55	13.500/2,2				•	•	•

\* nach Kundenwunsch/Projektkonfiguration, acc. to customers request/to project specification, sur demande du client/configuration projet

- Abmessungen und Kräfteangaben sind Maximalwerte. Dimensions and forces are maximal indications. Dimensions et indications de puissance sont des valeurs maximales.
- Wegen nationaler oder internationaler Bestimmungen können technische Angaben geringfügig abweichen. Due to modifications of national or international regulations the technical data can slightly differ. Certaines données techniques peuvent varier légèrement à cause des réglementations nationales ou internationales.

# The first step for **more productivity:** **Contact us!**

**Not only the first step is very easy.** In close co-operation with our customers, we realize the efficient production of a wide range of products. Let's determine your chances together. We are looking forward to your contact.

Your **biegema**-team

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