▼Web Page

⚠ CAUTIONS

- ◆Install the machine indoors where no explosive, inflammable or corrosive gases exist nearby.
- ◆Install and operate the machine according to operation manual.
- ◆Do not modify the machine by yourselves.
- ◆Mishandling may cause a serious accident. Use the machine according to operation manual.
- ◆Maintenance and inspection should be done periodically. Operation without maintenance and inspection may cause a serious accident (mechanical damage, etc.).
  Make sure to carry out maintenance and inspection described in operation manual.
- ◆The contents of this brochure are subject to change without notice.

TOYO KENSETSU KOHKI CO., LTD.

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TOYO GENERAL CATALOG Ver.3

QMS Assessment ISO 9001 LIACA-012

MS JAB QMS CMO17

GENERAL CATALOG **Ver.3**

TOYO'S POWER

Rebar Processing Machines

TOYO KENSETSU KOHKI CO., LTD.

OSAKA, JAPAN SINCE 1933

TOYO

Beyond the Machines, Beyond the Borders

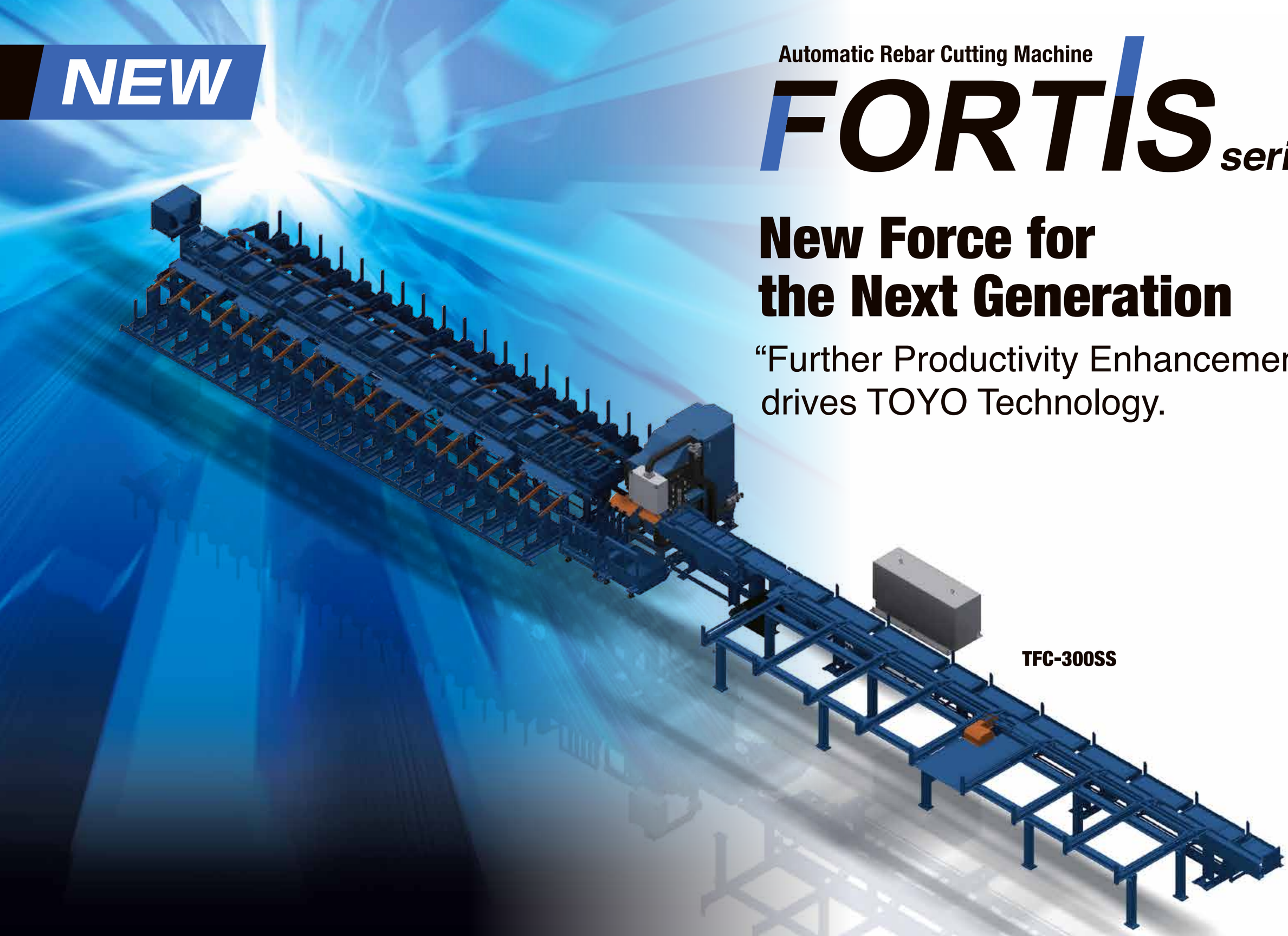
NEW

Automatic Rebar Cutting Machine

FORTIS series

New Force for the Next Generation

“Further Productivity Enhancement” drives TOYO Technology.



TFC-300SS

1

2

AUTOMATIC REBAR CUTTING MACHINE

TFC-300SS

D10-D51

Cut

FORTIS series

Multi-functional and high-spec series of cutting machines have been released.

Setting on touch screen

Dimension

Combination

Cutting blade width

TFC-300SS

300mm

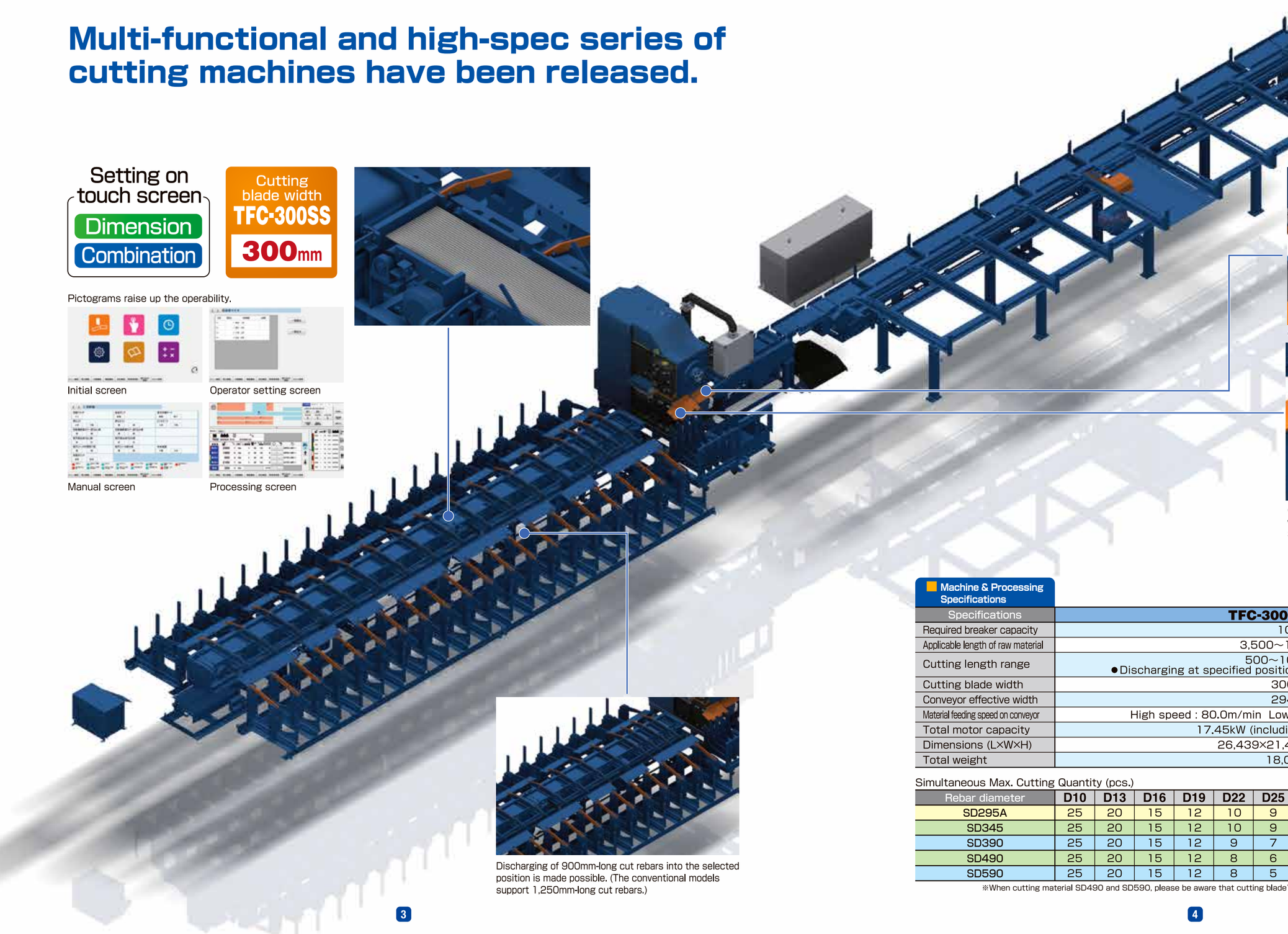
Pictograms raise up the operability.

Initial screen

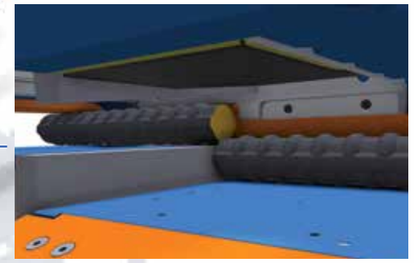
Operator setting screen

Manual screen

Processing screen



Discharging of 900mm-long cut rebars into the selected position is made possible. (The conventional models support 1,250mm-long cut rebars.)



Cutting 51mm

Capable of automatically discharging the off-cuts, which raises the operational efficiency.
Short length cutting is also supported.

Machine & Processing Specifications

Specifications	TFC-300SS (10×12)
Required breaker capacity	100A
Applicable length of raw material	3,500～12,000mm
Cutting length range	500～10,000mm ●Discharging at specified position can be conducted from 900mm.
Cutting blade width	300mm
Conveyor effective width	294mm
Material feeding speed on conveyor	High speed : 80.0m/min Low speed : 30.0m/min(50/60Hz)
Total motor capacity	17.45kW (including air-compressor)
Dimensions (L×W×H)	26,439×21,437×1,983mm
Total weight	18,000kg

Simultaneous Max. Cutting Quantity (pcs.)

Rebar diameter	D10	D13	D16	D19	D22	D25	D29	D32	D35	D38	D41	D51
SD295A	25	20	15	12	10	9	6	5	4	3※2	3※2	1※2
SD345	25	20	15	12	10	9	6	5	4	3※2	2※2	1※2
SD390	25	20	15	12	9	7	5	4	3	2※2	2※2	1※2
SD490	25	20	15	12	8	6	4	3	3	2※2	1※2	1※2
SD590	25	20	15	12	8	5	3	2	2	2※2	1※2	1※2

※When cutting material SD490 and SD590, please be aware that cutting blade's life will be shortened.Please contact us for further assistance.
※2Upper blade should be replaced with the blade for large rebar.

AUTOMATIC REBAR CUTTING MACHINE

CS-185HB

with cutter MC-51W

D10-D38

Cut

▼Movie

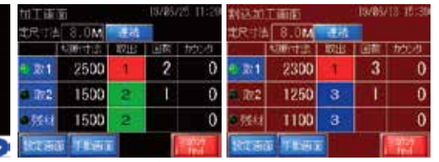
FORTIS series

The first model in rebar cutting machine series with belt conveyor. Capable of combination cutting of 2 kinds of length from raw materials.

Setting on touch screen
Dimension
Combination

Cutting blade width
CS185HB
(MC-51W)
190mm

Title screen



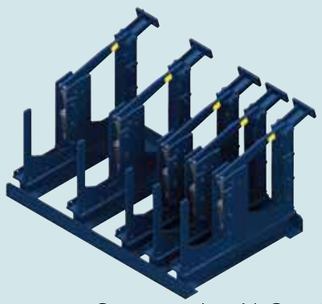
Processing screens

Setting screens

2 types of storage racks

Storage racks with 2 pockets need less space to install.
Storage racks with 3 pockets is capable of stocking more cut rebars.

Storage racks with 3 pockets



Storage racks with 2 pockets

Machine & Processing Specifications

Specifications	**CS-185HB** (10×12)
Required breaker capacity	60A
Applicable length of raw material	3,500～12,000mm
Cutting length range	800～10,000mm ●When product discharging unit is not attached ; 500mm～ ●When stopper for short dimension is attached ; 300mm～
Cutting blade width	190mm
Conveyor effective width	185mm
Material feeding speed on conveyor	52.1/62.5 m/min(50/60Hz)
Total motor capacity	8.55kW (including air-compressor)
Dimensions (L×W×H)	23,600×2,650×1,450mm
Total weight	7,500kg

Simultaneous Max. Cutting Quantity (pcs.)

Rebar diameter	D10	D13	D16	D19	D22	D25	D29	D32	D35	D38
SD390	16	12	10	7	5	4	3	2	1	1※2
SD490	16	12	10	5	4	3	2	2	1	1※2

※When cutting material SD490, please be aware that cutting blade's life will be shortened.Please contact us for further assistance.
※2Upper blade should be replaced with the blade for large rebar.

We, TOYO, develop energy-saving & labor-saving systems.

Generally, 機動力 (Kidō-ryoku) means an ability to flexibly make a move as the situation demands.
It is a fact that “機動力” is a major factor in order to address big changes in the costruction industry.
Another factor, however, is necessary for TOYO, as the leading machinery manufacturer, to fulfill its mission.
That is “human power (human resources).” It is human being that performs historical revolutions and makes the impossible possible.
TOYO believes “機働力”, which indicates human wisdom & power, is the source of value creation.
(“動” literally means “move”. “亻” stands for human. “亻” plus “動” makes “働” which literally means “work”.)
We, TOYO, is committed to developing the leading-edge energy-saving / labor-saving systems
to support cutomers' safety and security.

TOYO'S POWER

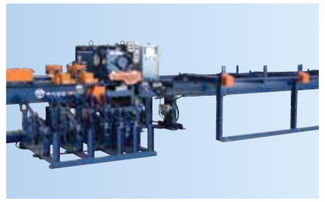
TOYO BRAND

Since its foundation, TOYO has been developing and supplying rebar processing machines which meet the needs of the era and create the next generation. We have enthusiastically dedicated ourselves to the development and sales of products in order to meet our valued customers' expectation so farr, and we will from now on. Under the brand name of TOYO, we are introducing IoT to our machines to enhance customers efficiency with total productivity management. Management of on-going work in the factory realizes “reduction of human errors”, “prevention of miscounting”, and “process trackng”, which enables to provide finished products promptly and securely. We are seeking to expand our TOYO BRAND further.

TOYO KENSETSU KOHKI
Please subscribe our channel.

INDEX

FORTIS series



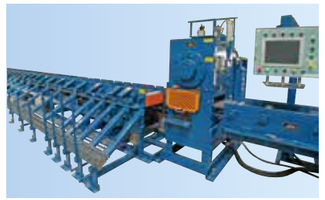
Carry FEEDING DEVICE

Carry SORTING & FEEDING DEVICE

TOYO Recommended

AUTOMATIC REBAR CUTTING MACHINE

Cut AUTOMATIC REBAR CUTTING MACHINE



Cut CUTTING CONVEYOR

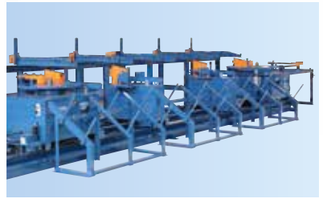
Cut BANDSAW PRECISION CUTTING MACHINE

AUTOMATIC REBAR BENDING MACHINE

Bend AUTOMATIC REBAR BENDING MACHINE

TOYO Recommended

Bend DOUBLE BENDER



Carry PRODUCT CONVEYOR

Bend UNIVERSAL BENDER

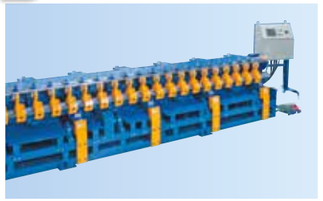
AUTOMATIC REBAR CUTTING & BENDING MACHINE

Cut Bend AUTOMATIC REBAR CUTTING & BENDING MACHINE

TOYO Recommended

MESH&SLAB BENDER

Bend MESH BENDER



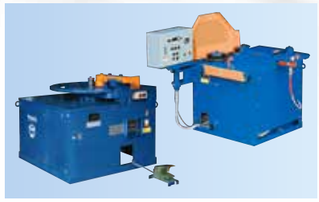
Bend SLAB BENDER

STANDARD CUTTER&BENDER & RING SPIRAL MACHINE

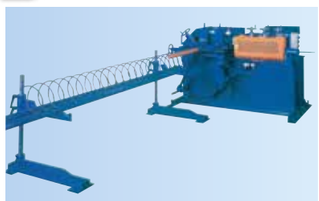
Cut REBAR CUTTER

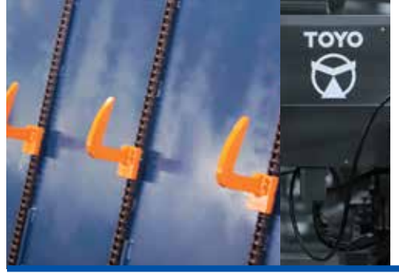
SD390 SD490 supported

Bend REBAR BENDER



Bend RING SPIRAL MACHINE





Line System

Cut Carry Bend

Automatically feeding the cut materials. No need of cranes and slinging tools.

TOYO Recommended

SORTING & FEEDING DEVICE

TAS-Ⅱ Carry

※Please refer to P.13 for the details of TAS-Ⅱ processing specifications.

ADDITIONAL CONVEYOR

TLC-L Carry

REBAR BENDING MACHINE

TBS-13-6-NC Bend

※Please refer to P.37-38 for the details of TBS-13-6-NC processing specifications.

FEEDING DEVICE

TS-V Carry

REBAR CUTTING MACHINE

TFC-LA Cut

※Please refer to P.19 for the details of TFC-LA processing specifications.

■ Machine & Processing Specifications

Specifications	TS-V (8m)
Required breaker capacity	20A ※Provided that distribution wiring is not connected to original power supply of "Automatic rebar bending machine" from power distribution terminal.
Min. feeding length	1,250mm
Max. feeding length	8,000mm
Chain hook feeding speed	5.9／7.0m/min(50/60Hz)
Motor capacity	0.75kW
Dimensions (L×W×H)	8,050x750x1,810mm
Total weight	1,580kg

Max.Feeding Quantity (pcs.)

Rebar diameter	D10	D13	D16	D19	D22	D25
Max. feeding q'ty	25	19	15	12	10	9

It conforms to the simultaneous cutting quantity of cutting machine. Quantity above is that of TFC-L(LA).

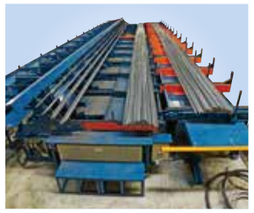
SORTING & FEEDING DEVICE
TAS-Ⅱ

Carry

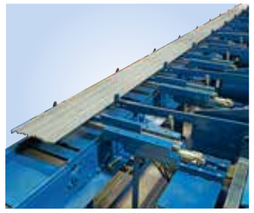
TOYO Recommended

Drastically enhancing the working efficiency by automatically sorting and feeding materials smoothly.

TFC-LA with TAS-Ⅱ



Sorting the material



Feeding to the conveyor

Machine & Processing Specifications

Specifications	**TAS-Ⅱ** (9m)
Required breaker capacity	50A
Standard feeding length	3,500~9,000mm
Time of stair treads going up & down	High speed : 58.7rpm Low speed : 42.0rpm (feeding 1 pce per second up/down movement)
Total motor capacity	4.45kW (excluding air-compressor)
Dimensions (L×W×H)	10,050×3,000×1,100mm
Total weight	5,000kg

Max.Loading & Lining-up Quantity (pcs.)

Rebar diameter	D10	D13	D16	D19	D22
On large bundles platform	400	220	140	100	70
On small bundles platform	50	60	40	20	20
Lining-up q'ty.	25	19	15	12	10

It conforms to the simultaneous cutting quantity of cutting machine. Quantity above is that of TFC-L(LA).

Number management : the first step of quality control

Prevention of misproduction and mis-shipping to the site;

it is a great challenge.

Conventional way of counting was to check the movement of the machine. Operators had to multiply it by the number of rebar simultaneously processed to get the actual number of rebar processed.
Our latest machines have their own "eye" to count rebars they processed. The counting device is attached to cutting machines and bending machines. You can check processed quantity at the both points of cutting and bending.

■Counter screen of TFC-LA

Our bending machines are equipped with two ways of counting mode:

Down counter ···Subtract the number processed from the preset number to process

Up counter ···Count up the number processed

■Down counter screen

■Up counter screen

originally equipped ■Bending machine TBS-13-6-NC・TRB-10-5Ⅱ・TRM-2A TBS-25-NC4R・TUB-25-1-NC・TUB-32-1-NC

optional ■Cutting machine TFC-MA・TFC-LA・TFC-LLA

AUTOMATIC REBAR CUTTING MACHINE

TFC-LLA
TFC-LA
TFC-MA
TFC-L
TFC-M
TFC-M-H
TFC-S-H

CUTTING CONVEYOR

TFC-SR

BANDSAW PRECISION CUTTING MACHINE

TFB-XL
TFB-LA

AUTOMATIC REBAR CUTTING MACHINE

TFC-LLA

D10-D41

Cut

Mega capacity model for mass production

Setting on touch screen

Dimension

Combination

Counter/ indoor use type (Option)

Line specification

Cutting blade width **TFC-LLA** **460mm**

Title screen

Processing screen

Counter screen

From cutting to discharging the finished products

*This machine has special specification

Machine & Processing Specifications

Specifications	**TFC-LLA** (10×12)
Required breaker capacity	150A
Applicable length of raw material	3,500～12,000mm
Cutting length range	750～10,000mm ●Discharging at specified position can be conducted from 1,500mm.
Cutting blade width	460mm
Conveyor effective width	430mm
Material feeding speed on conveyor	High speed : 60m/min Low speed : 40m/min(50/60Hz)
Total motor capacity	19.5kW (excluding air-compressor)
Dimensions (L×W×H)	24,650×4,400×2,100mm
Total weight	18,900kg

Simultaneous Max. Cutting Quantity (pcs.)

Rebar diameter	D10	D13	D16	D19	D22	D25	D29	D32	D35	D38	D41
SD390	40	30	24	20	16	15	10	8	7	5	3
SD490	40	30	24	20	14	13	9	7	6	4	3

※When cutting material SD490, please be aware that cutting blade's life will be shortened.Please contact us for further assistance.

AUTOMATIC REBAR CUTTING MACHINE

TFC-LA D10-D41 Cut

TFC-MA D10-D41 Cut

▼Movie

User-friendly & productive model

Setting on touch screen
Dimension
Combination

Cutting blade width
TFC-LA
300mm

Title screen


Processing screen

Counting screen

TFC-LA


Counter/ indoor use type (Option)

Setting on touch screen
Dimension
Combination

Cutting blade width
TFC-MA
225mm

TFC-MA
(Line specification)

Machine & Processing Specifications

Specifications	**TFC-LA** (10×12)
Required breaker capacity	100A
Applicable length of raw material	3,500～12,000mm
Cutting length range	500～10,000mm ●Discharging at specified position can be conducted from 1,250mm.
Cutting blade width	300mm
Conveyor effective width	275mm
Material feeding speed on conveyor	High speed : 54.0m/min Low speed : 27.0m/min(50/60Hz)
Total motor capacity	14.65kW (including air-compressor)
Dimensions (L×W×H)	24,160×4,070×1,600mm
Total weight	12,410kg

Simultaneous Max. Cutting Quantity (pcs.)

Rebar diameter	D10	D13	D16	D19	D22	D25	D29	D32	D35	D38	D41
SD345	25	19	15	12	10	9	6	5	4	3	1
SD390	25	19	15	12	9	7	5	4	3	2	1
SD490	25	19	15	11	8	6	4	3	3	2	1

※When cutting material SD490, please be aware that cutting blade's life will be shortened.Please contact us for further assistance.

Machine & Processing Specifications

Specifications	**TFC-MA** (10×12)
Required breaker capacity	100A
Applicable length of raw material	3,500～12,000mm
Cutting length range	500～10,000mm ●Discharging at specified position can be conducted from 1,250mm.
Cutting blade width	225mm
Conveyor effective width	200mm
Material feeding speed on conveyor	High speed : 50.6m/min Low speed : 25.3m/min(50/60Hz)
Total motor capacity	11.0kW (including air-compressor)
Dimensions (L×W×H)	24,050×3,310×1,350 mm
Total weight	9,070kg

Simultaneous Max. Cutting Quantity (pcs.)

Rebar diameter	D10	D13	D16	D19	D22	D25	D29	D32	D35	D38	D41
SD345	18	13	10	9	8	6	4	3	2	2	1
SD390	18	13	10	9	7	6	4	3	2	2	1
SD490	18	13	10	8	7	6	4	3	2	2	1

※When cutting material SD490, please be aware that cutting blade's life will be shortened.Please contact us for further assistance.

AUTOMATIC REBAR CUTTING MACHINE

TFC-L D10-D41 Cut

TFC-M D10-D41 Cut

▼Movie

Best-selling & cost effective models

Cutting blade width **TFC-M** **225mm**

TFC-M

Cutting Machine up graded to TFC-MW

Cutting blade width **TFC-L** **300mm**

TFC-L

■ **Machine & Processing Specifications**

Specifications	**TFC-L** (10×12)	**TFC-M** (10×12)
Required breaker capacity	100A	100A
Applicable length of raw material	3,500～12,000mm	3,500～12,000mm
Cutting length range	500～10,000mm ●Discharging at specified position can be conducted from 1,250mm.	500～10,000mm ●Discharging at specified position can be conducted from 1,250mm.
Cutting blade width	300mm	225mm
Conveyor effective width	275mm	200mm
Material feeding speed on conveyor	54.0m/min(50/60Hz)	50.6m/min(50/60Hz)
Total motor capacity	15.5kW(including air-compressor)	9.65kW(including air-compressor)
Dimensions (L×W×H)	24,200×4,100×1,600mm	24,050×3,310×1,500mm
Total weight	12,435kg	8,530kg

Simultaneous Max. Cutting Quantity (pcs.)

Model	Rebar diameter	D10	D13	D16	D19	D22	D25	D29	D32	D35	D38	D41
TFC-L	SD345	25	19	15	12	10	9	6	5	4	3	1
	SD390	25	19	15	12	9	7	5	4	3	2	1
	SD490	25	19	15	11	8	6	4	3	3	2	1
TFC-M	SD345	18	13	10	9	8	6	4	3	2	2	1
	SD390	18	13	10	9	7	6	4	3	2	2	1
	SD490	18	13	10	8	7	6	4	3	2	2	1

※When cutting material SD490, please be aware that cutting blade's life will be shortened.Please contact us for further assistance.

AUTOMATIC REBAR CUTTING MACHINE

TFC-M-H

with cutter MC-51W

D10-D38

Cut

TFC-S-H

with cutter MC-41

D10-D32

Cut

▼Movie

Simple & high performance

TFC-S-H

Cutting blade width **TFC-M-H** (MC-51W) **190mm**

Cutting blade width **TFC-S-H** (MC-41) **125mm**

Stopper setting switch

Lubricating pump

Option

Storage rack standby arm is to receive finished products temporarily. After bundling, they can be discharged to the products storage rack.

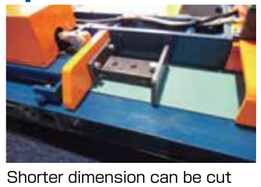
TFC-M-H
Material standby (feeding) switch

TFC-S-H
Operating lever of material standby (feeding)

Option

Operation switch of storage rack standby arm

Option



Shorter dimension can be cut with stopper for the short length

Machine & Processing Specifications

Specifications	**TFC-M-H** (10×12·MC-51W)	**TFC-S-H** (6×7·MC-41)
Required breaker capacity	75A	60A
Applicable length of raw material	3,500～12,000mm	3,500～7,000mm
Cutting length range	1,050～10,000mm ● When product discharging unit is not attached ; 500mm～ ● When stopper for short dimension is attached ; 300mm～ (Optional)	1,060～6,500mm ● When product discharging unit is not attached ; 750mm～ ● When stopper for short dimension is attached ; 300mm～ (Optional)
Cutting blade width	190mm	125mm
Conveyor effective width	185mm	125mm
Material feeding speed on conveyor	54.0／64.7 m/min(50/60Hz)	54.3／65.2 m/min(50/60Hz)
Total motor capacity	8.35kW(including air-compressor)	4.7kW (including air-compressor)
Dimensions (L×W×H)	23,200×2,650×1,450mm	14,800×2,400×1,390mm
Total weight	5,900kg	2,500kg

Simultaneous Max. Cutting Quantity (pcs.)

Model	Rebar diameter	D10	D13	D16	D19	D22	D25	D29	D32	D35	D38
TFC-M-H	SD390	16	12	10	7	5	4	3	2	1	1※2
	SD490	16	12	10	5	4	3	2	2	1	1※2
TFC-S-H	SD390	10	7	6	4	3	2	1	1	—	—
	SD490	10	7	5	4	2	2	1	1	—	—

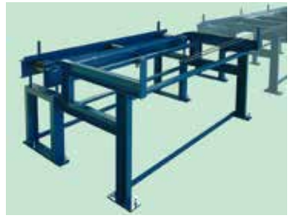
※When cutting material SD490, please be aware that cutting blade's life will be shortened.Please contact us for further assistance.
※2Upper blade should be replaced with the blade for large rebar.

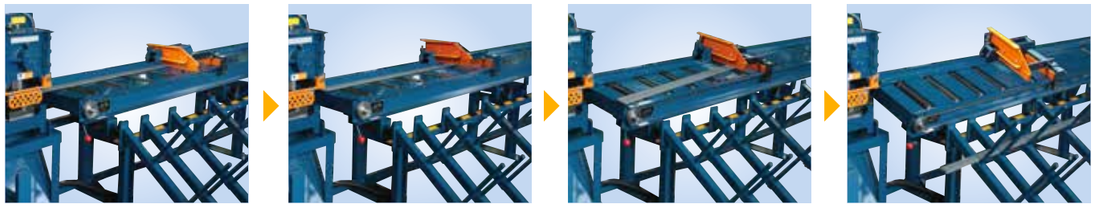
CUTTING CONVEYOR
TFC-SR
D10-D32

Cut

Working efficiency can be enhanced by attaching conveyor to your rebar cutter

Option Additional material platform





Feed-out conveyor tilts by switch after cutting and cut rebars are discharged into storage racks.

Machine & Processing Specifications

Specifications	**TFC-SR** (5×6)
Required breaker capacity	60A
Applicable length of raw material	3,500~6,000mm
Cutting length range	400~5,000mm※
Conveyor effective width	300mm
Material feeding speed on conveyor	58.0／70.0 m/min(50/60Hz)
Total motor capacity	1.0kW(excluding air-compressor)
Dimensions (L×W×H)	11,670×1,910×960mm※
Total weight	1,300kg

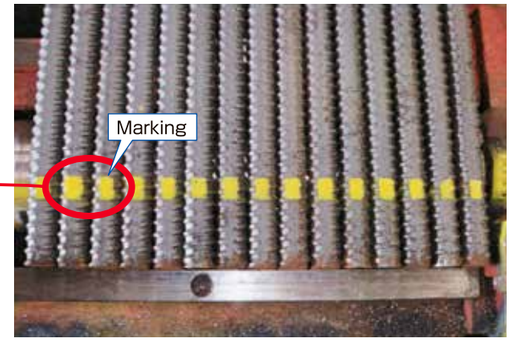
Simultaneous Max. Cutting Quantity (pcs.)

Rebar diameter	D10	D13	D16	D19	D22	D25	D29	D32
Quantity	8	6	5	4	3	2	1	1

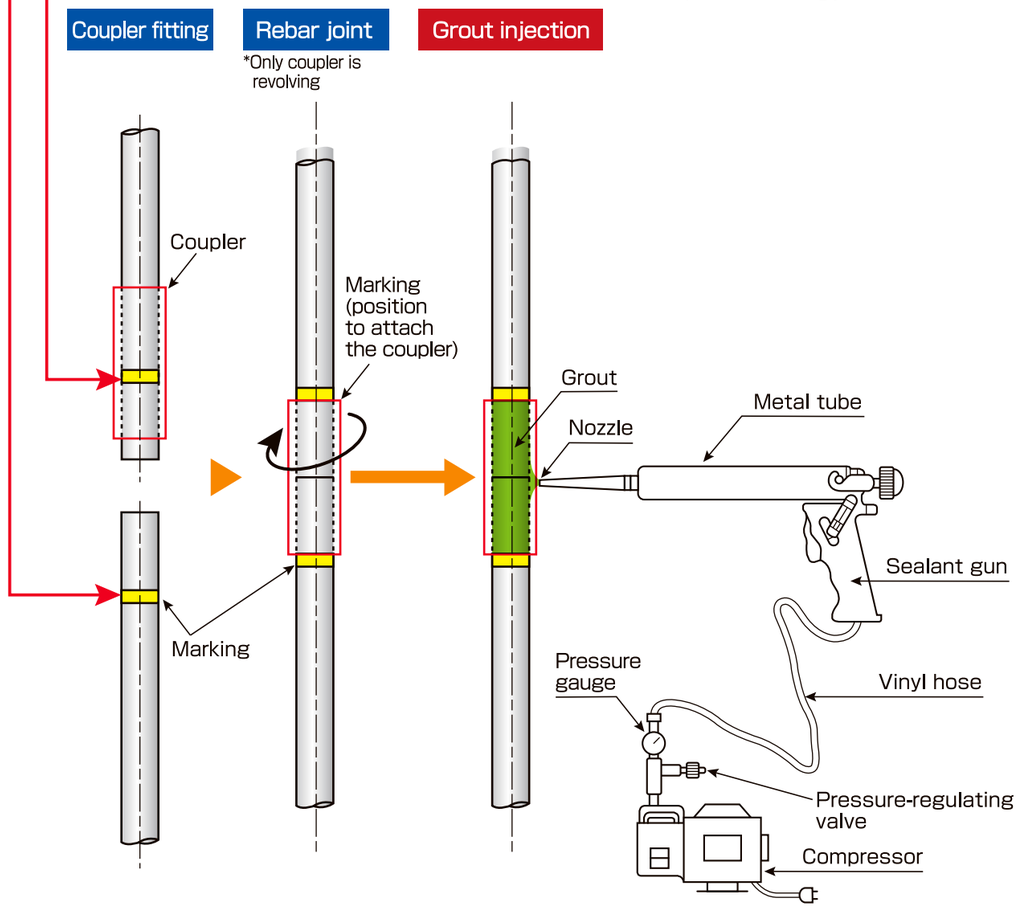
※Cutting quantity changes based on which cutting machine you get it attached. Please confirm detail with us.

Mechanical Joint (screw-knotted reinforcement)

All you have to do is to fix rebars with the screw-knotted joint. Anyone is able to carry out the work after a short course. A great quantity can be jointed with a small number of workers.
Without any weather impact and large-scaled facilities, construction work can be facilitated.



Conventional way of gas pressure welding joints



BANDSAW PRECISION CUTTING MACHINE

TFB-XL

D16-D51

Cut

Mass production can be done by bandsaw cutting, achieving no deformation of cut surface regardless of rebar material specs.

Cutting in progress

Setting on touch screen

Dimension

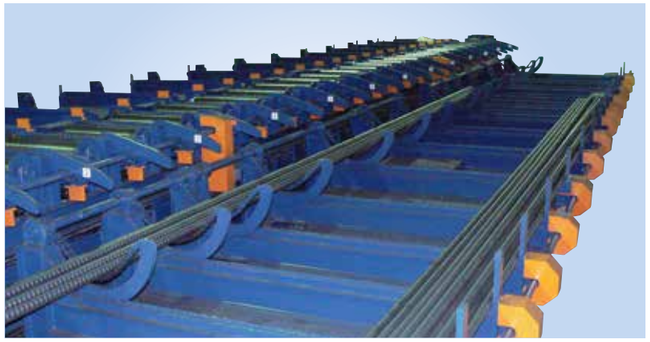
Combination

Counting screen

Marker selecting screen

Dimension setting screen

Manual screen



Auto-storage rack (Option)
Bundling can be done easily without cranes.

D25▸18PCS **D38▸12PCS** **D51▸9PCS**

Machine & Processing Specifications

Specifications	**TFB-XL** (13×13)
Required breaker capacity	125A
Applicable length of raw material	3,500~13,000mm
Cutting length range	750~13,000mm ●Automatic discharging can be conducted from 1,250mm. ●When stopper for short dimension is attached ; 350~749mm
Cutting blade width	600mm
Conveyor effective width	580mm
Material feeding speed on conveyor	10.2~40.0 m/min(50/60Hz)
Total motor capacity	21.8kW(excluding air-compressor)
Dimensions (L×W×H)	28,950×4,610×2,080mm(excluding control panel)
Total weight	25,800kg

Simultaneous Max. Cutting Quantity (pcs.)

Rebar diameter	D16	D19	D22	D25	D29	D32	D35	D38	D41	D51
Quantity	28	24	21	18	16	15	13	12	11	9

BANDSAW PRECISION CUTTING MAHCINE

TFB-LA

D16-D51

Cut

Mass production can be done by bandsaw cutting, achieving no deformation of cut surface regardless of rebar material specs.

Title screen


Processing screen


Dimension setting screen

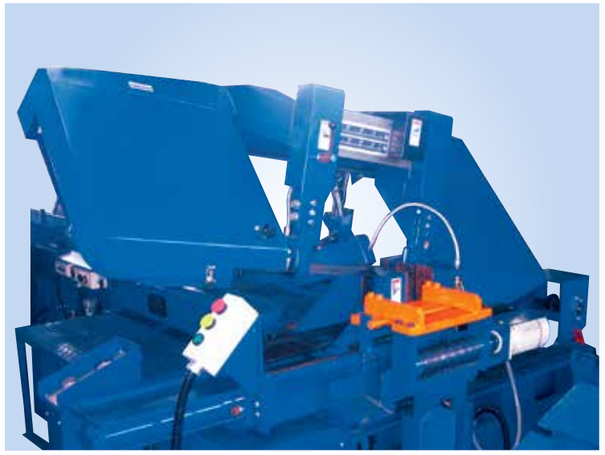

Manual screen

AUTOMATIC REBAR CUTTING MACHINE

Setting on touch screen

Dimension

Combination



D25▸9PCS D38▸6PCS D51▸4PCS

Machine & Processing Specifications

Specifications	**TFB-LA** (13×13)
Required breaker capacity	125A
Applicable length of raw material	3,500～13,000mm
Cutting length range	500～13,000mm ●Discharging at specified position can be conducted from 1,255mm.
Cutting blade width	330mm
Conveyor effective width	275mm
Material feeding speed on conveyor	13.5～54.0 m/min(50/60Hz)
Total motor capacity	19.525kW(including air-compressor)
Dimensions (L×W×H)	28,170×3,825×2,100mm
Total weight	12,500kg

Simultaneous Max. Cutting Quantity (pcs.)

Rebar diameter	D16	D19	D22	D25	D29	D32	D35	D38	D41	D51
Quantity	15	12	11	9	8	7	6	6	5	4

AUTOMATIC REBAR BENDING MACHINE

TBS-25-NC4R
TBS-25-1A
TBS-25-1
TBS-25-1H
TBS-13-6-NC
TBS-13-6
TRB-10-5Ⅱ
TRM-2A

DOUBLE BENDER

TWB-40SNⅡ
TBM-41-1AS
TBM-41-1S

PRODUCT CONVEYOR

TCS-550
TCS-700

UNIVERSAL BENDER

TUB-32-1-NC
TUB-25-1-NC
TUB-19-1-NC

AUTOMATIC REBAR BENDING MACHINE

TBS-25-NC4R D10-D25 Bend

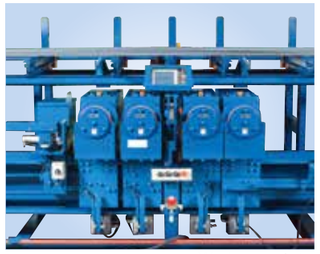
▼Movie

TOYO Recommended

A model for bending high strength rebar: SD785, SD490.
NC of dimension and angle enhances operability.

Setting on touch screen
- Angle
- Dimension
- Shape

Bending closed hoop



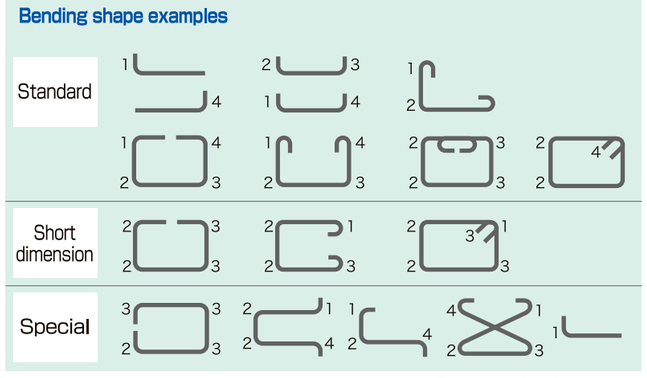
Work complete

Processing screen

Counter screen

Data register screen

Bending shape examples



(Figure shows No. of bending unit)

Chucking device in the middle

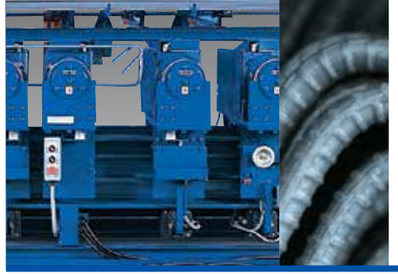
Machine & Processing Specifications

Specifications	TBS-25-NC4R (10m)
Required breaker capacity	50A
Min. distance between fulcrum centers	390mm(No.2-3)
Max. distance between fulcrum centers	9,340mm(No.1-4)
Bending angle	15～180°
Bending unit revolution	2.5～7.5 rpm(50/60Hz)
Total motor capacity	12.55kW (including air-compressor)
Dimensions (L×W×H)	10,435×2,260×1,605mm
Total weight	6,400kg

Simultaneous Max. Bending Quantity (pcs.)

Rebar diameter	D10	D13	D16	D19	D22	D25
Fulcrum roller dia.	φ39	φ52	φ62	φ74	φ86	φ97
SD390	9	7	5	3	2	1
SD490	9	7	4	2	1	1
SD785	8	5	3	—	—	—

*Fulcrum rollers for 5D and 6D are optional



AUTOMATIC REBAR BENDING MACHINE

TBS-25-1A D10-D25 Bend

TBS-25-1/1H D10-D25 Bend

▼Movie

Working efficiency can be enhanced dratistically with 5-head bending machine.

Bending shape examples

Setting on touch screen

Dimension

Shape

▼Movie

Control panel

Processing screen

TBS-25-1A

TBS-25-1/1H

Setting on touch screen

Shape

AUTOMATIC REBAR BENDING MACHINE

Machine & Processing Specifications

Specifications	TBS-25-1A (10m)	TBS-25-1 (10m)	TBS-25-1H (10m)
Required breaker capacity	60A	30A	50A
Min. distance between fulcrum centers	290mm(No.3-4)	265mm(No.3-4)	265mm(No.3-4)
Max. distance between fulcrum centers	9,440mm(No.1-5)	9,440mm(No.1-5)	9,500mm(No.1-5)
Bending angle	15～180°	15～180°	15～180°
Bending unit revolution	6.0／7.2 rpm(50/60Hz)	7.2 rpm(50/60Hz)	5.4／6.4 rpm(50/60Hz)
Total motor capacity	11.25kW (including air-compressor)	9.75kW (including air-compressor)	13.25 kW (including air-compressor)
Dimensions (L×W×H)	10,435×2,100×1,605mm	10,180×2,100×1,605mm	10,100×1,855×1,650mm
Total weight	4,500kg	4,380kg	4,750kg

Simultaneous Max. Bending Quantity (pcs.)

Model	Rebar diameter	D10	D13	D16	D19	D22	D25
	Fulcrum roller dia.	φ39	φ52	φ62	φ73	φ84	φ94
TBS-25-1A	SD345	9	7	5	2	1	1
	SD390	9	7	4	2	1	1
TBS-25-1	SD345	9	7	5	2	1	1
	SD390	9	7	4	2	1	1
TBS-25-1H	SD390	9	7	5	3	2	1
	SD490(600)	9	7	4(3)	2	1	1

For TBS-25-1: Fulcrum roller for 6D is optional (bending angle: up to 90°).

AUTOMATIC REBAR BENDING MACHINE

TBS-13-6-NC D10-D16 Bend

▼Movie

TOYO Recommended

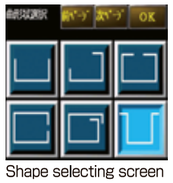
5-head bending machine with NC of dimension and angle.

Setting on touch screen

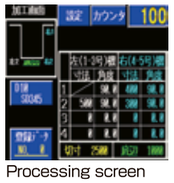
- Angle
- Dimension
- Shape

Bending shape examples

Counting device



Shape selecting screen



Processing screen

Down counter screen

Machine & Processing Specifications

Specifications	TBS-13-6-NC (8m)
Required breaker capacity	50A
Min. distance between fulcrum centers	180mm (No.3-4)
Max. distance between fulcrum centers	7,400mm (No.1-5)
Bending angle	15～180°
Bending unit revolution	MAX9.5 rpm(50/60Hz)
Total motor capacity	7.5kW (including air-compressor)
Dimensions (L×W×H)	8,480×1,980×1,670mm
Total weight	3,400kg

Simultaneous Max. Bending Quantity (pcs.)

Rebar diameter	D10	D13	D16
Fulcrum roller dia.	ϕ39	ϕ39 ϕ53	ϕ53 ϕ59
SD345	8	6	3
SD390	8	5	2

AUTOMATIC REBAR BENDING MACHINE

TBS-13-6

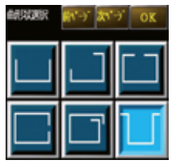
D10-D16

Bend

▼Movie

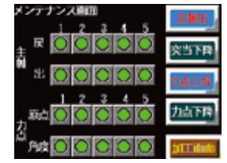
High speed & productivity for bending hoop and stirrup

Bending shape examples



Selecting shape screen

Processing screen



Maintenance screen

Setting on touch screen

Shape

Stopper can be attached to bending units No.1, No.2, and No.3

Stopper Unit No.1 Unit No.2 Unit No.3

Processing Speed (13mm×6pcs.)

10 sec. 7.5 sec. 7.5 sec.

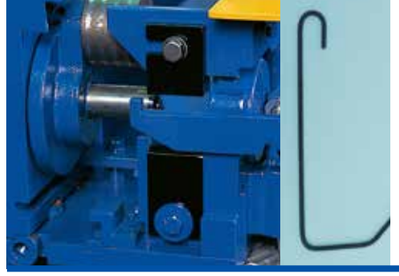
*Bending with 60Hz

Machine & Processing Specifications

Specifications	**TBS-13-6** (8m)
Required breaker capacity	30A
Min. distance between fulcrum centers	166mm
Max. distance between fulcrum centers	7,700mm(No.1-5)
Bending angle	15~180°
Bending unit revolution	9.5 rpm
Total motor capacity	5.25kW (including air-compressor)
Dimensions (L×W×H)	8,070×1,950×1,570mm
Total weight	2,800kg

Simultaneous Max. Bending Quantity (pcs.)

Rebar diameter	D10	D13	D16
Fulcrum roller dia.	ϕ39	ϕ39 ϕ53	ϕ53 ϕ59
SD345	8	6	3
SD390	8	5	2



AUTOMATIC REBAR BENDING MACHINE

TRB-10-5Ⅱ

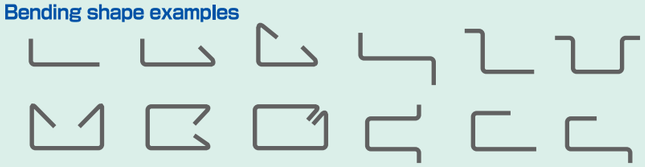
D10-D16

Bend

▼Movie

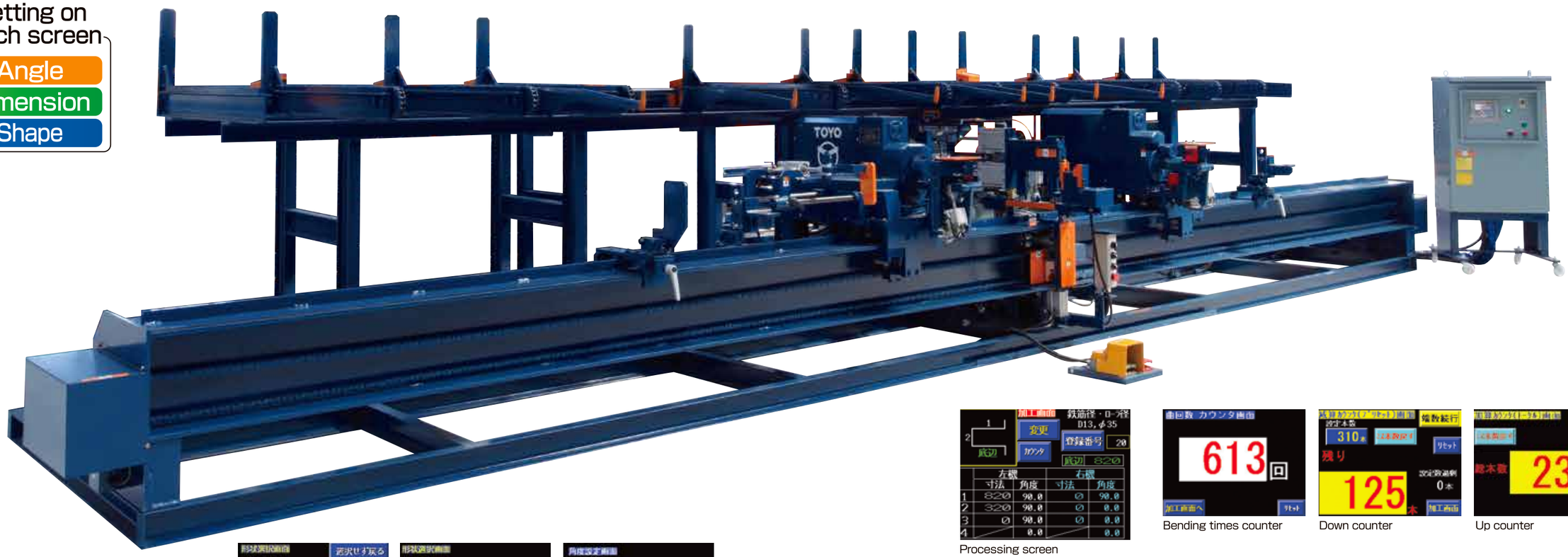
Capable of bending both upward and downward, achieving flexibly bending various shapes.

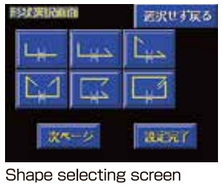
Bending shape examples



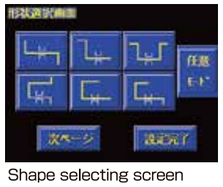
Setting on touch screen

- Angle
- Dimension
- Shape

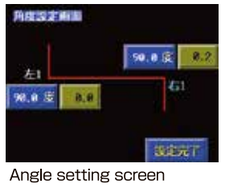




Shape selecting screen



Shape selecting screen



Angle setting screen

Bending downward

Bending upward

Processing screen

Bending times counter

Down counter

Up counter

Machine & Processing Specifications

Specifications	TRB-10-5Ⅱ (6m)
Required breaker capacity	30A
Min. distance between fulcrum centers	250mm
Max. distance between fulcrum centers	5,350mm
Bending angle	Upward:15～180°/Downward:15～90°
Bending unit revolution	6.2～9.3 rpm
Total motor capacity	4.55kW (including air-compressor)
Dimensions (L×W×H)	6,450×2,050×1,680mm
Total weight	2,450kg

Simultaneous Max. Bending Quantity (pcs.)

Rebar diameter	D10	D13	D16
Fulcrum roller dia.	φ35	φ35	φ53
SD345	5	4	2
SD390	5	3	1

AUTOMATIC REBAR BENDING MACHINE

TRM-2A

D10-D16

Bend

▼Movie

Capable of bending small & complicated shapes, which are hard to be bent by manual bender

Numeric keypad for dimension setting


Processing screen

Shape selecting screen

Down counter screen

Setting on touch screen

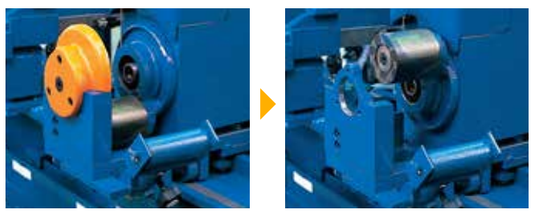
Dimension

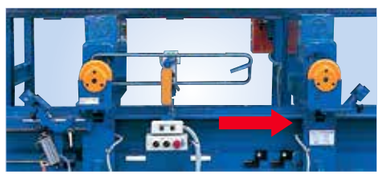
Shape

Bending shape examples


Chucking (counting) device


Stopper


Bending arm can be uplifted for easy replacement of power point rollers


Right bending unit travels at the time of final bending

Machine & Processing Specifications

Specifications	**TRM-2A** (6m)
Required breaker capacity	30A
Min. distance between fulcrum centers	245mm
Max. distance between fulcrum centers	5,545mm
Bending angle	15～180°
Bending unit revolution	7.8／9.4 rpm(50/60Hz)
Total motor capacity	3.8kW (including air-compressor)
Dimensions (L×W×H)	6,425×1,910×1,570mm
Total weight	2,250kg

Simultaneous Max. Bending Quantity (pcs.)

Rebar diameter	D10	D13	D16
Fulcrum roller dia.	ϕ35	ϕ35 ϕ53	ϕ53
SD345	7	5	2
SD390	7	4	2

DOUBLE BENDER

TWB-40SNII

D16-D38

Bend

▼Movie

Large and long rebars can be processed by only one operator.

Bending shape examples

Material supply and finished products discharge can be done simultaneously by the lifts

Angle setting dials

Machine & Processing Specifications

Specifications	**TWB-40SNII** (10.5m)
Required breaker capacity	60A
Min. distance between fulcrum centers	1,400mm
Max. distance between fulcrum centers	10,500mm
Bending angle	15～180° (large radius:15～90°)
Bending unit revolution	Low speed 5.2／6.2 rpm(50/60Hz)　High speed 7.6／9.2 rpm(50/60Hz)
Total motor capacity	10.4kW (including air-compressor)
Dimensions (L×W×H)	13,650×3,560×1,650mm
Total weight	5,800kg

Simultaneous Max. Bending Quantity (pcs.)

Rebar diameter	D16	D19	D22	D25	D29	D32	D35	D38
Fulcrum roller dia.	φ64	φ74	φ86	φ97	φ113	φ125	φ137	φ148
SD390	3	3	2	2	2※	1※	1※	1※
SD490	3	3	2	2※	1※	1※	—	—
Fulcrum roller dia. for large radius	φ250・φ300・φ400 ／ φ500・φ600 ／ φ700・φ800 (make-to-order parts)							

Fulcrum rollers for 5D and 6D are optional. ※: Should be bent at low speed

DOUBLE BENDER

TBM-41-1AS

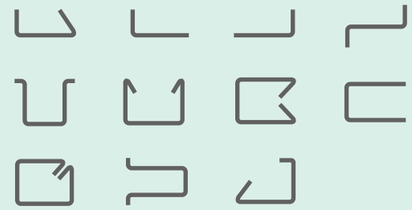
D19-D41

Bend

▼Movie

Capable of bending rebar up to D41-SD490.
Touch screen is equipped for the high operability.
Right and left bending units travelling makes it possible to perform multiple angle bending.

Bending shape examples



Bending angle setting dial

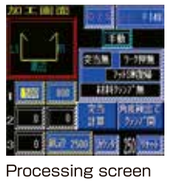
Processing with large radius

Setting on touch screen

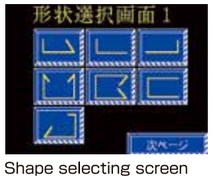
Dimension

Shape

TBM-41-1AS



Processing screen



Shape selecting screen

Machine & Processing Specifications

Specifications	**TBM-41-1AS** (10m)
Required breaker capacity	100A
Min. distance between fulcrum centers	1,450mm
Max. distance between fulcrum centers	8,200mm
Bending angle	15～180° (large radius:15～90°)
Bending unit revolution	4.7／5.7 rpm(50/60Hz)
Total motor capacity	15.5kW (including air-compressor)
Dimensions (L×W×H)	11,545×2,410×1,375mm
Total weight	6,000kg

Simultaneous Max. Bending Quantity (pcs.)

Rebar diameter	D19	D22	D25	D29	D32	D35	D38	D41
Fulcrum roller dia.	φ113	φ125	φ148	φ168	φ186	φ204	φ222	φ237
SD390	4	3	3	2	2	1	1	1
SD490	4	3	3	2	2	1	1	1
Fulcrum roller dia. for large radius	φ250・φ300・φ400 ／ φ500・φ600 ／ φ700・φ800 (make-to-order parts)							

*Fulcrum rollers for 4D and 5D are optional

DOUBLE BENDER

TBM-41-1S

D19-D41

Bend

Capable of bending rebar up to D41-SD490.
Left bending unit is fixed and right one is mobile.
Function limited type.

TBM-41-1S
Examples of bending shapes

Bending angles setting dial

Operating switch

Dimension setting (by tape measure)

Machine & Processing Specifications

Specifications	**TBM-41-1S** (10m)
Required breaker capacity	75A
Min. distance between fulcrum centers	900mm
Max. distance between fulcrum centers	8,500mm
Bending angle	15～180° (large radius:15～90°)
Bending unit revolution	3.4／4.1 rpm(50/60Hz)
Total motor capacity	10.8kW (including air-compressor)
Dimensions (L×W×H)	12,207×2,345×1,575mm
Total weight	6,200kg

Simultaneous Max. Bending Quantity (pcs.)

Rebar diameter	D19	D22	D25	D29	D32	D35	D38	D41
Fulcrum roller dia.	φ113	φ125	φ148	φ168	φ186	φ204	φ222	φ237
SD390	4	3	3	2	2	1	1	1
SD490	4	3	3	2	2	1	1	1
Fulcrum roller dia. for large radius	φ250・φ300・φ400 ／ φ500・φ600 ／ φ700・φ800 (make-to-order parts)							

PRODUCT CONVEYOR

TCS-550/700

Carry

Carrying finished products by conveyor enhances the workability

Conveyor in use

Machine & Processing Specifications

Specifications	**TCS-550** (5.5m)	**TCS-700** (7m)
Required breaker capacity	15A	15A
Max. conveying weight	1,500kg	1,500kg
Conveyor effective width	1,140mm	1,140mm
コンベア有効長さ	5,300mm	6,800mm
Conveying speed	4.7／5.7 m/min(50/60Hz)	4.7／5.7 m/min(50/60Hz)
Total motor capacity	0.4kW	0.4kW
Dimensions (L×W×H)	5,525×1,260×270mm	7,025×1,260×270mm
Total weight	550kg	650kg

UNIVERSAL BENDER

TUB-32-1-NC D16-D32 Bend

TUB-25-1-NC D10-D25 Bend

▼Movie

Capable of bending both upward and downward. A model suitable for producing products used in civil engineering works (such as bridge girder) and segment construction work.

Setting on touch screen

- Angle
- Dimension
- Shape

TUB-25-1-NC

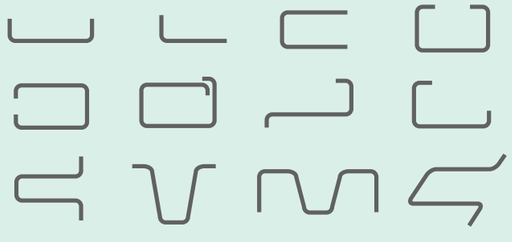
Start screen

Processing screen

Shape selecting screen

Counter screen

Bending shape examples



Machine & Processing Specifications

Specifications	TUB-32-1-NC (10m)	TUB-25-1-NC (10m)
Required breaker capacity	75A	60A
Min. distance between fulcrum centers	770mm	490mm
Max. distance between fulcrum centers	8,500mm	8,790mm
Bending angle	Upward 15°~180° Downward 15°~135°	Upward 15°~180° Downward 15°~135°
Bending unit revolution	MAX4.2 rpm(50/60Hz)	1.8~6.1 rpm(50/60Hz)
Total motor capacity	11.2kW (including air-compressor)	6.75kW (including air-compressor)
Dimensions (L×W×H)	10,500×1,950×1,720mm	10,435×1,980×1,570mm
Total weight	6,000kg	4,700kg

Simultaneous Max. Bending Quantity (pcs.)

Model	Rebar diameter	D10	D13	D16	D19	D22	D25	D29	D32
	Fulcrum roller dia.	φ36	φ48	φ64/φ62	φ74	φ86	φ97	φ113	φ125
TUB-32-1-NC	SD345	—	—	4	3	2	2	1	1
	SD390	—	—	4	3	2	2	1	1
TUB-25-1-NC	SD345	5	4	3	2	1	1	—	—
	SD390	5	4	3	2	1	—	—	—

UNIVERSAL BENDER
TUB-19-1-NC D10-D19 Bend

▼Movie

Capable of bending both upward and downward. A model suitable for producing products used in civil engineering works (such as bridge girder) and segment construction work.

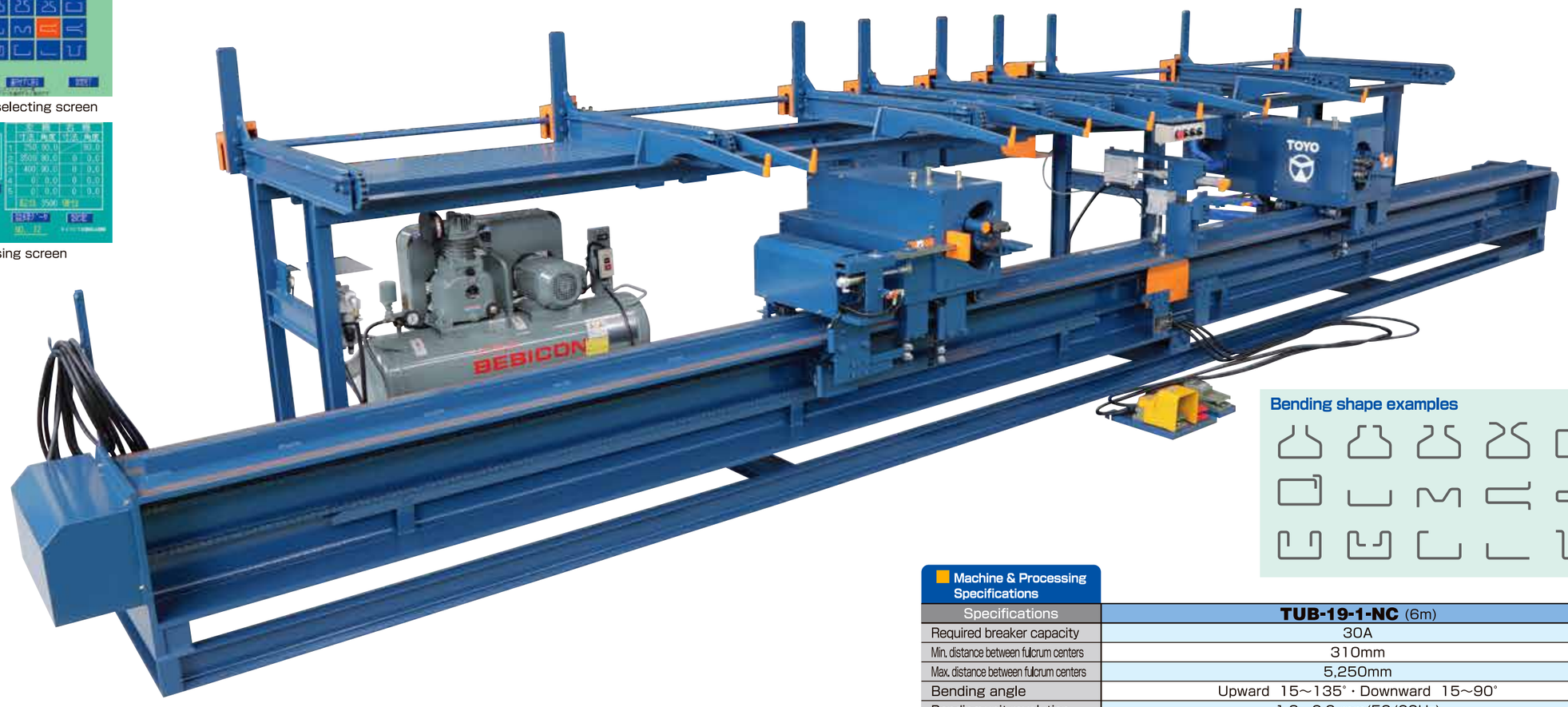
Setting on touch screen
- Angle
- Dimension
- Shape

Shape selecting screen

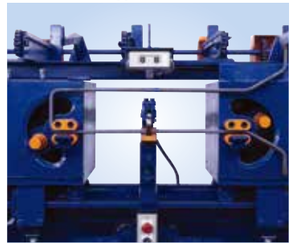
Processing screen

Stopper

Chucking device



Processing product examples



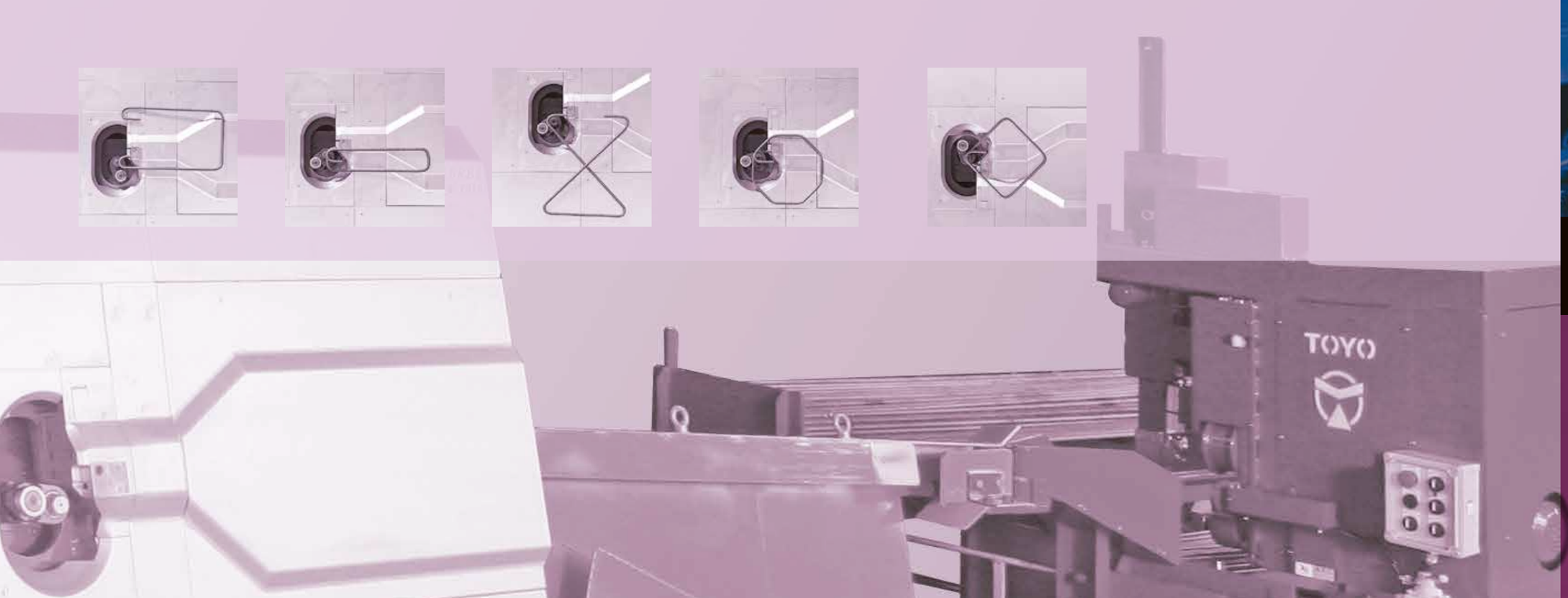
Bending shape examples

Machine & Processing Specifications

Specifications	TUB-19-1-NC (6m)
Required breaker capacity	30A
Min. distance between fulcrum centers	310mm
Max. distance between fulcrum centers	5,250mm
Bending angle	Upward 15~135° · Downward 15~90°
Bending unit revolution	1.8~6.0 rpm(50/60Hz)
Total motor capacity	4.55kW (including air-compressor)
Dimensions (L×W×H)	6,650×1,950×1,500mm
Total weight	3,500kg

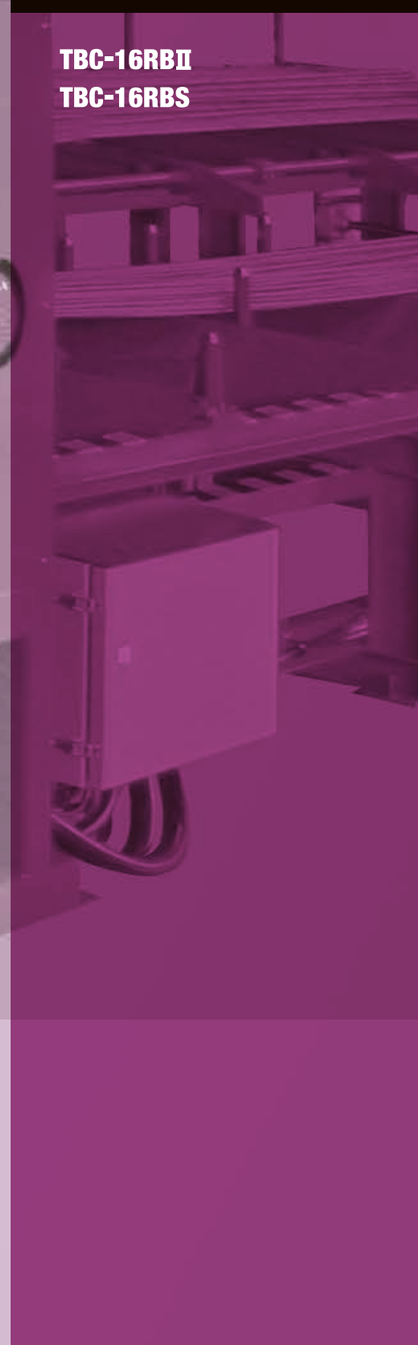
Simultaneous Max. Bending Quantity (pcs.)

Rebar diameter	D10	D13	D16	D19
Fulcrum roller dia.	R15	R15	R25	R25
SD345	6	4	2	1
SD390	6	3	2	—



AUTOMATIC REBAR CUTTING & BENDING MACHINE

TBC-16RBⅡ
TBC-16RBS



AUTOMATIC REBAR CUTTING & BENDING MACHINE

TBC-16RBⅡ

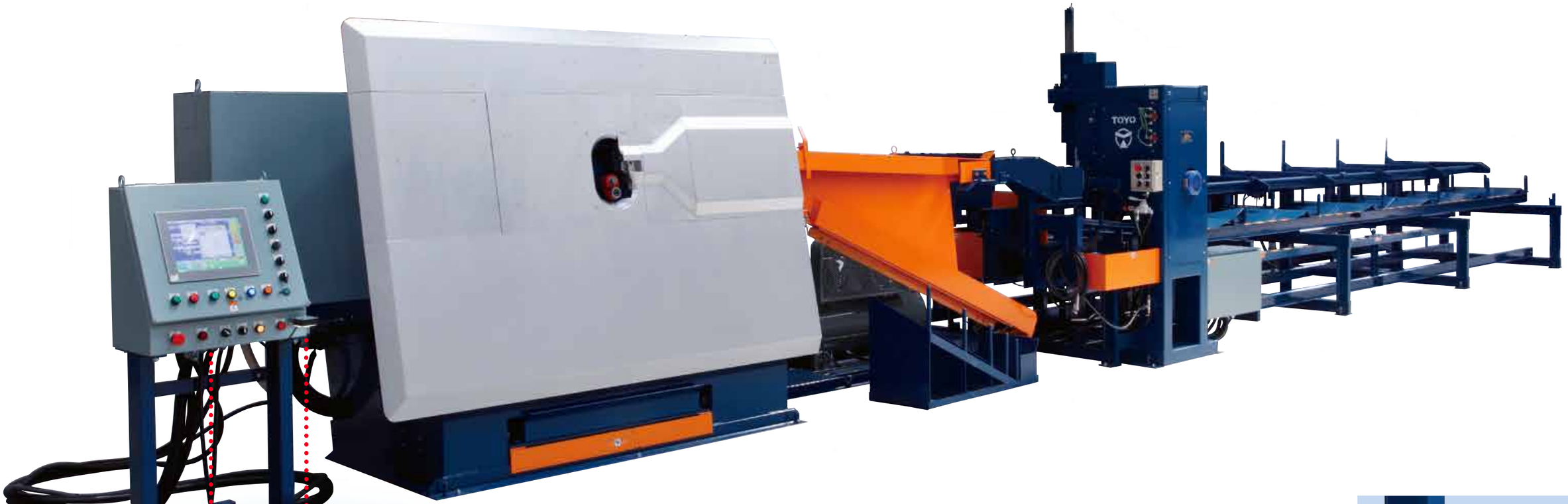
D10-D16

Cut Bend

▼Movie

TOYO Recommended

Cut & bend machine for straight rebar Suitable for various shapes and high-mix low-volume production

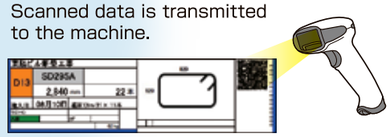


Data transmission makes it more effective!

Transmission of processing data from the office eliminates labor and possible input error by a machine operator. Operational efficiency can be greatly enhanced.

Optional QR code

Scanned data is transmitted to the machine.



Processing screen

Shape list for frequent use

Data register screen

Haunch processing screen

Setting screen

Counter screen

Feeding device

AUTOMATIC REBAR CUTTING & BENDING MACHINE

TBC-16RBⅡ D10-D16 Cut Bend

TOYO Recommended

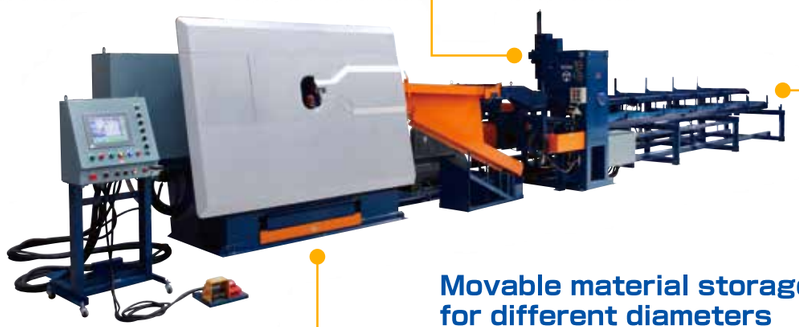
From feeding to cutting and bending by one machine Advanced model reducing manpower and processing time drastically

Automatic feeding

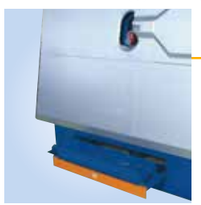
Pick up a rebar

Supply to the pinch rollers

Pick up next rebar



Equipped with scrap collecting tray



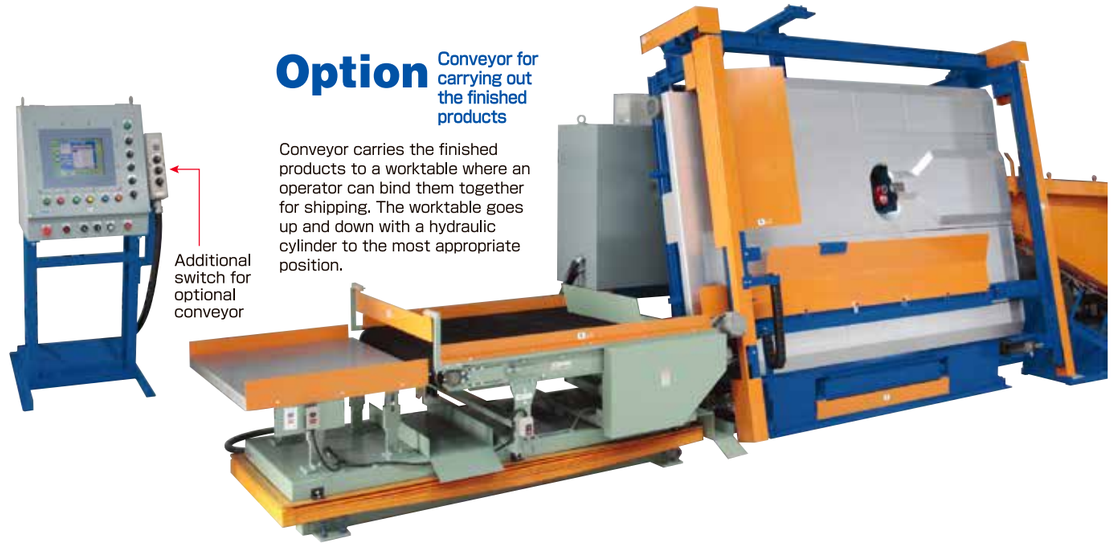
Movable material storage for different diameters

Machine & Processing Specifications

Specifications	**TBC-16RBⅡ** (12m)
Required breaker capacity	75A
Processable material length	4,000～12,000mm
Max. q'ty loadable on the material plat form	D10:400pcs.,D13:220pcs.,D16:140pcs.
Bending angle	Upward 5°～135° Downward 5°～180°
Bending unit revolution	MAX 187.0 rpm
Feeding speed	MAX 155.0 m/min
Total motor capacity	20.9kW (including air compressor)
Dimensions (L×W×H)	16,400×2,105×2,200mm
Total weight	6,500kg

Simultaneous Max. processing Quantity (pcs.)

Rebar diameter	D10	D13		D16
Fulcrum roller dia.	ϕ35	ϕ35	ϕ39	ϕ48
SD345	1	1	1	1
SD390	1	1	1	—



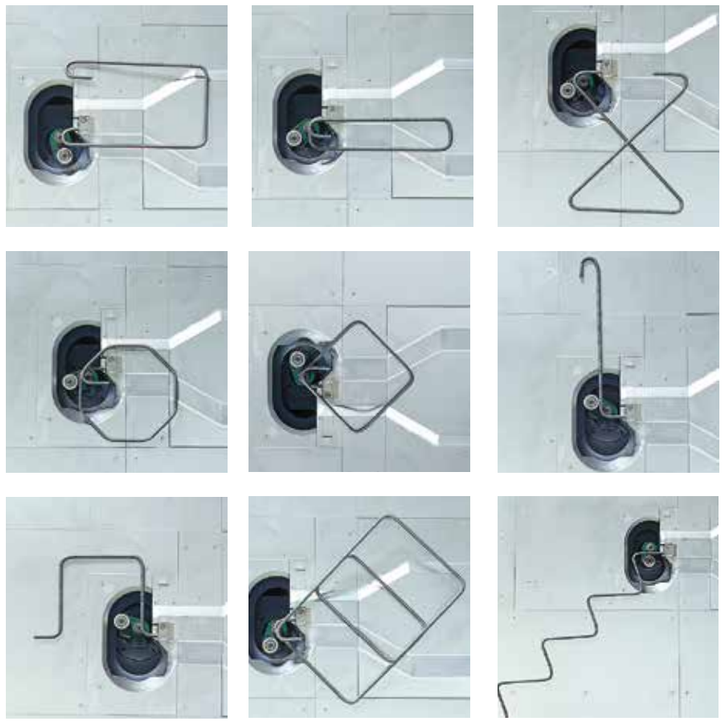
Option Conveyor for carrying out the finished products

Conveyor carries the finished products to a worktable where an operator can bind them together for shipping. The worktable goes up and down with a hydraulic cylinder to the most appropriate position.

Eco-friendly machine making efficient use of rebars

Off-cuts are cut to the length for reuse

Bending shape examples



AUTOMATIC REBAR CUTTING & BENDING MACHINE

TBC-16RBS

D10-D16

Cut Bend

(Make-To-Order Model)

Automatically feeding, cutting and bending of raw mateirals
High-strength rebar SD785 is supported.


Processing screen


Setting screen


Haunch Processing screen

Continuous processing screen

List screen

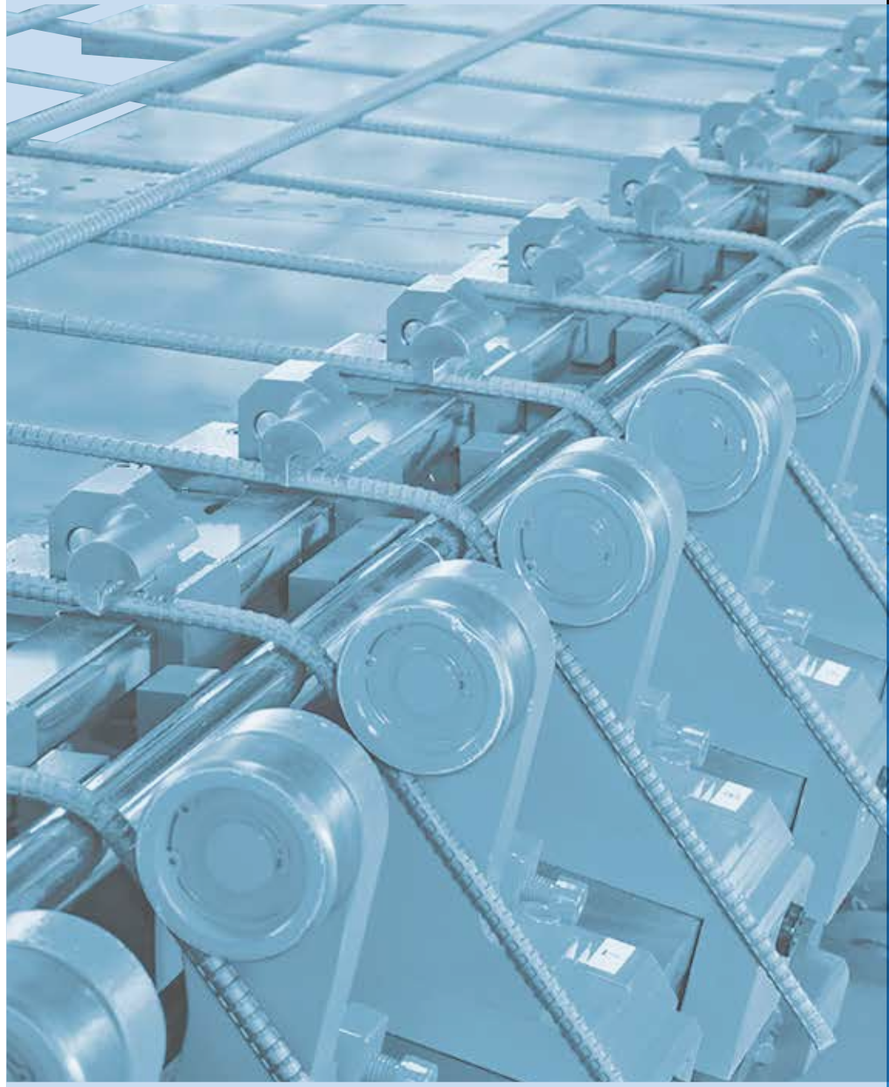
Machine & Processing Specifications

Specifications	**TBC-16RBS** (12m)
Required breaker capacity	150A
Processable material length	5,000～12,000mm
Max. q'ty loadable on the material plat form	D10:400pcs.,D13:220pcs.,D16:140pcs.
Bending angle	Upward 5°～135° Downward 5°～180°
Bending unit revolution	MAX 93.7 rpm(50/60Hz)
Feeding speed	MAX 104.0 m/min(50/60Hz)
Total motor capacity	38.7kW (including air compressor)
Dimensions (L×W×H)	17,520×3,185×3,850mm
Total weight	8,300kg

Simultaneous Max. processing Quantity (pcs.)

Rebar diameter	D10		D13		D16	
Fulcrum roller dia.	ϕ39	ϕ48	ϕ52	ϕ62	ϕ62	ϕ77
SD345	1	1	1	1	1	1
SD785	1	1	1	1	1	1

MESH&SLAB BENDER

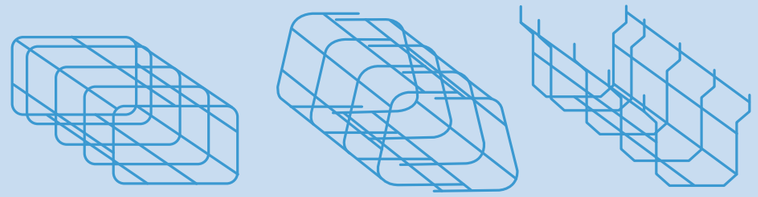


MESH BENDER

FMI-2000H
FMI-4000H
FMI-5000H
FM-2000
TMP-5000H
FM-4000UD
FMW-2500H
FMG-6-30

SLAB BENDER

TEB-19-NC
EB-19
EB-16

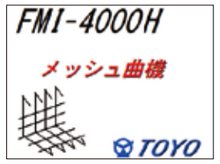


MESH BENDER
FMI series
2000H/4000H/5000H

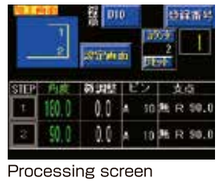
Bend

Involute system, with “Automatic Bending Angle Stepping Function”

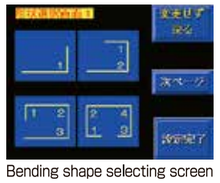
FMI-4000H



Initial screen



Processing screen



Bending shape selecting screen

▼Movie

Machine & Processing Specifications

Specifications		FMI-2000H (2m)	FMI-4000H (4m)	FMI-5000H (5m)
Required breaker capacity		30A	30A	50A
Max. mesh width to be processed		2,000mm	4,000mm	5,000mm
Bending angle to be processed	Round fulcrum	15~180°	15~180°	15~180°
	Sharp fulcrum	15~135°	15~135°	—
	Large-R fulcrum	15~90°	15~90°	15~90°
Bending revolution		2.7／3.3 rpm(50/60Hz)	2.9／3.4 rpm(50/60Hz)	2.2／2.6 rpm(50Hz) 2.6／3.1 rpm(60Hz)
Total motor capacity		3.7kW	3.7kW	5.5kW
Dimensions (L×W×H)		2,430×855×830mm	4,390×855×830mm	5,400×1,250×830mm
Total weight		2,000kg	2,700kg	3,500kg

Model		Simultaneous Max. Bending Capacity(pcs.)				
FMI-2000H	Material SD345	Rebar diameter	D10	D13	D16	D19
		Q'ty up to 135°	25	25	15	—
		Q'ty over 135°	25	20	10	—
FMI-4000H	Material SD345	Rebar diameter	D10	D13	D16	D19
		Q'ty up to 135°	50	30	15	—
		Q'ty over 135°	40	20	10	—
FMI-5000H	Material SD345	Rebar diameter	D10	D13	D16	D19
		Q'ty up to 135°	50	30	20	11
		Q'ty over 135°	50	30	15	7
		Q'ty (Large R fulcrum)	50	30	20	11

MESH BENDER
FM-2000
TMP-5000H (Make-To-Order Model)

Bend

Simple & best-selling model

Fulcrum base

FM-2000

Machine & Processing Specifications

Specifications	FM-2000 (2m)
Required breaker capacity	15A
Max length of mesh to be processed	2,000mm
Bending angle to be processed	15~180°(15~90°in case of large R processing)
Bending revolution	7.7／9.2 rpm(50/60Hz)
Total motor capacity	2.2kW
Dimensions (L×W×H)	3,170×1,220×1,010mm
Total wight	1,000kg

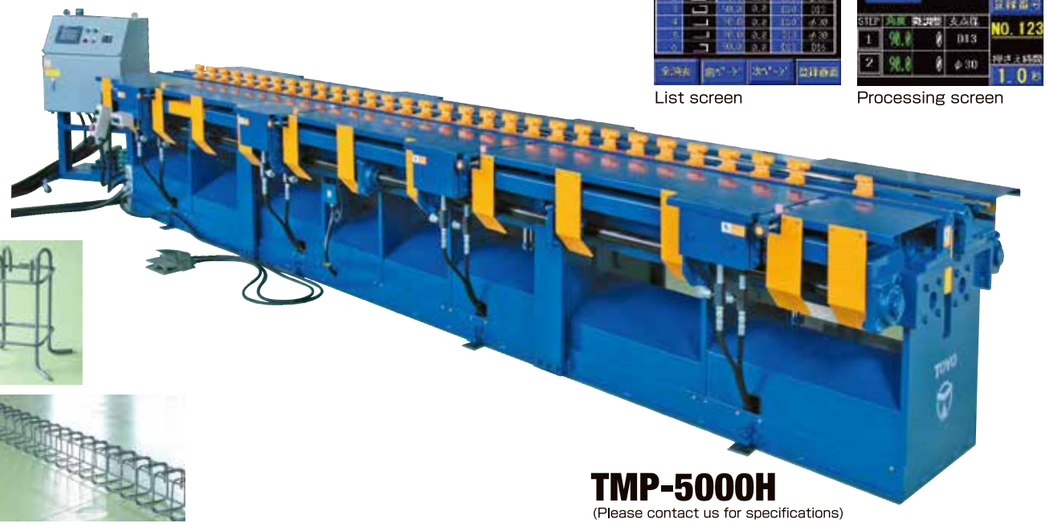
Simultaneous Max. Bending Quantity (pcs.)

Material	φ6	D10
SWM-B·SWM-P	40	—
SD295A	—	15

Hook-in system, Automatic bending angle stepping function

List screen

Processing screen



TMP-5000H

(Please contact us for specifications)

MESH&SLAB BENDER

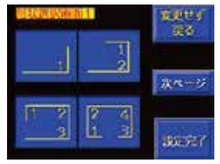
MESH BENDER

FM-4000UD Bend

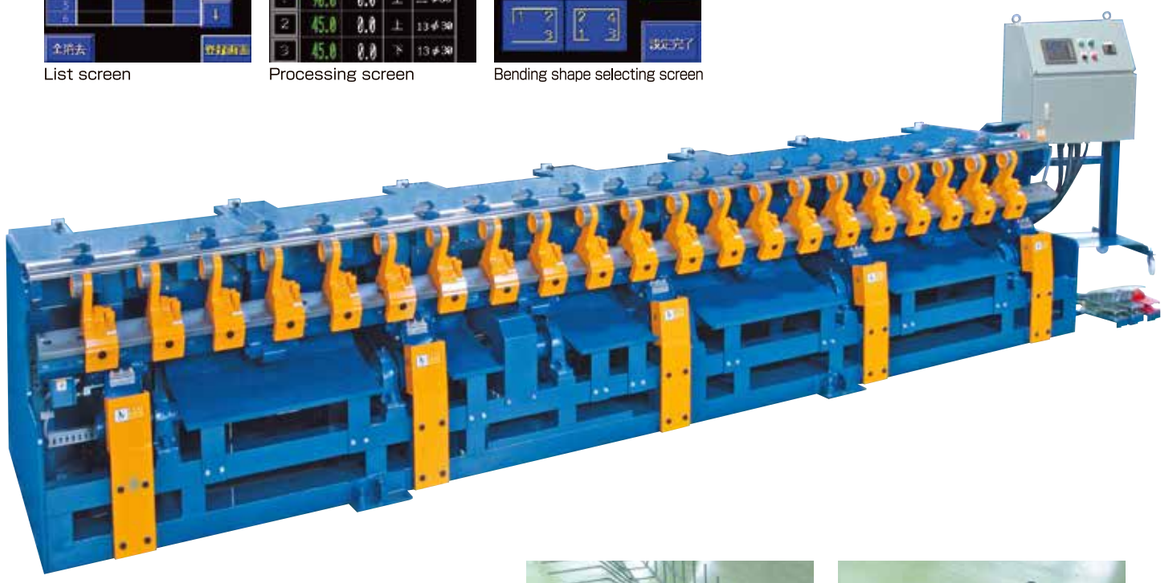
Capable of bending upward & downward

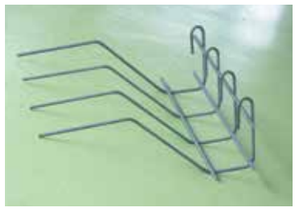
List screen

Processing screen



Bending shape selecting screen





Machine & Processing Specifications

Specifications		FM-4000UD (4m)
Required breaker capacity		50A
Max. mesh width to be processed		4,000mm
Bending angle to be processed	Upward	15~135°(15~90°in case of large R processing)
	Downward	15~60°
Bending revolution		0.5~2.0 rpm(50/60Hz)
Total motor capacity		3.7kW
Dimensions (L×W×H)		4,500×1,000×800mm
Total weight		3,000kg

Simultaneous Max. Bending Quantity (pcs.)

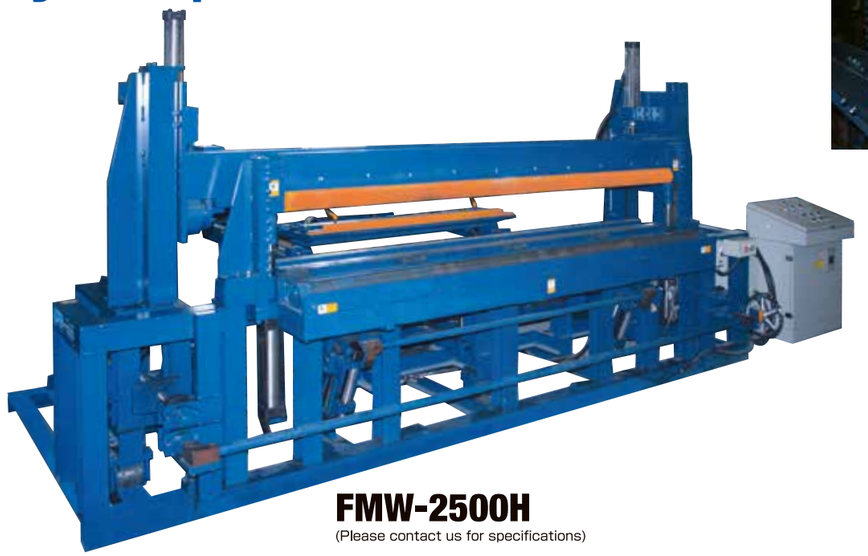
Rebar diameter	D10	D13
SD295A	25	25
SD345	21	21

MESH BENDER

FMW-2500H (Make-To-Order Model)
FMG-6-30 (Make-To-Order Model) Bend

Capable of bending crank part by one procedure

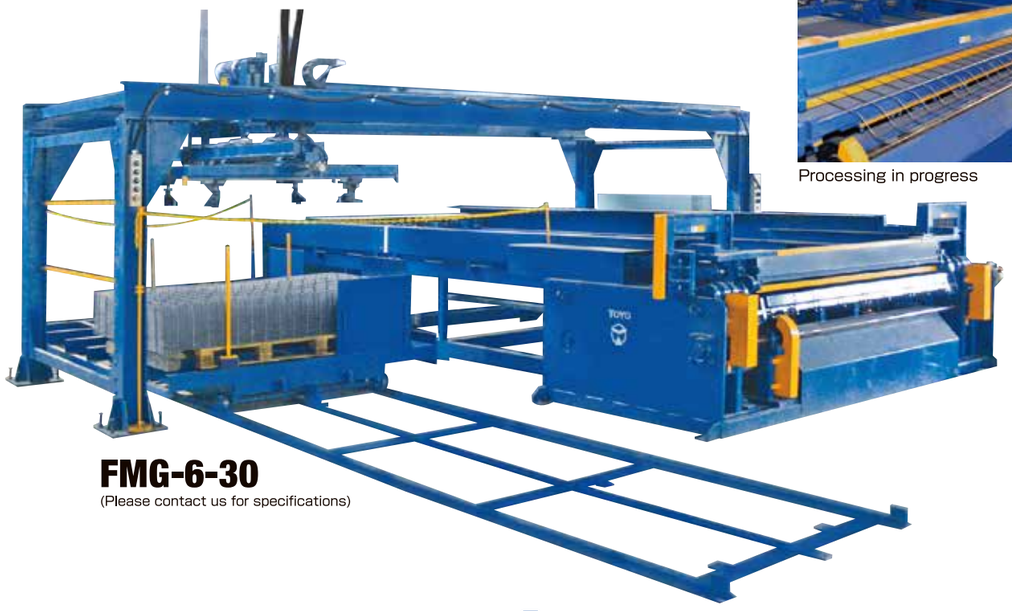

Processing in progress



FMW-2500H
(Please contact us for specifications)

Automatic feeding & processing


Processing in progress



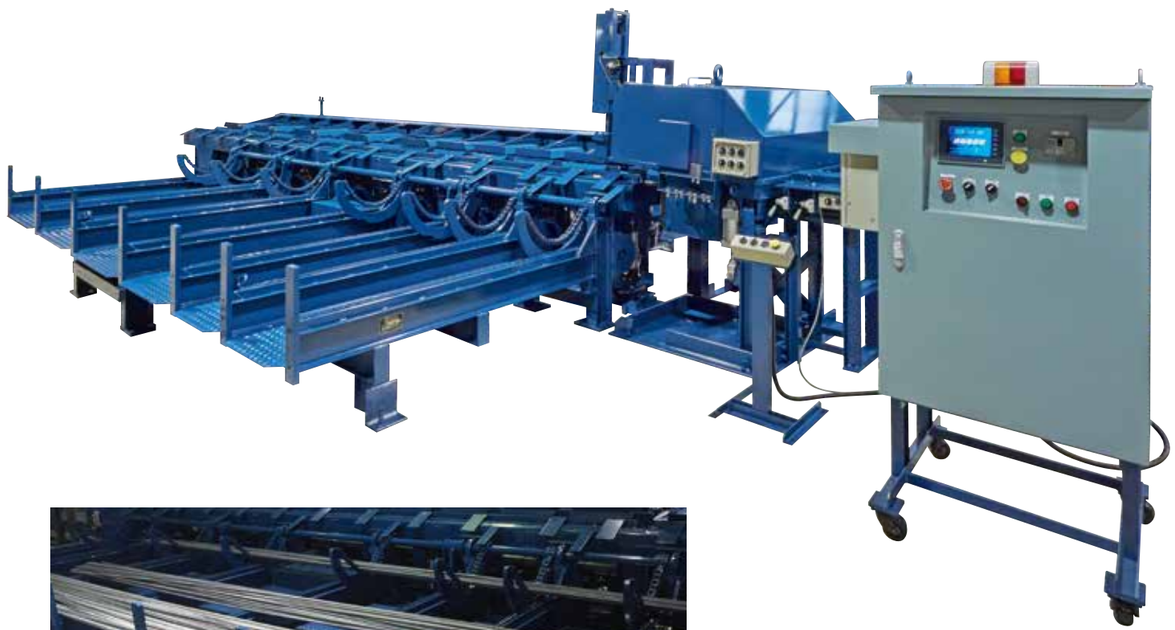
FMG-6-30
(Please contact us for specifications)

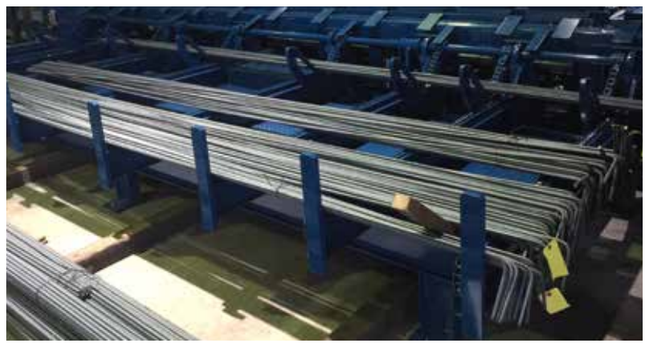
SLAB BENDER

TEB-19-NC D10-D19 Bend

(Make-To-Order Model) TOYO Recommended

Most suitable for bending slabs





Bending in process

Machine & Processing Specifications

Specifications	**TEB-19-NC** (6.5m)
Required breaker capacity	75A(excluding air-compressor)
Bending length range	1,750~6,500mm
Bending angle	15~135° (D10、D13) 15~180° (D16、D19)
Bending unit revolution	8.0rpm
Total motor capacity	13.35kW(excluding air-compressor)
Dimensions (L×W×H)	6,500×9,100×2,000mm
Total weight	11,400kg

Rebar diameter	D10	D13	D16	D19
	20	15	10	4

Please contact us for specifications.

Proposed Case for Improving Productivity of Single Anchor Bending

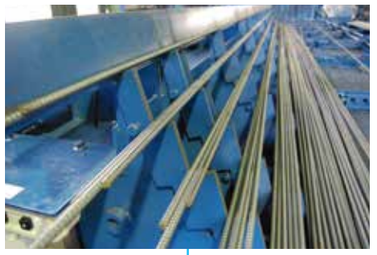
Capable of a series of works from cutting to bending slabs, which shortens working time dratistically.

CUTTING MACHINE

TFC-LA Cut

SORTING & FEEDING DEVICE

TAS-II Carry



Overall view of machines

BENDING MACHINE FOR SLAB REINFORCEMENT

TEB-19-NC Bend

SLAB BENDER

EB-19 D10-D19 Bend /EB-16 D10-D16 Bend

Best model for mass production of single anchor 10mm×20pcs. at one time

EB-16

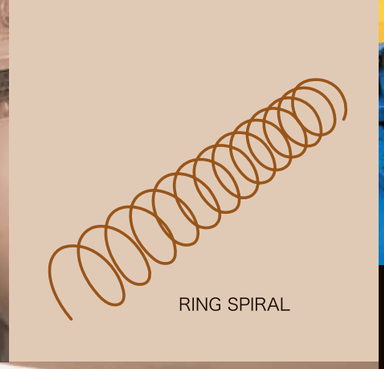
Machine & Processing Specifications

Specifications	EB-19	EB-16
Required breaker capacity	30A	30A
Bending angle	15~180°	15~180°
Bending unit revolution	5.4~6.7rpm (50/60Hz)	4.2~5.1rpm (50/60Hz)
Total motor capacity	3.7kW (excluding air-compressor)	2.2kW (excluding air-compressor)
Dimensions (L×W×H)	2,050×1,700×1,000mm	2,280×1,585×935mm
Total weight	1,200kg	900kg

Simultaneous Max. Bending Quantity (pcs.)

Model	Rebar diameter	D10	D13		D16		D19
EB-19	Fulcrum roller dia.	φ39	φ53		φ64		φ74
	SD345	20	15		13		7
	SD390	20	13		10		6
EB-16	Fulcrum roller dia.	φ39	φ39	φ53	φ39	φ53	—
	SD345	20	15		8	10	—
	SD390	20	13		6	8	—

Optional air compressor (0.4kW) is required to operate EB19/EB-16



STANDARD CUTTER & BENDER & RING SPIRAL MACHINE

REBAR CUTTER
C-33/C-43
MC-41/MC-51W/MC-64
REBAR BENDER
B-16/B-25/B-33
DIAL-TYPE REBAR BENDER
B-16-DA/B-16-DR/B-25-D
B-40SII/B-52S
Large Radius Parts
BENDER FOR LARGE DIAMETER
B-80
CIRCULAR BENDER
R-22/R-32/R-41/R-52
HYDRAULIC CIRCULAR BENDER
R-32-U/R-41-U/R-52-U
R-32-3R/R-41-2R/R-52-3R
REBAR BENDER
GRID BENDER
CRANK BENDER
B-22-HW
RING SPIRAL MACHINE
TRS-100/600
R-13

REBAR CUTTER Cut

C-33/C-43

Long-selling and highly-reliable series

C-33

C-43

Machine & Processing Specifications

Specifications	C-33	C-43
Motor Capacity	1.5kW	2.2kW
Required breaker capacity	30A	30A
Revolution	40.0／48.0 rpm(50/60Hz)	38.0／46.0 rpm(50/60Hz)
Dimensions (L×W×H)	555×615×930mm	580×710×1,045mm
Total weight	460kg	600kg

Simultaneous Max. Cutting Quantity (pcs.)

Model	Rebar diameter	D10	D13	D16	D19	D22	D25	D29	D32	D35	D38	D41
C-33	SD345	7	5	4	2	2	1	1	1	—	—	—
	SD390	7	5	3	2	1	1	1	—	—	—	—
C-43	SD345	8	6	5	4	3	2	1	1	1	1	1
	SD390	8	6	5	3	2	2	1	1	1	1	—

Higher capacity models

REBAR CUTTER Cut

MC-41/MC-51W/MC-64

Designed to cut high-strength rebar

MC-41

MC-64

MC-51W

Machine & Processing Specifications

Specifications	MC-41	MC-51W	MC-64
Motor Capacity	2.2kW	3.7kW	5.5kW
Required breaker capacity	30A	60A	100A
Revolution	34.0／40.0 rpm(50/60Hz)	23.6／27.7 rpm(50/60Hz)	22.6 rpm(50/60Hz)
Dimensions (L×W×H)	630×975×1,015mm	690×1,235×1,130mm	750×1,260×1,380mm
Total weight	900kg	1,590kg	2,000kg

Simultaneous Max. Cutting Quantity (pcs.)

Model	Rebar diameter	D10	D13	D16	D19	D22	D25	D29	D32	D35	D38	D41	D51
MC-41	SD390	10	8	6	4	3	2	2	1	1	1	1	—
	SD490	10	8	5	3	2	2	1	1	1	—	—	—
MC-51W	SD390	16	12	10	7	5	4	3	2	2	1※	1※	1※
	SD490	16	12	10	5	4	3	2	2	1	1※	1※	—
MC-64	SD345	—	—	—	—	—	4	4	3	3	2※	2※	1※
	SD390	—	—	—	—	—	4	3	2	2	2※	1※	1※
	SD490	—	—	—	—	—	4	3	2	2	1※	1※	1※

※Upper blade should be replaced with the blade for large rebar.

REBAR BENDER Bend

B-16/B-25/B-33

Long-selling and highly-reliable series

B-16 equipped with supporting table (Optional)

B-16

B-25

B-33

▼Movie

You can see the comparison between B-25 and B-25-D.

Machine & Processing Specifications

Specifications		B-16	B-25	B-33
Motor Capacity		1.5kW	1.5kW	2.2kW
Required breaker capacity		30A	30A	30A
Revolution	50Hz	24.2 rpm	8.2／12.2 rpm(Low/High speed)	7.2／10.7 rpm(Low/High speed)
	60Hz	29.1 rpm	9.8／14.7 rpm(Low/High speed)	8.6／12.9 rpm(Low/High speed)
Dimensions (L×W×H)		690×740×855mm	785×755×855mm	950×970×875mm
Height of processing surface		755mm	750mm	750mm
Total weight		190kg	315kg	460kg

Simultaneous Max. Bending Quantity (pcs.)

Model	Rebar diameter	D10	D13	D16	D19	D22	D25	D29	D32
B-16	SD345	4	3	1	—	—	—	—	—
	SD390	4	2	1	—	—	—	—	—
B-25	SD345	5	4	2	1	1※	1※	—	—
	SD390	5	4	1	1	1※	—	—	—
B-33	SD345	—	—	3	2	1	1	1※	1※
	SD390	—	—	3	2	1	1	1※	—

※Should be bent at low speed. B-16 should be bent only with ϕ36 fulcrum roller.

DIAL-TYPE REBAR BENDER Bend

B-16-DA/B-16-DR/B-25-D

Suitable for processing hoop & stirrup Angle setting with "Automatic Bending Angle Stepping Function"

B-16-DA equipped with supporting table (Optional)

B-16-DA

B-25-D

Automatic Bending Angle Stepping Function

A function to carry out sequent bending automatically from the top dial to be selected "ON".

B-16-DR

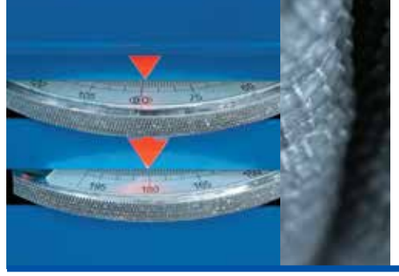
Machine & Processing Specifications

Specifications		B-16-DA	B-16-DR	B-25-D
Motor Capacity		1.5kW	1.5kW	1.5kW
Required breaker capacity		30A	30A	30A
Revolution	50Hz	24.2 rpm	24.2 rpm	8.2／12.2 rpm(Low/High speed)
	60Hz	29.1 rpm	29.1 rpm	9.8／14.7 rpm(Low/High speed)
Dimensions (L×W×H)		690×715×855mm	560×640×830mm	670×805×855mm
Height of processing surface		755mm	750mm	750mm
Total weight		200kg	210kg	315kg

Simultaneous Max. Bending Quantity (pcs.)

Model	Rebar diameter	D10	D13	D16	D19	D22	D25
B-16-DA	SD345	4	3	1	—	—	—
	SD390	4	2	1	—	—	—
B-16-DR	SD345	4	3	1	—	—	—
	SD390	4	2	1	—	—	—
B-25-D	SD345	5	4	2	1	1※	1※
	SD390	5	4	1	1	1※	—

※Should be bent at low speed. B-16-DA/B-16-DR should be bent only with ϕ36 fulcrum roller.



Higher capacity models

DIAL-TYPE REBAR BENDER Bend

B-40SII/B-52S

Capable of setting 2-kind of bending angles Designed to bend high-strength rebar

▼Movie

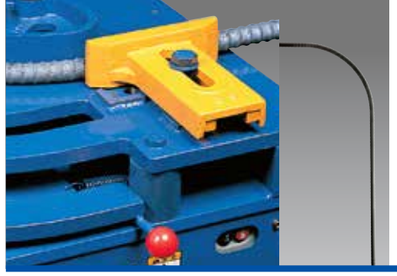
Machine & Processing Specifications

Specifications		B-40SII	B-52S
Motor Capacity		3.7kW	7.5kW
Required breaker capacity		50A	60A
Revolution	50Hz	5.2／7.6 rpm(Low/High speed)	2.2／3.3 rpm(Low/High speed)
	60Hz	6.2／9.2 rpm(Low/High speed)	2.7／4.0 rpm(Low/High speed)
Dimensions (L×W×H)		1,100×1,150×885mm	1,250×1,200×975mm
Height of processing surface		750mm	802mm
Total weight		810kg	1,680kg

Simultaneous Max. Bending Quantity (pcs.)

Model	Rebar diameter	D16	D19	D22	D25	D29	D32	D35	D38	D41	D51
B-40SII	SD390	3	3	2	2	2※	1※	1※	1※	—	—
	SD490	3	3	2	2※	1※	1※	1※	—	—	—
B-52S	SD390	—	—	—	2	2	2	1	1※	1※	1※
	SD490	—	—	—	2	2	2	1	1※	1※	1※

5D & 6D fulcrum rollers are optional for B-40SII. 4D & 5D fulcrum rollers are optional for B-52S. ※Should be bent at low speed.

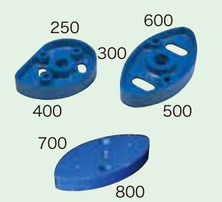


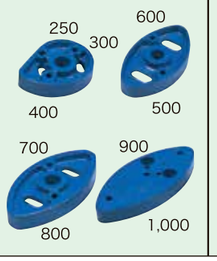
Option

Large Radius Parts Bend

For large construction work such as high-rise building, highway, subway, etc.

Parts for Large R

Model	Power Point Arm	Fulcrum Roller	Bending R (Diameter)
B-25 B-25-D			ϕ150 ϕ200
B-33			ϕ250 ϕ300 ϕ400 ϕ500 ϕ600
B-40SII			ϕ250 ϕ300 ϕ400 ϕ500 ϕ600 Make-To-Order Parts ϕ700 ϕ800

Model	Power Point Arm	Fulcrum Roller	Bending R (Diameter)
B-52S			ϕ250 ϕ300 ϕ400 ϕ500 ϕ600 ϕ700 ϕ800 ϕ900 ϕ1,000

Bending angle is up to 90°

Large R processing in progress

Rebar Processing Table

STANDARD CUTTER&BENDER & RING SPIRAL MACHINE

BENDER FOR LARGE DIAMETER

Bend

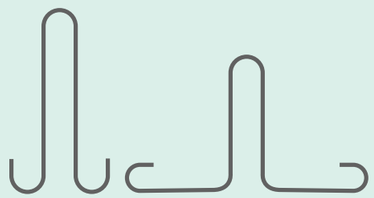
B-80 (Make-To-Order Model)

Suitable for processing caisson hook bar

B-80

(Please contact us for specifications.)

Bending Shape Examples



CIRCULAR BENDER

Bend

R-22/R-32/R-41/R-52

For reinforcement, foundation of bridge girder, round pillar, etc.

R-22

R-32

R-41

R-52

Machine & Processing Specifications

Specifications		R-22	R-32	R-41	R-52
Rebar diameter to be fabricated		D10~D22	D13~D32	D25~D41	D32~D51
Motor Capacity		1.5kW	2.2kW	3.7kW	5.5kW
Required breaker capacity		30A	30A	30A	50A
Feeding speed	50Hz	8.1 m/min	9.0／13.8 m/min(Low/High speed)	—	—
	60Hz	9.2 m/min	11.1／16.6 m/min(Low/High speed)	—	—
Revolution of driving roller	50Hz	—	—	20.2 rpm	13.2／19.8 rpm(Low/High speed)
	60Hz	—	—	24.4 rpm	15.9／23.8 rpm(Low/High speed)
Outer dimension of driving roller		φ126	φ205	φ245	φ295
Dimensions (L×W×H)		690×680×850mm	820×790×900mm	1,100×985×955mm	1,240×1,400×900mm
Height of processing surface		750mm	750mm	—	—
Height of material feeding		—	—	850mm	860mm
Total weight		200kg	450kg	750kg	1,750kg

HYDRAULIC CIRCULAR BENDER

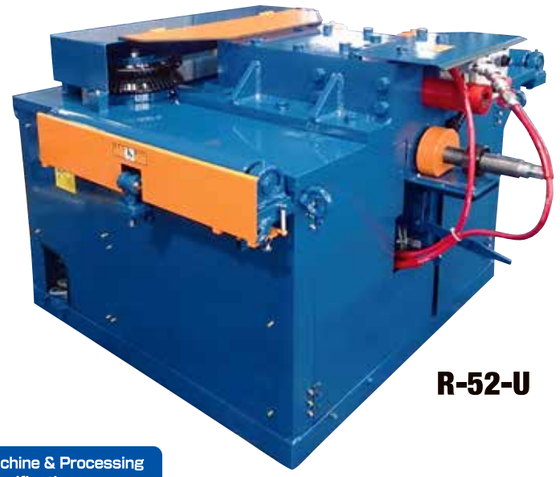
R-32-U/R-41-U/R-52-U

Capable of ring bending, U-shaped bending, and large R bending.

R-32-U

Bending Shape Examples

R-41-U



R-52-U

■ Machine & Processing Specifications

Specifications		R-32-U	R-41-U	R-52-U
Rebar diameter to be fabricated		D13~D32	D25~D41	D32~D51
Total motor capacity		2.45kW	3.95kW	7.0kW
Required breaker capacity		30A	40A	40A
Revolution of driving roller	50Hz	14.3／21.5 rpm(Low/High speed)	20.2 rpm	12.6／19.0 rpm(Low/High speed)
	60Hz	17.2／25.8 rpm(Low/High speed)	24.4 rpm	15.2／22.8 rpm(Low/High speed)
Outer dimension of driving roller		ϕ205	ϕ245	ϕ295
Dimensions (L×W×H)		950×1,000×950mm	1,040×1,170×955mm	1,470×1,585×960mm
Height of processing surface		750mm	—	—
Height of material feeding		—	850mm	860mm
Total weight		650kg	900kg	1,750kg

Please contact us for the specifications of R-52-U.

HYDRAULIC CIRCULAR BENDER

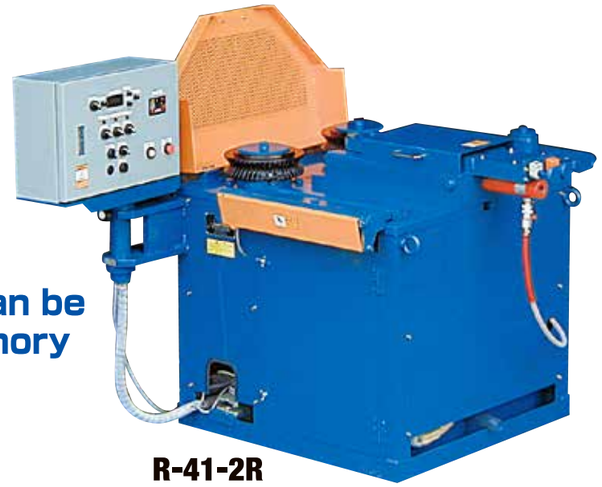
R-32-3R/R-41-2R/R-52-3R

Capable of continuous bending with 2 or 3-kind radiuses.

R-32-3R

R-52-3R

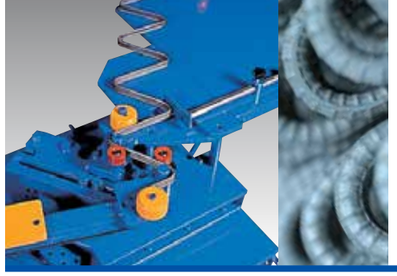
Dimension setting time can be shortened by inching memory function



R-41-2R

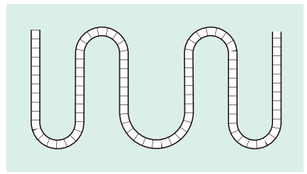
■ Machine & Processing Specifications

Specifications		R-32-3R	R-41-2R	R-52-3R
Rebar diameter to be fabricated		D13~D32	D25~D41	D32~D51
Total motor capacity		2.45kW	3.95kW	5.95kW
Required breaker capacity		30A	40A	50A
Revolution of driving roller	50Hz	12.7／19.0 m/min(Low/High speed)	20.2 rpm	9.4／14.1 rpm(Low/High speed)
	60Hz	15.2／22.8 m/min(Low/High speed)	24.4 rpm	11.3／17.0 rpm(Low/High speed)
Outer dimension of driving roller		ϕ245	ϕ245	ϕ395
Dimensions (L×W×H)		970×1,000×1,040mm	1,380×1,400×1,160mm	1,750×2,050×1,300mm
Height of processing surface		750mm	—	—
Height of material feeding		—	850mm	890mm
Total weight		800kg	1,000kg	3,000kg



REBAR BENDER
GRID BENDER Bend

Suitable for bending grid shape



Machine & Processing Specifications

Specifications		GRID BENDER
Required breaker capacity		30A
Motor capacity		1.5kW
Revolution	50Hz	8.2／12.2 rpm(Low/High speed)
	60Hz	9.8／14.7 rpm(Low/High speed)
Dimensions (L×W×H)		890×790×945mm
Height of processing surface		880mm
Total weight		420kg

Simultaneous Max. Bending Quantity (pcs.)

Rebar diameter	φ9(SS400)	D10	D13	D16
SD345	2	2	1	1

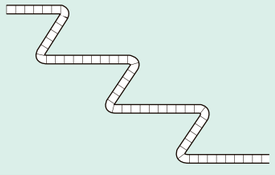
Min. diameter of fulcrum roller to be installed:φ32 / Max. diameter of fulcrum roller to be installed:φ300

CRANK BENDER
B-22-HW Bend

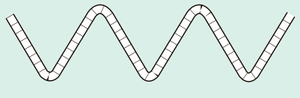
B-22-HW

▼Movie

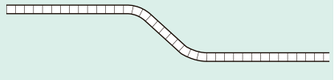
Stairs bending shape



Lattice bending shape



Crank bending shape



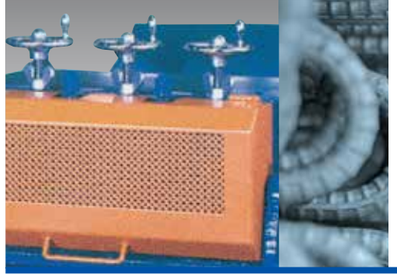
Machine & Processing Specifications

Specifications		B-22-HW
Required breaker capacity		30A
Motor capacity		2.2kW
Revolution	50Hz	5.4／8.1 rpm(Low/High speed)
	60Hz	6.5／9.7 rpm(Low/High speed)
Dimensions (L×W×H)		2,750×1,220×870mm
Height of processing surface		800mm
Total weight		650kg

Simultaneous Max. Bending Quantity (pcs.)

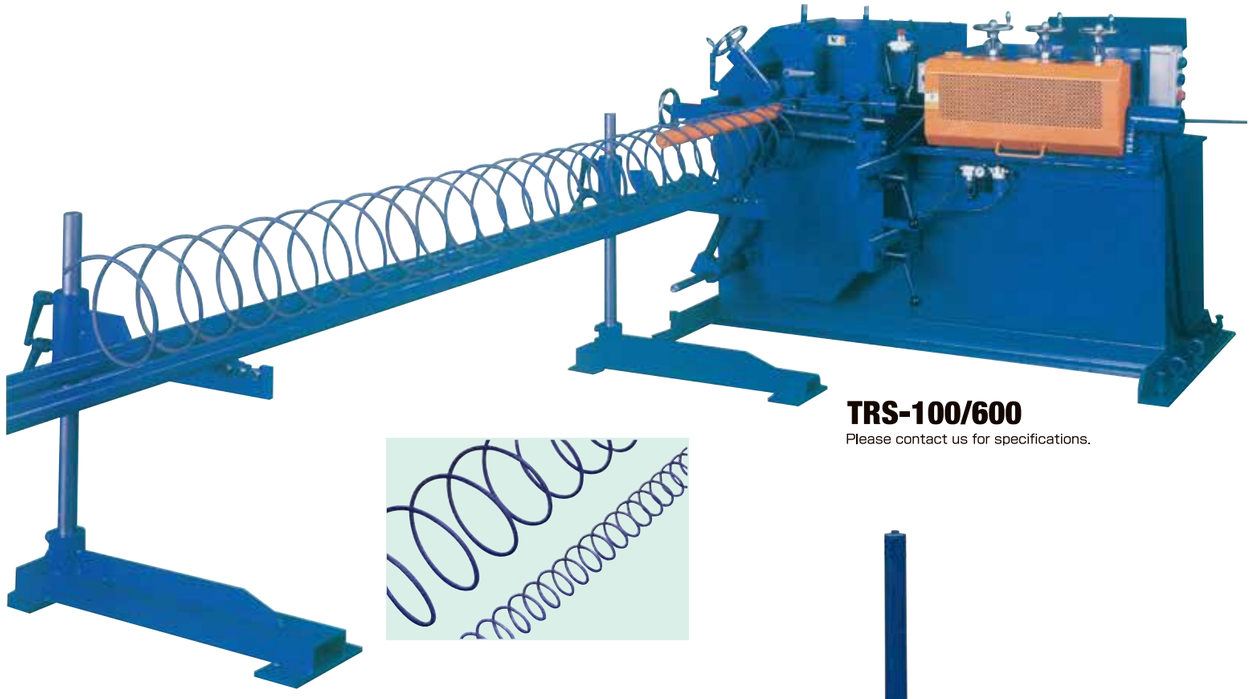
Rebar diameter		D10	D13	D16	D19	D22
Stairs	SD345	3※	2※	—	—	—
Lattice	SD345	3※	2※	1※	—	—
Crank	SD345	3	2	1	1※	1※

※Should be bent at low speed.



RING SPIRAL MACHINE
TRS-100/600 (Make-To-Order Model)
R-13 (Make-To-Order Model) Bend

For ring spiral shape
Suitable for processing reinforcement



TRS-100/600
Please contact us for specifications.

R-13
Please contact us for specifications.

STANDARD CUTTER&BENDER & RING SPIRAL MACHINE

Rebar to be used for reinforced-concrete structure

Japanese Industrial Standards (JIS) specifies and defines round steel bars and deformed steel bars manufactured by hot rolling. There are 2 kinds for the round steel bars and 4 kinds for the deformed steels bars defined as reinforced-concrete steel bars as shown in the table below.

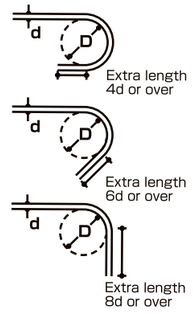
Category	Material marking	Yield Point (N/mm2)	Tensile Strength (N/mm2)
Round steel bar	**SR245**	235 or over	380~520
	SR295	295 or over	440~600
Deformed steel bar	**SD295A**	295 or over	440~600
	SD295B	295~390	440 or over
	SD345	345~440	490 or over
	SD390	390~510	560 or over
	SD490	490~625	620 or over

Weight list per one piece of rebar (JIS G 3112) (Unit: kg)

Length \ Diameter	D6	D10	D13	D16	D19	D22	D25	D29	D32	D35	D38	D41	D51
1.0	0.249	0.56	0.995	1.56	2.25	3.04	3.98	5.04	6.23	7.51	8.95	10.5	15.9
3.5	0.872	1.96	3.48	5.46	7.88	10.6	13.9	17.6	21.8	26.3	31.3	36.8	55.6
4.0	0.996	2.24	3.98	6.24	9.00	12.2	15.9	20.2	24.9	30.0	35.8	42.0	63.6
4.5	1.12	2.52	4.48	7.02	10.1	13.7	17.9	22.7	28.0	33.8	40.3	47.2	71.6
5.0	1.24	2.80	4.98	7.80	11.2	15.2	19.9	25.2	31.2	37.6	44.8	52.5	79.5
5.5	1.37	3.08	5.47	8.58	12.4	16.7	21.9	27.7	34.3	41.3	49.2	57.8	87.4
6.0	1.49	3.36	5.97	9.36	13.5	18.2	23.9	30.2	37.4	45.1	53.7	63.0	95.4
6.5	1.62	3.64	6.47	10.1	14.6	19.8	25.9	32.8	40.5	48.8	58.2	68.2	103
7.0	1.74	3.92	6.96	10.9	15.8	21.3	27.9	35.3	43.6	52.6	62.6	73.5	111
7.5	1.87	4.20	7.46	11.7	16.9	22.8	29.8	37.8	46.7	56.3	67.1	78.8	119
8.0	1.99	4.48	7.96	12.5	18.0	24.3	31.8	40.3	49.8	60.1	71.6	84.0	127
8.5	2.12	4.76	8.46	13.3	19.1	25.8	33.8	42.8	53.0	63.8	76.1	89.2	135
9.0	2.24	5.04	8.96	14.0	20.2	27.4	35.8	45.4	56.1	67.6	80.6	94.5	143
9.5	2.37	5.32	9.45	14.8	21.4	28.9	37.8	47.9	59.2	71.3	85.0	99.8	151
10.0	2.49	5.60	9.95	15.6	22.5	30.4	39.8	50.4	62.3	75.1	89.5	105	159
10.5	2.61	5.88	10.4	16.4	23.6	31.9	41.8	52.9	65.4	78.9	94.0	110	167
11.0	2.74	6.16	10.9	17.2	24.8	33.4	43.8	55.4	68.5	82.6	98.4	116	175
11.5	2.86	6.44	11.4	17.9	25.9	35.0	45.8	58.0	71.6	86.4	103	121	183
12.0	2.99	6.72	11.9	18.7	27.0	36.5	47.8	60.5	74.8	90.1	107	126	191

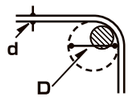
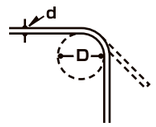
Bending standard (JASS5 : 2010)

List 1 Bending shape & dimension in the edge of rebar

Bending angle	Pictures	Rebar material	Classification by rebar dia.	Inner diameter of bending rebar
180° 135° 90°		**SR235, SRR235**	under dia.16mm	3d or over (1)
		SR295, SRR295B **SD295A, SD295B** **SDR295,** **SD345, SDR345**	under dia.16mm under D16	3d or over
			dia.19mm D19~D38	4d or over
			D41	5d or over
		SD390	D16~D41	5d or over

Remarks : (1) “d” indicates diameter for round bar and nominal dia. for deformed bar.
(2) Over 4d is acceptable for extra length used for the upper-end bar in cantilevered slab and free edge in wall.

List 2 Bending shape & dimension in the middle of rebar

Bending angle	Pictures	Name depending on the position of rebar	Rebar material	Classification by rebar dia.	Inner diameter of bending rebar
under 90°		**hoop** **stirrup** **spiral** **slab** **wall**	**SR235, SRR235** **SD295A, SD295B** **SDR295, SR295** **SRR295,** **SD345, SDR345**	under dia.16mm under D16	3d or over (1)
				dia.19mm D19	4d or over
		**Main bar for column, beam wall, slab footing beam**	**SD295A, SD295B** **SDR295,** **SD345, SDR345** **SD390**	under D16	4d or over
				D19~D25	6d or over
				D29~D41	8d or over

Remarks : (1) “d” indicates diameter for round bar and nominal dia. for deformed bar.

Towards the era of IoT
TOYO

IoT changes rebar processing factory; improving the efficiency and generating the best outcome.

Machines send out the data related to production status and maintenance timing, based on which preventive maintenance can be made, and bottleneck can be eliminated.

Keep production running

Information analysis with and through IoT turns "Corrective maintenance" to "Preventive maintenance."

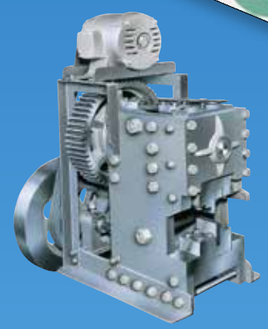
Provide factory management information

Information analysis with and through IoT will help solve issues and bottlenecks in processing factories.

- Alarm detection
- Cutting blade replacing timing

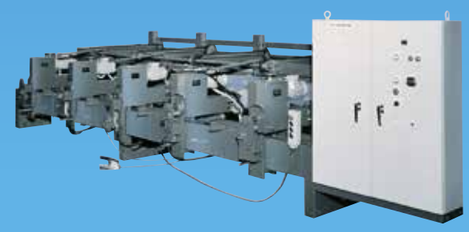
Company Profile

since 1933



1950's • Rebar cutter

1950's • Rebar bender



1980 • Automatic rebar bending machine

▼Movie

Manufacturing Factories: Giving Shape to Trusted Technology for Customer

We have four factories in Japan, all of which have production engineering departments.
These factories have the latest facilities to produce and support standard machines, automatic machines, computer systems and large-scale line systems.
We have embodied and will embody Toyo's technology, responding to customers' trust by close collaboration of our sales, engineering and manufacturing teams.

Tokyo Factory

Torikai (Osaka Pref.) Factory

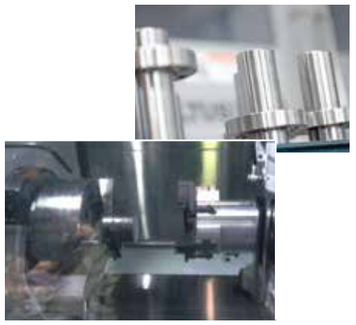
Fukuoka Factory

Hino (Shiga Pref.) Factory

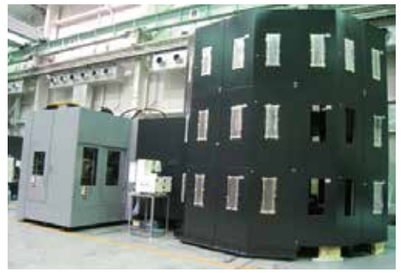
Manufacturing Factories

Primary manufacturing facilities

Automatic welding robot, Machining centers, Combined lathes, NC lathes, etc.



Combined Lathe

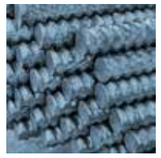


Machining center (OKK)

Fundamental Technologies to Build the Trust, Development Technologies to Build the Future.

MANAGEMENT PRINCIPLES

1. AN ENTERPRISE CONTINUES TO EXIST AS LONG AS SOCIETY NEEDS IT.
2. SERVE SOCIETY WITH INDIVIDUAL CHARACTERISTICS AND SKILLS.
3. LEAD THE INDUSTRY OF REBAR PROCESSING MACHINES.



It has already been more than 70 years since we started our business as a rebar processing machine manufacturer.
History of rebar processing machines is also Toyo's history itself.
The tasks assigned to us as a pioneer of the industry have been raising the bar with the times. We have been accomplishing these tasks one by one, and at the same time, the said fact have been growing strong spirit to create the way to the future in the mind of all of our staff members.
We will continue to value close communication with clients, suppliers and all the stakeholders, and will make a fresh start for the creation of required “Technology”, acceptable “Products” and trustworthy “Enterprise” and for creation of new TOYO.

Yasuo Tanaka, President

Company Outline

TOYO Company Profile

Founded	August, 1933
Incorporated	July, 1959
Capital	J. Yen 100,000,000.-
Business	Development,designing,manufacturing and sales of the followings: Rebar processing machine (Cutter, Bender, Automatic Machine) Line system, FA system, Calculation system, Processing data communication system, etc.
Employee	200
Head office	Osaka
Factory	Tokyo, Hino (Shiga Pref.), Torikai (Osaka Pref.), Fukuoka
Sales office	Sendai, Tokyo, Nagoya, Osaka, Hiroshima, Fukuoka

Corporate History

AUG. 1933	Started business in iron industry at the resent location of head office
MAR. 1950	Developed first rebar cutter and rebar bender in Japan
JUL. 1959	Established Toyo Kensetsu Kohki Co., Ltd.
JUN. 1960	Set up Fukuoka Factory
OCT. 1961	Set up Tokyo Factory
APR. 1962	Developed roller-type rebar bender
DEC. 1962	Set up Sendai Factory (present Sendai Sales Office)
AUG. 1964	Set up Yokohama Sales Office
DEC. 1967	Set up Torikai Factory
JUN. 1969	Set up Nagoya Sales Office
FEB. 1970	Received the investment from Small and Medium Business Investment & Consultation Co., Ltd.
FEB. 1971	Set up Hiroshima Sales Office
APR. 1971	Set up the first overseas distributor in Singapore (overseas distributors in more than 20 countries at present)
MAR. 1974	Increased capital to 100,000,000 yen
OCT. 1974	Developed automatic rebar cutting machine
APR. 1980	Developed automatic rebar bending machine
APR. 1982	Developed Line system for rebar processing
APR. 1985	Set up Hino Factory
APR. 2000	Acquired ISO9001 certification for Quality Management System
NOV. 2010	Participated in Zhejiang Ministry Recommendation Japanese Construction Material and Method of Construction Conference
FEB. 2013	Participated in bc India 2013
APR. 2013	Participated in Steel Processing Delivery Industrialization Development Summit in China
NOV. 2014	Participated in bauma China 2014
NOV. 2017	Participated in REBAR EXPO 2017
JAN. 2019	Hiroshima Sales Office relocated
JUL. 2019	New head office building completed