

PRESS BRAKES



Press Brakes
SynchroMaster
EuroMaster-S
PressMaster

HACO's Affordable Bending Solutions to the Highest Standards

Always the right choice for your application

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HACO's pressbrake series are the result of a decades long tradition in designing and manufacturing affordable **state-of-the art bending machines** for a wide variety of customers and applications.

HACO continues its policy of single source responsibility. Our in house developed **CNC controls** and **software solutions** have been recognized as being among the most user-friendly in the market. The new generation **Multi Touch** controls sets a new standard for an intuitive and user-friendly operator interface, introducing innovations such as **Smart Draft, Step Previewer** and **Combined Icons**.

HACO's attention for **design** and **manufacturing quality** has resulted in a worldwide reputation of long lasting production machines offering **excellent reliability** and **precision**.

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Our Press Brakes Series



SynchroMaster (SRM)

Entry Level Machine

Entry level pressbrake with basic execution for operation with European Standard Tooling. Possibility to extend with straightforward options. Attractive price/quality ratio. Standard with user friendly 2D graphical control.



EuroMaster-S (EMS)

Standard Multifunctional Allround machine

General level pressbrake with market oriented execution. Extensive choice of options, both basic and sophisticated. Innovative 2D Multi Touch graphical control. Excellent price-performance ratio. Integration of advanced safety equipment.



PressMaster (PM)

Top Level High-Spec machine

Top level pressbrake with high-end specifications and execution. Increased Daylight Opening and Beam Stroke for increased bending freedom. Increased beam and backgauge speeds for high productivity. Innovative 3D Multi Touch graphical control. Possibility for extension with sophisticated options. Features accurate bending characteristics. Integration of advanced safety equipment.

SynchroMaster Series

Your entry-level machine

BEAM CONTROL

Beam parallelism and depth stop setting by means of bed referenced linear encoders for accurate beam position measurement, synchro module and proportional valve hydraulics

INTUITIVE EASYBEND-2D CONTROL



EASYBEND-2D T

Touch Screen control (optional)



SynchroMaster Series

SRM



CROWNING TABLE (OPTIONAL)

Compensates for ram and table deflection, ensuring consistent bending angles over the entire bending length.
Manual operation and CNC controlled versions (V-axis)

STANDARD BACK GAUGE X

Rigid back gauge for accurate sheet positioning



STANDARD EUROPEAN

Quick Manual Upper clamping
Manual bottom clamping



Model SRM 275 13 10

*Flush Floor frame
design for all models*

SynchroMaster Series

Standard Execution

INTUITIVE EASYBEND-2D GRAPHICAL CONTROL

Intuitive entry level control for 2D applications with graphical support during work piece design and production cycle.

Automatic bending sequence calculation, collision detection and program generation.
User friendly interface enabling operation by low to medium skilled operators.

SPECIFICATIONS:

- **10.4"** colour graphic LCD display
- WIN7 Embedded operating system
- Multiple drawing methods
- Graphic simulation of work pieces with **Multitasking Real Time solution Finding**
- **Automatic bending sequence calculation** with collision control
- Automatic program generation
- Expandable up to **7 axes**:
 - standard Y1 + Y2
 - standard X-axis
 - optional R-axis
 - optional X-R-Z/Z' and X-R-Z1-Z2 axes
 - optional crowning (= V-axis)
- Material library up to **30 different materials**
- Tool library with graphical visualisation for
- **30 upper** and **30 lower tools**
- **USB Support** (stick included) + Network board
- **Programmable Beam Speed** and **Speed Change-Over Point**
- **Top Death Centre (TDC)**, Back gauge Positioning with retraction



SynchroMaster Series

Standard Execution



EUROPEAN STANDARD (ES) top tooling with Quick Manual Clamping arrangement

The European Standard Tooling System has proven its flexibility, affordability and precision during the last decades in an infinite number of sheet metal working shops. A wide choice of a vast number of top and bottom tools allows for a unpredictable number of applications in various materials and thicknesses.



X BACK GAUGE, expandable to X-R, X-R-Z/Z' and X-R-Z1-Z2

The SynchroMaster is standard equipped with a rigid and accurate X back gauge featuring average travelling speeds. Optional X-R (height programming), X-R-Z/Z' (symmetric finger programming) and X-R-Z1-Z2 (asymmetric finger programming) are available for increasing your range of applications.

Picture: X-R back gauge

- **EasyBEND-2D control**
- **X Backgauge for accurate sheet positioning**
 - Stroke X = 32", maximum speed = 945"/min
 - Stroke R = 10", maximum speed = 236"/min (Optional)
- **European Standard (ES) top clamping with Quick Manual Clamping Arrangement**
- **Intermediate clamping with height 6" (all models ≤ 350 Ton),
height 5" HD version (all models = 440 Ton)**

Your Competitive Edge

A. Excellent Value for Money

B. User Friendly EasyBEND-2D graphical control

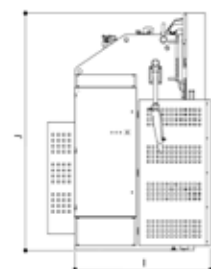
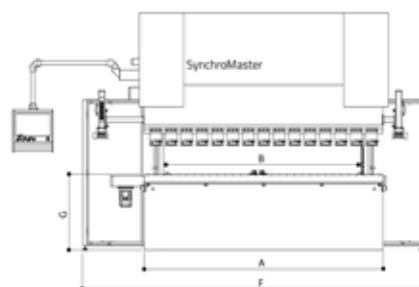
C. Proven Profitability for Various Workload Conditions

SynchroMaster Series

Technical Specifications

	Bending length	Capacity	Distance between housings	Gap	Daylight opening	Stroke	Table Height	Fast Approach Speed	Max. Bending Speed	Fast Return Speed	Motor Power	Length	Width	Height	Weight
MODEL	A	T	B	C	D	E	G	"/min	"/min	"/min	HP	F	I	J	Lbs
75 6 5	80	75	63	15.75	20.47	10.6	36	354	23.6	236	15	98	59	114	12346
75 8 6	100	75	83	15.75	20.47	10.6	36	354	23.6	236	15	118	59	114	14991
75 10 8	120	75	102	15.75	20.47	10.6	36	354	23.6	236	15	138	59	114	16976
110 8 6	100	110	83	15.75	20.47	10.6	36	472	23.6	295	15	118	67	115	15873
110 10 8	120	110	102	15.75	20.47	10.6	36	472	23.6	295	15	138	67	115	17186
110 12 10	144	110	124	15.75	20.47	10.6	36	472	23.6	295	15	160	67	115	22487
110 13 10	161	110	124	15.75	20.47	10.6	36	472	23.6	295	15	177	67	115	23149
110 14 12	167	110	148	15.75	20.47	10.6	36	472	23.6	295	15	185	67	115	26015
165 8 6	100	165	83	15.75	20.47	10.6	36	472	23.6	295	20	118	67	115	17196
165 10 8	120	165	102	15.75	20.47	10.6	36	472	23.6	295	20	138	67	115	20723
165 12 10	144	165	124	15.75	20.47	10.6	36	472	23.6	295	20	160	67	115	24912
165 13 10	161	165	124	15.75	20.47	10.6	36	472	23.6	295	20	177	67	115	25794
165 14 12	167	165	148	15.75	20.47	10.6	36	472	23.6	295	20	185	67	115	29101
220 8 6	100	220	83	15.75	20.47	10.6	36	472	18.9	283	25	118	81	115	22928
220 10 8	120	220	102	15.75	20.47	10.6	36	472	18.9	283	25	138	81	115	25353
220 12 10	144	220	124	15.75	20.47	10.6	36	472	18.9	283	25	160	81	115	27117
220 13 10	161	220	124	15.75	20.47	10.6	36	472	18.9	283	25	177	81	115	28881
220 14 12	167	220	148	15.75	20.47	10.6	36	472	18.9	283	25	185	81	115	36156
275 10 8	120	275	102	15.75	20.47	10.6	35	307	18.9	213	25	138	81	115	29762
275 12 10	144	275	124	15.75	20.47	10.6	35	307	18.9	213	25	160	81	115	33069
275 13 10	161	275	124	15.75	20.47	10.6	35	307	18.9	213	25	177	81	115	33731
275 14 12	167	275	148	15.75	20.47	10.6	35	307	18.9	213	25	185	81	115	36817
275 16 13	197	275	159	15.75	20.47	10.6	37	307	18.9	213	25	213	81	115	53572
275 20 16	236	275	198	15.75	20.47	10.6	43	307	18.9	213	25	252	81	115	68343
350 10 8	120	350	102	15.75	24.41	16.54	35	236	18.9	225	30	138	80	138	38581
350 12 10	144	350	124	15.75	24.41	16.54	35	236	18.9	225	30	160	80	138	44092
350 13 10	161	350	124	15.75	24.41	16.54	35	236	18.9	225	30	177	80	138	47399
350 14 12	167	350	148	15.75	24.41	16.54	35	236	18.9	225	30	185	80	138	51089
350 16 13	197	350	159	15.75	24.41	16.54	37	236	18.9	225	30	213	80	138	61729
350 20 16	236	350	198	15.75	24.41	16.54	43	236	18.9	225	30	252	80	138	72752
440 10 8	120	440	102	15.75	24.41	16.54	41	212	16.5	142	50	161	89	138	58422
440 12 10	144	440	124	15.75	24.41	16.54	41	212	16.5	142	50	183	89	138	65036
440 13 10	161	440	124	15.75	24.41	16.54	41	212	16.5	142	50	201	89	138	69446
440 14 12	167	440	124	15.75	24.41	16.54	41	212	16.5	142	50	209	89	138	70548

Specifications subject to modifications without price notice



SynchroMaster

EasyBEND-2D T Control (Optional)

EASYBEND-2D T CONTROL

- **18.5" multi colour graphic LCD display with Touch Screen Technology**
- WIN10 IoT operating system
- Multiple drawing methods
- Graphic simulation of work pieces with **Multitasking Real Time solution Finding**
- **Automatic bending sequence calculation** with collision control
- Automatic program generation
- **Unlimited number of programs**
- Expandable up to **7 axes**:
 - standard Y1 + Y2
 - standard X-axis
 - optional R-axis
 - optional X-R-Z/Z' and X-R-Z1-Z2 axes
 - optional crowning (= V-axis)
- Material library up to **30 different materials**
- Tool library with graphical visualisation for
- **30 upper and 30 lower tools**
- **Multi-language support**
- **USB Support** (stick included) + Network board
- **Remote diagnostics**
- **Programmable Beam Speed** and **Speed Change-Over Point**
- **Top Death Centre (TDC)**, Back gauge Positioning with retraction



SynchroMaster

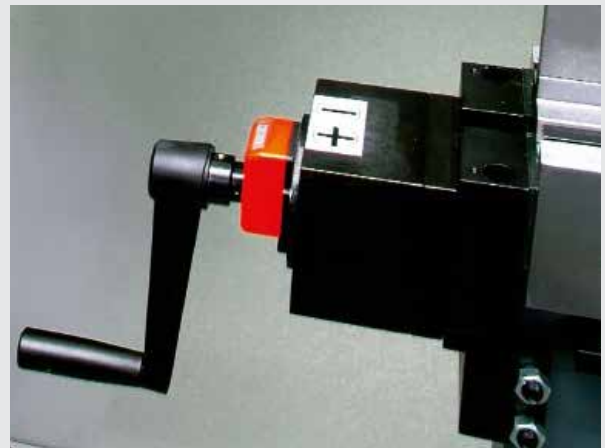
Optional equipment

X-R BACK GAUGE



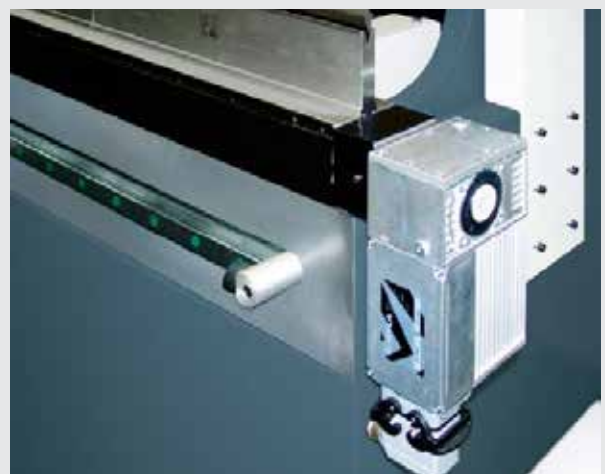
MANUAL CROWNING

Manual Anti-Deflection table for European Standard Bottom tooling



CNC CROWNING

Motorised CNC controlled anti-deflection table for European Standard and single V-dies



SynchroMaster

Optional equipment

FRONT STOP TYPE I

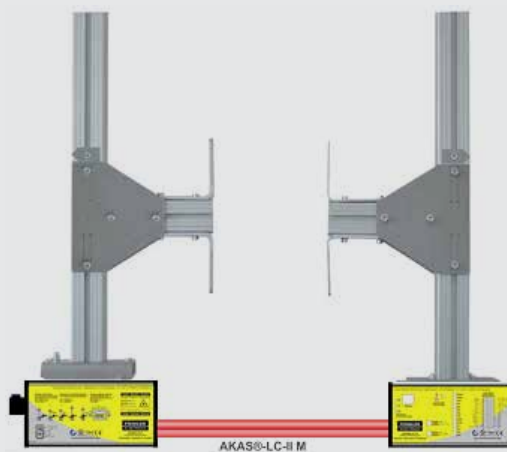


OPTICAL SAFETY GUARDS DSP AND FIESSLER AKAS® LC-II M

The CE regulation allows only Fast Approach Speed when applying an optical safety guard moving with the closing beam.

This guard is mounted to the beam and can be adjusted manually in height.

When detecting an obstacle within the protected area around the tip of the upper tooling, the system interrupts the downward movement instantaneously.



EuroMaster-S Series

Your allround bending machine

BEAM CONTROL

Beam parallelism and depth stop setting by means of bed referenced linear encoders for accurate beam position measurement, synchro module and proportional valve hydraulics

INTUITIVE FASTBEND-2D MT PREMIUM CONTROL

- Multi Touch Technology on 21.5" screen
- Intuitive Operator Interface
- Smart Draft
- Multi-Tasking
- Step Previewer
- Combined Icons
- Auto Tooling
- Pendant arm with optional height adjustment



EUROPEAN STANDARD TOP TOOLING WITH QUICK MANUAL CLAMPING

Picture: New Standard Top and Bottom Tooling (optional)

EuroMaster-S Series



CROWNING TABLE

Compensates for ram and table deflection, ensuring consistent bending angles over the entire bending length. Standard CNC controlled (V-axis).

2-AXES X-R BACK GAUGE

Rigid and High Speed back gauge for accurate sheet positioning



2 SHEET SUPPORTS WITH GUIDING



Model 275 13 10
Flush Floor frame
design for all models

EuroMaster-S Series

Standard Execution



INTUITIVE FASTBEND-2D MT PREMIUM CONTROL

The application of Multi Touch technology reduces the number of keyboard- and button actions to an absolute minimum. The innovative Smart Draft, Design/Bending Multitasking, Step Previewer and Combined Icons features allow the operator a straightforward, intuitive control of the entire production cycle.



EUROPEAN STANDARD (ES)

TOP TOOLING with

Quick Manual Clamping arrangement and CNC Anti Deflection Table with clamping for ES dies

The European Standard Tooling System has proven its flexibility, affordability and precision during the last decades in an infinite number of sheet metal working shops. A wide choice of a vast number of top and bottom tools allows for an unpredictable number of applications in various materials and thicknesses.



HIGH SPEED X-R-BACK GAUGE

A rigid and accurate back gauge is an absolute condition for precision. High speed is an absolute condition for production output and short cycle times. The EuroMaster's X-R back gauge (and optional X-R-Z/Z' and X-R-Z1-Z2 versions) offers both.

Manual finger width adjustment from the front.

EuroMaster-S Series

Standard Execution

- **FastBEND-2D MT Premium control**

Smart Draft + MultiTasking + Step Previewer + Combined Icons + Auto Tooling

21.5" Multi Touch screen

- **High Speed X-R Back gauge for accurate sheet positioning**

Stroke X = 32", speed = 2362"/min

Stroke R = 10", speed = 590"/min

- **European Standard (ES) top clamping with Quick Manual Clamping Arrangement**

- **Intermediate clamping with height 6" (all models \leq 350 Ton),
height 5" HD version (all models = 400 Ton)**

- **CNC controlled Anti Deflection Table (Crowning) for ES dies, including nute for clamping single-V dies**

- **2 Sheet Supports 29,5" with guiding, manually adjustable in height**

- **LED illumination of the bending area**

Your Competitive Edge

A. Outstanding Price-Performance Ratio

B. State-Of-The-Art User Friendly 2D Multi Touch Control

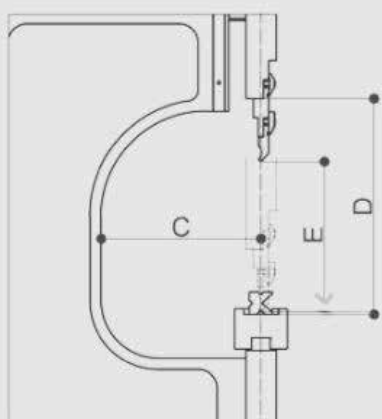
C. Highest Part Precision

EuroMaster-S Series

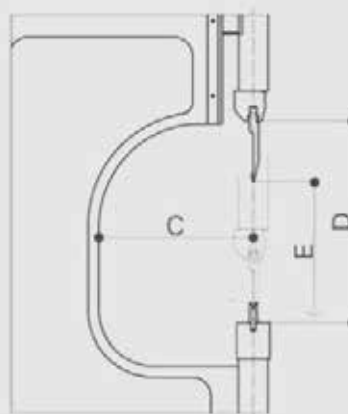
Technical Specifications

Daylight Opening - Stroke - Gap

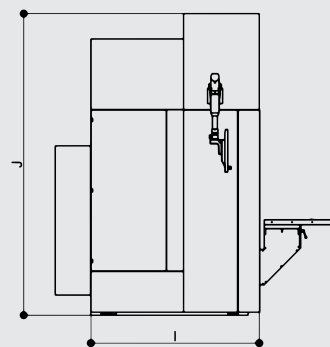
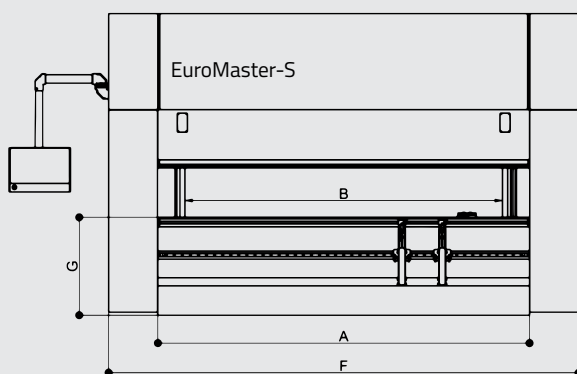
	Basic European Standard (ES)			Option ES High Specs			Option New Standard (NS)			Option NS High Specs		
	Daylight Opening	STROKE	GAP	Daylight Opening	STROKE	GAP	Daylight Opening	STROKE	GAP	Daylight Opening	STROKE	GAP
	D	E	C	D	E	C	D	E	C	D	E	C
	inches	inches	inches	inches	inches	inches	inches	inches	inches	inches	inches	inches
75 T	20.47	10.6	15.75	24.41	15.56	15.75	17.32	10.6	15.75	21.25	14.57	15.75
110 T	20.47	10.6	15.75	24.41	15.56	15.75	17.32	10.6	15.75	21.25	14.57	15.75
165 T	20.47	10.6	15.75	24.41	15.56	15.75	17.32	10.6	15.75	21.25	14.57	15.75
220 T	20.47	10.6	15.75	24.41	15.56	15.75	17.32	10.6	15.75	21.25	14.57	15.75
275 T	20.47	10.6	15.75	24.41	15.56	15.75	17.32	10.6	15.75	21.25	14.57	15.75
350 T	24.41	16.54	15.75	-	-	-	21.25	16.54	15.75	-	-	-
440 T	24.41	16.54	15.75	-	-	-	21.25	16.54	15.75	-	-	-



EUROPEAN STANDARD



NEW STANDARD



EuroMaster-S Series

Technical Specifications

(Valid for Basic European Standard)

	Bending length	Capacity	Distance between housings	Table Height	Fast Approach Speed	Max. Bending Speed	Fast Return Speed	Motor Power	Length	Width	Height	Weight
	A	T	B	G	"/min	"/min	"/min	HP	F	I	J	Lbs
MODEL	"	T	"	"	"/min	"/min	"/min	HP	"	"	"	Lbs
75 6 5	80	75	63	36	354	23.6	236	15	127	62	115	13007
75 8 6	100	75	83	36	354	23.6	236	15	147	62	115	15653
75 10 8	120	75	102	36	354	23.6	236	15	167	62	115	17636
110 8 6	100	110	83	36	472	23.6	295	15	147	62	115	16535
110 10 8	120	110	102	36	472	23.6	295	15	167	62	115	17857
110 12 10	144	110	124	36	472	23.6	295	15	183	62	115	23149
110 13 10	161	110	124	36	472	23.6	295	15	206	62	115	23810
110 14 12	167	110	148	36	472	23.6	295	15	213	62	115	26676
165 8 6	100	165	83	36	472	23.6	295	20	147	67	115	17857
165 10 8	120	165	102	36	472	23.6	295	20	167	67	115	21385
165 12 10	144	165	124	38	472	23.6	295	20	183	67	115	25574
165 13 10	161	165	124	38	472	23.6	295	20	206	67	115	26455
165 14 12	167	165	148	38	472	23.6	295	20	213	67	115	29762
220 8 6	100	220	83	38	472	18.9	283	25	147	72	115	23589
220 10 8	120	220	102	38	472	18.9	283	25	167	72	115	26235
220 12 10	144	220	124	38	472	18.9	283	25	183	72	115	28219
220 13 10	161	220	124	38	472	18.9	283	25	206	72	115	29762
220 14 12	167	220	148	38	472	18.9	283	25	213	72	115	37038
275 10 8	120	275	102	35	307	18.9	213	25	167	80	115	30644
275 12 10	144	275	124	35	307	18.9	213	25	183	80	115	33951
275 13 10	161	275	124	35	307	18.9	213	25	206	80	115	34833
275 14 12	167	275	148	35	307	18.9	213	25	213	80	115	37699
275 16 13	197	275	159	37	307	18.9	213	25	215	80	137	53572
275 20 16	236	275	198	43	307	18.9	213	25	254	80	137	68343
350 10 8	120	350	102	35	236	18.9	225	30	161	80	137	38581
350 12 10	144	350	124	35	236	18.9	225	30	185	80	137	44092
350 13 10	161	350	124	35	236	18.9	225	30	201	80	137	47399
350 14 12	167	350	148	35	236	18.9	225	30	209	80	137	51809
350 16 13	197	350	159	37	236	18.9	225	30	215	80	137	61729
350 20 16	236	350	198	43	236	18.9	225	30	254	80	137	72752
440 10 8	120	440	102	41	212	16.5	142	50	161	89	156	58422
440 12 10	144	440	124	41	212	16.5	142	50	183	89	156	65036
440 13 10	161	440	124	41	212	16.5	142	50	201	89	156	69446
440 14 12	167	4000	124	41	212	16.5	142	50	209	89	156	70548

Specifications subject to modifications without price notice

PressMaster Series

Your High Spec, High Performance bending machine

**INCREASED DAYLIGHT OPENING (21,25 "),
STROKE (14,65")**

BEAM CONTROL

Beam parallelism and depth stop setting by means of bed referenced linear encoders for accurate beam position measurement, synchro module and proportional valve hydraulics



SyncView

INTUITIVE FASTBEND-3D MT PREMIUM CONTROL

- Multi Touch Technology on 24" screen
- Intuitive Operator Interface
- Smart Draft
- Multi-Tasking
- Step Previewer
- Combined Icons
- Auto Tooling
- PartManager-3D



NEW STANDARD HYDRAULIC TOP TOOL CLAMPING

LAZERSAFE OPTICAL SAFETY GUARD (optional)

PressMaster Series

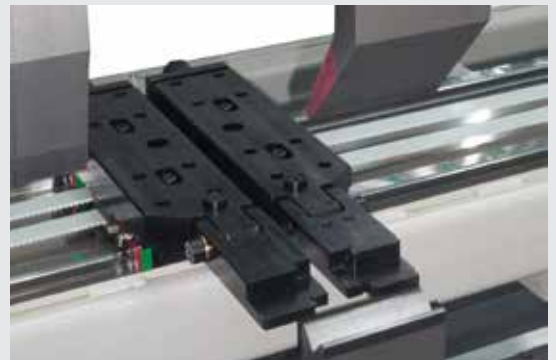


CNC CROWNING TABLE WITH HYDRAULIC CLAMPING FOR NEW STANDARD BOTTOM TOOLING

Compensates for ram and table deflection, ensuring consistent bending angles over the entire bending length.
CNC controlled (V-axis)

4-AXES X-R-Z1-Z2 BACK GAUGE

Rigid and High Speed back gauge for accurate sheet positioning



2 SHEET SUPPORTS WITH GUIDING



Model PRM 165 12 10

Flush Floor frame design for all models

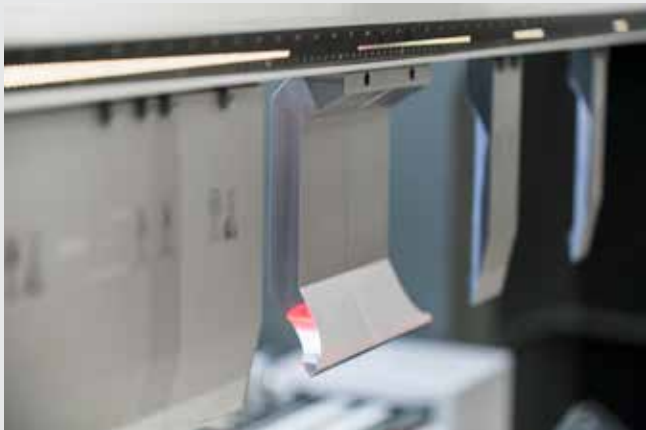
PressMaster Series

Standard Execution



INTUITIVE FASTBEND-3D MT PREMIUM CONTROL

The application of Multi Touch technology reduces the number of keyboard- and button actions to an absolute minimum. The innovative Smart Draft, Design/Bending Multitasking, Step Previewer and Combined Icons features allow the operator a straightforward, intuitive control of the entire production cycle.



NEW STANDARD (NS)

hydraulic top tool clamping and
CNC controlled Anti Deflection Table
with hydraulic bottom tool clamping

The New Standard Tooling System has proven its flexibility and precision during the last decades in an infinite number of sheet metal working shops. A wide choice of a vast number of top and bottom tools allows for a unpredictable number of applications in various materials and thicknesses.



HIGH SPEED X-R-Z1-Z2 BACK GAUGE

A rigid and accurate back gauge is an absolute condition for precision. High speed is an absolute condition for production output and short cycle times. The PressMaster's X-R-Z1-Z2 back gauge offers both.

PressMaster Series

Standard Execution

- **FastBEND-3D MT Premium control**
 - Smart Draft + MultiTasking + Step Previewer + Combined Icons + Auto Tooling + Part Manager-3D
 - 24" Multi Touch screen
- **Increased Daylight Opening (21.25"), Stroke (14,56") and Gap (15.75")**
- **Increased Fast Approach Beam Speed (up to 427"/min) and Fast Return Speed (up to 401"/min)**
- **High Speed X-R-Z1-Z2 Backgauge for accurate sheet positioning**
 - Stroke X = 32", speed = 2362"/min
 - Stroke R = 10", speed = 590"/min
 - Speed Z1 and Z2 axes = 2362"/min
- **New Standard (NS) hydraulic top tool clamping**
- **CNC controlled Anti Deflection Table (Crowning) for NS dies**
- **2 Sheet Supports with guiding, manually adjustable in height**
- **LED illumination of the bending area**
- **Less Power Consumption through application of Variable Inverter Drive (= VID) for motor-pump unit.**

The VID technology allows for higher beam return speeds in combination with 'no power consumption with stationary beam.

Your Competitive Edge

A. Ultimate Price-Quality Ratio

B. State-Of-The-Art User Friendly 3D Multi Touch Control

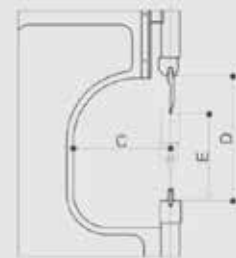
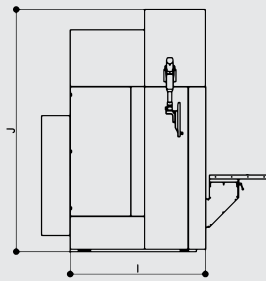
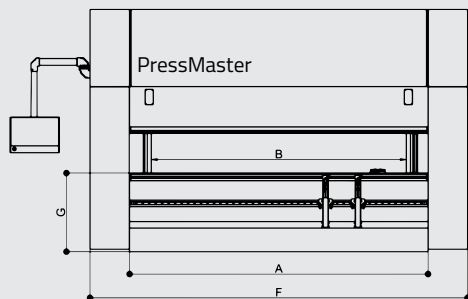
C. Lowest Cycle Times

PressMaster Series

Technical Specifications

	Bending length	Capacity	Distance between housings	Gap	Daylight opening	Stroke	Table Height	Fast Approach Speed	Max. Bending Speed	Fast Return Speed	Motor Power	Length	Width	Height	Weight
	A	T	B	C	D	E	G	"/min	"/min	"/min	HP	F	I	J	Lbs
MODEL	"	T	"	"	"	"	"	"	"	"	HP	"	"	"	Lbs
75 6 5	80	75	63	15.75	21.25	14.56	36	472	23.6	354	15	127	62	117	13227
75 8 6	100	75	83	15.75	21.25	14.56	36	472	23.6	354	15	146	62	117	14991
75 10 8	120	75	102	15.75	21.25	14.56	36	472	23.6	354	15	166	62	117	18078
110 8 6	100	110	83	15.75	21.25	14.56	36	472	23.6	401	15	147	62	117	17857
110 10 8	120	110	102	15.75	21.25	14.56	36	472	23.6	401	15	166	62	117	21164
110 12 10	144	110	124	15.75	21.25	14.56	36	472	23.6	401	15	183	62	117	22928
110 13 10	161	110	124	15.75	21.25	14.56	36	472	23.6	401	15	206	62	117	24691
110 14 10	167	110	148	15.75	21.25	14.56	36	472	23.6	401	15	213	62	117	28219
165 8 6	100	165	83	15.75	21.25	14.56	36	472	23.6	401	20	147	67	117	19180
165 10 8	120	165	102	15.75	21.25	14.56	36	472	23.6	401	20	167	67	117	22708
165 12 10	144	165	124	15.75	21.25	14.56	38	472	23.6	401	20	183	67	117	27778
165 13 10	161	165	124	15.75	21.25	14.56	38	472	23.6	401	20	206	67	117	28881
165 14 12	167	165	148	15.75	21.25	14.56	38	472	23.6	401	20	213	67	117	32187
220 8 6	100	220	83	15.75	21.25	14.56	36	472	18.9	401	25	147	72	117	23810
220 10 8	120	220	102	15.75	21.25	14.56	36	472	18.9	401	25	167	72	117	26455
220 12 10	144	220	124	15.75	21.25	14.56	36	472	18.9	401	25	183	72	117	28881
220 13 10	161	220	124	15.75	21.25	14.56	36	472	18.9	401	25	206	72	117	30424
220 14 12	167	220	148	15.75	21.25	14.56	36	472	18.9	401	25	213	72	117	37479
275 10 8	120	275	102	15.75	21.25	14.56	35	307	18.9	212	25	167	80	117	32849
275 12 10	144	275	124	15.75	21.25	14.56	35	307	18.9	212	25	183	80	117	34833
275 13 10	161	275	124	15.75	21.25	14.56	35	307	18.9	212	25	206	80	117	36156
275 14 12	167	275	148	15.75	21.25	14.56	35	307	18.9	212	25	213	80	117	39463

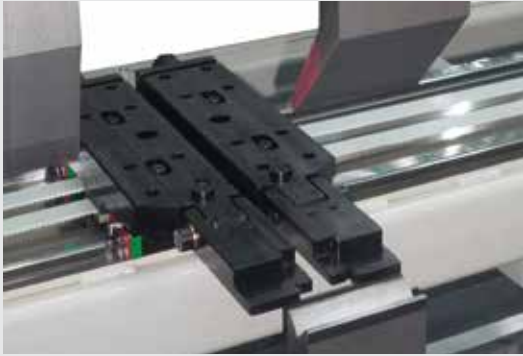
Specifications subject to modifications without price notice



NEW STANDARD

Back gauges

Standard and optional



X-R-Z1-Z2 (standard)

Stroke **X** = 32"

Max. Speed **X** = 2362"/min

Stroke **R** = 10"

Max. Speed **R** = 590"/min

Max. Speed **Z1-Z2** = 2362"/min



X-R-Z1-Z2-X3 (optional)

Stroke **X** = 32"

Max. Speed **X** = 2362"/min

Stroke **R** = 10"

Max. Speed **R** = 590"/min

Max. Speed **Z1-Z2** = 2362"/min

Stroke **X3** = -2"/+2"



X1-X2-R1-R2-W1-W2 (optional)

Stroke **X1-X2** = 23.6"

Stroke **R1-R2** = 4" (\leq 165 Ton)

= 5.3" ($>$ 165 Ton)

FastBEND-2D/3D MT Premium

Intuitive Bending

The **FastBEND-2D/3D MT Premium** Controls set a new standard in the market for flexible, reliable and high precision sheet metal bending.

Driven by **state-of-the-art PC-based hardware**, the system allows for very fast data processing and highly accurate calculation of the optimal bending programs for hydraulic CNC press brakes.



FastBEND-2D/3D MT Premium

Intuitive Bending

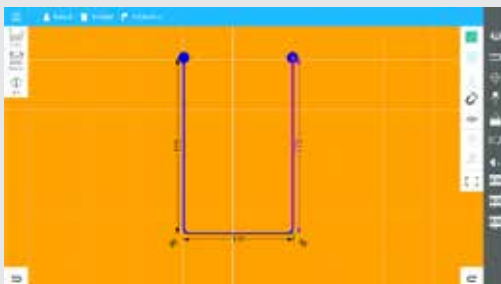
Intuitive Interface with a minimum of interactions to draw the workpiece and generate the corresponding program



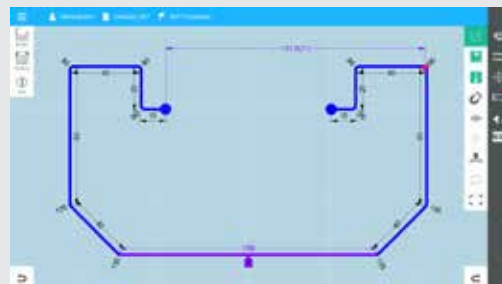
Multi Touch Technology on
24" screen (FastBEND-3D MT Premium)
21,5" screen (FastBEND-2D MT Premium)



Intuitive Interface with combined numerical-graphical user interface



MULTITASKING : Workpiece drawing with instantaneous collision detection and calculation of the bending sequence in the background



SMART DRAFT : Innovative drawing method for generating 2D workpieces



STEP PREVIEWER : bar with possibility of horizontally scrolling of the bending steps



COMBINED ICONS : multiple functionalities by means of one single icon

New Standard Tooling System

Standard for PressMaster, Optional for EuroMaster-S

Wila's **'New Standard' Tooling System** has become market leader for precision, quality and flexibility. The selfseating and selfaligning features considerably improve your set up times and productivity of your pressbrake. Both bottom (OZU) and top (BIU) tooling are clamped hydraulically. The bottom clamping is integrated in the crowning table.

New Standard tooling is safe: the Safety-Click system (for top tools up to 28 Lbs.) enables vertical loading and unloading of your top tooling without any risk. For tools with bigger weight, a safety pin or key is applied.

Working surfaces and bending radii of New Standard tooling are hardened and precision ground for maximum longevity.



MAIN BENEFITS

1. Vertical loading and unloading

2. Self-seating and self-aligning

3. High precision and longevity

Optional Smart Tool Locator

Increase your pressbrake productivity

The **Smart Tool Locator (STL)** further increases your pressbrake productivity. The system indicates by means of built-in LED's the right clamping position of your tooling during tool set up and indicates the active tool location in production mode. The Smart Tool Locator offers significant benefits in **speed, precision** and **flexibility**.

Available for all hydraulic New Standard Tool Holders for top and bottom tools.



NEW STANDARD PREMIUM AND PRO TOOLING

Both top (BIU) and bottom (OZU) tools are available in a wide variety of shapes and dimensions. For more detailed information, see the New Standard Tooling Catalogue.

Available for all hydraulic New Standard Tool Holders for top and bottom tools.

Lazersafe Optical Safety Guards

Advanced Safety

CE Safety Regulations require the application of an **Optical Safety Guard (OSG)** when operating at closing speed.

Optical modules (transmitter and receiver) mounted to the ram of the machine monitor the downward movement in the area underneath the top tooling tip. During the fast closing speed, the beam movement is instantaneously stopped when the system detects an obstacle.

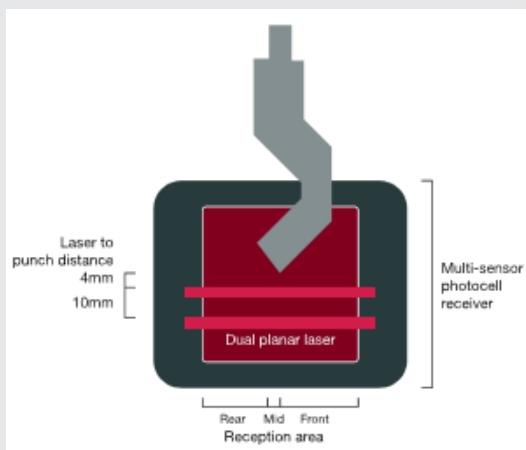
EuroMaster-S and PressMaster can be equipped with **LazerSafe LZS-LG-HS** with mute point 1/4" (RapidBend) or with **LazerSafe IRIS** (RapidBend Ultimate) with mute point 0".

BOTH SYSTEMS GUARANTEE

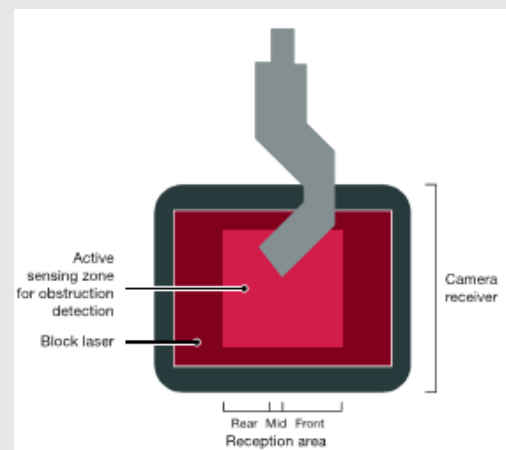
a high level of safety for the operator

a high level of machine productivity

security against tooling collision at high speeds



Lazersafe LZS-L6-HS



Lazersafe IRIS



EMS

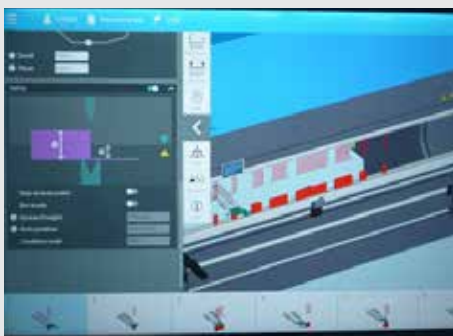


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Lazersafe Optical Safety Guards IRIS

Features

- Optimal Speed Change Over Point
- Fast Closing Speed in safe conditions (monitoring till mute point 0 mm)
- Faster cycle times
- Ultimate Operator Safety
- Security against tooling damage
- Full Integration in the CNC System
- Automatic Alignment



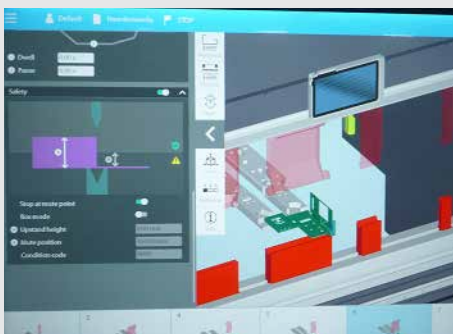
NORMAL MODE

All sensors + 3 zones active
 Fast Approach Speed till mute punt
 Followed by Working Speed
 (unless interruption by obstacle)



BOX MODE WITH PROGRAMMABLE FLANGE HEIGHT

Programmable flange height
 Extra deliberately foot pedal command
 Front and Rear zone switched off at flange height



MUTE STOP MODE

Applicable for workpieces with flanges which interrupt the monitored zone in normal mode operation.
 Initial fast approach till mute point, consequently operator infeed of the workpiece.

Angle Measuring System Alfa-F

Angle Measurement



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System consisting of 2 laser beam transmitters and 2 camera's on both sides of the workpiece.

Principle :

Angle Measurement

Force reduction + calculation of the springback

Automatic angle correction (taking into account the calculated springback)

FEATURES ALFA-F

- Different V-openings and dies are applicable, preferable single-V's with minimal height of 4"
- Quick manual adjustment along the machine length (optional CNC-positioning)
- Optional parking station if system is not in operation

FEATURES ALFA-F AND IRIS PLUS

- Standard tooling is applicable - no extra cost for internal measuring units
- No contact elements - no mechanical wear
- Contactless angle measurement principle guarantees a reliable system even in heavy duty circumstances.



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Angle Measuring System IRIS Plus

Angle Measurement

Automatic angle measurement and automatic correction of the bending angle



Active Angle control is a highly accurate angle control process that calculates spring back for each individual bend, then controls the bend depth with Live Angle Bending to achieve the correct angle.

IRIS Plus comprises a laser transmitter and receiver set mounted to the upper beam of the press brake. It includes a high speed digital camera and image data processing system contained within the receiver unit.



FEATURES IRIS PLUS

- Different V-openings (5/16" until 1 3/8") and dies are applicable, only single V-'s
- Recommendable limitation on the working length: 12'
- Most optimal accuracy results (10' or less)
- Never collision with workpiece

FEATURES ALFA-F AND IRIS PLUS

- Compact assembly guarantees an optimal working space for operator and material
- Possibility of measuring on workpieces with apertures
- Guaranteed precision

Sheet Following Systems

For bending long and thin sheets

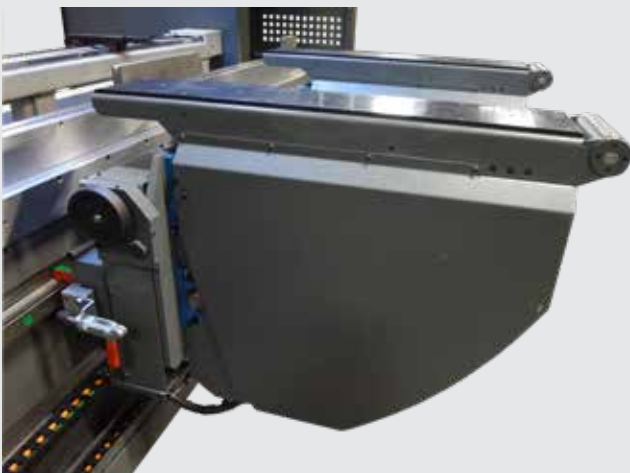
Sheet Following Systems are especially recommended when bending **long** and **thin** sheets as they support as well as prevent second bends in your part.

They are very efficient in **supporting heavy parts** during decompression and the beam return movement.



The Sheet Following Units are operating electro-mechanically by means of servo motors, with adjustable speed as a function of the applied V-opening.

They can be adjusted vertically in order to suit different die heights.





EMS



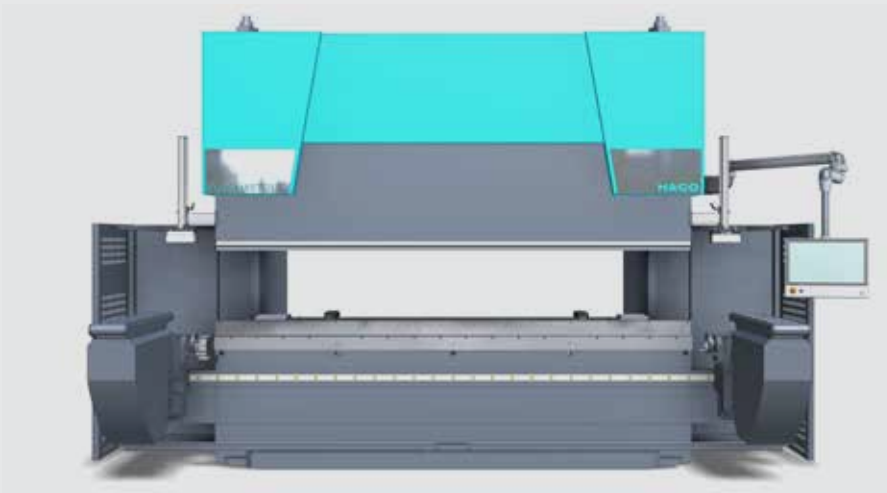
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Sheet Following Systems

Optional parking stations

Optional parking stations at right and/or left hand side of your pressbrake allow for parking your sheet following system when not operational. The system is moved out of the bending zone enhancing ergonomics and safety.

Picture: control panel at the right hand side is optional



Picture below:

Special Customized Sheet Following System with 1 telescopic arm inclusive width adjustment of the support surface and height adjustment of the following arm.



SyncView

Human and machine become one

SYNCVIEW: BENDING EFFICIENCY

SyncView was invented from the notion that it would be ideal to **watch both screen and workpiece simultaneously** during the bending process. This innovative solution consists of a tablet screen that is automatically positioned at the **optimal location**: where the piece is actually positioned by the operator.

SYNCVIEW SPECIFICATIONS:

- 8" display
- fast, automated positioning to the correct tool location
- Multi-Touch interface
- automated wireless charging





EMS



PM

SyncView

Human and machine become one

SYNCVIEW'S ADVANTAGES

Time-savings & efficiency

The operator no longer has to look at a fixed 3D image on the screen – sometimes meters away from him – time is no longer wasted when bending (complex) parts. With this innovation – in which the 3D image of the bending steps is always right in front of the user – he can understand and carry out the steps quicker during the bending sequence. In addition, the 3D images on the screen can be rotated, without the operator having to leave the work position. This enables an even better and faster evaluation of complex pieces than is possible from a single perspective. User tests indicate time-savings of up to 25% during the actual bending process.

Ergonomics & physical comfort

The operator no longer has to constantly keep turning his head between the screen and the workpiece. Eliminating repetitive torsional movements of the neck and torso reduces long-term health risks. Now, the operator can look in the same direction at both the screen and the workpiece, which simply requires eye movement – producing a more pleasant, natural and comfortable interaction.

Safety & user-friendliness

What's more, should something go wrong, the operator now recognizes it quickly. This is a safety benefit particularly when positioning the piece. The operator is no longer occupied either with the screen or with the workpiece. The workflow becomes one, so to speak – enabling the operator to focus 100% on the bending process itself.



Fiber Laser Cutting



Robot Bending



Punching

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