

# iCON-100

## CNC Pressbrake Controller



## Features-

- Latest CNC technology
- 17" Touch screen interface
- Windows 10 operating system
- Pressbrake motion controller
- Direct proportional valve control
- Operator friendly
- Quick draw
- 2D & 3D simulation
- Part modelling
- Automatic bend sequencing



CP iCON interface pendant

## iCON-100 CNC



### All Axis Configuration

Y1/Y2 - Y - X1/X2 - X - R1/R2 - R - Z1/Z2 - Z - C  
Synchro - Nutstop/Torsion Bar - Upstroke - Servo

### All makes and models

- Amada - Durma - Gasparini - Steelmaster - Darley - Trumph - Safan  
- Kleen - S&E - LVD - Yawei - Promecam - Adira - Haco - Hurco - Baykal - MVD  
and many more.....



## Part design - Editing - Simulation

AP02\_02 F200(S) S2.1 01.12.18 12:17 NEW18120101 | 3.00 | S-STANDARD | S-STANDARD

0/51 Select Template or Draw

Screen Tools

Stock

Name Job

Draw Part

Touch Draw

Quick

Top Hat

Big Curve

Massive Curve

AP02\_02 F200(S) S2.1 01.05.18 11:52 NEW181805001 | 2.00 | |

0/51 [EDITING] External Dimensions

Screen Tools

Stock

Save As

Clear Sequence

Z Length 0.00

Review

Use 1

Use 2

Cut Length = 170.52

Final Eng. Make Eng. Part Job Limited Job Simulate Jog Axes Tools Admin.

Job ID	Z Length	Bend Qty	Thick	Cut Length	Material	Date↑
NEW18112702	0.00	3	5.00	249.18	MS	27/11/2018
NEW18112701	0.00	2	1.00	185.34	AL	27/11/2018
NEW18102701	0.00	1	1.00	201.54	AL	27/10/2018
NEW18101201	0.00	1	1.00	N/A	AL	12/10/2018
S-TRAILER SIDE	2400.00	12	1.60	1010.09	MS	09/02/2018
S-GUTTER 300	3500.00	5	1.00	1122.96	SS	09/02/2018
S-DOOR JAMB	1500.00	8	1.00	267.33	MS	09/02/2018
S-CLAMP THICK	400.00	2	8.00	353.98	MS	09/02/2018
S-CLAMP TEST	1000.00	3	3.00	248.09	MS	09/02/2018
S-BRACKET 2	100.00	5	1.20	143.86	AL	09/02/2018
S-BRACKET 1	500.00	5	1.00	357.37	SS	09/02/2018

Find Job ID

Find Bend Qty

Find Thick

Find Material

Find Date

Find Cut Length

Find Z Length

Delete Job

Save As

AP02\_02 F200(S) S2.1 01.05.18 12:01 NEW181805005 | 2.00 | S-SHARP | S-MULTI 16

0/51 Simulate Job

Screen Tools

Part Data

- Cut Length = 219.85
- Gauge = 2.00
- Material = AL
- TOD = 94.40
- MM/dog = 0.08
- Tonnage = 60T or 100%
- Bend = 1 98.49 73.02
- Flip Rotate Retract

Edit Job Run Job Set Opening Simulate Tools Next Prev

Bend No. = 2

X 46.68

R 65.00

1 3 2

Flip

Rotate

Retract

Delay

Position 0

Clear Sequence

Last Bend Next Bend

X To Point X To Face

## Manual bend sequencing and modelling

AP02\_16 F200(B) S4.1    24.05.19 2:47    S-BRACKET 2 > 1.20 > S-RADICAL > S-NARROW 10

0/39    Edit Bend Sequence and Functions

Screen Tools

Bend No. = 3    X 29.64

Flip

Rotate

Retract

Delay

Position 0

Edit Sequence

Last Bend    Next Bend

X To Point    X To Face

Find Seq.    Edit Job    Run Job    Locked Job    Simulate    Jog Axes    Tools    Maint.

AP02\_16 F200(B) S4.1    24.05.19 2:51    S-BRACKET 2 > 1.20 > S-STANDARD > S-STANDARD

0/39    Edit Bend Sequence and Functions

Screen Tools

Bend No. = 4    X 13.80

Flip

Rotate

Retract

Delay

Position 0

Edit Sequence

Last Bend    Next Bend

X To Point    X To Face

Find Seq.    Edit Job    Run Job    Locked Job    Simulate    Jog Axes    Tools    Maint.

### 3D Job Library

AP02\_16 F200(B) S1.1

0/34

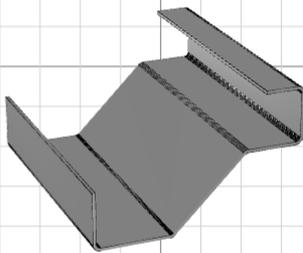
24.05.19

2:30

QUICK > 1.00 > S-STANDARD > S-STANDARD

Find Old Job

Job ID	Z Length	Bend Qty	Thick	Cut Length	Material	Date↑
S-CLAMP TEST	1000.00	3	3.00	248.09	MS	9/02/2018
S-BRACKET 2	100.00	5	1.20	143.86	AL	9/02/2018
S-BRACKET 1	500.00	5	1.00	357.37	SS	9/02/2018



← New Part Edit Job Select Job Quick Bend

Simulate Tools

▽ Next △ Prev

Screen Tools

Pan

Zoom In

Zoom Out

View All

Switch units

Length

Find Z Length

Delete Job

Save As

### 3D Tooling

AP02\_22 F200(A) S3.3

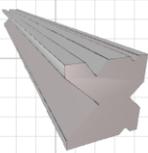
0/66

15.05.19

1:26

S-BRACKET 2 > 1.20 > S-STANDARD > S-NARROW 10

Die Block ID↓	Shape	V	Height	V Angle	Tons/m	Length
S-STANDARD	Std.	16.00	100.00	88.0°	80	1200.00
S-NARROW 15	Std.	15.00	100.00	88.0°	80	1200.00
S-NARROW 10	Std.	10.00	100.00	88.0°	80	1200.00
S-MULTI 75	Multi	75.00	97.00	88.0°	80	1200.00
S-MULTI 35	Multi	35.00	97.00	88.0°	80	1200.00
S-MULTI 26	Multi	26.00	101.60	75.0°	80	1200.00
S-MULTI 16	Multi	16.00	101.60	88.0°	80	1200.00
S-MULTI 12	Multi	12.00	101.60	88.0°	80	1200.00



Front

← Edit Job Select Die Run Job ↺ Edit Die Simulate Jog Axes Flip Die Maint.

Search Dies New Die Search Punches Position Tools Save As Delete Die

AP02\_22 F200(A) S3.1

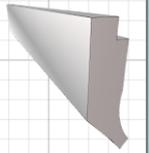
0/66

15.05.19

1:25

S-BRACKET 2 > 1.20 > S-STANDARD > S-NARROW 10

Punch Tool ID↓	Shape	Angle	Height	Tons/m	Length
S-STANDARD	Standard	80.0°	100.00	80	500.00
S-SIMPLE	Simple	60.0°	110.00	80	1200.00
S-SHARP	Sharp	60.0°	110.00	80	1200.00
S-RADICAL	Radical	80.0°	105.00	80	1200.00
S-NARROW	Narrow	88.0°	120.00	80	1200.00
S-FINE	Fine	88.0°	150.00	80	1200.00
S-BIG RADIUS	Big Radius	90.0°	100.00	60	1200.00
S-BASIC HEAVY	Basic Heavy	80.0°	100.00	100	1200.00



Front

← Edit Job Select Punch Run Job ↺ Edit Punch Simulate Jog Axes Flip Punch Maint.

Search Punches New Punch Search Dies Position Tools Save As Delete Punch

## 2D Tooling

### Punch Library- Create and edit

APG\_38 F200B S1.2 05.05.18 11:58 QUICK | 1.00 | <NO PUNCH> | <NO DIE>

Punch Tool ID	Shape	Angle	Height	Tons/m	Length
S-STANDARD	Standard	88.0°	100.00	80	1200.00
S-SIMPLE	Simple	60.0°	110.00	80	1200.00
S-SHARP	Sharp	60.0°	110.00	80	1200.00
S-RADICAL	Radical	80.0°	105.00	80	1200.00
S-NARROW	Narrow	88.0°	120.00	80	1200.00
S-FINE	Fine	88.0°	150.00	80	1200.00
S-BIG RADIUS	Big Radius	90.0°	100.00	60	1200.00
S-RACK HEAVY	Rack Heavy	80.0°	100.00	100	1300.00

Property	Value
Shape =	Standard
A =	80.0°
H =	100.00
R =	1.0
W =	30.00
Length [L] =	1200.00
Tons/m =	80
O =	35.00
T =	20.00
J =	40.00
C =	0.00
E =	35.00
G =	30.00
D =	75.00
F =	40.00
B =	12.00

### Die Library- Create and edit

AP02\_03 F200 S3.3 02.12.18 12:06 QUICK | 1.00 | <NO PUNCH> | <NO DIE>

Die Block ID	Shape	V	Height	V Angle	Tons/m	Length
S-STANDARD	Std.	25.00	100.00	88.0°	80	1200.00
S-NARROW 15	Std.	15.00	100.00	88.0°	80	1200.00
S-NARROW 10	Std.	10.00	100.00	88.0°	80	1200.00
S-MULTI 75	Multi	75.00	97.00	88.0°	80	1200.00
S-MULTI 35	Multi	35.00	97.00	88.0°	80	1200.00
S-MULTI 26	Multi	26.00	101.60	75.0°	80	1200.00
S-MULTI 16	Multi	16.00	101.60	88.0°	80	1200.00
S-MULTI 12	Multi	12.00	101.60	88.0°	80	1200.00

Property	Value
Shape =	Multiple Die
Width [W] =	101.60
V Width [V] =	75.00
Height [H] =	97.0
V Angle [A] =	88.0°
Radius [R] =	1.00
Length [L] =	1200
Tons/m =	80.00
Offset from...	0.00
Shoulder...	0.50
Face [F] =	3

## Run Job



AP02\_03 F200(A) S6.4  
0/64

03.06.19  
10:06

TEST > 1.20 > S-STANDARD > S-STANDARD  
D=190.49 > Touch Point 2 > Touch Point 1 > View All >...

Screen Tools

**S**  
100

**Bend No. = 5**

**QTY**  
0

**S**  
0%

**Y**  
0.00

**X**  
0.00

**A3**  
MID

**R**  
0.00

**C**  
0.00

**A6**  
0.00

Angle  
135.0°

Corr  
0.0°

X  
163.84

Y1  
132.80

Line  
OFF

Retract  
OFF

Dwell  
0.3

Flip  
OFF

X1/0  
0

Repeats  
0

Rotate  
OFF

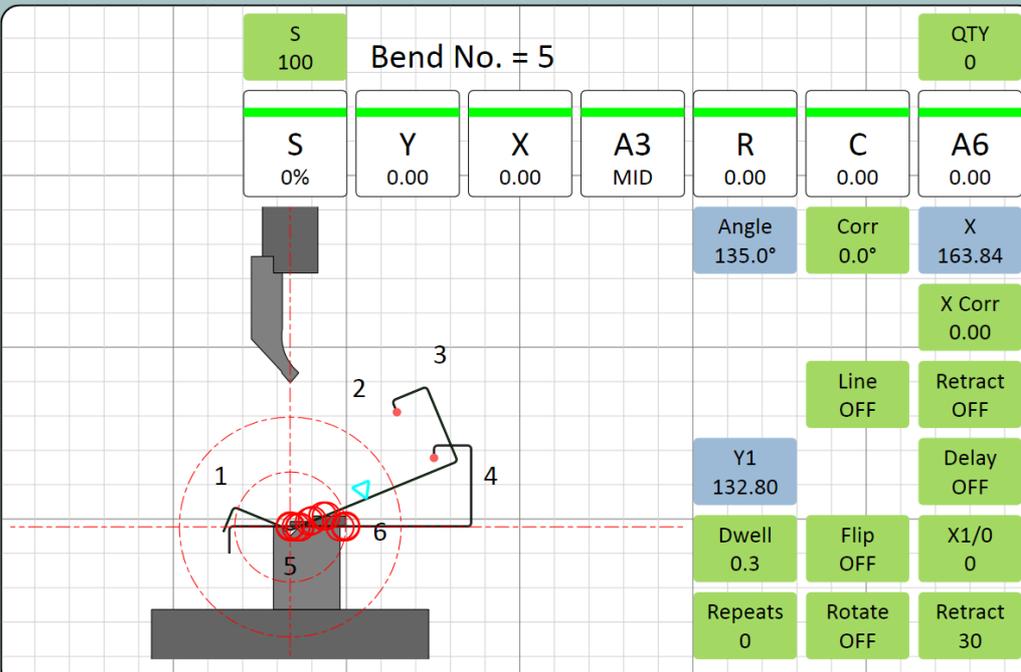
Retract  
30

Locked Job

Delay  
OFF

Last Bend

Next Bend



←

Edit Job

Run Job



Single Step

Simulate

Jog Axes

Tools

Maint.

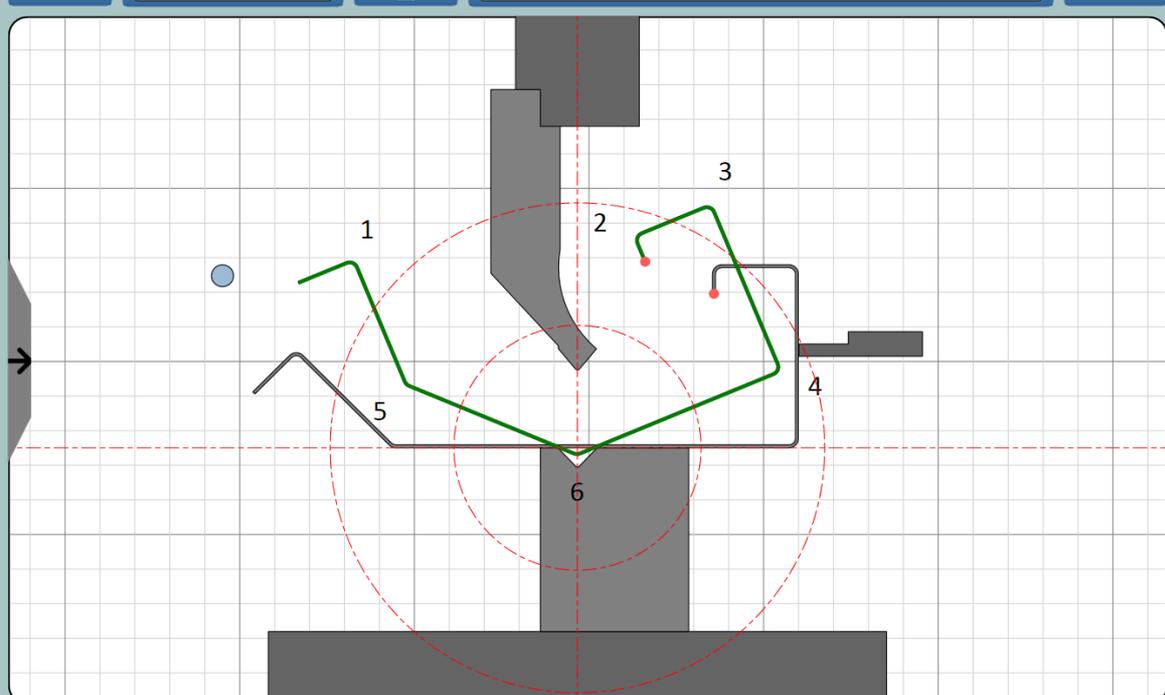


AP02\_03 F200(A) S1.3  
0/63

03.06.19  
10:04

NEW19060304 > 1.20 > S-STANDARD > S-STANDARD  
Simulate Job

Screen Tools



←

Edit Job

Run Job

Set Opening

Simulate

Tools

Next

Prev

AP02\_03 F200(A) S4.1 03.06.19 10:08 TEST > 1.20 > S-STANDARD > S-STANDARD  
0/66 Edit Bend Sequence and Functions

Bend No. = 4

A3  
73.53  
R  
92.36

Last Bend Next Bend X To Point X To Face

Find Seq. Edit Job Run Job Locked Job Simulate Jog Axes Tools Maint.

Screen Tools  
Flip  
Rotate  
Retract  
Delay  
Position 0  
Edit Sequence

AP02\_03 F200(A) S4.1 03.06.19 10:06 TEST > 1.20 > S-STANDARD > S-STANDARD  
0/64 Edit Bend Sequence and Functions

Bend No. = 5

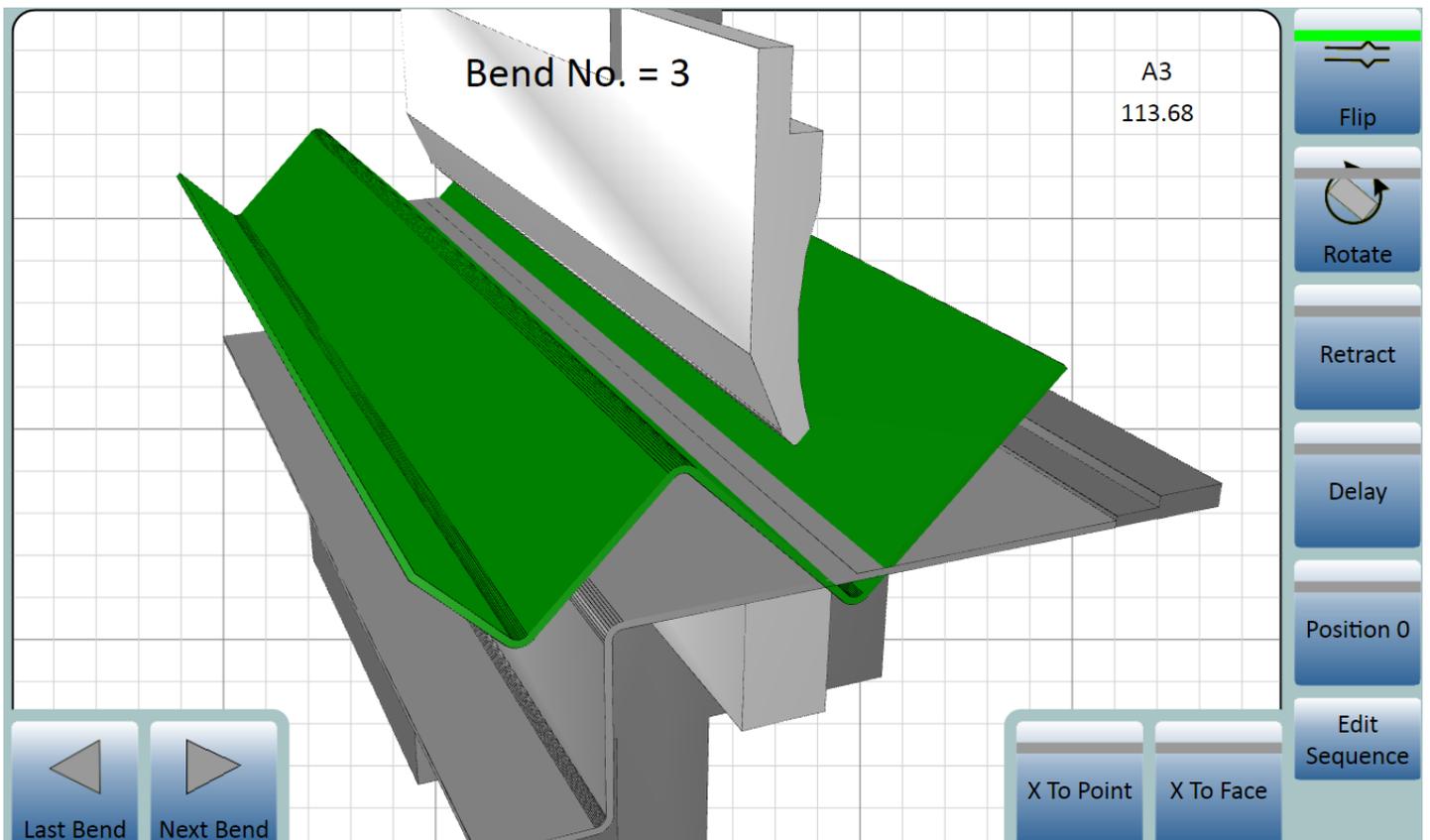
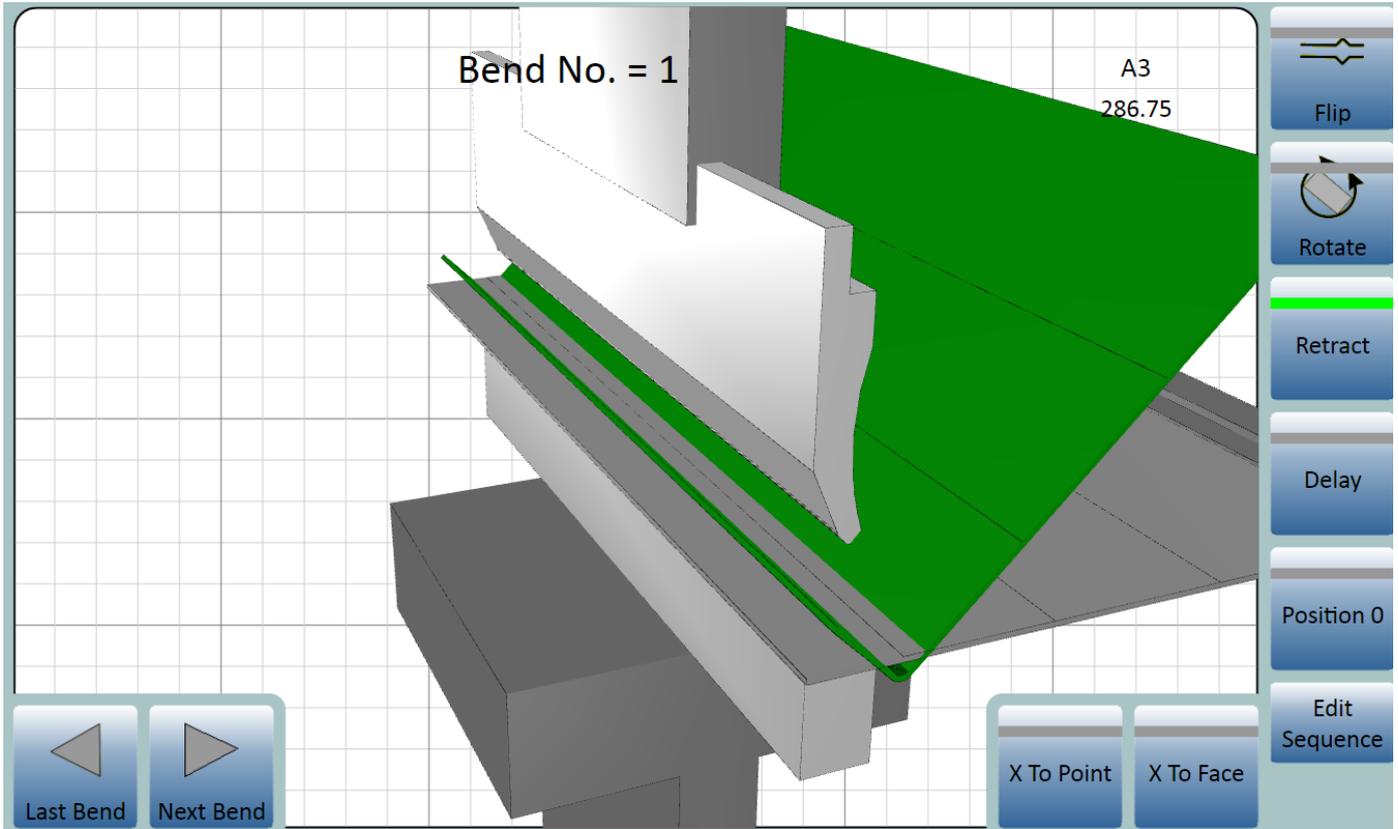
A3  
163.84  
R  
112.36

Last Bend Next Bend X To Point X To Face

Find Seq. Edit Job Run Job Locked Job Simulate Jog Axes Tools Maint.

Screen Tools  
Flip  
Rotate  
Retract  
Delay  
Position 0  
Edit Sequence

### 3D Modelling



## Calibration Automatic Y Axis Calibration

AP02\_02 F200(S) S7.1    01.12.18 12:16    QUICK | 3.00 | S-STANDARD | S-STANDARD  
0/51    Jog Axes | ???

**Y AXES**

0.00    0.00    0.00

Move Y1    Move Y1 +Y2    Move Y2

Man Cal    AutoCal    Set Y Feedrate

Feedrate -10    0%    Feedrate +10

**Pressure**

80%    Set Pressure

Pressure -10%    Pressure +10%

**X AXIS**

0.00

Move X

Set X Feedrate

Feedrate -10    0%    Feedrate +10

Abs Cal    GOTO

FWD    Auto Off    REV

Edit Job    Run Job    Tools    Maint.

## Machine Parameters

AP02\_03 F200 S9.1    02.12.18 12:11    S-BRACKET 2 | 1.20 | S-RADICAL | S-NARROW 10  
0/33    Physical Dimensions

Height [H] = 2000.00  
Width [W] = 1500.00  
Throat Width [TW] = 1250.00  
Plate Thickness [T] = 30.00  
Throat Height [TH] = 450.00  
Throat Depth [TD] = 550.00  
Throat Position [TP] = 800.00  
Throat Radius [TR] = 50.00  
Distance between side cheeks [DS] = 2500.00

Frame Dimensions  
Top Beam Dimensions  
Bottom Dimensions  
X Finger Dimensions  
Adapter Dimensions  
Aux Dimensions

AP02\_03 F200 S8.1    02.12.18 12:12    S-BRACKET 2 | 1.20 | S-RADICAL | S-NARROW 10  
0/33    ICON Settings

Setting	Value
Setup	
1. Span	156.00
2. Pos Limit	150.00
3. Neg Limit	0.00
4. Output Range	0-10
5. Quad Multiplier	X4
6. PPM	100.00
7. Calibration Direction	UP
8. Calibration Position	75.00
9. Positioning Style	VELOCITY
10. Fast Dist	20
11. Slow Dist	10
Feedrates	
12. Jog Min	0

Change Value    Next UP    Next DN

General Settings  
Y Axis  
X Axis  
Axis 3  
Axis 4  
Axis 5  
Maint.

## iCON 100 – Main Hardware Components

### Controller Interface

Windows 10, WiFi, Bluetooth, USB 3.0



### iCON-1 Pressbrake Controller



## Other Components

### AC Servo



### Digital Linear Encoders and Analog Transducers

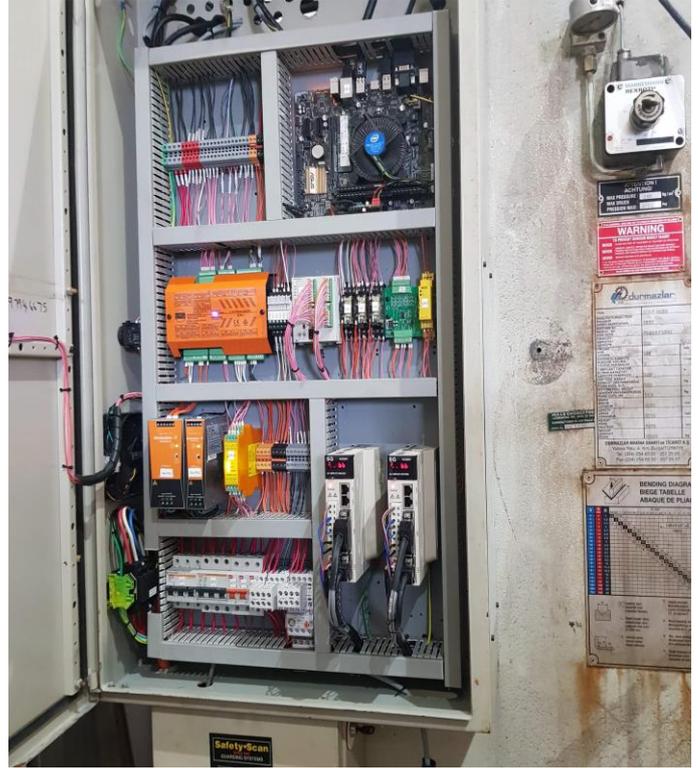
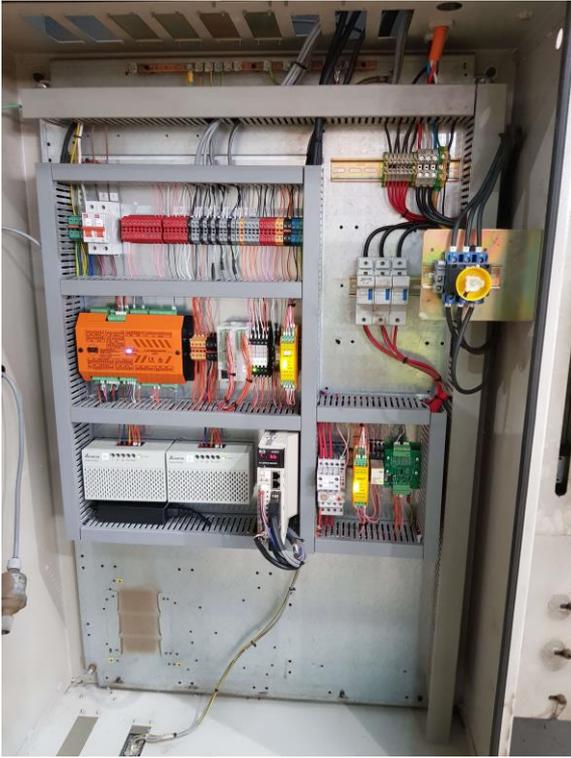


Digital



Analog





## CP BLPS Safety Lasers



Omron Safety PLC - Programmed by CP Machinery

## Online updates and support



Contact-



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We reserve the right to make changes to equipment presented without prior notice