

PA  
PA PLUS

**adira**

METAL FORMING SOLUTIONS



# **PRESS BRAKES PA / PA PLUS**

TECHNICAL DATA SHEETS

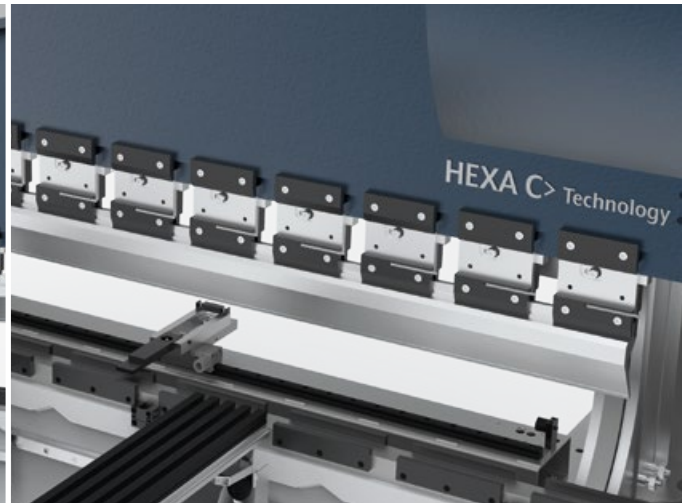
## Press Brakes

# PA / PA PLUS



The HEXA-C® frame ensures better bending precision, given that the movable ram stays perfectly aligned with the fixed ram.

Greendrive System (PA PLUS).



## Main Features PA PLUS

Increased return speed (faster work cycle)

The Greendrive system makes the motor turn very slowly, thereby reducing consumption when the operator is not pressing the pedal or using the machine

A significant reduction in energy consumption

Standard machine equipped with a crowning table, Lazersafe safety system and 4-axis back gauge (X/R/Z1 and Z2)

## PA Benefits

Electric-hydraulic synchronisation of the movable ram ( $Y_1$  and  $Y_2$  axes);

Electric-hydraulic stoppage of the movable ram at 0.01 mm; Comprehensive programming of the bending angle;

Movable ram slope programming ( $Y_1$  and  $Y_2$ );

Programming work speeds (Advance and Return) [10-100%];

Start/Stop system that allows energy savings;

Standard machine equipped with crowning table, Lazersafe safety system and 2 axes on the back gauge with 4 back gauge stops (X/R).



The position of the ram is constantly monitored through guides, located at the ends of the HEXA-C frame, ensuring repeatability of 0.01 mm of ram positioning, irrespective of the tonnage, load position or oil temperature.

## PA PLUS Benefits

GREENDRIVE SYSTEM – the system varies rotation of the electric motor, thus enabling:

- Increased return speed (faster work cycle)
- Residual motor rotation when the machine is stopped
- A significant reduction in energy consumption

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## Press Brake PA

| PA                                          |      | 13530 | 13540 | 16030 | 16040 | 22030 | 22040 |
|---------------------------------------------|------|-------|-------|-------|-------|-------|-------|
| Capacity                                    | kN   | 1350  | 1350  | 1600  | 1600  | 2200  | 2200  |
| Bending length                              | mm   | 3000  | 4000  | 3000  | 4000  | 3000  | 4000  |
| Distance between side frames                | mm   | 2550  | 3150  | 2550  | 3150  | 2550  | 3150  |
| Maximum stroke                              | mm   | 260   | 260   | 260   | 260   | 260   | 260   |
| Max. opening without intermediate tools (A) | mm   | 500   | 500   | 500   | 500   | 500   | 500   |
| Arch (B)                                    | mm   | 400   | 400   | 400   | 400   | 400   | 400   |
| Power                                       | kW   | 15    | 15    | 15    | 15    | 15    | 15    |
| Approximation speed                         | mm/s | 150   | 150   | 150   | 150   | 130   | 130   |
| Working speed                               | mm/s | 10    | 10    | 10    | 10    | 8     | 8     |
| Return speed                                | mm/s | 100   | 100   | 100   | 100   | 85    | 85    |
| X-axis stroke                               | mm   | 625   | 625   | 625   | 625   | 625   | 625   |
| X-axis speed                                | mm/s | 500   | 500   | 500   | 500   | 500   | 500   |
| R-axis stroke                               | mm   | 180   | 180   | 180   | 180   | 180   | 180   |
| R-axis speed                                | mm/s | 50    | 50    | 50    | 50    | 50    | 50    |
| Z1/Z2-axis stroke (optional)                | mm   | 2150  | 2750  | 2150  | 2750  | 2150  | 2750  |
| Z1/Z2-axis speed (optional)                 | mm/s | 400   | 400   | 400   | 400   | 400   | 400   |
| Min. machine length                         | mm   | 3950  | 4980  | 3950  | 4980  | 3950  | 4980  |
| Max. machine length (C)                     | mm   | 4700  | 5780  | 4700  | 5780  | 4700  | 5780  |
| Max. width (D)                              | mm   | 2180  | 2180  | 2180  | 2180  | 2180  | 2180  |
| Max. height (E)                             | mm   | 2960  | 3120  | 2960  | 3120  | 3050  | 3120  |
| Height for transport                        | mm   | 2750  | 2880  | 2750  | 2880  | 2830  | 2880  |
| Approx. weight                              | Kg   | 9100  | 11500 | 9300  | 11700 | 11200 | 13500 |
| Height of workstation (F)                   | mm   | 930   | 930   | 930   | 930   | 930   | 930   |



| PA PLUS                                     |      | 13530 | 13540 | 16030 | 16040 | 22030 | 22040 |
|---------------------------------------------|------|-------|-------|-------|-------|-------|-------|
| Capacity                                    | kN   | 1350  | 1350  | 1600  | 1600  | 2200  | 2200  |
| Bending length                              | mm   | 3000  | 4000  | 3000  | 4000  | 3000  | 4000  |
| Distance between side frames                | mm   | 2550  | 3150  | 2550  | 3150  | 2550  | 3150  |
| Maximum stroke                              | mm   | 260   | 260   | 260   | 260   | 260   | 260   |
| Max. opening without intermediate tools (A) | mm   | 500   | 500   | 500   | 500   | 500   | 500   |
| Throat Depth (B)                            | mm   | 400   | 400   | 400   | 400   | 400   | 400   |
| Power                                       | kW   | 15    | 15    | 15    | 15    | 15    | 15    |
| Approach Speed                              | mm/s | 150   | 150   | 150   | 150   | 130   | 130   |
| Working speed                               | mm/s | 10    | 10    | 10    | 10    | 8     | 8     |
| Return speed                                | mm/s | 150   | 150   | 150   | 150   | 130   | 130   |
| X-axis stroke                               | mm   | 625   | 625   | 625   | 625   | 625   | 625   |
| X-axis speed                                | mm/s | 800   | 800   | 800   | 800   | 800   | 800   |
| R-axis stroke                               | mm   | 180   | 180   | 180   | 180   | 180   | 180   |
| R-axis speed                                | mm/s | 200   | 200   | 200   | 200   | 200   | 200   |
| Approx. Z1/Z2-axis stroke                   | mm   | 2150  | 2150  | 2150  | 2750  | 2150  | 2750  |
| Z1/Z2-axis speed                            | mm/s | 800   | 800   | 800   | 800   | 800   | 800   |
| X/X1-axis stroke (optional)                 | mm   | ± 100 | ± 100 | ± 100 | ± 100 | ± 100 | -/100 |
| X/X1-axis speed (optional)                  | mm/s | 100   | 100   | 100   | 100   | 100   | 100   |
| Min. machine length                         | mm   | 3950  | 3950  | 3950  | 4980  | 3950  | 4980  |
| Max. machine length (C)                     | mm   | 4700  | 4700  | 4700  | 5780  | 4700  | 5780  |
| Max. width (D)                              | mm   | 2180  | 2180  | 2180  | 2180  | 2180  | 2180  |
| Max. height (E)                             | mm   | 2960  | 2960  | 2960  | 3120  | 3050  | 3120  |
| Height for transport                        | mm   | 2750  | 2750  | 2750  | 2880  | 2830  | 2880  |
| Approx. weight                              | Kg   | 9100  | 11700 | 9300  | 11700 | 11200 | 13500 |
| Height of workstation (F)                   | mm   | 930   | 930   | 930   | 930   | 930   | 930   |



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| Equipment           |                                                                                           | PA       | PA PLUS  |
|---------------------|-------------------------------------------------------------------------------------------|----------|----------|
| Punch Tightening    | Fast clamping "ADIRA" punch holders, non-reversible                                       | standard |          |
|                     | Fast clamping "ADIRA" punch holders, reversible                                           | ■        | standard |
|                     | "ADIRA/USA" punch holders                                                                 | ■        | ■        |
|                     | Wila Pro Hydraulic Punch Clamping                                                         | ■        | ■        |
|                     | Wila Pro USA Hydraulic Punch Clamping                                                     |          | ■        |
|                     | Aperto Hidráulico Punção Wila Premium                                                     |          | ■        |
|                     | Aperto Hidráulico Punção Wila Premium USA                                                 |          | ■        |
|                     | Pneumatic Punch Clamping Teda with Frontal Insertion                                      |          | ■        |
| Tables              | Crowning Table, base 60, "Standard Table Kit"                                             | standard | standard |
|                     | Table without Crowning, base 60, "Standard Table Kit"                                     | ■        |          |
|                     | Table without Crowning, 180 mm, "Table Kit II"                                            | ■        |          |
|                     | Table without Crowning, 13 mm, "Table Kit III"                                            | ■        |          |
|                     | 180 mm Table for Multi V "Table Kit II" Dies                                              | ■        | ■        |
|                     | 13 mm Table for Wila "Table Kit III" Dies                                                 | ■        | ■        |
|                     | Wila Pro Hydraulic Clamping with Crowning table                                           |          | ■        |
|                     | Pneumatic Clamping for 60 mm base dies                                                    |          | ■        |
| Sheet metal support | 2 support arms on rail (without height adjustment, without brushes, L = 500 mm)           | standard | standard |
|                     | 1 additional support arm on rail (without height adjustment, without brushes, L = 500 mm) | ■        | ■        |
|                     | 2 support arms on rail (with height adjustment, with brushes, L = 800 mm)                 | ■        | ■        |
|                     | 1 additional support arm on rail (with height adjustment, with brushes, L = 800 mm)       | ■        | ■        |
|                     | Bending Follower (AQ1)                                                                    |          | ■        |
|                     | Second Bending Follower (AQ2)                                                             |          | ■        |
| Back gauges         | X, R back gauge for AD25                                                                  | standard |          |
|                     | X/R/Z1/Z2 back gauge for AD25                                                             | ■        |          |
|                     | X/R/Z1/Z2 back gauge for CYBTOUCH 15                                                      | ■        |          |
|                     | X/R/Z1/Z2 for AD61                                                                        |          | standard |
|                     | X/R/Z1/Z2 back gauge for Delem 6X                                                         |          | ■        |
|                     | X/X1/R/Z1/Z2 back gauge for AD61                                                          |          | ■        |
|                     | X/X1/R/Z1/Z2 back gauge for Delem 6X                                                      |          | ■        |
|                     | X1/X2 - R1/R2 - Z1/Z2 tower back gauge (AD61 or Delem 6X)                                 |          | ■        |
|                     | 1 extra light-duty back gauge stop                                                        | ■        | ■        |
|                     | 2 extra back gauge stops                                                                  |          | ■        |
|                     | Anti-collision function per stop (extra for each stop)                                    |          | ■        |

| Equipment                |                                                                                                             | PA         | PA PLUS    |
|--------------------------|-------------------------------------------------------------------------------------------------------------|------------|------------|
| Angle Measurement Safety | LZS- LG Laser Safety                                                                                        | standard   | standard   |
|                          | No safety                                                                                                   | ■          | ■          |
|                          | IRIS Laser Safety                                                                                           |            | ■          |
|                          | IRIS PLUS Laser Safety (Angle Measurement) (only with AD60)                                                 |            | ■          |
| Controls                 | ESA AD40                                                                                                    | standard   |            |
|                          | ESA AD75                                                                                                    |            | ■          |
|                          | DELEM DA 69_3D (up to 16 axes)                                                                              |            | ■          |
| Leds                     | Leds (Smart Placing) Esa (only with Wila and AD6X)                                                          |            | ■          |
|                          | Leds (Smart Placing) Esa (only with Wila and Delem6X)                                                       |            | ■          |
|                          | Leds (Smart Placing) Wila (apenas com Wila e Delem6X)                                                       |            | ■          |
| Other                    | UPS                                                                                                         | ■          | ■          |
|                          | Supply Voltage 220 V/400 V 25 kV                                                                            | ■          | ■          |
|                          | Robot Interface                                                                                             |            | ■          |
|                          | Adaptation to High Temperatures                                                                             | ■          | ■          |
|                          | Adaptation to Low Temperatures                                                                              | ■          | ■          |
|                          | Air Conditioning on the Electrical Cabinet                                                                  | ■          | ■          |
|                          | Special Paint                                                                                               | ■          | ■          |
|                          | Standard tool kit - @ 85° Punch: 3 or 4 x701603305 + 1x701602302 / 4-vee die 3 or 4 x721103300 +1x721104300 | ■          | ■          |
|                          | Special Tools                                                                                               | on request | on request |
|                          | Digital Goniometer                                                                                          |            | ■          |
|                          | AdBendPro                                                                                                   | ■          | ■          |
|                          | 2 Machines in tandem                                                                                        | on request | on request |





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