DENER MAKİNA was established in 1974 in Kayseri / TURKEY. It has been manufacturing sheet metal working machines like Fiber Laser Cutting, Servo Electric Press Brake, Ball Screw Press Brake, Hydraulic Press Brakes, Hybrid Press Brake, NC - CNC Hydraulic Shears and Plasma Cutting machines.

Dener Makina's production facilities are located in the industrial and Freezone Area in Kayseri. Since it's beginning, Dener has the philosophy of production with the best quality and latest technology. It crowns this with the ISO 9001 Quality Management System and following European Safety Standards. Dener Makina is a leading Turkish Brand in Sheet Metal Working Machinery. It has qualified workmanship and a complete machinery manufacturing facility in it's 30.000 m² closed area. Today, Dener machines are working all around the world.

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TOOLS CLAMPING SYSTEMS
DENER PUMA XL CNC Press Brakes are born with the goal to be flexible, reliable, and advanced bending machines; Dener utilizes the most stringent manufacturing technologies during production to manufacture the highest quality machines. Based on proven design, Dener has increased working speeds, stroke, daylight, and pressing capacities of Puma XL machines.

DENER PUMA XL is a synchronized hydraulic press brake with a 3D Graphical CNC controller and offers simple operation, quick and easy 3D or numerical part programming easy setup of the machine, and auto calculation of the bend sequence. 3D and DXF programming feature with ESA S 660 W Controller gives the possibility to end users. These functions make Dener PUMA XL CNC Hydraulic Press Brakes very popular in sheet metal industries.

Forming Challenges
Simplified Solution.

* Some optional equipment was used on the machine photo.
STANDARD EQUIPMENT

2 (X,R) Axis Back Gauge

Manual Crowning

Front Support Arms

ESA S 660 W Control Unit

European Type Sectioned Punch
European Type Sectioned V Die
CONTROLLERS

ESA S 660 W CONTROLLER
- 19" 4:3 high-resolution 3D touch screen
- 2.5" Hard disk drive 20GB or more
- Fiber optic interface
- 3D Programming
- Direct import of tools shapes (.dxf files)
- Automatic bending sequence search and collision control
- Remote access
- Windows 7 operating system

CYBELEC MODEVA15T
- 15" colour touch screen
- Multi-simulation capability
- On-screen finger profile drawing
- Very simple and convenient data transfer
- Automatic bend listing
- EC safety-cycle management
- Ethernet for easy communication

DELEM DA-66T
- 2D graphical touch screen programming mode
- 3D visualisation in simulation and production
- 17” high resolution colour TFT
- Full Windows application suite
- Delem modusys compatibility
- USB, peripheral interfacing
- User specific application support with in the controllers
- Multitasking environment
- Sensor bending & correction interface

DELEM DA-69T
- 3D and 2D graphical touch screen programming mode
- 3D visualisation in simulation and production
- 17” high resolution colour TFT
- Full Windows application suite
- Delem modusys compatibility
- USB, peripheral interfacing
- User specific application support with in the controllers
- Multitasking environment
- Sensor bending & correction interface

OPTIONAL EQUIPMENT

- Motorized Crowning
- Hydro Mechanical Crowning
Gauging is a main concern for press brake operators. Whether you require complex part multi station bending or single bending or production of taper bends Puma XL offers solution with 6 different back gauge options to its customer. Depending on the geometry of the parts and their complexity, all back gauge models are particularly manufactured to reach high precision and high speeds.

**Standard Back Gauge Systems**
- X - R CNC axes
- Ball screw driven X axis
- Two linear guides per ball screw
- 750 mm X axis stroke (1040 mm total gauge distance)
- 250mm R axis stroke
- Positioning accuracy of X axis ± 0.03mm

**Optional Back Gauge Systems**
- X1, X2, R
- X, R, Z1, Z2
- X, X', R, Z1, Z2
- X1, X2, R, Z1, Z2
- X1, X2, R1, R2, Z1, Z2 (ATF TYPE)
Deeper Throat Depth
Higher Stroke Longer Daylight
Linear Guided
Stronger Front Supports
(175 Tons and above machines)
Stronger Beam Guiding System
to stable the beam
Double Linear Guided
Stronger Back Gauges
Linear Guided Stronger
Back Gauge X Movement
| PUMA XL | 1540 | 2060 | 2660 | 26100 | 30100 | 30135 | 30175 | 30220 | 30320 | 36175 | 36220 | 36320 | 40175 | 40220 | 40320 | 40400 | 40500 | 40600 | 40500 | 60220 | 60320 | 60400 | 60600 |
|---------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Bending Length (mm) (A) | 1550 | 2050 | 2600 | 2600 | 3020 | 3020 | 3020 | 3020 | 3020 | 3650 | 3650 | 3650 | 4050 | 4050 | 4050 | 4050 | 4050 | 4050 | 4050 | 6050 | 6050 | 6050 | 6050 |
| Bending Capacity (ton) | 40 | 60 | 60 | 100 | 100 | 135 | 175 | 220 | 320 | 175 | 220 | 320 | 175 | 220 | 320 | 400 | 500 | 600 | 220 | 320 | 400 | 600 |
| Approaching Speed (mm/sn) | 180 | 180 | 180 | 160 | 160 | 160 | 150 | 140 | 140 | 150 | 140 | 140 | 80 | 80 | 60 | 100 | 80 | 80 |
| Bending Speed (mm/sn) | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 8 | 8 |
| Returning Speed (mm/sn) | 160 | 160 | 150 | 150 | 140 | 130 | 130 | 120 | 130 | 130 | 130 | 120 | 80 | 80 | 60 | 100 | 80 | 60 |
| Stroke (C) | 220 | 220 | 220 | 300 | 300 | 300 | 350 | 350 | 400 | 350 | 350 | 400 | 400 | 400 | 455 | 350 | 350 | 400 |
| Daylight (D) | 410 | 410 | 410 | 530 | 530 | 530 | 530 | 530 | 530 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |
| Throat Depth (E) | 400 | 400 | 450 | 450 | 450 | 450 | 450 | 450 | 450 | 450 | 450 | 450 | 450 | 450 | 450 | 450 | 450 | 450 |
| Distance Between Side Frames (B) | 1250 | 1650 | 2150 | 2150 | 2555 | 2555 | 2555 | 2555 | 2555 | 3100 | 3100 | 3100 | 3100 | 3550 | 3550 | 3550 | 3550 | 3550 |
| Length (L) | 2445 | 2845 | 3345 | 3320 | 3725 | 3745 | 3745 | 3745 | 3745 | 4290 | 4290 | 4330 | 4740 | 4740 | 4780 | 5000 | 5000 | 5000 | 6775 | 6815 | 6855 | 7100 |
| Width (W) | 2200 | 2200 | 1930 | 2260 | 2260 | 2250 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2290 | 2770 | 2770 | 4050 | 2300 | 2280 | 2780 | 3275 |
| Width Without Front Supports (Y) | 1330 | 1335 | 1330 | 1695 | 1670 | 1710 | 1710 | 1710 | 1710 | 1710 | 1710 | 1710 | 1710 | 1710 | 1725 | 2310 | 2600 | 2130 | 1760 | 1760 | 2070 | 3190 |
| Height (H) | 2390 | 2390 | 2390 | 2780 | 2780 | 2835 | 3030 | 3055 | 3100 | 3030 | 3055 | 3100 | 3030 | 3030 | 3050 | 3050 | 3100 | 3560 | 3560 | 4225 | 3010 | 3110 | 3615 | 3910 |
| Table Height (F) | 900 | 900 | 900 | 900 | 900 | 900 | 920 | 920 | 920 | 920 | 920 | 920 | 920 | 920 | 920 | 1095 | 1095 | 1095 | 920 | 920 | 920 | 1095 |
| Pit Depth | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 850 | 0 | 0 | 0 | 1030 |
| Main Motor (KW) | 7.5 | 7.5 | 7.5 | 11 | 11 | 15 | 22 | 22 | 30 | 22 | 22 | 30 | 22 | 22 | 22 | 45 | 45 | 45 | 45 | 22 | 30 | 45 | 45 |
| Oil Tank (lt) | 100 | 100 | 100 | 190 | 190 | 190 | 300 | 300 | 400 | 300 | 300 | 400 | 400 | 400 | 400 | 400 | 400 | 600 | 300 | 400 | 400 | 600 |
| Approximate Weight | 4250 | 4800 | 5500 | 7900 | 8550 | 9300 | 11150 | 11250 | 14450 | 12350 | 12500 | 15650 | 13250 | 13350 | 16750 | 23950 | 25200 | 25700 | 18200 | 23100 | 31400 | 50200 |

DENER HAS THE RIGHT TO MAKE MODIFICATIONS IN TECHNICAL PROPERTIES WITHOUT GIVING ANY NOTIFICATION
The DENER SMART XL CNC is an economical, strong, fast and accurate new model. The SMART XL Press brake targets small and medium size sheet metal working companies. The most important features of DENER SMART XL are:

- Faster working speeds
- Greater bending power
- Deeper throat depth
- Bigger stroke and day light

The DENER SMART XL is a synchronized hydraulic press brake with numerical CNC controllers. It offers simple operation, quick and easy part programming, easy setup of the machine, auto calculation of the bend angle, and back gauge correction. The 2D off line programming feature of the ESA 630 control gives possibility to complete bending programs on the Office PC and transfer them to the machine by LAN or USB. This feature is popular for end users not interested in more expensive off line CAD/CAM bend softwares. The SMART XL has more advanced features than its competitors. Some of these features are: a strong and complete mono block welded frame, longer stroke and longer distance between frames, deeper throat depth, and a higher working table.

* Some optional equipment was used on the machine photo.
STANDARD EQUIPMENT

ESA S 630 CONTROL UNIT
- 10” colour touch screen
- Automatic bend listing
- Easy programmable 2D graphic display.
- 2D graphic display of machine frame, work-piece and tools.
- Up to 4 axes (Y1,Y2, and 2 auxiliary axes)
- Multiple language options
- Multiple simulation
- Remote access
- 128 MB silicon disk

European Type Sectioned Punch
European Type Sectioned V Die

European Type Sectioned Clamping System
Stronger Front Support Arms
BACK GAUGES

- Single (X) Axis Back Gauge (Standard)
- 2 (X,R) Axis Back Gauge (Optional)
- Single (X) Axis With Additional Finger (Optional)
## SMART XL

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DENER HAS THE RIGHT TO MAKE MODIFICATIONS IN TECHNICAL PROPERTIES WITHOUT GIVING ANY NOTIFICATION
“EXCEED YOUR EXPECTATIONS”
OPTIONAL TOOL CLAMPING SYSTEMS

- Dener Type Pneumatic Clamping System
- Manual Quick Clamping System
- Wila NSCL-II-HC/UPB Premium Hydraulic Punch Clamping
- Wila ASCL-I-HC/UPB American Type Hydraulic Clamping
- Wila NSCL-I-MC/UPB Mechanical Punch Clamping
- Wila NSCL-I-HC/UPB Hydraulic Punch Clamping
- Wila OB-I-MC-TY/ES IV Mechanical Die Clamping
- Wila NSCR-I-HC-CNC/UPB Hydraulic Die Clamping

ACCESSORIES

- SMART XL
- PUMA XL
- Double Linear Guiding System to Stabilize the Ram

Dener Type Pneumatic Clamping System
Manual Quick Clamping System
Wila NSCL-II-HC/UPB Premium Hydraulic Punch Clamping
Wila ASCL-I-HC/UPB American Type Hydraulic Clamping
Wila NSCL-I-MC/UPB Mechanical Punch Clamping
Wila NSCL-I-HC/UPB Hydraulic Punch Clamping
Wila OB-I-MC-TY/ES IV Mechanical Die Clamping
Wila NSCR-I-HC-CNC/UPB Hydraulic Die Clamping

Double Linear Guiding System to Stabilize the Ram
OPTIONAL EQUIPMENT

- Hydraulic Oil Cooling System
- Electrical Cabinet Cooler
- CNC Controlled Sheet Followers (Puma XL only)
- Additional Back Gauge Fingers for 2-3-4-5-6 Axis Back Gauge
- Tandem Preparation

ACCESSORIES
Special Projects
“EXCEED YOUR EXPECTATIONS”