



DANOBATGROUP

PANEL BENDER



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DANOBAT PG: Main features

- ✓ CNC controlled automatic panel bender: flexible, versatile, accurate and high productive
- ✓ Ideal solution for flexible series and great production volume.
- ✓ More accurate and higher repeatability than conventional bending machines.
- ✓ Less operator dependency. The operator only needs to put the pre-cut part in the loading area and collect the finish part simultaneously. (Optionally, this process could be automatic).
- ✓ Every bends and also the manipulation and rotation of the parts are carried out automatically.
- ✓ Minimum set-up times. Perfect for great variety of works.



Part Feeding/removal device

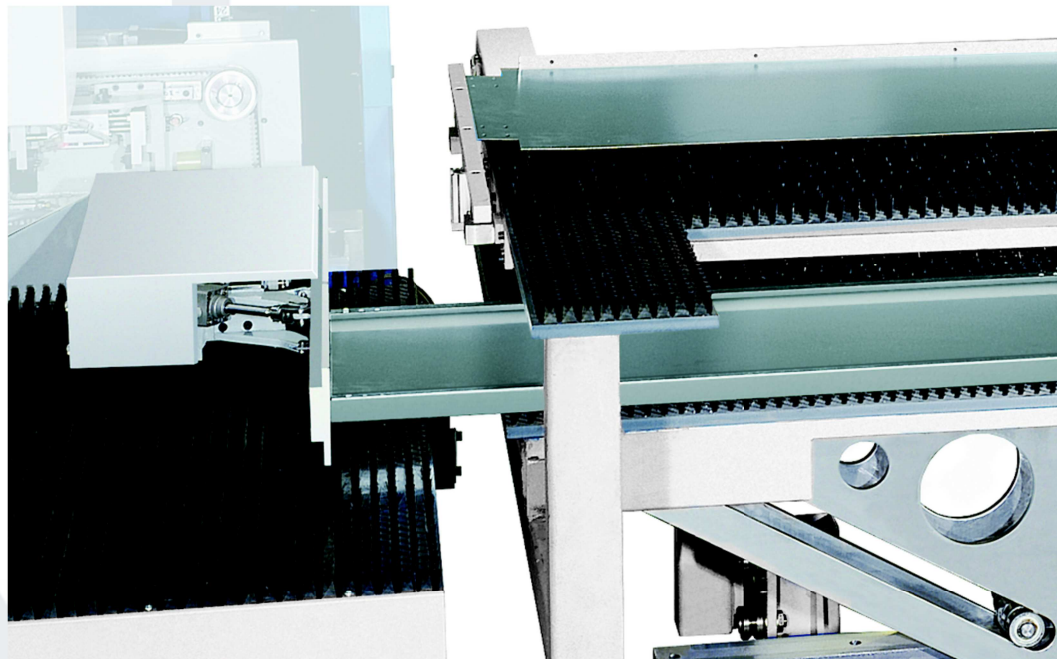
Simultaneous part feeding
and removal



Machine's downtime reduction

Controlled by means of a servomotor and toothed belt-pinion transmission

Labour work reduction. The operator only leaves the part to be bent in the loading area and takes out the finished part



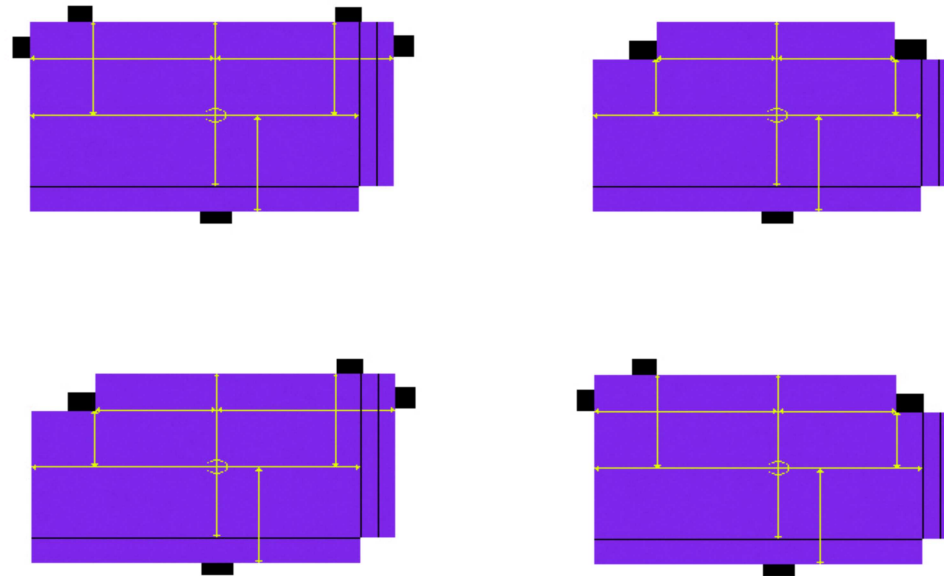
Electric/pneumatic reference system

- *Centring pins*

They are controlled by means of a servomotor and some pneumatic cylinders.

- *Thrust pin*

It's movement is controlled by a servomotor and ball screw. The part is pushed against the centring pins thanks to a pneumatic cylinder. The pushing force will vary depending on the part material and thickness.



Automatic Workiece Manipulation

Automatic part
manipulation among
bending process



Reduction of labour work. Human error is vanished.
Correct and accurate positioning of workpiece

Part rotation controlled
by servomotor



Folding at any angle



Hydraulic part clamping



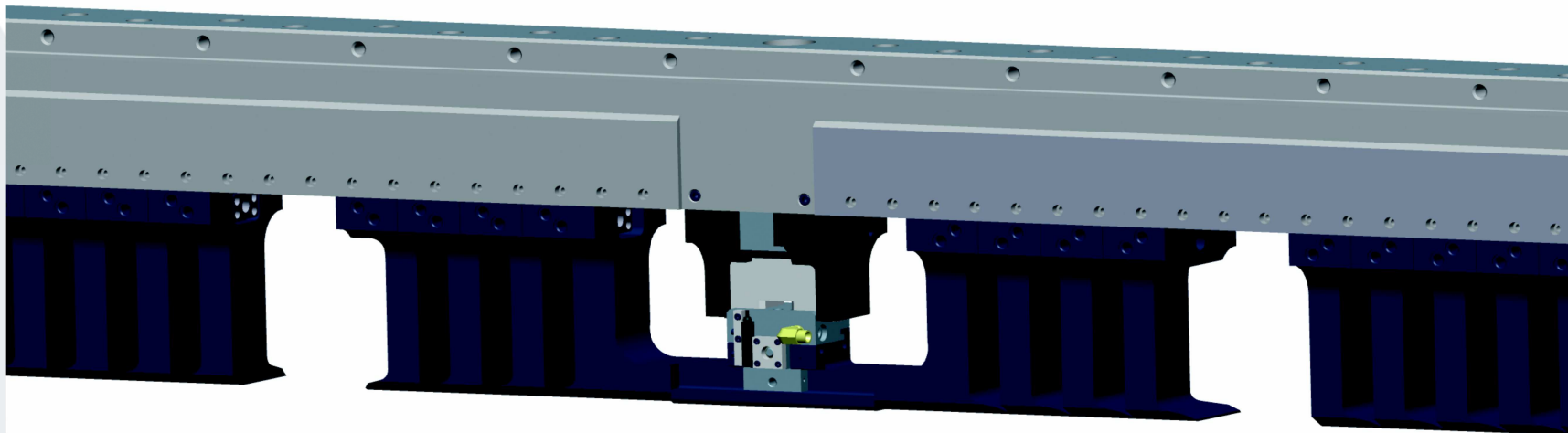
Perfect clamping avoiding sheet slidings



Automatic tool change

DANOBAT panel benders incorporate an automatic tool change. This system carries out the changes needed during part manipulation. This way, machine's downtimes and also possible human errors that may happen during manual operations are drastically reduced.

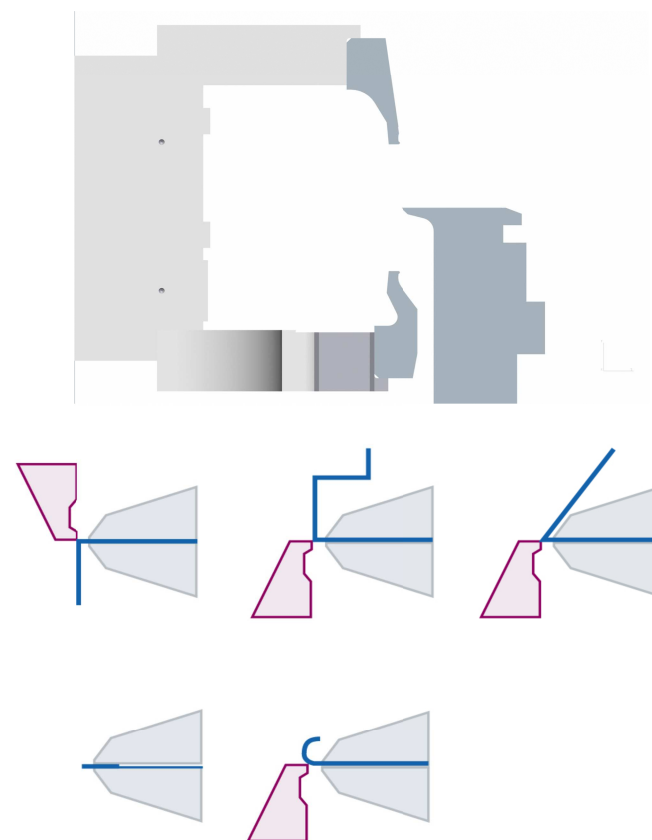
The hold-down tool is composed by a central tool and other identical lateral segments. The control chooses the right central tool and the lateral ones that to be used in accordance with the characteristics of the workpiece to be manufactured. This way, bending length is automatically adjusted.



Bending technology

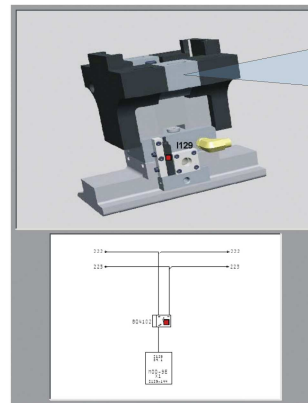
The single tool bending concept on one hand and the automatic manipulation on the other, make the panel bender the ideal solution for large and varied production volumes. The system enables greater bending precision than conventional bending machines.

Bending is performed automatically in both directions, positive and negative, (up and down) which translates into a great reduction in part cycle time and less operator intervention.



Smart Technology

DANOBAT panel benders incorporate the SMART TECH system, which makes the interpretation of messages easier for the customer and enables direct connection with our technical assistance service.



To allow easier maintenance for the user, the control incorporates an interactive assistance module

Flexible production

DANOBAT panel benders are the best solution for complex bends and high added value applications.

Due to their flexibility to make different parts and short setting up times, they efficiently work with short/large series.

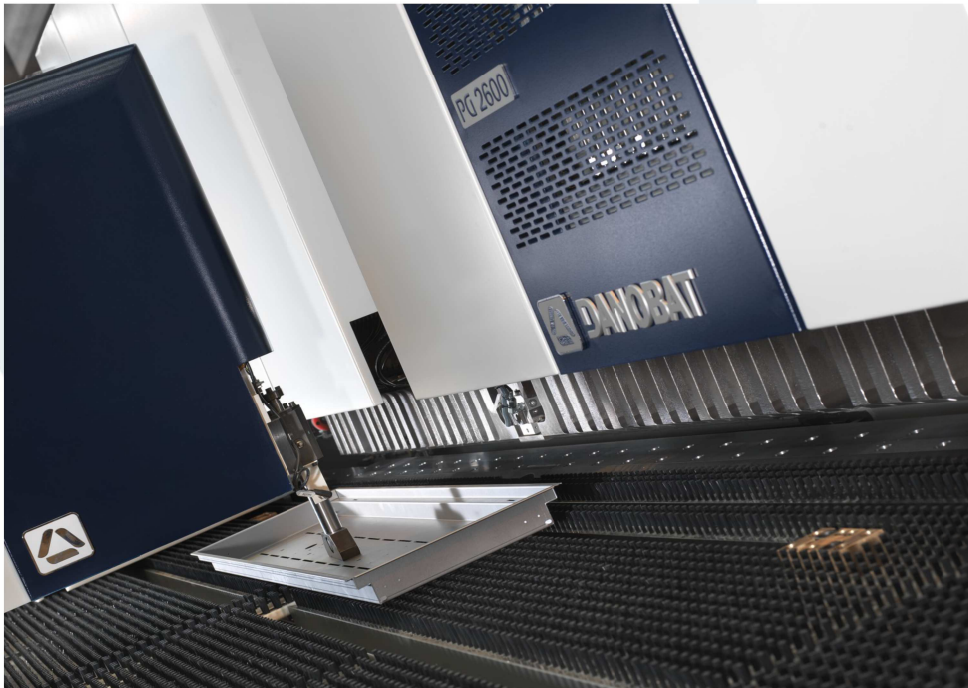


SPECIAL FEATURES as standard

- ✓ Automatic tool change
- ✓ Automatic manipulation
- ✓ Up and down bendings
- ✓ Simultaneous automatic loading/unloading
- ✓ Bendings at any angle of the part
- ✓ Possibility to do the last bending negative
- ✓ Flexibility to produce short and large series
- ✓ User friendly control system



RESUME



- ✓ Automatic sheet loading
- ✓ Part feeding/removal device
- ✓ Reference system
- ✓ Manipulator
- ✓ Tool change
- ✓ Unloading table

Electric
 Electric
 Electric
 Semi-electric
 Semi-electric
 Electric

A small hydraulic group is incorporated below the working table. Part holding, bendings and hold-down tools locking system are hydraulic.

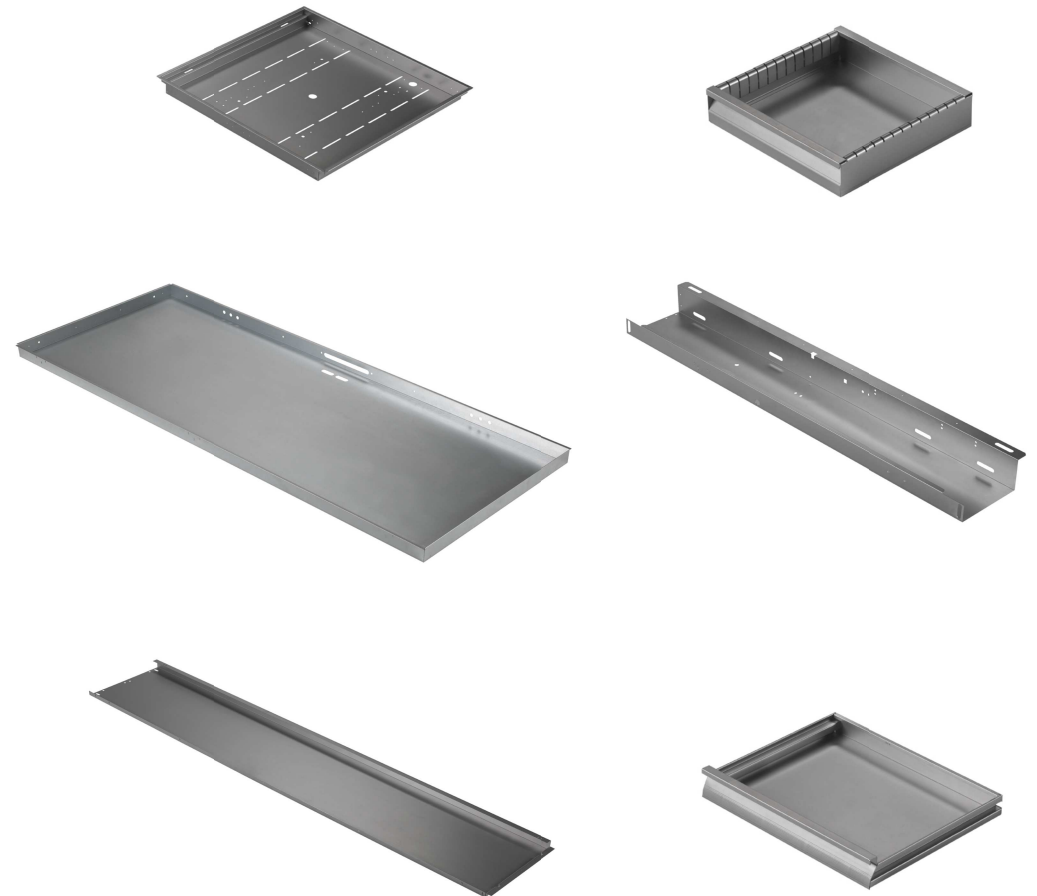
Why?:

- Reliable system
- Efficient
- It achieves the necessary strength for bending
- Low maintenance
- Good value for dynamic-force-precision

APPLICATIONS

There are different applications:

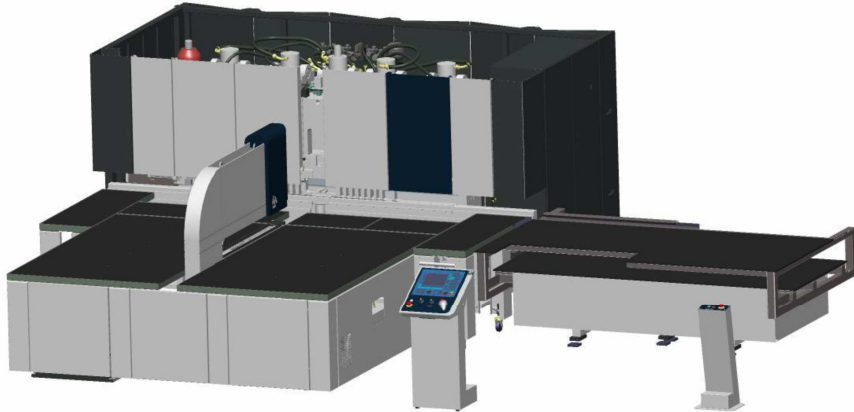
- HVAC
- Lift and mechanical stairs
- Electrical cabinets
- White goods
- Industrial cooling
- Metallic furniture
- Lighting industry
- Metal doors
- Paint booths
- Vending machines
- Computer case
- Subcontracting
- Etc.



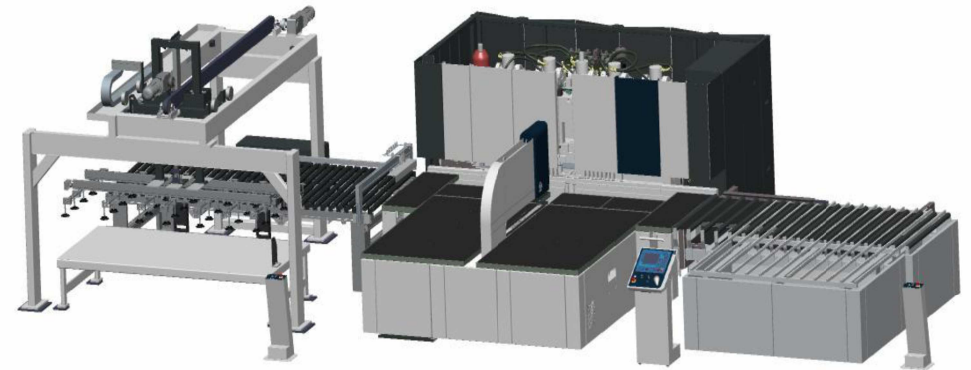


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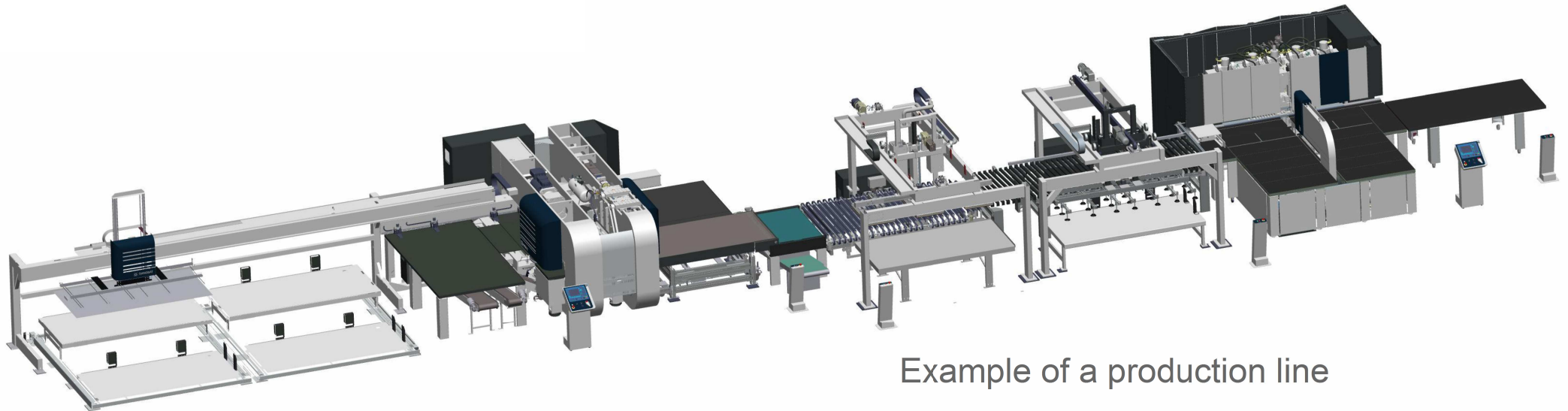
ADAPTED SOLUTIONS



Semi-automatic material handling



Automatic material handling



Example of a production line

