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## HFE 3i 5012



CONNECTED BENDING WORK STATION FOR SMALL PARTS PROCESSING











### **HFE 3i 5012**

#### CONNECTED BENDING WORK STATION FOR SMALL PARTS PROCESSING

#### SMART PROCESSING OF SMALL COMPONENTS

Keeping the philosophy of the range based on reliability, accuracy, energy saving and process digitalization, the new HFE3i-5012 offers the best performance together with a series of ergonomic features and accessories. This makes it a highly productive, connected work station for production of small parts with variable shapes and batch sizes.

ERGONOMICS - the operator becomes the heart of the process: all functions and solutions are thought to make the job easier, all necessary things for the daily job are around him with clear benefit of overall productivity.

PRODUCTIVITY - thanks to the high performance of upper beam and the AMADA patented FAST finger, the HFE3i-5012 is a highly productive solution for small parts processing.



#### **EQUIPMENT**

Photograph may include optional equipment

#### AKAS 5



The latest AKAS security system solution (AKAS 5) offers the highest level of safety with increased performance due to easier set-up.

#### HAND WHEEL



Manual adjustments of all axes are easily done with the hand wheel.

#### **DIGIPRO**





This electronic device uses wireless technology to transmit the measured angle to the NC. The machine then compensates to provide a precise bend angle.

#### **MAIN FUNCTIONS**

1 ERGONOMIC

#### **EASY TASK ACCOMPLISHMENT**

The working environment has been organised with features that support the operator's activity. They can work with higher comfort, higher speed and, thus, higher productivity with less effort.

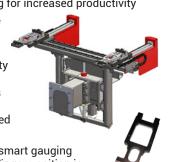
- Front table with adjustable height, can be folded away if necessary
- Ergonomic chair with adjustable height and backrest inclination
- Footrest for operation when sitting, retractable when standing
- Drawers: 3 on each side, equipped with specific inserts to store tooling
- · Work place lighting kit



#### **5-AXIS BACK GAUGE**

Extremely fast: High speed and dynamic back gauge guarantees fast positioning for increased productivity

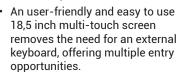
- With Delta X for effective and reliable gauging
- FAST (option): The back gauge with active security feature allows increased productivity and process safety with low impact force and maximum speed
- U-Shape Finger (option):
  Special finger shape for smart gauging of complex part shape. Finger position is properly calculated by AMNC 3i or VPSS 3i.



#### 3 CONNECTED

#### **SMART PROGRAMMING**

The network ready AMNC 3i numerical control allows for offline programming, digital integration and is compatible with Industry 4.0.



 The use of offline programs allows to reduce set-up time and increase machine efficiency.





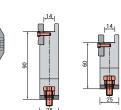
The bending CAM software VPSS 3i BEND, automatically selects tools, creates tool layouts and bend sequences.



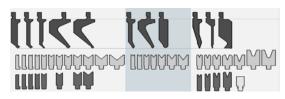
#### 4 FLEXIBLE WITH SMART TOOLING EQUIPMENT

#### **CLAMPING AND TOOLS**

- SGRIP (standard)
- R-GRIP (option)
- Hydraulic clamp (option)
- · Dedicated range of die holders



· AFH tools

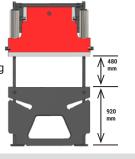


#### 5 COMPACT AND POWERFUL SOLUTION

#### **FRAME AND UPPER BEAM**

The increased open height of the frame results in the optimum solution for all tooling types, allowing deeper box bending.

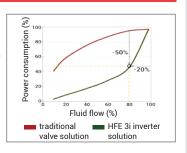
The new lower beam with crowning function, operator ergonomics and narrower dimensions provide high process flexibility.

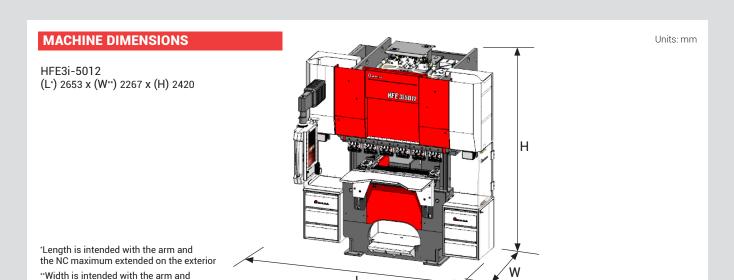


#### **6** GREEN AND RELIABLE

#### INVERTER

The Eco-drive system continually monitors and self-adjusts bending requirements – providing benefits such as less energy usage, reduced maintenance, less oil consumption, lower noise levels and increased reliability.





#### **MACHINE SPECIFICATIONS**

the NC maximum extended in front

HFE3i-5012		
Bending capacity	kN	500
Beam length	mm	1270
Distance between frames	mm	1035
Throat depth	mm	100
Open height	mm	480
Upper beam stroke	mm	150
Working height	mm	920
Power consumption (only pump motor)	kW	5.5
Oil capacity	I	85
Approach speed (with additional protection option)	mm/s	220
Bending speed	mm/s	25*
Return speed	mm/s	220
Minimum increment	mm	0.01
Positioning accuracy	mm	+/- 0.005
Machine mass	kg	3550

#### **BACK GAUGE SPECIFICATIONS**

5-AXIS BACK GAUGE					
		X axis	R axis	Z axis	
Operating stroke	mm	300	185	720	
Speed	mm/s	1000	200	1000	
Accuracy	mm	+/- 0.1	+/- 0.2	+/- 1	

The specifications, appearance and equipment are subject to change without notice due to improvement.



For Your Safety

\*max load 350 kN and depending by V-die

Please read the user manual before use. Before using this machine, please familiarise yourself with the risks.

The use of this product requires appropriate risk prevention measures depending on the type of work to be performed. The safety devices recommended by AMADA are supplied as standard for proper use with regard to EC conformity.

The official name of the machine described in this brochure is HFE3i-5012. Please use this reference when contacting authorities to apply for financing, installation or exporting. The machine name may contain a hyphen for easier reading. Safety devices have been removed in some photos used in this brochure.

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