Amada engineered the HG ATC as an ideal solution for variable lot sizes and complex tool layouts. The Automatic Tool Changer (ATC) can load the most complex tool layout within three minutes and allows operators of varied experience levels to efficiently utilize this bending system.

Quick tool setups achieved by the ATC gives users the ability to introduce rush jobs seamlessly and triple or quadruple the amount of setups performed each day (based on eight setups per day).

The ATC is capable of storing more than 86’ (26.4 m) of precision tooling and is equipped with four tool manipulators that place punches and dies along the length of the press brake. Additionally, tooling can also be installed in reverse orientation.

Other standard features on the HG ATC include a new AMNC-3i touchscreen control, an integrated bend sensor that guarantees consistent bend angle accuracy, and a servo/hydraulic drive system that consumes less energy than a conventional press brake.

**Key Benefits:**
- Ideal solution for variable lot sizes and complex tool layouts
- Increase the number of tool setups performed each day
- Reduce operator experience requirements
- ATC stores 86’ (26.4 m) of tooling
- New AMNC-3i control
- Integrated bend sensor
- Low energy consumption

**Standard Features**

- AMNC-3i Control
- Laser Safety Device
- Automatic Bend Indicator
- Servo/Hydraulic Drive System
- Punch Stockers
- Die Stockers
- Auto Slide Foot Pedal
- Safety Door
**HG ATC Tool Changer**

- 86 tool capacity
- 15 Punch Stockers
- 18 Die Stockers
- Punch Reversal Unit

- Rotating stockers enable punches to be installed in reverse orientation
- 4 manipulators (2 punch, 2 die) automatically provide quick and precise tool changes

**Multi-Axis Backgauge**

6-axis backgauge plus 2 additional L-axes provide L-Shift functionality to gauge complex part geometries

- An automatic foot pedal moves to the tool station where the next bend is produced
- High-speed movement on all axes ensures that the gauge fingers are positioned as quickly as the operator positions the part
- Independent servo drives for “L” axis, including L-Shift, allow for tapered and offset gauging
- Unprecedented positioning repeatability of ±0.0001"  
- Extended gauging allows for up to a 39" flange dimension
- Low-profile design enables part positioning over the top of the backgauge
The HG Series Press Brake

A high-precision, high-speed press brake featuring an advanced servo/hydraulic drive system that provides unmatched bending control and accuracy.

Unique Hybrid Drive System

Independent AC-servo motors drive high-efficiency, bi-directional hydraulic pumps

- Extremely fast approach, bending and return speeds, provide faster cycle times and result in more parts per hour
- Unequalled ram positioning and repeatability of ±0.00004"
- Programmable ram tilting and 50% off-center bending capacity allows for quick setup of multi-stage part bending
- Low power consumption — hydraulic pump motors are active only when the ram is in motion
- Stable hydraulic oil temperature ensures consistent angular accuracy
- Less hydraulic oil and fewer oil changes required
- Very low noise level

Servo/hydraulic Drive Principle

- High Precision
- Dynamic
- Consistent bending results
- Quiet
- Energy efficient
- Eco-friendly
**Bi-S — Bend Indicator Sensor**

- Automatic detection and compensation of material spring-back
- Eliminate test bends and reduce setup
- Automatic angle adjustment ensures high-quality production bending even when material thickness and hardness varies from part to part
- Usable with 1V-dies (0.236” – 0.787”)

**Dynamic Hydraulic Crown Bed**

- Hydraulic cylinders located in the lower beam of the machine automatically compensate for any ram deflection
- Achieve consistent bend angles throughout the entire length of the machine
- Operators can program a complete workflow by staging multiple tool setups along the bed
- Thickness Detection System (TDS) utilizes pressure sensors to monitor the ram stroke and compensate for material thickness variations

**AMNC-3i — PC Control with Network Capabilities**

- 19” touchscreen display offers multiple modes of data entry (angle, depth, 2D and 3D) to maximize programming flexibility
- User-friendly interface reduces operator learning curve
- Automatic program creation from a 3D representation of the work piece
- Secured storage of machine setup and program data
- Control mounted handwheel adjusts each of the machine’s axes
- Built-in barcode reader
- Amada’s SDD software database provides program storage on the control or on a server when the control is networked
### Specifications

#### Press Brake
- **Tonnage (US):** 110
- **Open Height:** 23.4”
- **Stroke:** 9.8”
- **Maximum Bend Length:** 122.44”
- **Distance Between Frames:** 106.3”
- **Backgauge:** 6 axis plus 2 axis L-Shift
- **Oil Capacity:** 12.7 gal.
- **Max. Approach Speed:** 8.66”/sec.
- **Max. Bending Speed:** 0.78”/sec.
- **Max. Return Speed:** 9.84”/sec.
- **Control:** AMNC-3i

#### Automatic Tool Changer (ATC)
- **Tool Style:** AMTS ATC
- **Punch Stockers:** 15
- **Die Stockers:** 18
- **ATC Location:** Right hand
- **Max. Tool Layout Length:** 120.47”
- **Auto Tool Layout Range:** 118.1”
- **Minimum Tool Pitch:** 0.196”
- **“V” Range:** 0.157” – 1.57”
- **Punch Reversal Unit:** Yes
- **Punch Height:** 6.7” standard
  8.7” special

#### Complete System
- **Total Length:** 239.4”
- **Total Width:** 118.5”
- **Total Height:** 114.8”
- **Total Weight:** 26,840 lbs.
- **Supply Power:** 22KVA
- **Voltage:** 200V
- **Foot Pedal:** 2, auto slide and remote
- **Bend Control:** Auto Bend Indicator Slide
- **Crown:** Auto wedge type
- **Safety:** Safety device, safety gate (tool change), light guard (slide pedal)