## **IMA Unveils New Typhoon HD at DTG2025**

In DTG2025 edition, IMA will introduce IMA model 922.70 – Typhoon HD which is the IMA latest model of Typhoon, particularly suitable for hard materials like denim, military clothing or technical one and driven by the new software AMI which is really innovative and rich of new and specific functions completely developed by IMA software team. The machine can also be equipped with the continuous cutting option.



The followings are the explanation of new 922 Typhoon HD.

922 Typhoon HD - Automatic cutting for layers up to 70 mm compressed according to the type of fabric to be cut. Structurally designed specifically for hard materials, to achieve top-level performance and reduce downtime during processing using the optional of continuous cutting. The single control software, simple and intuitive, is installed on the on-board PC

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that governs the cutting machine, increasing its efficiency and productivity.

The AMI software manages the acquisition of cutting files, their modification (available in a package with the main cad functions such as moving copy, modification, etc.) and the execution of the cutting. AMI allows the real-time modification of the file being processed, adapting not only the cutting parameters but also the types of processing or the choice of the pattern to be processed. It is possible to store an unlimited number of machining profiles to be recalled if necessary. Prepared for Industry 4.0 and the Syncro Cutting Room System. The innovative management of the vacuum system and the dynamic management of the cutting window guarantees a reduction in consumption with the same performance.

The digital technology totally based on the ETHERCAT communication protocol allows you to check the status of the machinery in real time, with self-diagnosis functions and automatic performance adjustment options based on the type of processing in progress. The presence of blade force sensors as an option allows to obtain high quality levels even on high layers. The movement of the bridge is managed by an electric axis (gantry axis); the management of the air pressure of the functions most involved in the cutting process is electronically differentiated; there is a touchscreen control panel located on the bridge to allow the operator greater ease of intervention. Being equipped with inverters on all functions, eco-friendly management of each motorization is ensured.

## TECHNICAL DETAILS

- useful length of the cutting window: 175 cm.
- cutting height: from single ply up to 70 mm of compressed fabric.
- installed power: 45 kw
- energy consumption: 10 12 kwh
- ambient temperature from 10 to 60 ".

- humidity from 30% to 80% without condensation.
- -voltage 400 V 3 PH 50/60 Hz.
- weight: -4000 / 4500 kg

## SOFTWARE SPECIFICATIONS

The control software of the machine AMI (Advance Machine Interface) has a simple and intuitive interface, the main features:

- Possibility of adapting the polygonal system to the Cartesian geometric system, for greater fluidity of movement thanks to the optimization of the ISO file.
- Adjustment of the machine movement according to curves or critical angles, so as to allow a clean cut between the pattern in a marker
- Possibility to manage the symmetries of all pattern
- Possibility to recognize and manage common lines
- Automatic search for the optimal cutting start point
- Possibility of varying the direction of execution of the pattern
- Optimized speed management based on the geometric profile of the shape
- Zero buffer cut
- Different cutting strategies based on the types of graphic and fabric with the optimization of the head path.
- Ability to manage, convert and modify all types of notches (normal, V and on the fly) even during the execution of the machining.
- Possibility to merge markers, to eliminate pattern within a marker and to manually move the pieces with a collision control to optimize the work
- Possibility of processing markers with graphical and statistical reports
- waste cutting for an orderly management of fabric waste

## HARDWARE SPECIFICATIONS

- The AMI software is preinstalled on the PC supplied as standard. Windows operating system
- Auction controlled by PID, optimizing energy consumption
- Totally digital functions control technology on ETHERCAT bus
- Synchronized loading and unloading conveyor with automatic cutting
- Blade speed up to 6000 rpm.
- Gantry axis for moving the bridge,
- -Possibility to have continuous cutting, avoiding cutting windows' change cycles
- Touch screen on the side of the bridge to easily control the machine even away from the PC.

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