MX-02 Typhoon

The MX-02 Typhon is the newest model of the MX series, and is still in testing. Basically an advanced, all around better version of the Zilant. Using the battle pack system it is more adaptable, faster, more heavily armored, and basically an all around superior mech.

History and Background

While the MX-01 Zilant served good as a defense mech, there was still something to be lacking. For that reason, the MX-02 Typhoon was developed to improve on the Zilant. Developed in secret, HiGA and Divolis used the best materials they could find to build the prototypes. However since they are not an extremely large cooperation, they knew they would not be able to afford designing the MX-03 for quite some time, so they decided on use of modular packs, which only cost a fraction to make of what a mech normally would. (For more info, see Battle packs)

Statistical Information

Organizations: Higa Industrial, Divolis Corporation Manufacturer: HIGA Industrial Corporation divolis_corporation

Type: Ship Defense Heavy Mobile Weapon Class: MX Series Large Scale mobile Humanoid. Crew: 1 Pilot. Maximum Capacity: One person, though two can fit in, but the pilot wouldn't be able to use the mech to it's full potential.

Appearance: The Typhon looks less bulky then the Zilant, mostly due to it's curved and sloped armor. The mech has a tall, humanoid appearance. The head of the Typhoon resembles a man in armor, with a sloped plate covering the "Mouth" area, two slightly angled Green Eyes, and a sloped plate covering the back of the head. The body is more angled then on the Zilant, with sloped armor covering the vents and cockpit. The arms are longer then in the previous model, but just as bulky. The Upper arms have large plates of armor, covering most of the upper arm, and some of the shoulder. The legs, while still bulky, are better looking. the legs are covered with armor, thrust vectoring outlets, and cooling vents. The back is covered mostly with hardpoints, with thrust vectoring outlets near the shoulders.

Width: 5.5m at shoulders Height: 22.4 m Mass: 42.6 metric tonnes without any extra equipment

Ground Speed: 75 KPH **Atmospheric flight speed:** 834 KPH (battle speed), 1,024 KPH (cruising speed) **Sublight:** 0.391c **FTL Range:** 2 LY

Combat duration: An MX-02 duration in combat depends totally on its battle pack, but default armaments wouldn't do much. Optional armaments or battle packs are highly suggested unless the pilot wishes to commit suicide. The MX-02 also has a rather simple, but rugged movement system for its joint. The only way to actually stop a MX-02 from moving would be to kill the pilot, destroy the generator, or blow off all its limbs.

Lifespan: Though the cockpit of a Typhon is fully pressurized and capable of providing a breathable atmosphere and such for about a week by itself, it does not possess any food or water which has to be brought on separately by the pilot, as well as any spare oxygen or other consumables.

Weapon Systems

The MX-02 was designed to be as light as possible without it's packs, so it would be able to use its battle packs to their full effect. So it has little in terms of build in weapons. The MX-02 also has the ability to use some optional hand-held weapons.

Diamond-Edged Knife

A standard Duranidum blade with a diamond-edged blade and tip.

Location: Stored on each of the Typhon's outer thighs **Primary Purpose:** Close range melee **Damage Rating:** 3 Range: Point Blank

"Spacesweeper"

The Spacesweeper usually comes in the form of a removable modular equipment set. This includes a back-mounted electronics package, and a pair of launch tubes mounted on each shoulder plate. Millimeter-wavelength Doppler radar is used to detect incoming threats. A cluster projectile is then launched, detonating in proximity of its target and spraying a 45-degree area with depleted uranium shards. Even if the target is not destroyed, the shrapnel spray will often have enough energy to deflect the target's trajectory.

Location: Shoulder-mounted launchers **Primary Purpose:** Missile, Projectile, and Meteor Defense **Damage Rating:** 2 Rate of Fire: Two per second **Notes:** Awareness range of 2000ft / 600m, reaction time of 0.05 sec. Interception capability depends on target speed.

Hi-M2-W100 Light Carbine

One handed weapons are the equivalent of extended-barrel SMGs for the MX-02. These are primarily designed for fighting units smaller than the MX-02, such as light vehicles, power armor, or fighter craft. These fire standard chemically-propelled steel alloy rounds.

Location: Either of the MX-02's hands, a pilot can even hold two **Purpose:** Meant for tackling many, poorly armored enemies **Damage Rating:** 3 Range: 1500 meters Rate of Fire: 1400 rounds per minute. Can be set on a three round burst fire mode too Payload 35MM solid slug rounds

Hi-M2-W200 Battle Rifle

Heavier than its cousin, the Battle Rifle is the equivalent of a full-fledged assault rifle for the MX-02. It fires much heavier, and therefore better penetrating, tungsten-core rounds using hybrid railgun-chemical propulsion. Due to the time needed to recharge rails between shots the rate of fire is significantly lower.

Location: Typical high powered rifle held by two hands **Purpose:** Meant for foes who are more higher armor **Damage:** 5 **Range Rating:** 1500 meters Rate of Fire: Designed for single shot but can fire at up to 120 RPM Payload Tungsten carbide core with ferrous fiber casing

Hi-M2-W300 Heavy Armor Warhead Launch System [HAWLS]

This rugged high precision missile launcher fires 5 foot long smartfire self-propelled warheads, designed largely to inflict substantial damage on small to medium targets. Each warhead has a specific function, though the high explosive rounds are the standard used. Micro missile capsules are similar to HE warheads, only they open up mid, flight and launch a set of 20 micro missiles that swim about and dart around towards the target with impressive agility. Similarly, Flak warheads detonate about 10 feet from the target, and pelt it with a razor sharp spray lightly ionized metal fragments. White Phosphorus is a luminescent, high intensity burning powder that stubbornly clings to soft materials, like flesh, and textiles, persistently burning for up to an hour. EMP rounds use an explosively pumped flux compression generator, with a yield in the low terrawatts. It has a destabilizing effect on non-spatial distortion shielding and can severely disrupt or damage electronics. Tactical Fusion Nukes and Antimatter are rare warheads, high restricted in use and expensive to field. The antimatter warheads only contain a small amount of AM, but can still generate a large "elimination" area when they impact.

Location: Held by one hand with the rear half needing to rest on the shoulder. Can be fired with one hand but accuracy might suffer. **Purpose:** Anti-Mech, Anti-Craft **Damage:** High Explosive: DR 4; Micro Missile Canisters: DR 3; Flak: DR 3; White Phosphorus: DR 2; EMP: DR 1 Versus Armor, DR 6 Versus Shields, Damages Electronics; Tactical Nuclear Fusion Warhead: DR 6; Antimatter: DR 7, Unusable in Atmosphere **Area of Effect (Lethal):** High Explosive: 5m; Micro Missile Canisters: .25m; Flak: 7m (Infantry) ; White Phosphorus: None, Devastating in minutes after exposure; EMP: None, Most effective within 20m ; Tactical Nuclear Warhead: 800m ; Antimatter: 80m **Aera of Effect (Partial Effect):** High Explosive: 10m ; Micro Missile Canisters: 1m ; Flak: 17m ; White Phosphorus: 20m; EMP: 40m ; Tactical Nuclear Warhead: 1.7km ; Antimatter: 200m Range: Warheads have an average range of 30 km, with the exception of antimatter and tactical nukes, which have a range of 60 km. Rate of Fire: Single Shot, 2 Second Cooldown, 5 Second Reload Payload 6 Warheads per Clip, 10 Clips **Warhead Max Speed:** 1km/s, 7 seconds to reach top speed **Usage:** Rounds can be preset to track specific emissions, such as heat, EM or gravitational anomalies. Dumbfire can also be used, but rounds cannot strafe or even auto correct mid-flight. A laser guiding system is also available, but is susceptible to blooming in certain environments.

Battle packs

The true power of this mech comes from the battle packs. Optional pre-configured armorments that the

pilot can remove quickly to adapt to the ever changing battlefield. Normally the MX-02 is a dull gray, but when the packs are correctly installed, the armor will change it's color. The pack all have their default colors, but if a pilot wants, they can customize the colors to whatever they want.

The packs were originally made because HiGA and Divolis spent a fair bit of their money into designing, testing, and building the frame. Fearing that the MX-02 might become obsolete too soon, these modular battle packs were made. These packs only cost a fraction to produce compared to the mechs, and since new packs can always be made the MX-02's lifespan would be greatly increased with this system. Additional packs are almost always being designed by pilots, engineers and scientists.

Commander Frame

Purpose: A combined ECM/ECCM generator with an intigrated multispectral communications suite. This is commonly used by commanders to feed targeting data to other units in the field who may be overwhelmed by enemy ECM systems. **Color:** Yellow **Modules:**

- x1 Light carbine
- x4 Micro missile batteries (two on each shoulder, two on thigh)
- x1 Integrated ECM-ECCM generator and communications suite

Skirmisher Frame

Purpose: Excels at dealing with many targets at once. Since PA's outnumber MX-02's greatly, this was thought to be needed. **Color:** Light Blue **Modules:**

- x2 Light carbine (one in each hand)
- x6 micro missile pods (Two on shoulder side, two on each upper and lower thigh)
- x2 Wired Gunpod bays (Each bay contains 2 wired gunpods that use the same ammo as the Carbine's, their wires feed them ammo and cannot go very far, maybe 15 meters. Each Gunpod can independently track, monitor and rate incoming threats. They are also effective at targeting and destroying missiles. They also "assist" each other by providing information of oncoming threats so they do not get destroyed. Located on the shoulder back. Damage rating is 3 per pod)

Demolisher Frame

Purpose: Meant for taking on single, highly armored targets **Color:** Dark Blue **Modules:**

- x1 Battle Rifle or "cracker" bazooka
- x2 Autocannons (shoulder-mounted)
- X4 Missile pods (two on each leg, each containing 4 high powered anti-armor missiles)

Lancer Frame

Purpose: Originally meant for close combat, able to destroy even the most heavily armor targets with

ease. **Color:** Bright red **Modules:**

- x1 "Javelot Léger" Coherent Plasma Projector (Spear)
- x2 Autocannons (wrist-mounted)
- x2 Micromissile pods (legs)
- x1 Backpack Unit ([Freespacer](#) Entropy's Shroud ECM module and afterburners)

Systems Descriptions

Internal Frame

Durandium skeleton for stability, which is lined with buckypaper in order to shield internal components from energy discharges.

FTL System

The Zilant uses an advanced Space Fold drive, which folds space around the Zilant for instantaneous transport

Armor

The MX-02's armor systems consist of an ablative alloy (DR 5) designed to protect the internal structure of the MX-02 from damage. Though this system is costly, it has the advantage of not having to perform as much maintenance on the inner structure, which would heavily increase operating cost.

Shielding

To reduce costs, the basic shielding system of the MX-02 is an electromagnetic shell (DR 4). To allow for atmospheric operations and to reduce energy concerns, the system is regulated by the computer systems, to only activate when required. In addition, a manual switch is used to allow for pilots to react to unrecognized threats.

Propulsion

The MX-02 uses three standard thrusters in a row on the back and veiner in strategic places around the mech to allow sudden bursts of speed in six locations. The MX-02 cannot normally fly by itself when all of it's systems are up, but if enough power is rerouted to the thrusters, it can maintain flight for extended periods. However it is extremely vulnerable as this would take down it's shield, and most power to it's weapon systems

Reactor

The Typhon uses an closed-cycle nuclear fission reactor, stored in the mech's torso. This reactor typically has a lifespan of five years, and can be safely removed or replaced without fear of radiation leakage. The coolant lines are thickly padded with a gel that rapidly expands upon contact with oxygen or coolant, thus automatically sealing any breaches the physical shielding of the reactor.

Co-Processor

An localized Freespacer construct is installed to provide real-time feeds on firing solutions and IFF data. They are divided into to classes:

NU

Nonvolitional Units (NU), which are purely linear processors with limiters on its peripheral capabilities. These units are little more than generic firing computers

SI

Synthetic Intelligence (SI) which can vary in sentience anywhere from animal-like behavior to a fully sentient individual. Pilots must take care to only use a trustworthy and reliable construct as higher intelligences may be prone to refusing orders or sabotaging their own units in protest. A cockpit-based override is possible, but this will not stop a malcontent construct from feeding a pilot false targeting and IFF data to cripple their combat capability.

Cockpit

The Typhon's cockpit is a radical departure from that of the MX-01. For starters, it's just a chair surrounded by a panoramic screen. The chair, through use of various systems, uses the pilot's brainwaves to control the machine. Controls still exist however in the rare event that this system fails, but the response time would be horribly sluggish, but enough to get to safety at least.

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