MEDIEVAL FANTASY MECHS POWERED BY STEAM, MAGIC, OR THE LABOR OF A THOUSAND SLAVES

DRAGONMECH™

SWORD & SORCERY

d20 system™

PLATE 3 *From city-mech to combat walker, the mech is the defining feature of today's Highpoint.*

MECHS

The mechs of Highpoint are of a unique type. They are modeled on medieval European imagery, crafted in an era where mass manufacture is unknown, and constructed with antique machinery, hand-tooled parts, and massive amounts of hard physical labor. The advanced mecha of Japanese anime have no bearing on **DragonMech**. Instead, consider the Gutenberg press, hand-made muskets with custom-fitted bullets, and da Vinci's flying machines. That is the historical legacy in which the DragonMechs are steeped.

This chapter gives rules for the construction and use of mechs, as well as many examples of the specialized mechs that have appeared in the harsh circumstances of Highpoint. The focus of this book is on the adventures of individual characters, not mech-vs.-mech mass combat, so the rules herein maintain the scale of normal d20 battles. Tactical-level mech combat will be described in future volumes, where a different set of rules will streamline such encounters.

ORIGINS

The true origins of the mech are obscured by legend and lore. The Gearwrights Guild claims provenance over the earliest mechs, which they built many thousands of years ago. A great vault deep in the earth still stores the greatest creations of this lost Age of Walkers, and certain archaeological oddities, such as the Pretominin Heads, hint at such deep history. Outside the Guild and its dwarven adherents, few cling to this tale, especially among the elves, who dismiss such claims as complete foolishness. After all, the elves are oldest of all, and if their memories hold no record of the Age of Walkers, surely it never happened.

In modern times, the mech resurfaced when Parilus, Master Gearwright, brought his knowledge out of the underdeep. His instructions to Duerok led to the first operational mech and the first city-mech, Durgan-lok. (See page 170 for the full story.) It is undisputed that the dwarves of Duerok were the first creatures in modern times to wield a mech.

Now mechs are common among all advanced surface cultures. The humans of the plains, the elves of the forest, and even the ubiquitous orcs have built, stolen, or salvaged their own mechs. It is said that even some underdeep civilizations have experimented with mechanized walkers, though theirs are much smaller than the ones found on the surface.

Mechs were designed to fill two needs. The first need was protection from the meteor rain and lunar dragons. The mechs' thick armor protects from the rain; their enormous size and large-scale weapons provide a counter to the dragons. With mechs, the dwarves (and now all races) were able to reoccupy the surface world for the first time in recent memory.

The second need was mobility. In a world of scavengers, refugees, and flying menaces, protection alone was not enough. Castles built solidly enough to withstand a dragon were simply coffins in which the inhabitants would starve while they futilely tried to outwait its siege. The mobile mechs could defeat some dragons, flee from others, and band together for additional protection.

The crucial component in mech construction is the steam-powered engine. In a world of magic, steam engines were, until recently, unimpressive. Mundane spells can be used to create much more powerful devices with much lower maintenance requirements. The dwarves had long used steam engines but had never developed them on a grand scale. They built steam-powered tunnel cars and a few walkers which were used to patrol mountain strongholds. Aside from that, steam technology was primitive and never seen outside of dwarven holds.

Parilus changed that. He demonstrated that steam could efficiently power armored vehicles that were larger than even the dragons. His engineering knowledge allowed the dwarves not only to build mobile suits of armor that could match the best spell-created constructs, but also to fight with them using weapons that were themselves powered by steam. When Parilus demonstrated the first operational mech, the dwarves immediately understood the steam engine's potential. It was as if they had had the residual knowledge and needed only to be shown how to use it.

The success of the steam-powered mechs was immediate. Lunar dragons that had previously been defeated only with massed forces, cumbersome siege weapons, or high-level mages were beaten back by the mobile, maneuverable mechanized walkers that carried their siege weapons with them. Even at close range — which the more intelligent dragons utilized with brutal success in the early battles — the mechs could fight back with gargantuan battle axes and colossal javelins. Even when a mech was lost to a dragon, there was no question as to the mech's effectiveness. A single dwarf in a mech could do more damage to a dragon than one hundred dwarves on foot, and the mech could be built and its pilot trained in a tenth of the time it took to train a high-level mage.

The early mechs were built primarily of wood and stone, with iron infrastructures underlying it all. Now, the best mech jockeys personally commission custom-built steel mechs with mithral or adamantine armor. The humans have mastered basic iron construction methods, the elves have magically bent still-living trees into the shapes of mechs, and the orcs have learned to chop down huge forests to build crude wooden mechs. Some mages have attempted the construction of massive, hollow golems which are essentially animated mechs. Some reports even say that foul necromancers reanimate the bodies of felled dragons into necromantic bone-mechs.

SOCIETY

Most mechs are used only for patrols, raids, and other combat exercises. After the battle ends, the crew seeks shelter in its normal refuge: a surface city, an underground complex, or even a larger city-mech.

The culture of mech jockeys varies from race to race but invariably reflects the competitive, aggressive nature of the mech jockeys themselves. When out of their mechs, they walk with a swagger in their step, and understandably so: It takes nerves of steel and phenomenal reflexes to win a battle in a mech. Mech jockeys of the same squad or fleet will fight like brothers in battle, but off the field they compete incessantly. Deep down, a proud mech jockey might resent the fact that his life was saved by a cohort's crack shot, seeing it only as an attempt to show off.

On the battlefield, this competition manifests itself as a barely contained battle lust. Mech jockeys from different armies bear longstanding grudges against each other. A dwarven pilot defeated by an elven mech will remember every detail of his enemy, storing it away for future use. If he sights that mech in a future battle, he will go out of his way to engage it. This native personality trait has proven difficult to contain, especially among the generally regimented forces of the Stenian Confederacy. Personal grudge matches are officially off-limits to mech jockeys of all civilized races (orcs naturally not falling into that category), but once the mechs are in the field, their superiors often look the other way, knowing full well that there's no point in fretting over something they can't stop. In battles involving mech fleets with longstanding rivalries, it is customary to declare short-term cease-fires so individual mechs can pair up and resolve their grudges *mano a mano*.

The largest mechs support full-time populations. The majority of a so-called city-mech's population is crew, civilian support personnel, and military. A small but growing cadre of wealthy aristocracy has bribed its way into the populations of several city-mechs, highlighting a constant problem: determining who is "useful" on a city-mech.

City-mechs are by far the safest places to live on modern-day Highpoint, and in their early days, most had strict rules concerning who could live on board. The crew was most valuable, followed by military personnel. Civilians could fill the spots that remained but only insofar as they were useful to the mech. Thus, blacksmiths, engineers, and other such professions were well represented; farmers and traditional craftsmen were present only to the extent that their skills could be exercised and used on the mech; and miners, bankers, and other such specialists were completely absent. Visiting traders (a guise under which many an adventurer got on board) were permitted for short periods, provided they had needed goods (or a handy bribe).

Rules governing living requirements are stringent, especially in the lawful Stenian Confederacy and the Legion, two of the earliest factions to build city-mechs. Military law rules on the city-mechs, and courts and a judge are considered luxuries if an unruly citizen is interfering with the mech's functioning. Cruel or arbitrary as it may be, the population supports it, since they know perfectly well that their own safety depends on the city-mech's smooth functioning.

Over time, expanding safety zones have made the residency requirements less stringent. Most city-mechs don't perceive themselves as being in the same state of siege that they once were, an attitude that has been helped along with extensive bribery. Thus, a portion of each mech's population is now "nonessential." Rules governing such positions vary from mech to mech. On most mechs, nonessential personnel are required to pay monthly "rent" to the mech's governing forces and are also prohibited from owning "land" on the mech. (Certain sections of the mech can be owned, much like a modern condominium within a larger complex, while other areas are considered common property or restricted areas.) Many a thieves' guild has already exploited this situation to control black-market land ownership and get stowaways on board. Wealthy aristocrats have resorted to bribes and influence peddling to get spots, while politics have surfaced concerning which "professions" are declared essential.

Daily life on a city-mech is much the same as it used to be on the surface, though it's substantially more cramped. Even the aristocrats have had to come to terms with smaller quarters. A social hierarchy of sorts has evolved on the mechs, with the most prestigious quarters being those furthest from the ground. This evolved naturally from the placement of the mech's control center in the head or upper chest, and the simple fact that the higher areas are safer. The highest areas are occupied by military officers, senior members of the Gearwrights Guild (or other governing forces), and aristocrats. The middle areas (the mech's chest) are where you'll find the peasants and their common areas, including markets, pubs, inns, and the workplaces of the more respected professions (such as engineers and physicians). The lower you go, the more impoverished it becomes. A city-mech's legs are usually ghettos filled with the menial laborers who keep the mech running day to day. Below these quarters are hot, oppressive foundries and workrooms. Many stowaways hide in these areas. Below them are the gear forests, the massive levels of engine rooms that power the mech.

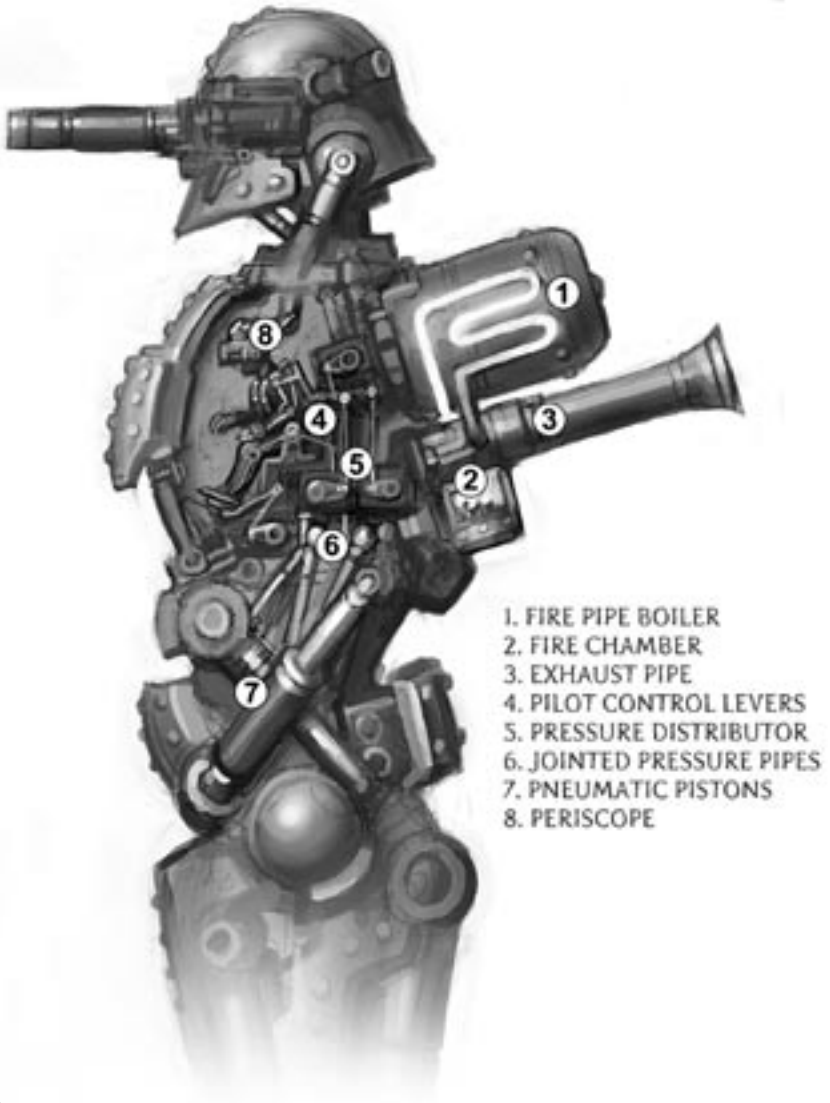
The lowest levels of the mech — its feet and shins — are called "the depths." What's in the depths varies from mech to mech. The better-built mechs (such as those of the Stenians and Legion) tend to have guard posts, or even hangars where smaller mechs are stored. The Gearwrights Guild's most advanced city-mechs can house fleets of smaller combat mechs in their oversized feet.

In other mechs, such as those of the Irontooth Clans and the orcs, the depths are intentionally left open to outside settlement and sealed off from the rest of the mech. They end up filled with stowaways who fight tooth and nail to keep their places. Some are settled by horrid monsters or evil humanoids looking for roosts. While this is terrifying to those who live on the levels of the mech closest to the depths, it serves a productive purpose: The mech is extremely difficult to board. Whatever lives in the depths fights hard to keep outsiders at bay. Orc mechs in particular are notoriously vile in this regard. Cruel orc taskmasters make examples of unruly slaves by tossing them into the depths, where they are devoured by whatever lairs there.

INSIDE A MECH

Except for cockpits, firing ports, and areas near portholes, the inside of a mech is naturally pitch-black. Dwarves don't mind this, but other races do. Elves and humans illuminate their mechs via magic, gas lighting, and simple torches.

City-mechs generally have room to walk around, but other mechs are not comfortable. The quarters are small and cramped. Riders must stay in the same positions for hours at a time; they have no room for stretching. Wearing armor other than leather, studded leather, padded, or hide is guaranteed to result in chafing and blisters after more than two hours of the mech's bumpy, irregular walking. Characters attempting to stay armored must make a Fortitude save every hour (DC 15) or give in to the discomfort and doff their armor — if they have room to do so. There's no room to take off half-plate or full plate. Characters who keep uncomfortable armor on suffer 1 hp of nonlethal damage each day. Mech jockeys wear a specialized form of armor called pilot's armor (described on page 138).



Mechs walk in a jarring, jerky fashion that is far more abrupt than the subtle swaying of a city-mech. The first time a character boards a mech other than a city-mech, he must make a Fortitude save (DC 10) or suffer from "mechsickness" due to the jerky motion. Mechsickness is exactly like seasickness. Mechsick characters spend 1d4 hours nauseated then suffer a –1 circumstance penalty to all rolls until they've spent a day getting used to the mech's motion.

A mech's controls are straightforward. Each usually has two levers, as in a tank. Each controls one leg. Push the right lever forward and the right leg advances; push the left lever

forward and the left leg advances. Push them forward in an alternating sequence and the mech walks. Push a lever all the way and the mech strides as far as it can; push it halfway and the mech takes a shorter stride.

Piloting a mech consists of learning how to time the motion of the levers. The pilot must connect his own personal kinesthetic sense to that of the mech. Avoiding boulders while walking across a rocky field requires moving the legs in different strides with each step, which only the best mech jockeys can do with any sort of speed or precision. Jumping requires pumping the legs to the maximum stride at just the right moment, then putting them in the right position when the mech lands. Turning requires moving one leg forward and the other backward at just the right rate. All of these techniques are hard to learn and difficult to master (especially since the consequence of failure can be toppling over and damaging the mech).

A pilot-operated weapon is generally controlled with a metal strut or arm that extends from the cockpit's wall. The pilot moves the weapon by moving this oversized joystick, whose motions are amplified and mimicked by the mech's arm. If it is an axe or other melee weapon, the pilot must swing the joystick in the right motion relative to the position of the mech's real arm. If it is a steam cannon or other ranged weapon, the pilot must aim the arm, then push a button to fire.

Since it is nearly impossible for a two-handed creature to control two joysticks and two levers at once, advanced mech jockeys modify their controls to make them easier. One common adaptation is the addition of a horizontal bar between the two leg levers. The bar has a ball joint on each end, and if the levers are given a little leeway at their base, the bar can be used to control both levers at once. The pilot simply grasps the bar in one hand and then shifts the strength of his hand to move one lever or the other. Pushing forward on the center of the bar brings both levers forward; pulling back does the same thing. It's similar to pushing a bicycle with one hand on the handlebars.

Steam-powered mechs require large amounts of water, as well as fuel. Usually this is coal or wood. When burned, this fuel heats the water reserves to the boiling point, providing the steam power. The mechs are designed to suck water through filters in their feet whenever they pass over a river or stream, but the fuel can be more difficult to come by. In places without large timber reserves, wood and coal have become pricey commodities. Mechs that utilize such power sources have built-in pulley systems for lifting buckets of coal into the mech. The pulley-powered bucket brigades can even be powered by the mech's steam engine, if fuel is that common. No other kind of mech requires fuel except for clockwork mechs, which need a short burst of fuel once every week. Their needs are so minimal that they're not worth keeping track of.

Communication between mechs takes place in a variety of ways. Almost all elven mechs use magic items or spells that allow telepathic communication. Dwarven city-mechs, as well as larger mechs with room to spare, incorporate steam powers such as wavemakers. Mechs without these luxuries use signal flags. The exact signals vary by race and faction but can range from simple (orc mechs usually have only three flags: "attack," "retreat," and "stop") to complex (the mechs of the Legion have more than two dozen flags that have different meanings when combined with each other).

Mechs distinguish their allegiances in a number of ways. General aesthetics are one method; it's very easy to tell a dwarven mech from an elven mech at a glance, and the allegiance of any mech taken over by the Irontooth clansmen is obvious. Beyond that, a mech will fly a flag indicating its mechdom, or, on the larger mechs, simply paint the flag or a coat of arms on its arm or torso. Military insignia are commonly painted on, as well as personal insignias as the pilot prefers.

Finally, certain flags are universal. A sky-blue flag means a merchant or trader. Mech traders use these flags to find customers in territories that would be hostile to anyone else. Mechs with such flags are still subject to scrutiny, especially if they appear in numbers or in any way appear to be military mechs, but the blue flag will keep them from being blown away at a distance before they ever get to talk.

DESCRIPTION AND CONSTRUCTION

A mech can be built by anyone with skill, a lot of gold, and a huge labor pool. In theory, the field is wide open; in practice, only well organized (or extremely numerous) societies can cobble together a battle mech, much less a city-mech.

Player characters can build their own mechs to field against dragons, enemy mechs, and other foes. They can also adventure on board the larger city-mechs, explore the burned-out husks of wrecked or ancient mechs, battle against enemy mechs, and research new ways to improve mech technology.

This section covers the description and construction of mechs. The two topics are covered together because by discussing a mech's construction, we will simultaneously detail its description.

POWER SOURCE

Mechs are classified by their power sources. By this measure, five types of mechs exist: steam-powered, man-powered, clockwork, animated, and undead.

Steam-powered mechs are the most prevalent. The first mechs to be built were steam-powered, and most new mechs continue to use steam as their power source. Dwarves and humans are the predominant users of steam-powered mechs. These mechs are durable and rugged, but labor-intensive and vulnerable to mechanical mishap.

Man-powered mechs are primitive constructs that mimic the mech's physical shape and abilities using a more antique engine — human labor. The typical man-powered mech requires dozens or hundreds of slaves toiling ceaselessly to keep it running. Orcs are the only race to use man-powered mechs

extensively. These mechs are slow, cumbersome, and vulnerable to slave revolts.

Clockwork mechs are in many respects similar to steam- or man-powered mechs, but their precision craftsmanship and extraordinary construction set them apart. Clockwork mechs are powered by springs, pendulums, and other such mechanisms. What makes them special is the exactitude of their design. A clockwork mech is periodically "wound" like a clock. For several days thereafter, all the power it needs comes from the unwinding of its mechanisms. Every single component of the mech is connected in an elegant, complex symphony of brass and steel. The winding process requires extreme force — generally it entails turning a massive spring running the height of the mech — and the clockwork mech incorporates steam or manpower once every few days to wind itself. Outside of this "refueling process," however, it runs on its own power. Clockwork mechs are extremely powerful and extremely rare, having been seen only in the hands of high-level gearwrights. It is rumored that the Master Repository holds even more advanced designs.

Animated mechs are like massive, hollow golems. Rather than be granted limited intelligence, as traditional golems are, they are endowed solely with a rudimentary kinesthetic sense that lets them move their bodies in response to their commanders' wills. Only the elves wield such mechs, which are magically constructed. These mechs are by far the fastest and most agile, and their magical arsenals are deadly. But they have one fatal weakness, which the dwarves are learning to exploit expertly: The concerted use of *dispel magic* spells can render animated mechs inoperable.

Undead mechs are a rarity. Known only through anecdotal evidence, they are rumored to be the reanimated, reconstructed remnants of dragon skeletons. Who would reassemble a dragon into a mechlike creature is unknown. Nevertheless, explorers of Highpoint's less-traveled regions continue to bring back disturbing reports of undead mechs. Little is known about them.

The various power sources have different strengths and weaknesses. Table 2-1 sums them up.

TABLE 2-1: COMPARISON OF MECH POWER SOURCES

	HD	Str	Dex	Ref	Fort	Speed	Crew Needs	Maneuverability
Steam-powered	High	High	Low	Low	High	Avg.	Avg.	Avg.
Man-powered	Avg.	Low	Low	Low	Avg.	Low	High	Low
Clockwork	High	High	High	High	Low	High	Low	High
Animated	Low	Low	High	High	Avg.	High	Low	High
Undead	Avg.	Avg.	Avg.	Avg.	High	Low	Very low	Low

PROFILE

A mech's stats are defined in the traditional monster format. They have hit dice, attacks, damage, and ability scores, just like any construct. A few new terms apply to mechs, however, and a few old terms are defined differently, as follows.

Hit Dice: All mechs use d10 for hit dice, and they always receive 5.5 hit points per hit die.

Speed: Mech speed is listed in tactical terms, as with normal monsters. Large mechs can move great distances quickly due to their massive strides, but in general mechs are not capable of high-speed movement.

Tactical speed converts to overland speed at the following rates:

Tactical Speed	Overland Speed
30 ft.	3 mph
40 ft.	5 mph
50 ft.	6 mph
60 ft.	7 mph
70 ft.	8 mph
80 ft.	9 mph
100 ft.	11 mph
120 ft.	14 mph
140 ft.	16 mph
160 ft.	18 mph
180 ft.	20 mph
200 ft.	23 mph
220 ft.	25 mph

AC: Armor Class isn't relevant in most mech combat. Each mech has an armor class, but due to their size they are often painfully easy to hit. More important is the mech's hardness, which is a function of its size and material type.

Hardness: A mech built of iron is more durable than a mech built of stone. This is reflected in the mech's hardness score. Similarly, a Colossal size mech has a denser superstructure than a Large mech. It also has more open space, meaning a successful penetration is less likely to hit something important. All of this is reflected in the mech's hardness rating.

Critical Thresholds: A heavily damaged mech may suffer system failures long before it is completely destroyed. Mechs have what are known as critical thresholds. These are divisions of their hit points. At each new threshold, the mech is more likely to suffer critical hits. Critical hits cause not only additional damage, but also specific system failures (such as a loss of power to the right arm, or clogged gun ports).

Each mech has four critical thresholds: green, yellow, orange, and red. A mech's entry will include break points, as a percentage of total hit points, for these critical thresholds. For example, "Green, Yellow 50%, Orange 25%, Red 10%" means a mech crosses the threshold to yellow when reduced to 50% of its starting hit points, orange at 25% of its total, and red at 10% of its total.

The effects of hits at the various critical thresholds is described in more detail on page 91. Note that all critical damage ignores the mech's hardness, since it takes place inside the mech's shell.

Attacks: A mech's attacks depend on its crew. This is described in more detail in the combat section (see page 86). For now, keep in mind that even though a mech may have many attacks listed, it

needs the relevant crew members to be alive and functioning in order to make those attacks.

Space/Reach: The height of a mech is determined by its size, as indicated on Table 2-2. The height may vary by up to 10% of the indicated measurement with no change in statistics. The face of a mech is generally equal to 1/2 its height, rounded down. The reach is 1/2 the mech's height. Again, the exact dimensions may vary based on the mech.

Saves: Mechs have Fortitude and Reflex saves. They do not have Willpower saves. A mech's base Reflex save (which is almost always negative) is *not* inclusive of Dexterity modifiers.

Ability Scores: Mechs have Strength and Dexterity scores. Both are contingent on the mech's size and power source. Some mechs may be clumsy but powerful, while others are agile but weak.

As with all constructs, mechs lack a Constitution score. Mechs do not have Intelligence, Charisma, or Wisdom scores. The mechs themselves are never subject to effects or checks concerning these stats; such effects or checks instead affect their pilots and crews.

Payload Units (PU): This new term describes how many people and weapons a mech can support in addition to its basic superstructure, armor, and engines. One Medium creature or weapon takes up one payload unit, a Large creature or weapon takes up two payload units, a Huge creature or weapon takes up four payload units, and the progression doubles at each increment thereafter.

Living space (for city-mechs) requires additional payload units. The absolute minimum is living space equal to the creature's PU (*e.g.*, a Medium creature would require 1 PU for workspace and 1 PU for living space). This is slavelike housing —just enough room to lie down beside a workstation. Normal mech living conditions require double the creature's PU (*e.g.*, a Medium creature requires 1 PU for workspace and 2 PU for living space). This is still quite cramped but at least includes enough room for a bed and a few possessions.

TABLE 2-2: TYPICAL MECH TRAITS BY SIZE

Size	PU	Height	Size Mod.	Hardness	Firing Ports	Unarmed Dmg.
Large	3	10 ft.	–1	+0	100%	1d6
Huge	5	15 ft.	–2	+0	100%	1d8
Gargantuan	10	25 ft.	–4	+0	100%	1d10
Colossal	16	35 ft.	–8	+1	80%	1d12
Colossal II	32	50 ft.	–8	+2	65%	3d6
Colossal III	64	75 ft.	–8	+4	55%	2d12
Colossal IV	128	110 ft.	–8	+6	40%	5d6
Colossal V	256	165 ft.	–8	+8	30%	3d12
City-mech A	512	240 ft.	–8	+10	20%	7d6
City-mech B	1,028	360 ft.	–8	+12	18%	4d12
City-mech C	2,056	540 ft.	–8	+14	16%	9d6
City-mech D	4,112	810 ft.	–8	+16	14%	5d12
City-mech E	8,224	1,200 ft.	–8	+18	12%	11d6
City-mech F	16,448	1,800 ft.	–8	+20	10%	6d12

Aristocrats, mech jockeys, senior engineers, and high-ranking military officers generally have 3 or more PU for living space.

Payload requirements for common spaces (kitchens, marketplaces, mess halls, recreational areas, etc.), are assumed to be included in the normal living space as an averaged figure. This is an abstraction, but it makes the mech-design process simple and fast. (It's certainly a lot easier than calculating kitchen and marketplace requirements for a city of 3,000 residents ...)

Payload requirements for weapons generally include space for ammunition and reloading, unless noted otherwise.

The mech itself occupies a space equal to twice its payload units. For example, a Huge mech stored on board a city-mech would occupy 8 PU.

Payload units can also be used for transporting raw materials. In general, 1 PU is sufficient to carry a volume measuring roughly 6x6x6 feet (216 cubic feet), or a weight of 1,000 pounds.

Crew: Different kinds of mechs require different kinds of crews. Man-powered mechs are extremely labor intensive, since the entire mech runs by manpower. Steam-powered mechs also need a lot of hands on board to keep the fires stoked and maintain machinery. Animated mechs require substantially less crew (mostly just gunners and tactical staff), while an undead mech requires only a single necromancer to control it. A mech's profile will indicate its crew requirements.

Firing Ports: In a small mech, all the passengers are near the edges and can fire ranged weapons through firing ports. The larger a mech becomes, the lower the proportion of its passengers that is near the edge and has access to firing ports. The firing ports entry is determined by a mech's size. It indicates what percentage of the mech's total payload units are next to firing ports. Remember to add vertical height into the range determinations for shots fired from high up on large mechs.

Power Source: As described above. A mech's entry includes a definition of the power source that runs it.

SIZE

A mech is constructed by determining its size and type, customizing various components, and adding weapons. Construction will be described in more detail later, along with information on pricing. For now, let's look at the various components of a mech's profile.

The first consideration in a mech's profile is its size. This determines the range of its payload and height. The type when combined with the size then determines the

range for the rest of the attributes. A mech can exceed its normal size/type range, but this raises the cost.

The "size modifier" applies to the mech's AC and melee attack bonuses.

Each individual mech type has its own profile based on its size, as follows. These profiles include critical hit tables for each mech type. These critical hit tables will be explained in more detail later.

MANEUVERABILITY

For the purpose of simplicity, a mech's maneuverability is linked to its size and power source. More flexible mechs can be built but they are more expensive.

The base maneuverability classes by mech size are as follows:

Size	Maneuverability
Large	Good
Huge	Good
Gargantuan	Average
Colossal	Average
Colossal II	Average
Colossal III	Poor
Colossal IV	Poor
Colossal V	Poor
City-mech A	Clumsy
City-mech B	Clumsy
City-mech C	Clumsy
City-mech D	Clumsy
City-mech E	Clumsy
City-mech F	Clumsy

Maneuverability is then modified by the mech's construction type, as follows. No mech can be worse than clumsy or better than perfect when it comes to maneuverability.

Power Source	Maneuverability
Steam-powered	No modifier
Man-powered	–1 increment
Clockwork	+1 increment
Animated	+1 increment
Undead	–1 increment

With regard to mechs, maneuverability classes are defined as shown in Table 2-3. Note that mech maneuverability is even more cumbersome than the typical flight maneuverability increments — most mechs are hardly graceful.

TABLE 2-3: MECH MANEUVERABILITY CLASSES

	Perfect	Good	Average	Poor	Clumsy
Reverse	Free	–10 ft.	No	No	No
Turn	Any	90°/20 ft.	45°/20 ft.	45°/20 ft.	45°/40 ft.
Turn in Place	Any	+90°/–20 ft.	+45°/–20 ft.	No	No
Maximum Turn	Any	Any	90°	45°	45°
Trip Checks	+4	+0	+0	–4	–8
Climb	Yes	–4	No	No	No
Jump	Yes	–4	–8	No	No
Clearance	3/4 height	1/2 height	1/2 height	1/4 height	1/4 height

Reverse: Mechs of perfect maneuverability can switch between forward and reverse movement at no penalty. At good class, the mech must expend 10 ft. of movement to switch to reverse. Mechs of average or worse maneuverability cannot move in reverse.

Turn: The amount of forward movement the mech must make to turn. Mechs with perfect maneuverability can wheel in place, while others must move forward in order to make a turn.

Turn in Place: The amount of speed that the mech can spend to turn in place. Mechs of poor or clumsy maneuverability cannot turn in place; they must move forward in order to turn.

Maximum Turn: The maximum amount that a mech can turn in one round.

Trip Checks: The modifier to the mech's trip checks. The less maneuverable a mech is, the less balanced it is, and thus easier to trip.

Climb: Well balanced mechs can climb cliff faces, castle walls, and other obstructions. This is made using the pilot's Mech Pilot skill, as described on page 88. Mechs of perfect maneuverability can do so at no penalty, mechs of good maneuverability have a –4 penalty, and other mechs cannot climb.

Jump: As with Climb, this describes whether a mech can jump, and if so, what penalty is applied. Jumping is described on page 88.

Clearance: How high the mech can step, as described on page 88.

STEAM-POWERED MECHS

Steam-powered mechs use massive steam engines to power their actions. Based on their size, steam-powered mechs have the following base profile.

Power Source: Steam.

Physical Appearance: Steam-powered mechs are large and loud. Their engines generate tremendous noise and heat. All steam-powered mechs are dotted with chimneys and smokestacks that constantly produce steam and smoke.

Critical Thresholds: Green, Yellow 50%, Orange 25%, Red 10%.

Crew: 25% of a steam-powered mech's PU must be crew. For smaller mechs this includes a mech jockey and gunners. A mech jockey with the Mechidextrous feat may be able to take over the role of a gunner.

In larger mechs, crew includes a mech commander (high-level mech jockey), assistant pilots (low-level mech jockeys), a navigator, and one or more engineers, as well as coalmen to stoke the fires. In city-mechs, this includes laborers (who shovel coal into furnaces, fabricate spare parts, and clean engine rooms), a fleet of engineers (for everything from major repairs to routine maintenance), and all sorts of support personnel.

TABLE 2-4: STEAM-POWERED MECHS CRITICAL HITS

Roll by Threshold (d%)				Critical Hit
Green	Yellow	Orange	Red	Result
01–25	01–10	—	—	Component damage. Attack causes extra critical damage but nothing more.
26–40	11–25	—	—	Pressure leak. Mech loses 2 Str and 2.5 ft. of speed each round until leak is repaired.
41–55	26–40	01–15	—	Steam pipe damage. Mech is frozen in place for one round until back-up pipes take over. It loses its next action.
				This applies to all onboard weapons and equipment powered by the main steam engine.
56–75	41–55	16–25	—	Arm relay damage. Determine arm randomly. That arm is frozen in place until damage is repaired. Weapons on that arm cannot be used.
76–95	56–70	26–35	—	One leg is damaged. Speed is halved; maneuverability drops by one category.
96–98	71–80	36–45	01–10	Gyroscope damage. Mech must make a Reflex save (DC 16) with every move or fall over. Mech suffers a –4 penalty to trip checks.
99–00	81–85	46–65	11–30	Boiler damage. Mech loses power for 1d4 rounds. It can take no actions during that time.
	86–95	66–75	31–50	Out of control. The pilots lose control. For the next 1d4 rounds, determine the mech's movement and attacks randomly.
	96–98	76–85	51–70	Secondary boiler explosion. A secondary boiler explodes, dealing an additional 3d6 points of damage to the mech.
				Back-up boilers make up for the power loss.
	99–00	86–95	71–85	Steam leak. The entire mech is suddenly flooded with waves of scalding steam. All creatures on board have a 50% chance of taking 1d3 points of steam damage each round. Reroll the 50% chance each round. This continues until the leak is repaired.
		96–98	86–95	Controls damaged. The mech's control room is damaged. The mech cannot be controlled until the damage is repaired.
				It cannot walk, use weapons, or do anything else.
		99–00	96–00	Main boiler explosion. The mech's main boiler explodes. It suffers 10d6 points of damage. All creatures on board the mech suffer 1d6 points of damage from flames and steam. The mech loses all power until the main boiler is repaired. Continuing fires deal an additional 2d6 points of damage to the mech per round for the next 1d6+2 rounds.

TABLE 2-5: STEAM-POWERED MECHS

Size	Str	Dex	Fort	Ref	Speed	HD
Large	18	10	+2	–2	40 ft.	6
Huge	22	10	+2	–2	40 ft.	12
Gargantuan	26	8	+2	–2	40 ft.	24
Colossal	30	8	0	–4	50 ft.	48
Colossal II	34	6	0	–4	50 ft.	96
Colossal III	38	6	0	–4	60 ft.	144
Colossal IV	42	4	0	–4	60 ft.	192
Colossal V	46	4	0	–4	80 ft.	240
City-mech A	50	2	–2	–8	100 ft.	336
City-mech B	54	2	–2	–8	120 ft.	432
City-mech C	58	0	–2	–8	140 ft.	528
City-mech D	62	0	–2	–8	160 ft.	624
City-mech E	66	0	–2	–8	180 ft.	718
City-mech F	70	0	–2	–8	200 ft.	814

MAN-POWERED MECHS

Man-powered mechs use hordes of toiling slaves to power their actions. Based on their size, man-powered mechs have the following base profile.

Power Source: Manpower.

Physical Appearance: Man-powered mechs lack the smoke-belching chimneys of steam mechs but they share the noise. In the case of man-powered mechs, the noise is the rhythmic pounding of drums, the grunts and screams of the slaves, and the painful squealing of straining gears.

Critical Thresholds: Green, Yellow 60%, Orange 35%, Red 20%.

Crew: 50% of a man-powered mech's PU must be laborers. These crew members can do nothing but work to provide power; they cannot pilot, navigate, fire weapons, or do anything else. The balance of necessary crew (pilots, gunners, and commanders, as dictated by the mech's design and the crew's capabilities) must come from the remaining PU. Obviously, this means most man-powered mechs use more than 50% of their PU for crew. In smaller mechs, the

mech jockey and gunners must provide some of the mech's power themselves through pedals or treadmills, in addition to the slaves. Larger man-powered mechs include some additional senior-level staff (a mech commander or navigator), but most of the space is dedicated to slave labor.

CLOCKWORK MECHS

Clockwork mechs use intricate, complex mechanisms to transmit power from a coiled spring to the rest of the mech. Based on their size, clockwork mechs have the following base profile.

Power Source: Clockwork apparatus.

Physical Appearance: Clockwork mechs are the best designed of all the mechanically-powered mechs. They are smooth and sleek. They don't need as much crew as other mechs, nor do they require chimneys or slave quarters. Under normal operation they produce no smoke or steam, and their only audible output is a constant low hum or ticking. Once per week, a clockwork mech must activate its steam engine to wind the central spring, and for this short interval it belches smoke from a single central chimney. The only drawback to clockwork mechs is their fragility (expressed as a low Fort save) – although they are well constructed and difficult to damage, a well-placed blow against the central spring can disable the entire mech.

Critical Thresholds: Green, Yellow 50%, Orange 25%, Red 10%.

TABLE 2-6: MAN-POWERED MECHS

Size	Str	Dex	Fort	Ref	Speed	HD
Large	*					
Huge	14	10	0	–2	30 ft.	10
Gargantuan	18	8	0	–2	30 ft.	20
Colossal	22	8	–2	–4	40 ft.	40
Colossal II	26	6	–2	–4	40 ft.	80
Colossal III	30	6	–2	–4	50 ft.	120
Colossal IV	34	4	–2	–4	50 ft.	160
Colossal V	38	4	–2	–4	70 ft.	200
City-mech A	42	2	–4	–8	80 ft.	280
City-mech B	46	2	–4	–8	100 ft.	340
City-mech C	50	0	–4	–8	120 ft.	420
City-mech D	54	0	–4	–8	140 ft.	500
City-mech E	58	0	–4	–8	160 ft.	580
City-mech F	62	0	–4	–8	180 ft.	660

*The smallest operable man-powered mech is of size Huge. Smaller models don't have space for the necessary laborers.

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