Jim's Guide to Intelligent Mechanika

Introduction

A Mechanikal device with an intelligence score is controlled in two ways:
- Verbal commands with instructions that are simple and take no more than a standard action to complete
- Verbal instructions that activate a 'task' that it has been 'trained' to perform, thes eoften take multiple turns to complete
- And it may sometimes make it's own decisions based on it's learned experiences

These devices require a form of programming but, far more organic, more akin to raising a child than programming a computer.

Theoretically any machine can be provided with a cerebral matrix or even a Cortex but, they are fairly sizeable and must have the means to take action once installed.

The means to take action is complex and esoteric. It is a brain, it is not a computer processor. Imagine if some arcane mechanic devised a cerebral matrix who's sole purpose was to perform simple mathematical calculations. Let's say it is built to receive numerical and operational inputs through levers and then to move beads to show the result of a mathematical calculation. Such a cerebral matrix may appear to operate flawlessly for a good long while, until someone interacts with it in a negative and new manner .. they spill a cup of coffee over it while it is mid process. How would it react? Would it believe that it is being punished, and if so what would it think it was doing incorrectly? What if it decides that the operator no longer likes to receive numbers over 100 in it's response or to always round up or down to the nearest whole number, or maybe it starts to believe that it needs to start making a noise so the operator knows it is busy performing the calculation. Whatever it decides it has received a new instruction in it's program, because this device has been created blind and unable to move or speak it is exceptionally difficult for the arcane mechanic to diagnose and reassure the cerebral matrix that accidents do occur and are random.

So along with a cerebral matrix or cortex, as much as can be done to provide senses and the ability to take action is done. Arms, pincers, legs, mandibles, the ability to hear and to see. Sadly speech is something that has always eluded even the most adept of arcane mechanics, groaning and venting steam in patterns is possible provided the vent is part of another system and not a dedicated noise making line.

New Rules for Mechanika

Who is in Control?

For Intelligence 1-2 Mechanika it is not possible to train them to respond to only a select few handlers, although anyone trying to command one they are unfamiliar with must check against jack handling as they are all unique in some way and have been trained slightly differently.

Typically an intelligent mechanika with Intelligence 4+ has a primary handler who's commands take precedence over all others. And it may know ½ intelligence attribute secondary handlers. The primary handler may ask the jack to forget a secondary at any time. The primary handler can only be change through it's 'Command Protocol'; typically that is a physical key and a passphrase which when issued reset it so it has no handlers. The steamjack recognises command inputs by voice, so a number of trigger phrases are read for the mechanika to learn a new handler. A steamjack can only understand it's handler's native tongue, (requiring INT +1 for a second language which it is unlikely to have). In places of work the operator list is often reset regularly as there have been cases where theft or mishandling have occurred.

Hacking

The command protocol key is a lock of exceptional quality (DC36), warjacks have even more secure defenses. Additionally warcasters have even more advanced methods of protection.

Mimicing a controller's voice to issue a command must be done as a separate check for each command issued and is a disguise check with a minimum of DC26, however with every test the check increases by the mech's WIS bonus or +1 if that is 0 or less. It will eventually realise.

Commands vs Tasks

A command is a single action, it can be a standard action, movement action, swift action or free action. How many of each a mech can perform in a turn varies but, each must be commanded verbally. This occupies the jack handler's freedom to talk to their comrades.

A task is something that takes more than a single action to complete, for example. "Unload a trailer" , "attack that enemy", or "defend me", Each one has additional actions within it that we might take for granted, and if the mech is trained we can. Unloading a trailer requires the cargo to be placed in a clear and safe space on the ground, each object would be placed in a different place, and each object might be a different shape.

A mechanika can learn 3 tasks per point of Intelligence

Owning and Jack Handling

If this is not an arcane mechanik's first bonded mechanika (ie. their second or anyone else's first) then the purchaser must bond with it, doing so links the mechanika to the handlers [level – 5] minimum level 1. A second mechanika takes additional effort to work with and operates at [level -10] minimum 1, however a second mechanika can not be bonded with until the handler is level 6. A third is [level -15] minimum 1, from level 12 and a fourth is [level -20] minimum 1, from level 18.

These penalties also apply when using jack handling to control multiple mechanika in the same scene; DC+5 for an arcane mechanic's second, or anyone else first mechanika, etc.

Enchanted Weaponry

Weaponry that is fitted to a steamjack may have an enhancement bonus but, that is not applied to the steamjack's attack or damage rolls. Any other effects a weapon may have work as normal.

With the note that only when intelligence is 3+ can the mechanikal familiar can perform simple tasks on verbal command as if they were sentient. As intelligence increases, more complex commands can be issued and they gain the ability to recognise individuals, locations and even objects of specific significance.

Destroyed Mechanika

If an intelligent mechanika's HP is reduced to 0 then, the mechanika must succeed in a Will Save DC 14 or the cerebral matrix is damaged beyond repair. If this check is passed the mechanika must succeed in a second will save DC 20 or intelligence is reduced by 1 permanently. When intelligence is reduced to 0 in this way the cerebral matrix or cortex is destroyed.

Jack Feats

Intelligent Mechanika learn feats similar to characters, these may be selected from the following list; Blind-Fight, Cleave, Deadly Aim, Far Shot, Great Cleave, Great Fortitude, Improved Combat Maneuver, Improved Critical, Iron Will, Jet Dash, Kip Up, Lightning Reflexes, Lunge, Mobility, Multi-Weapon Fighting, Nimble Moves, Opening Volley, Penetrating Attack, Shot on the Run, Skill Focus, Skill Synergy, Slippery Shooter, Spring Attack, Strike Back, Suppressive Fire, Versatile Focus, Versatile Specialization, Weapon Focus, Weapon Specialization, Evasion, improved evasion, multi attack.

At 10th level, you can also choose Extra Resolve, Improved Great Fortitude, Improved Iron Will, and Improved Lightning Reflexes.

THIS LIST IS NOT PATHFINDER READY!

Buying pre-built Intelligent Mechanika

Intelligent Mechanika vary considerably in size and function, from the tiny mites that are commonly found in factories to the mighty warjacks of the army.

Tiny Mite Servitor (CR1/2, 100gp in parts)
A multilegged beast. Often found helping out a mechanik, holding tools or cleaning. If designed to be a helper they grant +1 equipment bonus to craft(mechanika), this can be accumulated on large projects to a maximum of +10. Mites are often sent into hard to reach places and as such tend to attract gremlins. A mite gains a +5 Equipment bonus to climb checks it makes.
d5HP (3); INIT +3; SPD 20' (can't run), climb 10'; AC15, Touch 13, FF 12; BAB +2; GRP -6; ATK +2 melee (1d2 claw), Full Atk +2 melee (1d2 claw); Base 2.5'; Darkvision 60', servitor traits; AL N; SV Fort +0, Ref +3, Will +0; St 10, Dx 16, Con -, Int 2 (cerebral matrix), Wis 10, Cha 1

Small Crawler Servitor (CR1, 200gp in parts)
A multilegged beast. Often found helping out a mechanik, holding tools or cleaning. If designed to be a helper they grant +1 equipment bonus to craft(mechanika), this can be accumulated on large projects to a maximum of +10. Mites are often sent into hard to reach places and as such tend to attract gremlins. A mite gains a +5 Equipment bonus to climb checks it makes.
d10+10HP (15); INIT +0; SPD 20' (can't run), climb 5'; AC14, Touch 12, FF 12; BAB +1; GRP -3; ATK +1 melee (1d3 claw), Full Atk +1 melee (1d3 claw); Base 5'; Darkvision 60', servitor traits; AL N; SV Fort +0, Ref +2, Will +0; St 10, Dx 14, Con -, Int 2 (cerebral matrix), Wis 10, Cha 1

Small Manakin Servitor (CR1, 200gp in parts)
Resembles a humanoid. Often found sorting, cleaning, carrying light loads and keeping watch
d10+10HP (15); INIT 0; SPD 20' (can't run); AC13, Touch 11, FF 13; BAB +2; GRP -2; ATK +2 melee (1d3+1 non-lethal slam), Full Atk +2 melee (1d3+1 non-lethal slam); Base 5'; Darkvision 60', servitor traits; AL N; SV Fort +0, Ref +0, Will +0; St 12, Dx 10, Con -, Int 2 (cerebral matrix), Wis 10, Cha 1

Medium Manakin Servitor (CR2, 400gp in parts)
Resembles a humanoid. Often found sorting, cleaning, carrying light loads and keeping watch
d10+20HP (25); INIT 0; SPD 30' (can't run); AC12, Touch 10, FF 12; BAB +2; GRP +2; ATK +3 melee (1d4+2 non-lethal slam), Full Atk +3 melee (1d4+2 non-lethal slam); Base 5'; Darkvision 60', servitor traits; AL N; SV Fort +0, Ref +0, Will +0; St 14, Dx 10, Con -, Int 2 (cerebral matrix), Wis 10, Cha 1

Light Labourjack (CR7, 16,000+gp)
Large construct (steamjack); 8d10+30HP (74); INIT -2; SPD 20' (can't run); AC19, Touch 7, FF 19; BAB +6; GRP +16; ATK +12 melee (1d6+6 slam), Full Atk +8/+3 melee (2d6+6 slam) and +4 melee (off-hand 1d6+6 slam); Reach 10'; Base 10'; DR5/serricsteel, darkvision 60', low-light vision, steamjack traits; AL N; SV Fort +2, Ref +0, Will +2; St 23, Dx 7, Con -, Int 4 (cupernum grade cortex), Wis 11, Cha 1

Heavy Labourjack (CR9, 20,000+gp)
Large construct (steamjack); 12d10+30HP (96); INIT -3; SPD 20' (can't run); AC21, Touch 6, FF 21; BAB +9; GRP +21; ATK +16 melee (1d8+8 slam), Full Atk +16/+11 melee (1d8+8 slam) or +12/+7 melee (1d8+8 slam) and +8 melee (off-hand 1d8+8 slam); Reach 10'; Base 10'; DR 10/serricsteel, darkvision 60', low-light vision, steamjack traits; AL N; SV Fort +4, Ref +1, Will +4; St 27, Dx 5, Con -, Int 4 (cupernum grade cortex), Wis 11, Cha 1

Light Warjack (CR11, 39,000+weaponry+gp)
Large construct (steamjack); 14d10+30HP (107); INIT +2; SPD 25' (can't run); AC26, Touch 11, FF 24; BAB +10; GRP +21; ATK +17 melee (1d8+7 slam), Full Atk +17/+12/+7 melee (1d8+7 slam) or +13/+8/+3 melee (1d8+7 slam) and +9 melee (off-hand 1d8+7 slam); Reach 10'; Base 10'; DR 10/serricsteel, darkvision 60', low-light vision, steamjack traits; AL N; SV Fort +4, Ref +6, Will +4; St 25, Dx 15, Con -, Int 8 (aurum grade cortex), Wis 11, Cha 1

Heavy Warjack (CR13, 43,000+weaponry+gp)
Large construct (steamjack); 18d10+30HP (129); INIT +0; SPD 20' (can't run); AC29, Touch 9, FF 29; BAB +13; GRP +27; ATK +23 melee (1d10+10 slam), Full Atk +23/+18/+13 melee (1d10+10 slam) or +19/+14/+9 melee (1d10+10 slam) and +15 melee (off-hand 1d10+10 slam); Reach 10'; Base 10'; DR 15/ quenched serricsteel, darkvision 60', low-light vision, steamjack traits; AL N; SV Fort +6, Ref +6, Will +6; St 30, Dx 11, Con -, Int 8 (aurum grade cortex), Wis 11, Cha 1

Mucker a Common Cygnaran Light Labourjack (CR7, 16,000+gp)
Height/ Weight: 7'6" / 2.6 tons
Armament: Pneumatic powered fists
Fuel Load / Consumption: 220lbs / 5 hrs general labour, 1 hour combat
Initial Service Date: 543 AR
Cortex Manufacturer: Fraternal Order of Wizardry
Original Chassis Design: Bartley Mechanika Foundry & Jack Works
Description: see p350

Hurly a Common Cygnaran Heavy Labourjack (CR9, 20,000+gp)
Height/ Weight: 10' / 4 tons
Armament: Pneumatic powered fists
Fuel Load / Consumption: 300lbs / 5 hrs general labour, 1 hour combat
Initial Service Date: 534 AR
Cortex Manufacturer: Fraternal Order of Wizardry
Original Chassis Design: Bartley Mechanika Foundry & Jack Works
Description: see p351

Nomad a Common Cygnaran Heavy Warjack (CR13, 34,000+gp)
Height/ Weight: 12'3" / 6 tons
Armament: Large Caspian Battleblade (Left Hand) and Large Buckler
Fuel Load / Consumption: 300lbs / 5 hrs general labour, 1 hour combat
Initial Service Date: 522 AR
Cortex Manufacturer: Fraternal Order of Wizardry
Original Chassis Design: Bartley Mechanika Foundry & Jack Works
Description: see p351

Large construct (steamjack);
16d10+30HP (118); INIT -1; SPD 25' (can't run); AC27, Touch 8, FF 26; BAB +12; GRP +26; ATK +22 melee (2d6+10 LBattleblade), Full Atk +22/+17/+12 melee (2d6+10 LBattleblade) or +18/+13/+8 melee (2d6+10 LBattleblade) and +14 melee (off-hand 1d10+10 slam); Reach 10'; Base 10'; DR 10/ serricsteel, darkvision 60', low-light vision, steamjack traits; AL N; SV Fort +5, Ref +4, Will +5; St 30, Dx 9, Con -, Int 8 (aurum grade cortex), Wis 11, Cha 1

Montmart Traveler (light labourjack);
CR 6; 7'6"/ 2 tons; Date 605AR; 8d10+30HP (74); INIT -1; SPD 20' (can't run); AC17, Touch 9, FF 17; BAB +12/+7; GRP ??; ATK +12/+7 melee (1d6+6 slam), Full +12/+7 melee (1d6+6 slam); Reach 10'; Base 10'; DR 5/ serricsteel, darkvision 60', low-light vision, steamjack traits; AL N; SV Fort +2, Ref +2, Will +2; St 23, Dx 10, Con -, Int 6 (ferrum grade cortex), Wis 11, Cha 1; Build DC 24 / 6 weeks / 22,125gp (x2 on the market)

see also

Golem p158 PB1, Homonculus p176 PB1, Iron Cobra p182 PB1, Retriever p231 PB1, Adamantine and other Golems p131 PB2, Inevitables p161 PB2, Necrophidius p196 PB2, Scarecrow p238 PB2, Soulbound Doll p255 PB2, Caryatid Column p46 PB3, Clockworked p53 PB3, Bone and other Golems p133 PB3, Graven Guardian p140 PB3, Toatieh p260 PB3, Terra-Cotta Soldier p262 PB3, Tophet p271 PB3, Tupilaq p275 PB3

And in the spells section of IKCG; assistant servitor, courier servitor, monitor, sentry

Converting Warmachine Warjack's to d20

Decide on the size category depending on the card

HD =   Hull boxes (eg. A cygnaran ironclad has 18 hull boxes)
        Some will have more than the suggested maximum for the chassis type, if so double the construction cost for the additional dice

MOV = SPD, Every SPD is a 5' square of movement. This must be accounted for in construction, if   it is higher than the suggested maximum for the chassis type

DMG = Depends on the weapons fitted

Special Abilities = GM to work this out themselves

CR = ½ HD +2 +1 per special ability or additional attack

The Anatomy of Mechanika

Mechanika can be clockwork or steam powered, the costs to create a large clockwork Jack need to scale such that that would be wasteful, while conversely the tiny jack would be best powered by clockwork.

Outer Core – made of crystal, brass, aurum and other alchemically and magically purified metals enchanted with mechanikal runes and housed inside dozens of concentric flat rib plates that form a sphere and they move. It doesn't just act like it, it actually looks alive. Copper rods form spines through it and at it's core is a crystal. Whether a high performance military grade cortex or a labourjack's cortex it is capable of learning, they are sentient and over time might even gain a unique personality. Though often that comes with quirks and eccentricities. The cortex is usually located under the head, behind the turbines where it is safest from harm. Even a smart steamjack has only rudimentary intelligence and requires close supervision.

Inner Core – weather a cerebral matrix or cortex at the heart of the core is a pulsing energy called numen. It is energy in it's raw form. It is that pulsing natural energy that is key to the autonomy of these devices.

Chassis – The chassis of the mechanika is a steel skeleton, with muscles of pneumatic pipes. A separate torsoe to the limbs allows factory constructed units to be assembled in a variety of different ways. So buying an arm should be a bit cheaper than buying a customised limb for a unique torsoe.

Reflex triggers – connected by copper conduits direct to the cortex act like the jack's nervous system. The cortex is able to open and close brass valves to operate each appendange and receives feedback through pneumatic pressure chambers. The cortex interprets the pressure of these chambers to determine a limbs position.

Senses - Focal lenses and clockwork devices form a complex array of visual and auditory senses, they feed back into the cortex and are typically housed in the cranial area as there is a performance and reliability cost if they are too far away. A steamjack's audible range to receive clear instruction is 60'. Hand signals may be used too however the steamjack's visual range to make out it's owner precisely is not as good as a human's so this is treated as the same 60' range. Warcasters have a telepathic bond with their jack and this has a range based on their spellcaster level (see that prestige class for details).

Steam Engine – A coal burning firebox, a boiler and an arcane turbine form the power core of the steamjack. Typically mounted on the back and vented vertically. A light jack consumes 1/3 lb coal per hour, while a heavy (Large sized) jack burns ½ lb. Provided it moves slowly and steadily and is not pulling or hauling anything. Increasing it's work and/ or speed multiplies that dramatically. At full speed in full action mode a light jack will burn 2 lb coal per minute, while a large jack might burn 9 lb per minute. This dramatic change is because the magically pressured pneumatic lines release by venting steam and fill (and build overpressure) almost in an instant from the steam system.

The Arcane field – the arcane turbines may drive an arcane field. Essentially this disrupts high ballistic projectiles to the point where physical armour applies to the BAC (Ballistic AC) equally.

Cortex power relay – steam is fed through the cortex power relay system into the pneumatic valves, reflex triggers and Sensory systems and is controlled directly by the cortex. How the pair meld together is unique though standardisation between models from a small number of manufacturers reduce that. ie. Anyone making their own from scratch can not seemlessly transfer and adapt a component found at any old storefront.

Warjack's coal hopper – a warjack is expected to operate at full capacity for longer periods without refuelling and typically hold more fuel than labourjacks. A labourjack is also typically outfitted to perform the same repetitive task with maximum efficiency. This means that a labourjack is cheaper to run for the same period, the additional weight of a full warjack coal hopper is part of that efficiency loss. The hopper is able to gradually feed coal at a rate controlled by the cortex, also meaning that a warjack cortex has additional capability and control over it's own internal workings over a labourjack.

Overlay – The Overlay are the components, armour, weaponry, etc that are added after the rest of the mechanika has been built. In general a mechanika variant of an item has a similar cost to the non-mechanika version (remember size modifiers). They can be rune plate powered lightning infused magic items or simple weapons. The encumbrance values of the items are important to the frame's size. They occupy load space and weigh the mechanika down, possibly unbalancing it (-4 penalties for incorrect sized items could apply as normal).

Building Intelligent Mechanika

Requires 4+ ranks craft(clockwork, mechanika and steam engines) to construct a small sized intelligent mechanika and the appropriate crafting feats, in some facilities teams of mechanik's combine their talents to create a single one.

Time: 1 day for each 500gp cost

The engine and cerebral matrix must be built seperately, these are typically purchased.

Installing an engine on a tiny or small mechanika requires DC15 craft(mechanika) and takes 2 hours, other engines take just 1 hour (small engines are more intricate).

The Method

  Step1) Select Core (Cerebral Matrix or Cortex), Class and Level

  Step2) Select Chassis

  Step3) Select Powerplant

  Step4) Determine Cost

  Step5) Determine DC check difficulties and time per check for each stage

  Step6) Select Attachments

Cost multiplier pips

These are used as follows; Add up all of the pips and that becomes a multiplier. Then at the end of the selection process after calculating all of the component costs and overlay options and for every overlay change that is made.

The exception to this is the Core which is installed separately as a module, that is not multiplied.

Calculating CR

The base CR is ½ HD. Add +1 for every special attack or ability it has. If it is Large sized add +2

Select Class

A cortex will level up through experience, for an arcane mechanik this occurs in line with their own level progression, for most classes this is keyed to their character level -5 (at least).

Select anything here but, keep track of the cost multiplier pips. A warjack is noted to have better reasoning and faster reflexes because they have more intricate cortexes than labourjacks but, that is represented by these options and others later on.

For an Arcane Mechanik, or a similar character, each time they build a new body to house their cortex or cerebral matrix in these options may be extended. At 1HD they may be set to anything the player wishes, maximum is 4x skill progression, 3x from combat progression and 4x from a maximum of 2 save progressions which totals 12x costs to all modifications

Basic level progression

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
BAB	+0	+1	+1	+2	+2	+3	+3	+4	+4	+5	+5	+6	+6	+7	+7	+8	+8	+9	+9	+10
All Saves	+0	+0	+1	+1	+2	+2	+2	+3	+3	+3	+4	+4	+4	+5	+5	+5	+5	+6	+6	+6
Jack Feat	F		F		F		F		F		F		F		F		F		F	

Combat progression (cost multiplier pips +1)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
BAB	+0	+1	+2	+3	+3	+4	+5	+6	+6	+7	+8	+9	+9	+10	+11	+12	+12	+13	+14	+15

Superior combat progression (cost multiplier pips +3)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
BAB	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10	+11	+12	+13	+14	+15	+16	+17	+18	+19	+20

Increased save progression (cost multiplier pips +2, can be taken a maximum of twice)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
One Save	+2	+3	+3	+4	+4	+5	+5	+6	+6	+7	+7	+8	+8	+9	+9	+10	+10	+11	+11	+12

Skill Ranks
2+INT skill points, min 1/HD provided intelligence is 3+ (and from the level it becomes 3+)
+1 Skill point per level may be added (cost multiplier pips +1), this may be taken up to 4 times
An intelligent mechanika may never develop nor make checks for Bluff, Diplomacy, Disguise, Heal, Jack Handling, any knowledge, Ride, Sense Motive, Slight of Hand, Spellcraft, Survival or Use Magical Device.

Select Core

Select a Core from the below list. Note that an arcane mechanic's first bonded mechanika follows a different pattern.

If installing the Core fails then, the housing must be re-prepped which takes 1 day for a Cortex and 4 hours for a Cerebral Matrix.

Cerebral Matrix – construction time 1 month. Very similar to a Cortex, but far less complicated. Typically has animal intelligence (Intelligence 2) which means it has a limited command set, like a trained dog. Install DC 18 and takes 4 hours. 200GP/HD

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
INT	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6
WIS	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5

Cupernum Grade Cortex – see jack handling, always requires supervision. Intelligence 4. Install DC 22 and takes 5 days. 10,000gp +500/HD

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
INT	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8	8	8
WIS	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7

Ferrum Grade Cortex – can move, fetch, follow seek, stay or work with minimal supervision. Intelligence 6, DC -5 when pushing or handling. Install DC 24 and takes 8 days. 16,000gp +500/HD

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
INT	6	6	6	6	7	7	7	7	8	8	8	8	9	9	9	9	10	10	10	10
WIS	5	5	5	5	6	6	6	6	7	7	7	7	8	8	8	8	9	9	9	9

Aurum grade cortex – fitted to problem solving labourjacks and some warjacks. Can perform all of the tasks listed under jack handling without supervision, requiring a handler only for tasks that require complex strategy, problem solving or manual dexterity. Intelligence 8, DC -10 when pushing or handling. Install DC 26 and takes 11 days. 22,000gp +500/HD

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
INT	8	8	8	8	9	9	9	9	10	10	10	10	11	11	11	11	12	12	12	12
WIS	7	7	7	7	8	8	8	8	9	9	9	9	10	10	10	10	11	11	11	11

Arcanum Grade Cortex – military grade cortex. A handler is only required if the jack needs coaxing to perform an intricate or complicated task that would normally require a skill check. Intelligence 10, DC -15 when pushing or handling. Install DC 30 and takes 15 days. 30,000gp +500/HD

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
INT	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14
WIS	9	9	9	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13

The Arcane Mechanik's Bonded Mechanika

An Arcane Mechanik's bonded mechanika follows a different progression to the above. It begins tiny and grows over time as the arcane mechanik tinkers with it enhances it and further bonds with it.

An arcane mechanik's matrix built into a tiny chassis at level 4 suffers -2 to INT and WIS, a level 8 matrix in a tiny chassis suffers -4, level 12 suffers -6, level 16 suffers -8 and level 20 suffers -10.

An arcane mechanik's matrix built into a small chassis at level 8 suffers -2 to INT and WIS, a level 12 matrix in a small chassis suffers -4, level 16 suffers -6 and level 20 suffers -8.

An arcane mechanik's matrix built into a medium chassis at level 12 suffers -2 to INT and WIS, a level 16 matrix in a medium chassis suffers -4 and level 20 suffers -6.

An arcane mechanik's matrix built into a large chassis at level 16 suffers -2 to INT and WIS and at level 20 suffers -4.

There is no penalty for fitting a level 20 matrix into a huge chassis.

An Arcane Mechanik's bonded mechanika has Minor Spell resistance. SR == Master's caster level

Note that if the mechanika this is fitted into is destroyed this Cerebral Matrix/ Cortex can usually be recovered. An arcane mechanik's bonded mechanika gains +4 to saves to survive it's hull being destroyed and to avoid a permanent intelligence loss.

Note that the bonded mechanika can be commanded to perform a task it has been trained in without requiring a jack handling check.

Heirloom Matrix

A once glorious Cortex that has been rebuilt and left to the Arcane Mechanik by a relative. It is quirky, patient and has the mod:devotion as an additional bonus mod that can never be removed or changed (mods can normally be swapped out for others).

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
INT	2	2	3	4	4	5	6	6	7	8	8	9	10	10	11	12	12	13	14	14
WIS	3	4	4	5	6	7	8	8	9	10	11	12	12	13	14	15	16	16	17	18

Inspired Matrix

The character has developed this themselves and through their bond it has developed with greater potential than a foundry made Cortex. It is as curious as a small child, or a young cat and begins the game quite nieve and has the mod:overdrive as an additional bonus mod that can never be removed or changed (mods can normally be swapped out for others).

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
INT	2	3	3	4	5	6	7	7	8	9	10	11	11	12	13	14	15	15	16	17
WIS	1	1	2	3	3	4	5	5	6	7	7	8	9	9	10	11	11	12	13	13

Cortex Brain (Limited AI) - each round after you have acted jack may take either a movement to move or standard action to attack. You must be able to issue a command (jack must he able to see or hear you), this does not cost an action.

Well Trained (master control) - if you spend a movement action your jack msy take both a movement and standard action. These actions are not limited to the cortex brain restrictions. And/or If you spend a swift action, jack is able to take a swift action. Actions may be combined into a full round action. You must be able to issue a command (jack must he able to see or hear you).

At lvl 7 gain the trait Expert Cortex Brain (Expert AI) - as cortex brain but the choice includes an FRA. If used to make an additional attack (which must be allowed by another option) that attack is at -6.

lvl 10 Upgraded Powercore - your jack may spend resolve points like a player can. And may spend one to make an FRA at -4 instead of -6.

At level 20 gain the trait - Independent Thought (true AI) - your jack may act on it's own as it's own character.

Select Chassis

Chassis	Size	HD	Cost	Build DC	Mv	Cha	Con	Str	Dex	Notes
Mite	Tiny	d5	100gp/HD	18 +1/HD	20'	1	-	10	16	Servitor Traits
Crawler	Small	d10	200gp/HD	18 +1/HD	30'	1	-	10	14	Servitor Traits
Beast	Small	d10	300gp/HD	18 +1/HD	30'	1	-	14	12	Servitor Traits
Servitor	Small	d10	200gp/HD	18 +1/HD	20'	1	-	12	10	Servitor Traits
Manakin	Med	d10	400gp/HD	18 +1/HD	30'	1	-	14	10	Servitor Traits
Light Labourjack	Large	d10	500gp/HD	20 +1/HD	20'	1	-	20	5	Construct Traits
Heavy Labourjack	Large	d10	500gp/HD	20 +1/HD	20'	1	-	23	5	Construct Traits
Light Warjack	Large	d10	500gp/HD	25 +1/HD	25'	1	-	22	11	Construct Traits
Heavy Warjack	Large	d10	750gp/HD	25 +1/HD	20'	1	-	30	9	Construct Traits

Descriptions

Mite – A metal junebug about a foot long with 6 legs and mandibles that can be used to pick up and hold things. Weighs 30lb. The spiked legs can be used to climb at 10' per round. A mite gains a +5 Equipment bonus to climb checks it makes. For some unknown reason these things have an unusually high chance of attracting gremlins, the most common theory is that that is due to their typical first trained task to "go fetch <thing>" from "under there", "in there" or "down there". Optional outfit as a helper grants it's owner +1 equipment bonus to craft(mechanika), this can be accumulated on large projects to a maximum of +10 Helpers. If it attacks it's legs and mandibles are considered a single attack causing d2 damage. AC is 13 from the chassis +2 for being tiny, so AC15

Beast – A metal dog-like creature about 3.5 feet long with a tail. Weighs 80lb. It will usually attack with it's bite causing d4 damage, but may instead rear up and use it's front claws causing d3 damage. Has strong back legs that grant +4 to jumping. As all quadrupeds it is stable granting +4 CMD to resist attempts to trip it. This chassis is not just very heavy it is designed for combat which adds +10% to all upgrade and modification costs. AC is 13 from the chassis +1 for being small, so AC14.

Crawler – A metal centipede about 3 feet long with around 20 legs and mandibles that can be used to pick up and hold things. Weighs 60lb. The spiked legs can be used to climb at 5' per round. A crawler gains a +5 Equipment bonus to climb checks it makes. Optional outfit as a helper grants it's owner +1 equipment bonus to craft(mechanika), this can be accumulated on large projects to a maximum of +10 Helpers. If it attacks it's legs and mandibles are considered a single attack causing d3 damage. AC is 13 from the chassis +1 for being small, so AC14

Servitor – A little metal humanoid about 3 feet tall. Weighs 60lb. If it attacks with it's manipulators it can cause d3 damage. AC is 12 from the chassis +1 for being small, so AC13

Manakin – A metal humanoid of a little under average height. Weighs 120lb. If it attacks with it's manipulators it can cause d4 damage. AC 12

Light Labourjack – A metal humanoid a little over 7 feet tall. Weighs 2000lb. If it attacks with it's arms it can cause d6 damage. AC is 19 from the chassis -1 for being large, so AC 18. Damage resistance 5/ serricsteel. This chassis can be made to move without a cortex provided it has power, at 5' per round or it can be made to kneel with a craft(mechanika) DC 10 check. If this check fails by 10 or more the jack topples over and may be damaged.

Heavy Labourjack – A metal humanoid around 9 feet tall. Weighs 3000lb. If it attacks with it's arms it can cause d8 damage. AC is 21 from the chassis -1 for being large, so AC 20. Damage resistance 5/ serricsteel. This chassis can be made to move without a cortex provided it has

power, at 5' per round or it can be made to kneel with a craft(mechanika) DC 10 check. If this check fails by 10 or more the jack topples over and may be damaged.

Light Warjack – A metal humanoid a little over 7 feet tall. Weighs 2500lb. If it attacks with it's arms it can cause d8 damage. AC is 21 from the chassis -1 for being large, so AC 20. Damage resistance 10/ serricsteel. This chassis can be made to move without a cortex provided it has power, at 5' per round or it can be made to kneel with a craft(mechanika) DC 10 check. If this check fails by 10 or more the jack topples over and may be damaged.

Heavy Warjack – A metal humanoid around 9 feet tall. Weighs 6000lb. If it attacks with it's arms it can cause d10 damage. AC is 21 from the chassis -1 for being large, so AC 20. Damage resistance 10/ serricsteel. This chassis can be made to move without a cortex provided it has power, at 5' per round or it can be made to kneel with a craft(mechanika) DC 10 check. If this check fails by 10 or more the jack topples over and may be damaged.

Other Types of Chassis that might be possible
- Flyer (wings)
- Flyer (blimp)
- Ride in Walker (bipedal eg. an ATST)
- Walker (quadruped)
- Water (surface)
- Water (submarine)

Select Powerplant

Note that in some facilities a Hose Umbilical is used instead of a powerplant, or before a powerplant can be fitted. This is a permanent connection to a high pressure steam system. No engine is required.

Tiny to Medium Powerplants	Tiny	Small	Medium
Sandleton's Steamcharged Crank Engine	260gp	175gp	315gp
Devenrew ClockCoil Engine	85gp	130gp	180gp
Novotski Accumuloinducer	285gp	345gp	480gp
Alchemical Condenser	100gp	200gp	400gp
Spell Condenser	+0gp	+0gp	+0gp
Arcanodynamic Accumulator	250gp	500gp	1000gp

Tiny to Medium Powerplant Weights

Tiny engine	- weight 5lb
Small engine	- weight 20lb
Medium engine	- weight 40lb

Sandleton's Steamcharged ClockCoil Engine – 5hrs operation for 5lbs coal, 1 gal water (4.5ltr). Refuel 5 minutes. Basically a small steamjack engine. Add Steamjack traits to the mechanika

Devenrew Crank Engine – 1/2hr operation for 5 minutes cranking. A torsion wound spring (clockwork) engine. Add clockwork traits to the mechanika, remember that includes Difficult to Create +50% cost

Novotski Accumuloinducer – A mount for an arcanodynamic accumulator (sold seperately), tiny (light accumulator), small (medium), medium (heavy). 1 charge grants 1 hour of operation for a tiny and small servitor and ½ hr for a medium one. This device incorporates a power transfer socket of Novotski's own design, an engine housing, a cabalic crucible and all of the conduits, induction belts and rune plate components necessary for the powerplant.

Alchemical Condenser – A device for recharging an accumulator using alchemy or pre-made potions. Regardless of which method is employed the recharge time is 1 day per charge (soaking in the solution), requiring a craft(18) check once the charge level desired has been reached, the charge rating may not be greater than the maximum charges. The components for the alchemical process cost 20gp and are fairly common in areas where mechanika are found. A pre-made potion is the more common option, that costs 50gp, does not require a skill check but must be fully absorbed. Ending the process early has a risk of burning out the condenser, leaving it worth only 50gp in parts.

Spell Condenser - A device for recharging an accumulator using arcane magik, any arcane spellcaster may utilise this device. Some arcane spellcaster's who also have shops will hold an accumulator powered device for (typically 20 days) and charge the device fully through this method for a fee. This is the same device as found in other accumulator powered mechanika. For every 3 levels that the spell surrendered is, 1 charge is transferred into the accumulator. Exmple: surrendering a 4th level spell will add 1 charge to the device. Spell condensers are standard component of an alchemical condenser, but they can be removed at the time of purchase if desired. Note: the "charge accumulator" feat (see the arcane mechanic) reduces this to 2 levels of spell for 1 charge.

Arcanodynamic Accumulator - A device that stores magikal energy and converts it into power for a mechanikal device. A tiny sized accumulator (light accumulator) can hold 5 charges, a Small sized on (standard) can hold 10 charges and a Medium Sized one (heavy) can hold 20 charges. The weights listed in IKCG do not apply when built into a power plant. Note dispel magic can depleat an accumulator fully, but is DC16 and must be targetted (3rd round) at the accumulator requiring a successful knowledge check. A magically depleated accumulator is not damaged in any way, it is just drained of charges.

Large to Colossal Powerplants

It is only possible to power the large or greater sized autonomous mechanika using steam power. However in this category there are more steam engine options than the Devenrew offers, and each engine must be custom built into the chassis of the mechanika.

Steam Engine Basics – A coal burning firebox, a boiler and an arcane turbine that generate steam power. Typically mounted on the back of a steamjack and vented vertically. A light jack will typically consume 1/3 lb coal per hour, while a heavy jack might burn ½ lb. Provided it moves slowly and steadily and is not pulling or hauling anything. Increasing it's work and/ or speed multiplies that dramatically. At full speed in full action mode a light jack will burn 2 lb coal per minute, while a heavy jack might burn 9 lb per minute. This dramatic change is because the magically pressured pneumatic lines release by venting steam and fill (and build overpressure) almost in an instant from the steam system.

Large Steam Power Plants

Table 1-11 Power Plant Enhancements						
Type	Strength Bonus	Armour Bonus	Speed Increase	Weight	Cost (light)	Cost (heavy)
Normal	-	-	-	-	750gp	1100gp
Oversized	+2	+1	+5'	Chassis +15%	1500gp	2250gp
Performance	-	+1	+10'	Chassis +10%	2250gp	2800gp
Superheavy	+4	+2	+5'	Chassis +20%	3500gp	4200gp

Normal – The standard steam engine fitted into most large sized steamjacks from the light labourjack though to the heavy warjack. Fitting this grants the standard characteristics shown in the chassis table.

Oversized – You can put a steam engine in a steamjack that is a size category larger, and it actually works out as a reasonable idea, provided you can afford it of course. Note: As light steamjacks and heavy steamjacks are both Large sized the size category in this case means the engine from a heavy steamjack fitted into a light steamjack or the enginer from a huge steamjack fitted into a heavy steamjack.

Performance – Streamlining the system, reduces the systems bulk while, also improving the efficiency of all components grants the steamjack fluidity of movement. Though it does increase the weight, the steamjack looks smaller. This engine also adds +4 DC to all craft checks for maintaining and modifying the steamjack due to the complexity of the system.

Superheavy – You can even put a superheavy sized steam engine in a light steamjack too. It is not quite as cost effective but, the constant additional pressure buildup in the steam means the steamjack is ready for anything most of the time.

Load Rating from STR

An autonomous mechanika can only be modified a certain amount. The amount of junk they can haul, or have fitted is calculated using the following table. Modifications have a cost in LR. That is the value that is deducted from this starting rating.

Without modification, this table also acts as the mechanikas carry capacity. As it is reduced, so is the carry capacity. Or in other words, add the load reduction to the load carried to determine the effects.

Strength	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Load	3	6	10	13	16	20	23	26	30	33	38	43	50	58	66	76	86	100	116	133

Strength	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Load	153	173	200	233	266	306	346	400	466	532	612	692	800	932	1064	1224	1384	1600	1864	2128

If a steamjack's load in modifications plus the weight it is carrying is more than it's load, then it is underpowered.
>Underpowered (-3, reduced speed, run x3 (non-servitors) or servitors limited to move x1 per round)

If a steamjack's load in modifications plus the weight it is carrying is more than 2x it's load, then it is overloaded.
>Overloaded (-6, reduced speed, slow(move twice only)(non-servitors) or servitors limited to a 5' step)

If a steamjack's load in modifications plus the weight it is carrying is more than 4x it's load, then it is unable to move and any attempt to make it move is likely to severely damage it, although it might be able to move 5'. In this state any successful strike is counted as a critical and a miss is counted as a hit and a natural 1 is just a miss.

Speed reduction depends on what the mechanika's speed rating is. Provided it is not further limited.
>Reduced Speed is from > to (50>35, 45>35, 40>30, 35>25, 30>20, 25>15, 20>15, 15>10)

Acceleration/ Deceleration

A mechanika with legs does not need to be concerned with this rule, it can stop and accelerate however it needs to just like a person with legs can.

This affects wheeled, flying vehicles, watercraft and any other mode of transport not on legs (because in the iron kingdoms legs are best!)

Acceleration is added as an attribute. It is 10, and can be modified through enhancements.

10 means it can change speed by 10 feet per round. ie. It must move 10 feet less than it did last round within 90 degrees of it's current facing or be considered in breach of this rule. ie. Doing an emergency stop and risking damage or recovering from forcibly reduced momentum, like crashing or being halted through magic. It must also not move more than 10 feet faster than it did last round, in the case of accelerating there is no risk to the drive system. eg. Falling or going down a steep hill do not damage the motor, flywheels or other mechanisms are always built in to absorb that kind of energy but the speed it must travel next round has increased and these rules must be adhered to.

Maximum speed will be included in any vehicle that qualifies for this rule too. Minimum speed will be included only if that is required by the specific type of vehicle.

Enhacements for Tiny – Medium Sized Mechanika only

These are special modifications that do not reduce load, this is because the mechanika of this size all perform some function or other and their unique designs incorporate a couple of 'free' upgrade possibilities.

The LR these cost is applied only after the free limit has been reached.

Free Enhancements that do not reduce Load (0 LR)

Tiny	1
Small	2
Medium	3

Installing Enhancements requires a craft check and some time in a workshop.
> craft(mechanika) DC equals the enhancement install DC
> Time: 1 day for each 100gp cost

Burdenwelle Alchemical Trace Dispenser	400gp	LR 3lb
Burdenwelle Sight Link	750gp	1 only, LR 0lb
Equipment Mount	Chassis +25%	1 only, LR equals the equipment weight
Fortification	Chassis +10%	1 only, LR 5lb/AC bonus
Jame & Willet Task Plate	225gp	LR 3lb does not include the equipment/ tool
Jansenov's Eye	425gp	LR 2lb
Jansenov's Recogniser	325gp	LR 0lb
Physical Augmentation	Chassis +50%	1 only, LR 20lb
Porter's Carriage	Chassis +5%	1 only, LR 10lb
Speed	Chassis +25%	1 only, LR 3lb per 5' of movement

Two manipulator arms; Damage depends on attachement and size of the serviotor
– claws tiny(1dmg), small(d2), med(d3) or
– hands tiny(1dmg), small(d3), med(d4) or
– pincers tiny(d2), small(d3), med(d4)
– Each can be either piercing or slashing depending on what they look like

Burdenwelle Alchemical Trace Dispenser – A chemical breadcrumb trail is left behind that is visible only with special lens, which can be added to alchemical goggles. The trail is actually a gas that is slightly heavier than air and so settles on the ground without it being tactile. Very old trails will appear (in the lens) as stains on the ground that eventually fade over time, recent ones will appear to float just above the ground. After 48 hours the gas evaporates completely. Refills cost 35gp or for 20gp (for the chemicals) and a DC14 craft:alchemy check they can be created. +10 equipment bonus to tracking the servitor. Build DC 15, Install DC 15

Burdenwelle Sight Link – Uses a resonance coil to mirror the servitor's view onto alchemical goggles equipped with a special focus lens. This is viewed as a hazy blur but allows an idea of what the servitor can see. Useful for Mites accessing hard to reach places. Maximum range 30'. The mechanik may make craft checks at -2 to command the servitor to perform the action. The goggles cost 4800gp and are not included. Goggles can switch between multiple servitors, it takes a move action to switch view. Build DC 20, Install DC 10

Equipment Mount – Replace an arm with a tool, eg. A rivet gun, cutter, wrench, etc. Build DC 10, Install DC 15

Fortification – Armoured plate, heavier chassis, stronger gears, improvements to the structure, etc. +1 Armour Bonus, -5' movement, can be installed multiple times. Build DC 10, Install DC 10

Jame & Willet Task Plate – An intrusive mechanism that is prone to malfunction. This can be a trick (see handle animal) or a specific moderately complex action such as loading a ball into a breach loading gun or

riveting a bolt into place. When the plate is used roll a d20, and add the skill bonus. On a natural 18+ the task plate has succeeded but worn out and will need replaced, the servitor is no longer able to perform the task. A servitor can have multiple task plates fitted allowing it to perform several skilled tasks. It must also have the equipment to perform the task too. Build DC 10, Install DC 20

Jansenov's Eye – A high grade lens that allows the servitor to perform a task on an intricate mechanism, such as picking a lock. This attachment adds +4 equipment bonus to pick lock or disable device checks made by the mechanik. Build DC 20, Install DC 25

Jansenov's Recogniser – Also known as the glyph gate. Incorporates a specialised task plate and a series of arcane glyphs that allows only one specific individual to issue orders to the servitor. This device can be tricked with a successful performance or disguise check where the individual mimic's the mechanik. This does not count towards the enhancement limit that the servitor can have. Build DC 20, Install DC 20

Physical Augmentation – Stronger and sturdier coils, springs and gears a single physical attribute can be increased. +4 To either Strength or Dexterity or +4 HP. A servitor may have only one Strength enhancement, one Dexterity enhancement or two HP increases. Build DC 10, Install DC 15

Porter's Carriage – Also called a scabbard. This allows the servitor to conceal items, an assortment of small tools, weapons and gear. The internal arrangment can even be adjusted to allow a medium sized 1h weapon or 2 small 1h weapons to be concealed within it. It takes a move action to remove a concealed item by use of a command word. Build DC 5, Install DC 10

Speed – Optimising triggers and clockwork mechanisms and including a bit of arcane liquid to ease the interface with the cerebral matrix a mechanik can increase the speed of the servitor by 5'. Build DC 15, Install DC 25

Enhancements for Large and Larger sized Mechanika only

Pneumatic Venting – STR +1-5 (250gp, 325gp, 625gp, 1000gp, 1500gp), no LR

Reflex Array – DEX +1-5 (325gp, 625gp, 1000gp, 1500gp, 2500gp), no LR

Armoured Cowling

Table 3-6 Armoured Cowling Enhancements			
Armour Bonus	Speed Reduction	Load Reduction (LR)	Cost
+1 AC	-	5% Chassis	125gp
+2 AC	-5'	10% Chassis	250gp
+3 AC	-5'	15% Chassis	325gp
+4 AC	-10'	20% Chassis	625gp
+5 AC	-10'	30% Chassis	1000gp
+6 AC	-15'	40% Chassis	1500gp

Arc Node Mount – 4000gp does not include the arc node

Weapon Mount – Mount a weapon correct for the size of the steamjack. Typically melee weapons replace the forearm while ranged weapons typically replace the entire arm or may be a pintle or turret elsewhere. Ranged weapon limbs can not be used to deliver melee attacks, the steamjack is not programmed that way.

      Melee weapon mount 750gp
      Ranged weapon mount, pintle or turret 1000gp

Enhancements for Any sized Mechanika that is a New Build

These enhancements are only possible if they are designed into the chassis and assembled as a single new entity.

- Acceleration, non-walking mechanika only. CC(chassis cost) +15% per +10 foot increase
- depth enhancement, subs only, CC+5% per 30ft increase, max is STR bonus x90 + 300ft, LR (50 x Hull^2) x Hull lbs per increase
- Fuel Tank Enlargement, CC+5%, +10% fuel store size, LR- (none)
- Improve Economy, CC+20% per 10% improvement, max is double the unmodified rating
- Increase Cargo Space, CC+20%, per +1lb, max is 1/4 the unmodified rating
- Load Increase, CC+5% per +20lb, max is 1/2 the unmodified rating
- Signature Improvement (run quieter), CC+200% + (CC+200%) x increases^4 per increase. Rating 0 is normal, ie. Very noisey for a steam engine. Rating 1, still noisey but hearing protection might not be necessary to avoid permanent hearing loss unless in constant proximity for >2 hours at a time. In non steam engine systems the effects here will be different. Near silence is rating 8 and the improvement between each step could be barely noticeable with some power options.
- Auxiliary Engine, Cost as per power plant, LR = the weight increase + (chassis +10%). Max speed, speed and acceleration attributes for the auxiliary engine are half the listed ratings, the load is the lower of the fitted engines. switching over takes multiple rounds. For a steamjack 3 rounds and a DC18 craft check.
- Ballast tanks (not needed for water chassis), ascent/descent +5ft/rnd, CC+10% + (CC+10%) x increases^2 per increase, LR = STR bonus x increases^2 + 50lb
- Fins (water propulsion), more efficient than a propeller. base speed, maximum speed, and acceleration increase by +25% in water, CC+100%, Strength -4, LR = half the new load rating
- Dexterity +1. CC+50% per rating, max +6

Enhancements for Any sized Mechanika, new and old

the primary attributes here are:
- parts cost
- tool rating required (kit/ shop/ facility)
- base time per skill test
- LR (load reduction)
- CC (Chassis Cost)

Enhancements:
- Engine Customisation, speed +10', or acceleration +10', or load rating +10%. There is a risk of d3hp/lvl permanently deducted from the mechanika due to engine stress. 25% of the power plant's current cost for the first engine customisation, 50% for any others. Max is 1.5 x the value of the original characteristic being changed. Tools = facility. Time = 40hrs/DC20. 2+number of times this enhancement has been taken checks must be completed for this to be successful. 2 more than that to avoid suffering the permanent stress damage. Example; 4 checks must be made for the first change, if all are successful then no damage is suffered. If only 2 or 3 are successful the change still works but, the HP reduction is applied. If less than 2 are successful then the change did not work but the HP reduction is still applied and the cost still paid and this still counts as a change having been made for future adaptions.
- Improved control surface (watercraft only), speed +10' per rating. CC+15% per rating. Max 4 improvements. tools = facility. Time 40hrs/DC20 + 5 x existing rating
- Improved suspension / shock absorbers, HP +2 per level. CC+100%. tools = facility. Time 40hrs/ 25
- Ablative armour (discarding plates), doubles the Bonus HP based on Size ie. Tiny +5, Small = +10, Med = +20, Large = +30, Huge = +40, Garg = +50, Col = +60 HP. If Bonus HP based on size x3 damage is taken in a single hit then permanently reduce this additional bonus HP based on size by -2. This enhancement can be stripped off and built back on again at full cost. time = Tiny 4hrs, Small 6hrs, Med 12hrs, Large 18hrs, Huge 24hrs, Garg 30hrs, Col 40hrs. DC10. LR = Tiny 1/2xChassis, Small 20lbs, Med 40lbs, Large 60lbs, Huge 80lbs, Garg 150lbs, Col 240lbs. The mechanika always looks like a combat device with ablative armour fitted. Tools = shop.
- Armour, AC as armour, Dexterity limits and check penalties apply as normal. Cost = Armour + CC+5%, LR = Armour Weight +10% armour weight, tools = shop, time = 4hrs/DC15
- Concealed Armour, DC30-AC to notice, not compatible with Armour, AC +1, 200gp, LR = AC^2 lbs, tools = facility, time = 8hrs/DC15, may be taken multiple times, max 6
- Thermal Baffles, makes it harder for other mechanika to see it, as per the spell blur but, due to the bulk and colour normal vision is not affected, LR = 100lbs, 500gp (normal), 1000(flying) 250(water), tools = facility, time = 8hrs/DC15
- Ammunition hopper, 200 musket balls or 20 grenades. LR=10lbs, not possible with pintle mounts. 5gp, tools = shop, time = 12hrs/DC20
- Weapon conversion, make a weapon formatted correctly so it can be mounted. Time 12 hrs/DC20. Tools = kit. Cost = 50% weapon cost
- New Hardpoint (weapon), fixed facing; select one of the 4 faces of a square or one of the diagonals. Can be concealed, DC10 to notice the opening/ hatch. Can be retractable requiring an FRA to extend/ conceal. Weapon conversion must be applied to the weapon. 200gp external, 300gp internal. LR 10kg + weapon weight.
- Rocket mount, fires 1 rocket. cost 150gp external, 500gp internal. LR 0lbs + weapon weight. Tools = shop. Time = 8hrs/DC20
- Large Sized Arm Mounted Weapon (fixed arc weapon) select one of the faces of the base, this weapon can attack away from that face, example on a 5' base, and mounted to the side, not directly ahead or behind, but away from that. 300gp. LR 50lbs. Tools = shop. Skill = 8hrs/ DC 15
- Large Sized Turret Mounted Weapon (360° arc weapon) select the position of the turret, it can rotate 360° but it can only move 45° on the opposing axis. ie. If it rotates 360° horizontally it can only lift 45°. 500gp. LR 50lbs. Tools = shop. Skill = 2hrs/ DC 20
- Torpedo Tube (water only). 10,000gp per tube +5,000gp autoloader. LR 1000lbs per tube +20,000lbs

autoloader + weight of each torpedo. Tools = facility. Time = 300hrs/DC20

- – Enhanced Sensors (hearing or vision), enhance perception checks by +4 in either vision or hearing. Tools = facility. Time = 16hrs/ DC20. LR = 0lbs
- – Water Propeller, speed 30' in water. Cost 750gp, LR=30lbs, tools = facility, time 40 hrs DC25
- – Crane, must be used when stationary after dropping outrigger supports. If used while moving or without being supported or to tow or drag see character rules for STR, these do not apply. Cost = Lifting Load in lbs x 2gp, max lifting load is Load Rating x6, LR = lifting load /20 lbs, tools = facility, time 16 hrs/ DC20
- – Hidden Tiny Mechanika, Cost 1% of parent mech cost + cost of the tiny mechanika, LR =, tools = facility, time 8hrs/ DC20
- – External Cargo Rack, cargo can be strapped and is less likely to fall off. LR = cargo carried, tools = shop, time 8 hrs/ DC15. Cost 120gp for a large sized rack
- – Flyer water landing gear, for normal flyers. Can not land unless on water. Adds x1.2 to fuel usage, flying speed reduced by 50%. cost 250gp, LR 200lbs, tools = facility, time 32 hrs/ DC15
- – Flyer water landing gear, for slow hover flyers. Can not land unless on water. Adds x1.2 to fuel usage, flying speed reduced by 10%. cost 250gp, LR 200lbs, tools = facility, time 32 hrs/ DC15
- – Large Sized Mechanical Arms. Can lift as per normal character rules for the strength score. cost = 1,000gp. LR = 10% the maximum load rating. tools = facility, time 40 hrs/ DC30
- – Mechanical Arm load increase. +40lbs = 500gp. Max 10 increases
- – Spotlight. 120' x 5' beam (not a cone). cost 60gp. tools = shop, time 24 hrs/ DC20
- – Winch, must be used when stationary after dropping outrigger supports. If used while moving or without being supported or to tow or drag see character rules for STR, these do not apply. Cost = Tow Load in lbs x 2gp, max tow load is Load Rating x24, LR = tow load /80 lbs, tools = facility, time 16 hrs/ DC20

MODS – Things an Arcane Mechanic can do without spending gold or affecting Load Rating

Basic mods – Gain a mod every 2 levels, you may reconfigure your jacks mods each time a new mod is gained.

Advanced mods - provided jack has 5 basic mods. Advanced mods may also be selected.

Typically a mechanika can only have one of each mod

BASIC MODS
Bigger - increase size to small. Or from small to medium. Each size increase decreases speed by 5ft and increases HP per level (Small is 4, medium is 6, large is 10, huge is 16).
Faster - increase speed by +10ft
Heavy Armour - increase AC by 2. This also increases bulk which adds a small storage compartment (+1 units). This may only be taken once for tiny jacks, twice for small jacks and 3 times for medium jacks. If large 4 times. If huge 5.
Cargo rack - count +4 str for carrying capacity. It may not be able to carry some items due to it's size.
Climbing claws - climb speed is 1/2 land speed instead of 1/4 speed
Enhanced senses - count vision as low-light and darkvision (60'). And +2 perception checks.
Extra ammunition - jack holds 3x the ammo
Devotion - will save +4 to resist another's attempt at controlling or disrupting your jack. Enchantments and similar too.
Swimmer - may swim and swim speed is 1/2 speed
Jumping legs - may jump and jump 1/4 speed. Enhance by taking again to make a jump equal to speed.
Manipulator - change one or more arms to be grasping hands. Attacks made with these are -4.
Arcane Overdrive – sacrifice a level 0 spell to grant the ability to run, +1 to a save or to an attack roll. On the 3rd use each day and every time after that, the mechanikal familiar suffers d3 damage.
Machanikal Overdrive – may run or gain +1 to a specific save or an attack roll for 1 round. The 3rd time this is used in a day and for each subsequent use after that causes d3 damage from the stress it causes to the internal machinery.
Resistance - build resistance to a specific energy type equal to your level, max 10.
Riding saddle - must be the same size category as you. You may ride your jack as a mount. To carry another it must be a size larger. You can direct you jack as a rider to grant it a movement to move as a free action, allowing you to take all of your actions and your jack to move and attack.
Skilled - jack gains +2 int, a new class skill (usual restrictions). And gains your level again in skill ranks to distribute each level. If this mod is removed, when it is replaced the skill ranks and class skill selection remains the same. This may be taken a second time to create a second mod that has a different distribution but only one of these mods may be installed at any one time.
Hidden compartment - a light weapon or item may be hidden inside. DC 15+your level to find it. Accessing it is a move action.
Tool arm - replace one or more arms with a tool
Inefficient fuel processing - gain an extra mod. Half fuel duration
Extended fuel tank - 1.5 x duration
Martial Weapon proficiency - gain the feat
Exotic weapon proficiency - gain the feat
Jackfeat - gain a feat from the selection:
: Acrobatic, Agile Maneuvers, Athletic, Blind-Fight, Combat Reflexes, Diehard, Dodge, Endurance, Great Fortitude, Improved Bull Rush, Improved Initiative, Improved Natural Attack (see the Pathf inder RPG Bestiary), Improved Overrun, Intimidating Prowess, Iron Will, Lightning Reflexes, Mobility, Power Attack, Run, Skill Focus, Spring Attack, Stealthy, Toughness, Weapon Finesse, and Weapon Focus.

ADVANCED MODS
Bigger again - increase size from medium to large. This may be taken again after 12th level to become huge. Each size increase decreases speed by 5ft.
More arms - add another arm or a shoulder mounted weapon or similar.

Echolocation - gains blindsense feat

Excavator - May burrow and may move 1/2 land speed through clay, dirt, earth and sand. It does not leave a tunnel behind it. This replaces 2 arms. The claws may be used as weapons (picks).

Greater resistance - increase the maximum resistance from 10 to 15.

Applicator arms - replace one or more arms with a potion applicator. May learn ranks in medical skills.

Reductive design - jack gains damage reduction 1/-. At 7th level this is 2/-. Then by 1 again at 13, then 16, then 19.

Groundshock - when reduced to 0hp jack slams the ground causing balance checks to all within 20'. DC 10 + 1/2 your level + your int.

Adaptive reasoning - Gain a Good Save track:pick a save and pick a method
- fortitude through a toughened exterior or hardened internal systems
- Reflex through agile joints, bearings and gears or mobility enhanced legs
- Willpower through singlemindedness of the cortex design or intelligent reasoning in the cortex design

If toughened exterior was chosen, the second time adaptive reasoning is taken, the mechanika also gains +2AC

If hardened internal systems was chosen, the second time adaptive reasoning is taken, the mechanika also gains +level in HP

If agile joints, bearings and gears was chosen, the second time adaptive reasoning is taken, the mechanika also gains +2 Dexterity

If mobility enhanced legs was chosen, the second time adaptive reasoning is taken, the mechanika also gains +5' movement

If singlemindedness was chosen, the second time adaptive reasoning is taken, the mechanika also gains +4 to resist any affect created through a bluff check, and/or any feint, trick or distraction

If intelligent reasoning was chosen, the second time adaptive reasoning is taken, the mechanika also gains +2 Intelligence

Special Traits

Clockwork Traits (Pathfinder Beastiary 3)

Construct Traits and ..

Winding – Must be wound with a special key. It will operate for 1 hour per HD, but shorter or longer is possible
Vulnerability to Electricity: Plus an extra 50% additional damage
Swift Reactions: Improved Initiative, Lightning Reflexes, +2 Dodge bonus to AC
Difficult to Create: Plus an extra 50% additional cost
Winding down: Can be unwound
Unique Key: Bypassing the need for a key is DC20 + CR
Human Error: Loose bolts, illfitting coils and gears affect it's reliability. If attacked and then damaged, it's missfire chances increase by +1 (always miss on a 2 and risk a fumble chance on a 2+). If at ¾ HP this increases by another +1. At ½ HP by another +1 and at 1/4HP by another +1 (max 5).

Steampowered Traits

Construct Traits and ..

Cold vulnerability – cold damage causes no HP reduction, instead it is slowed for 1 round for every 6 hp of damage it would have taken.

Furnace vulnerability – A furnace fails if it is submerged for 10 rounds or more. A furnace that is 'quelled' in this way renders the steamjack stunned until it is relit.

Reliance on fuel – typically a steamjack consumes 100lbs and 100 gallons of water in 5-6 hours of typical operation (one encounter in that period). For 30 minutes after that the steamjack is considered fatigued. For 30 minutes after that it is exhausted. Finally the fuel has run out and the steamjack's furnace will become 'quelled' and the steamjack is considered stunned until the furnace is relit. Older steamjacks require refuelling more often. Inferior fuel exists and if used the steamjack is considered shaken.

Fire and electricity resistance is 20/-

Servitor Traits

Construct Traits and ..

Repairable; Roll craft(mechanika) DC20 heals 1d8 damage and takes 1 hour

Slow; may move twice in a round but, may never run

Fragile; no DR nor Hardness, take damage from criticals as normal, the bodger's demolish ability affects them.

Construct Traits (Pathfinder Beastiary 1)

Type: Construct

No Constitution score, if required for a DC treat as if 10
Low-light Vision
Darkvision 60'
Unable to heal damage without repair or magically using spells such as 'make whole'
Immediately destroyed if reduced to 0 HP
Cannot be raised nor resurrected

Immunities; Immune to death effects, bleed, disease, mind-affecting effects (charms, compulsions, phantasms, patterns and morale effects), necromancy effects, paralysis, poison, sleep, stun and any effect that requires a Fort save (unless that effect also works on objects or is harmless).

Constructs are not subject to non-lethal damage, ability damage, ability drain, fatigue, exhaustion or energy drain.

Constructs are not at risk of death from massive damage.

Bonus HP based on Size: Tiny = +0, Small = +10, Med = +20, Large = +30, Huge = +40, Garg = +50, Col = +60 HP

Proficient with natural weapons, unless humanoid in which case proficient with appropriate weaponry, not proficient with armour

Does not breathe, eat nor sleep

A newly crafted construct always has it's average HP.

Bonding Traits

Libre Mechanika p124-125

Baneful
Bellicose
Craven
Magnate
Stallwart

A bonded Jack may eventually manifest an arcane ability, 5% chance per year.
The ability should be no higher than a spell 2 levels lower than the highest spell the caster can cast

Other Mechanika

Animated objects (PF Beastiary 1, p14)

Construction Points (CP) per size: Tiny = 1, Small = 1, Med = 2, Large = 3, Huge = 4, Garg = 5, Col = 6
And that also has a different bonus damage chart changing Garg to +60 and Col to +80.

Animated Object (CR3)
Medium wooden construct; 3d10+20HP (36); INIT +0; SPD 30'; AC14, Touch 10, FF 12; BAB +3; CMB +5,
CMD 15; ATK ??; Base 5'; darkvision 60', low-light vision, construct traits; AL N; SV Fort +1, Ref +1, Will -4;
St 14, Dx 10, Con -, Int -, Wis 1, Cha 1. Perception -5

Spending CP –
 - more CP can be spent than the table above, every 2 additional increases it's CR by +1
Additional Attack – (1 CP), gains a second attack at the same bonus
Additional Movement – (1 CP), a new mode of movement (burrow, climb, fly(clumsy), swim) at a   speed
equal to half it's base speed
Constrict – (1 CP), Gains constrict when making a slam attack if it succeeded at a grab first
Faster - (1 CP), One movement mode increases by +10ft
Grab – (1 CP), Gains grab when making a slam attack
Metal – (2 CP), Made of common metal, +10 Hardness, +2 Natural Armour
Mithril – (4 CP), Made of that, +15 Hardness, +4 Natural Armour
Adamantine – (6 CP), Made of that, +20 Hardness, +6 Natural Armour
Stone or Crystal – (1 CP), Made of that, +8 Hardness, +1 Natural Armour
Trample – (2 CP), Gains trample (p305)

The Arcane Mechanic

There are two other versions of the Arcane Mechanik Class, one in the original character guide, the other in the Libre Mechanika. This is a Pathfinder 1e conversion incorporating both of those and using the Starfinder Engineer Class as a starting point. Pathfinder differs in several ways from 3rd edition d20 where this class was originally aimed. There are notes in the Character Guide that apply to d20 3rd edition, and for the Pathfinder Classes these mostly just work fine. For a few I have had to upgrade them further to bring them inline with Pathfinder, which offers each character slightly more than d20 did.

HD: d8
Skills: 4 + INT/ Lvl
Class Skills: Appraise, Craft(Clockwork, Mechanika and Steam Engine), Craft(Smithing and Tools), Disable Device, Jack Handling, Knowledge(Arcana), Knowledge(Mechanika), Profession, Spellcraft,
Proficiencies: Simple Weapons, Light Armour
Begins with 2d6x10gp and a Tiny sized Construct, equipped with the bonded cerebral matrix

Extra: Legitimate Spellcaster, begins play with a diploma from a recognised school
Extra: Make a spell failure check when casting any spell with a somatic component while wearing armour
Extra: Spells, must prepare spells ahead of time. Uses Intelligence as an Arcane spellcaster
Extra: May not learn any damaging spells other than electricity damage spells
Extra: Maximum spell level is equal to intelligence -10
Extra: Gains an additional spell of each level that is equal or less than the Intelligence modifier
Extra: Libre Mechanika, 2 spells per level are added each level (that he has been working on)

Class Features - Arcane Mechanik

Lvl	BAB	Fort	Ref	Will	Special
1	+0	+2	+0	+2	Bonded Matrix, Cantrips, Craft Tiny Mech, Mending Efficiency
2	+1	+3	+0	+3	Mechanik's Trick, Etch Rune Plate
3	+2	+3	+1	+3	Mechanika Familiarity, Craft Small Mech
4	+3	+4	+1	+4	Mechanik's Trick
5	+3	+4	+1	+4	Charge Accumulator
6	+4	+5	+2	+5	Mechanik's Trick
7	+5	+5	+2	+5	Miracle Worker(1), Craft Medium Mech
8	+6/+1	+2	+0	+6	Mechanik's Trick
9	+6/+1	+3	+0	+6	Craft Large Mech
10	+7/+2	+7	+3	+7	Mechanik's Trick
11	+8/+3	+7	+3	+7	Coordinated Assault(1), Miracle Worker(2)
12	+9/+4	+8	+4	+8	Mechanik's Trick, Rebuild Cortex or Cerebral Matrix
13	+9/+4	+8	+4	+8	
14	+10/+5	+9	+4	+9	Mechanik's Trick
15	+11/+6/+1	+9	+5	+9	
16	+12/+7/+2	+10	+5	+10	Mechanik's Trick, Craft Huge Mech
17	+12/+7/+2	+10	+5	+10	Miracle Worker(3)
18	+13/+8/+3	+11	+6	+11	Mechanik's Trick

| 19 | +14/+9/+4 | +11 | +6 | +11 | Coordinated Assault(2), Miracle Worker(4) |
| 20 | +15/+10/+5 | +12 | +6 | +12 | Mechanik's Trick, Craft Collossal Mech |

Class Feats - Arcane Mechanik
Bonded Matrix - Choose heirloom or inspired
 - Heirloom Matrix - A once glorious Cortex that has been rebuilt and left to the Arcane Mechanik by a relative. It is quirky, patient and has the mod:devotion as an additional bonus mod that can never be removed or changed (mods can normally be swapped out for others).
 - Mod:Devotion - will save +4 to resist another's attempt at controlling or disrupting your jack. Enchantments and similar too.
 - This Cortex has a different level progression to that of other Cortex or Cerebral Matrix
 - Inspired Matrix - The character has developed this themselves and through their bond it has developed with greater potential than a foundry made Cortex. It is as curious as a small child, or a young cat and begins the game quite nieve and has the mod:mechanical overdrive as an additional bonus mod that can never be removed or changed (mods can normally be swapped out for others).
 - Mod:Mechanikal Overdrive - may run or gain +1 to a specific save or an attack roll for 1 round. The 3rd time this is used in a day and for each subsequent use after that causes d3 damage from the stress it causes to the internal machinery.
 - This Cortex has a different level progression to that of other Cortex or Cerebral Matrix
 - In either case the matrix is fitted into a construct (see starting gear)
 - A Jack Handling check is not required when commanding the bonded construct to perform a task it knows (see jack handling)
 - A starting construct knows the following tasks: help, stop helping, fetch, carry, stay
Cantrips - 0 level spells that are prepared ahead of time but are not expended when cast and can be used again
Craft (size) Mech - Create a construct of the (size)
Mending Efficiency - Provided the cantrip Mending is memorised, old parts can be renewed allowing a scrap component to become a new mechanica component. This increases the time of the construction by x4 but, reduces the cost to 1/10th of the listed price.
Etch Rune Plate - Change to the feat as printed. May create scroll like single use mechanical devices. Any item creation feat learned becomes a mechanical variant of that feat requiring parts and used mechanically (disable device) as opposed to magical keywords (use magical device) with often worse side effects if used incorrectly
Mechanik's Trick - select one of the tricks availible at this level
Mechanika Familiarity - Add class level to craft checks to repair a steam powered, clockwork or mechanikal device.
 - If this character created it the roll automatically succeeds
Charge Accumulator - Instead of using mundane methods, sacrifice a ready spell to add charges equal to the spells level
 - This method is safe from the risks of accumulator backlash
Miracle Worker - Rating times per day, Spend a movement action to ..
 - add +2 armour to a Construct you are bonded with
 - add +2 to a to hit roll made by a Construct you are bonded with
 - repair 1 HP to a tiny Construct, 2 to a small one, 3 to medium, 4 to a large or 5 to a huge Construct
 - repair class level to a Construct you are bonded with
Rebuild Cortex or Cerebral Matrix - Re-spec an existing mechanika brain, previously constructed by the same character
Coordinated Assault - You and your Construct add rating to hit when making a to hit roll against the same target

1st Level Mechanik's Tricks
 - An item creation feat, made using mechanika rather than enchantment. Level restrictions apply
 - Attune Device, up to INT modifier devices do not require a check to be used by this character
 - Transfer Energy, sacrifice a ready spell to add fuel equal to the spells level to a Construct (see jack fuel)
 - Arcane Supercharge, attach to then drain a charge from an arcane accumulator to produce the effects of a metamagic feat. The device loses 10 charges. This feat may be taken multiple times, each time a different metamagic feat can be chosen
 - Repair, takes 10 minutes, heals 25% of the Bonded Construct's HP
 - Quick repair, half repair times
 - Overclocking, +2 Bonded Construct reflex saves. Takes a FRA to activate, target your bonded construct. Lasts until the end of combat
 - Watch out Construct, Bonded Construct may reroll a save, you must be able to be heard
 - Save me Construct, if Bonded Construct is within it's base size from you, when you are attacked, you may make a ref save DC15 and Construct takes the damage instead of you
 - What is it Construct? If within 30'. Your Bonded Construct can aid you granting +2 to your perception checks
 - Bonded Construct command range increases but must still be LoS, from short to medium or from medium to long (if taken multiple times)
 - Overcharge, takes a FRA to activate, target your bonded construct's weapon, the weapon deals +1d6 damage however gains +1 problem chance (crit fumble threat on a nat 2 instead of nat 1) and triple the ammo (ranged) or fuel (melee) is used. Lasts until the end of combat
 - Bonded Construct learns a teamwork feat, you will have to learn it separately
8th Level Mechanik's Tricks
 - Instinctive Save me Construct, Bonded Construct and you move in sync such that a roll is not necessary
 - Cortex Transplant, you may transplant a Cortex into another Construct of the same size. You gain +4 if it is your own Bonded Cortex
 - The hum it makes, you detect damaged mechanika within audible range with a perc check DC20. After detection you can spend a movement action to ascertain the condition to the nearest 20 HP
 - Bonded Construct command range increases but must still be LoS, from long to 1/2 mile or from 1/2 mile to any LoS (if taken multiple times)
 - Construct just knows, you do not need to be LoS to command your Bonded Construct. Changes Construct command ranges to fit. Warning: a Construct is not independent
 - More Overclocking, requires overclocking, +4 Bonded Construct reflex saves. Takes a FRA to activate, target your bonded construct. Lasts until the end of combat
 - More Overcharge, requires overcharge, takes a FRA to activate, target your bonded construct's weapon, the weapon deals +2d6 damage however gains +3 problem chance (crit fumble threat on a nat 4) and triple the ammo (ranged) or fuel (melee) is used. Lasts until the end of combat
 - ToyJack, you build a second cortex and implant it into a new Tiny Construct. This Cortex is neither inspired nor an heirloom but counnts as a bonded construct in all other ways

14th Level Mechanik's Tricks
 - Teach a special power to your Bonded Construct, see warmachine Construct loadouts for inspiration
 - Teach a martial feat to your Bonded Construct
 - The earth moves, Bonded Construct checks perception against invisible foes with half of the penalty
 - Tinkerer, you may adjust the mods in your Bonded Construct to any new configuration within an hour
 - Saboteur, when you attempt to sabotage a mechanikal device, roll twice and keep the best result
 - Superior Overclocking, requires More overclocking, Bonded Construct gains haste for 6 rounds
 - Superior Overcharge, requires more overcharge, takes a FRA to activate, target your bonded construct's weapon, the weapon deals +4d6 damage however gains +3 problem chance (crit fumble threat on a nat 4) and triple the ammo (ranged) or fuel (melee) is used. Lasts until the end of combat
 - Superior Overcharge may be taken multiple times, each time adding +1d6 damage, max +7d6

Spells Per Day

Lvl	0th	1st	2nd	3rd	4th	5th	6th	7th	8th	9th
1	3	0	-	-	-	-	-	-	-	-
2	3	1	-	-	-	-	-	-	-	-
3	4	2	0	-	-	-	-	-	-	-
4	4	2	1	-	-	-	-	-	-	-
5	4	3	2	0	-	-	-	-	-	-
6	4	3	2	1	-	-	-	-	-	-
7	4	4	3	2	0	-	-	-	-	-
8	4	4	3	2	1	-	-	-	-	-
9	4	4	4	3	2	0	-	-	-	-
10	4	4	4	3	2	1	-	-	-	-
11	4	4	4	4	3	2	0	-	-	-
12	4	4	4	4	3	2	1	-	-	-
13	4	4	4	4	4	3	2	0	-	-
14	4	4	4	4	4	3	2	1	-	-
15	4	4	4	4	4	4	3	2	0	-
16	4	4	4	4	4	4	3	2	1	-
17	4	4	4	4	4	4	4	3	2	0
18	4	4	4	4	4	4	4	3	2	1
19	4	4	4	4	4	4	4	4	3	2
20	4	4	4	4	4	4	4	4	3	2