

**FINAL Material Descriptions**

Material	Description	Attributes
<b>UHM</b>	Ultra-lightweight material. Moderately durable, and easy to replace. Plastics like UHM are perfect for low precision parts that get eaten up fast, with quick turnaround.	Ultra-lightweight. Moderately durable. Cheap.
<b>Aluminium</b>	A very light metal, Aluminium has about one third the density of other metals and must be mixed with other metals to produce a rigid alloy. Medium Strength	Lightweight. Low armor points, flexible, moderately durable.
<b>Titanium</b>	One of the best materials for combat robots. A little over half the density of steels, but up to 2x as resilient. Incredibly resource and time consuming to work with. High Strength.	One of the best materials for combat robots. Medium-weight but incredibly robust. Strong, and resilient. Medium to high Armor Points
<b>Steel</b>	Resistant and Strong but heavy. When mixed in the right alloy, can provide immense strength and rigidity after heat treatment.	Heavy-weight. Hardened, robust, heavy. Exceptionally durable at the cost of being very heavy.

**FINAL COMPONENT DESCRIPTIONS**

Component Name	Material	Final Description	Previous Description [V3]	Breakdown
<b>WEAPONS</b>				
<b>NAME</b>	<b>RAMMER</b>	Unpowered. Lightweight. Hold and release to charge forward.	An unpowered and lightweight weapon designed to ram and damage the opponent. Deals a small amount of damage.	Lightweight weapon. Does not affect bot mobility. Deflects heavy blows from the front.
<i>Titanium Ram</i>	<i>Titanium</i>	[Weight] [Speed] ICONS GO HERE	One of the best materials for combat robots. A little over half the density of steels, but up to 2x as resilient. Incredibly resource and time consuming to work with. High Strength.	
<i>Steel Ram</i>	<i>Steel</i>	[Weight] [Speed] UI GO HERE	Resistant and Strong but heavy. When mixed in the right alloy, can provide immense strength and rigidity after heat treatment.	= + damage abt
<b>NAME:</b>	<b>SPINNER</b>	Powered. Mediumweight. Press and hold to spin up the weapon.	A medium weight spinning weapon that requires a short amount of time to spin up to deal moderate damage.	Medium weight weapon. Requires a short time to spin up to store kinetic energy to deliver moderate damage. Moderately reduces overall Bot mobility.
<i>Titanium Spinner</i>	<i>Titanium</i>	[Weight] [Speed] UI GO HERE	One of the best materials for combat robots. A little over half the density of steels, but up to 2x as resilient. Incredibly resource and time consuming to work with. High Strength.	
<i>Steel Spinner</i>	<i>Steel</i>	[Weight] [Speed] UI GO HERE	Resistant and Strong but heavy. When mixed in the right alloy, can provide immense strength and rigidity after heat treatment.	
<b>NAME:</b>	<b>BEATER BAR</b>	Powered. Heavyweight. Press and hold to spin up the weapon.	A heavy weight spinning weapon that requires a medium amount of time to spin up to deal maximum damage.	Heavy weight weapon. Requires a longer amount of time to spin up to store kinetic energy to deal maximum damage. Greatly reduces overall Bot mobility.
<i>Titanium Bar</i>	<i>Titanium</i>	[Weight] [Speed] UI GO HERE	One of the best materials for combat robots. A little over half the density of steels, but up to 2x as resilient. Incredibly resource and time consuming to work with. High Strength.	Resistant and St blah blah
<i>Steel Bar</i>	<i>Steel</i>	[Weight] [Speed] UI GO HERE	Resistant and Strong but heavy. When mixed in the right alloy, can provide immense strength and rigidity after heat treatment.	
<b>ARMOR</b>				
<b>NAME:</b>	<b>Plate Armor</b>	Plated armor. Heavy. Robust.	Trussed Armor. Provides a layer of protection to the combat robot and more delicate components, like the internals and wheels.	Protects and shields vital internal components. Layer of protection for the wheels of the combat robot. Can be destroyed.
<i>Aluminum Plate</i>	<i>Aluminium</i>	[Weight] [Speed] UI GO HERE	A very light metal, Aluminium has about one third the density of other metals and must be mixed with other metals to produce a rigid alloy. Medium Strength	
<i>Titanium Plate</i>	<i>Titanium</i>	[Weight] [Speed] UI GO HERE	One of the best materials for combat robots. A little over half the density of steels, but up to 2x as resilient. Incredibly resource and time consuming to work with. High Strength.	
<i>Steel Plate</i>	<i>Steel</i>	[Weight] [Speed] UI GO HERE	Resistant and Strong but heavy. When mixed in the right alloy, can provide immense strength and rigidity after heat treatment.	
<b>NAME:</b>	<b>Reactive Armor</b>	Composite armor. Medium Weight.	Plate Armor. Provides a layer of protection to the combat robot and more delicate components, like the internals and wheels.	Protects and shields vital internal components. Layer of protection for the wheels of the combat robot. Can be destroyed.
<i>Aluminum Reactive</i>	<i>Aluminium</i>	[Weight] [Speed] UI GO HERE	A very light metal, Aluminium has about one third the density of other metals and must be mixed with other metals to produce a rigid alloy. Medium Strength	
<i>Titanium Reactive</i>	<i>Titanium</i>	[Weight] [Speed] UI GO HERE	One of the best materials for combat robots. A little over half the density of steels, but up to 2x as resilient. Incredibly resource and time consuming to work with. High Strength.	
<i>Steel Reactive</i>	<i>Steel</i>	[Weight] [Speed] UI GO HERE	Resistant and Strong but heavy. When mixed in the right alloy, can provide immense strength and rigidity after heat treatment.	
<b>WHEELS</b>				
<b>Foam Filled Pneumatic Tires</b>			Regular tires would deflate if they got punctures, so we've filled these with foam!	blah-blah-blah-
<i>Wheel Size 1</i>	<i>10 CM DIAMETER</i>			Smaller, 10 cm Diameter wheel. This component affects driveability.
<i>Wheel Size 2</i>	<i>15 CM DIAMETER</i>			Larger, 15 cm Diameter wheel. This component affects driveability.
<b>NAME:</b>	<b>Rubber Wheels</b>	Solid thermoplastic. Stiff yet grippy.	Made with a polypropylene core and thermoplastic rim, these wheels offer superb traction on the arena floor. They are stiff and robust for impact absorption, while soft enough to get plenty of grip.	Affects mobility. Very susceptible to damage. A potential weakness in the design of many Bots.
<b>NAME:</b>	<i>10 CM Wheels</i>	Solid thermoplastic. Stiff yet grippy.		Smaller, 10 cm Diameter wheel. This component affects driveability.
<b>NAME:</b>	<i>15 CM Wheels</i>	Solid thermoplastic. Stiff yet grippy.		Larger, 15 cm Diameter wheel. This component affects driveability.
<b>CHASSIS/FRAME</b>				
<b>NAME:</b>	<b>Chassis</b>	The frame of the bot.	The chassis holds the robot together. Made of a lightweight and high durability metal alloy. Compact and resistant enough to take some severe hits.	Provides structure for the varying components of the combat robot.
<i>Color Opt. 1</i>	<i>Aluminium</i>	[Weight] [Speed] UI GO HERE		Color Option 1.
<i>Color Opt. 2</i>	<i>Titanium</i>	[Weight] [Speed] UI GO HERE		Color Option 2.
<i>Color Opt. 3</i>	<i>Steel</i>	[Weight] [Speed] UI GO HERE		Z

**INTERNAL COMPONENTS**

Component Name	Material	Description	Key Points
<b>NAME:</b>	<b>Motors</b>	Drives the robot's weapons and wheels.	The most important part of the combat robot. Motors are responsible for driving the Bot and powering active weapon types. Typically brushless type motors.
<i>Weapon Motor</i>	<i>MOTOR A?</i>		Drives the wheels of the Bot. Drives the weapon of the bot (if powered). Power transferred through gears to the wheels or by belt to the weapon.
<i>Drive Motor</i>	<i>MOTOR B</i>		
<b>BATTERY</b>		NRL compliant standard battery.	Standard Issue 6-cell battery. Standardized, 6-cell battery.
<b>CONTROLLER AND RECEIVER</b>		Coordinates and controls the various components of the bot.	The "brains" of the bot. Coordinates and controls of each of the combat robots systems. Receiver integrated for wireless control.
<b>DRIVE BELTS AND GEARS</b>		Transfers energy from the motors to the wheels and weapon.	Responsible for the transfer of energy from the motors to either the wheels or weapon (if powered).