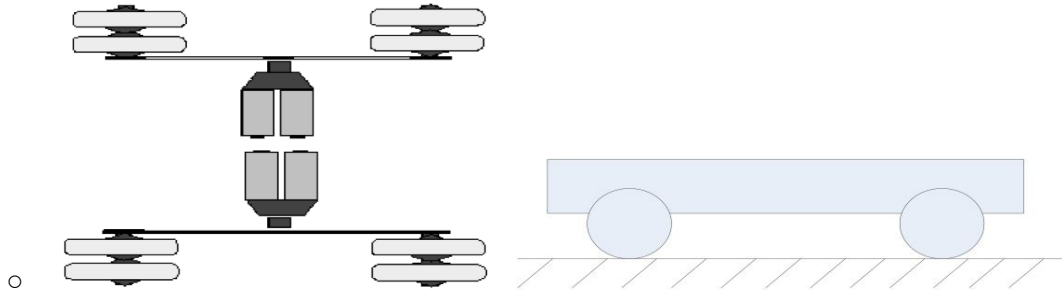
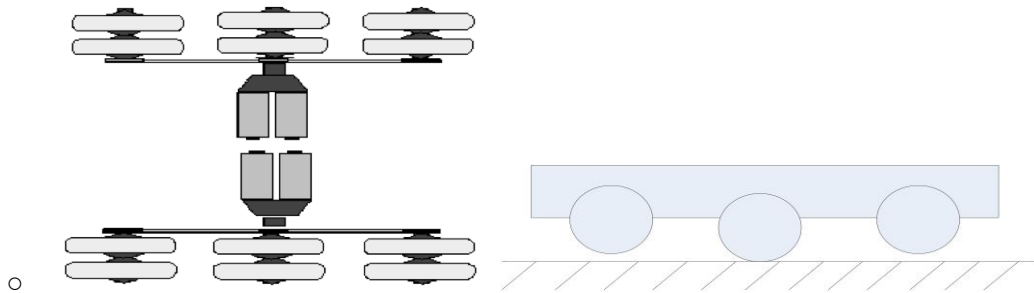


Overall Types

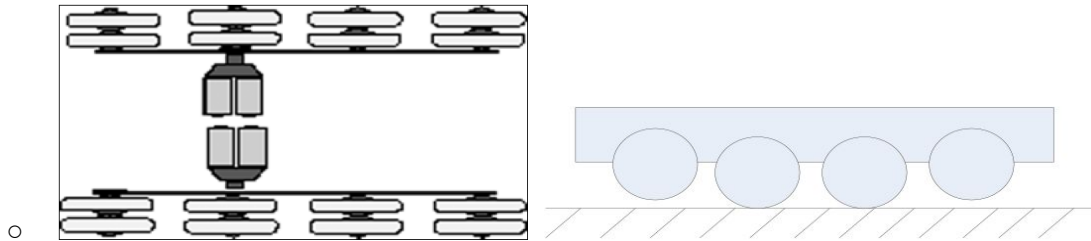
- 4 Wheel



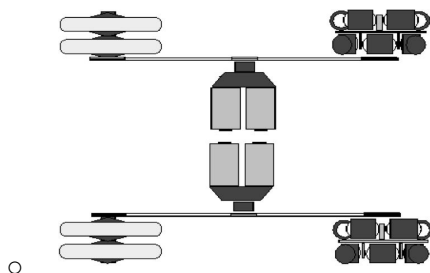
- 6 Wheel



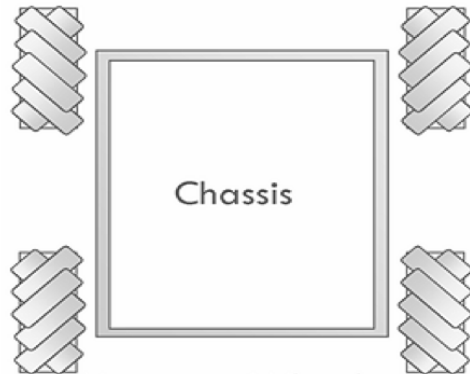
- 8 Wheel



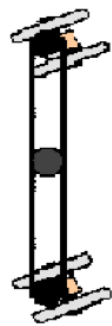
- 2 Omni Wheel



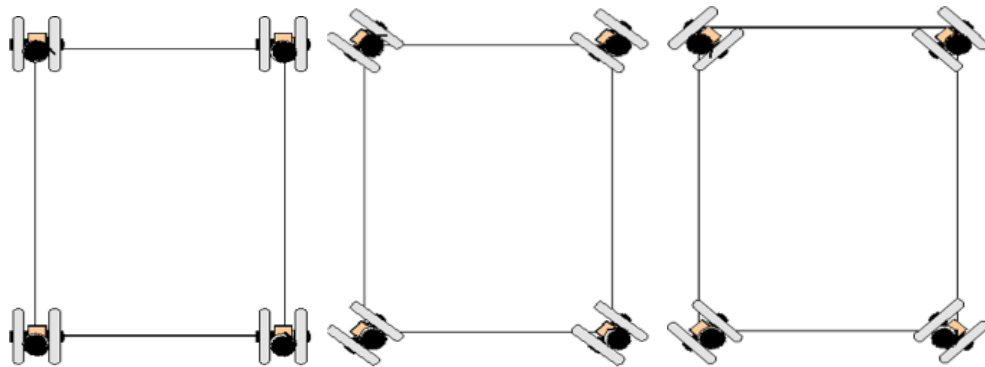
- 4 Mecanum wheel



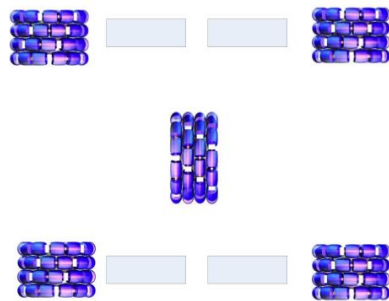
-
- Swerve



-
- Crab

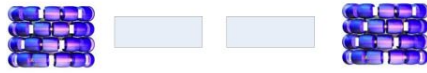


-
- Nona



-
- Butterfly

-



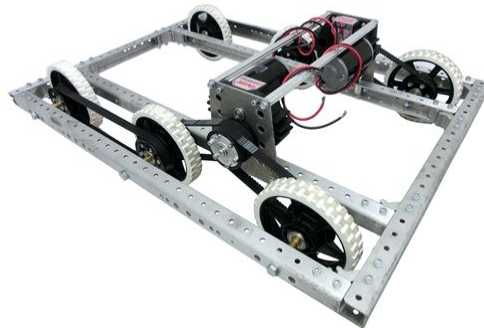
-

Orientation of Mechanism

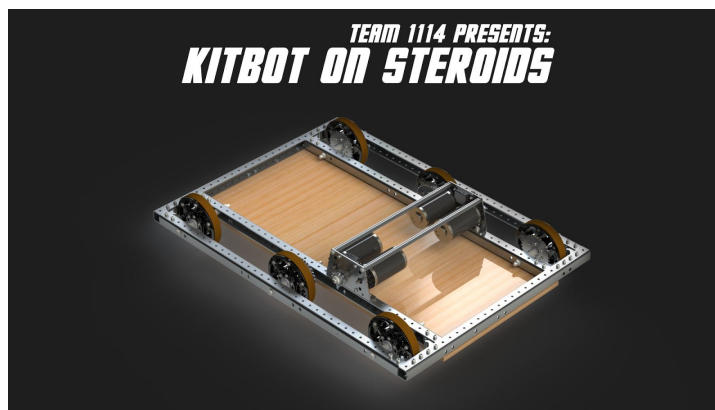
- long
 - stable but narrower workspace
- wide
 - unstable

Material

- Kitbot: weak aluminum



- C channel: stronger



Motion Translator

- Chain

- stronger, adjustable but not easy
 - pinch, pin, hammer piece, of lead with hole
 - slower because gear and sprocket need to line up to move each piece of metal
- Belt
 - fixed size, not adjustable
 - faster because continuous piece of plastic moves in unison faster

Gearbox

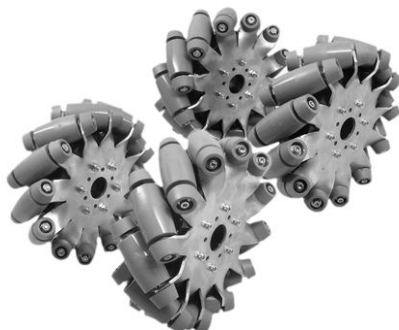
- gear shifter > shifts the drivetrain into modes by changing gear ratio (stronger or faster ratios)



- - CIMple > trapezoid, 2 motors
 - toughbox > rectangle, one motor
 - banebot > cylinder, one motor

Wheels

- Type of wheel
 - Mecanum



- - Provides no defense and is easily pushed, but if you have a capable driver and fast drivetrain the robot has enough maneuverability to avoid other robots.
 - Allows you to strafe.

- Kit bot



-
- Does not provide that much grip.

- Colson



-
- They are very wide & smooth.
- Most professionals use them.

- Performance/Traction



-
- Most commonly used.
- Made out of metal so they are durable.
- Different treads available.
 - Rough top



-

- less grip, but doesn't wear down as fast
- better because don't have to replace as much > really hard and complicated
- Wedgetop



- more grip, not as much plastic so wears down faster
- Plaction



-
- They are the plastic version of performance wheels.
- Do not use them! Since they are plastic, they are not durable at all
- Pneumatic



-
- air filled tire
- Best wheel for defense
- really big and really strong
- Size of wheels
 - 4, 6, 8 in
 - bigger
 - more distance covered per rotation, more grip, more strength needed to move it
 - used for traversing, going over something/game piece
 - smaller
 - opposite of above