

VEX Robotics Competition (VRC)

Day 2

Edwin Kofler and Eli Helmer

Agenda

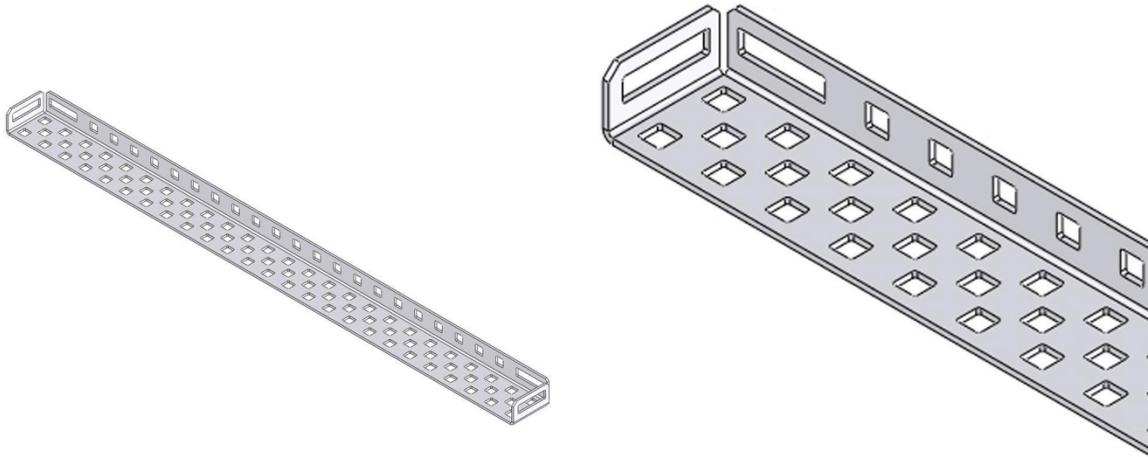
- Structure of VEX Parts
 - Beams
 - Gussets
 - Attachments
- Kahoot
- VEX Competition in connection with the VEX Field
- Build Preliminary VEX Structures

What are the different VEX parts?

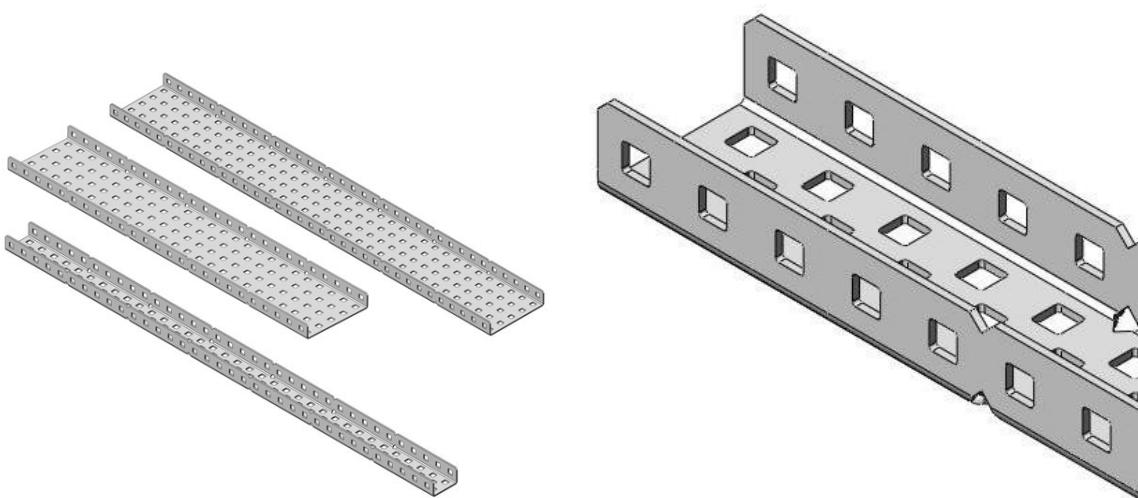
- Structure
 - Beams
 - Gussets
 - Attachments
- Motion
 - Wheels
 - Motors
 - Gears
 - Sprockets and Chain
 - Tank Tread
 - Shafts and Other
- Electronics (Power, Sensors, Logic, and Control)
 - Battery
 - Motor Controllers
 - LED
 - Sensors
 - Other

Structure: Beams

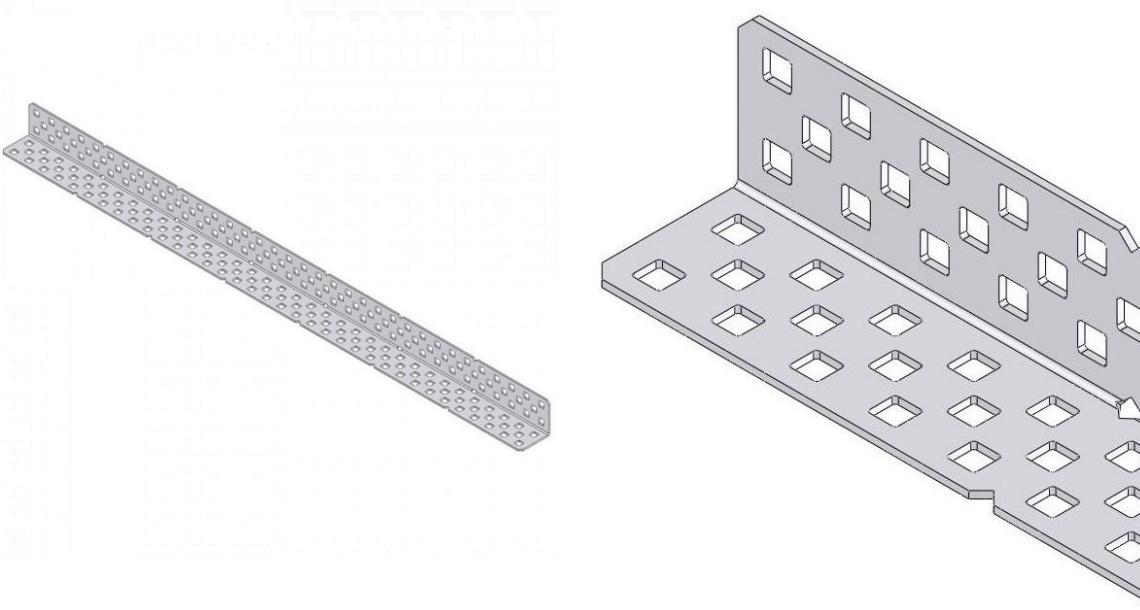
Chassis Bumper/Rail (20 and 25 hole)



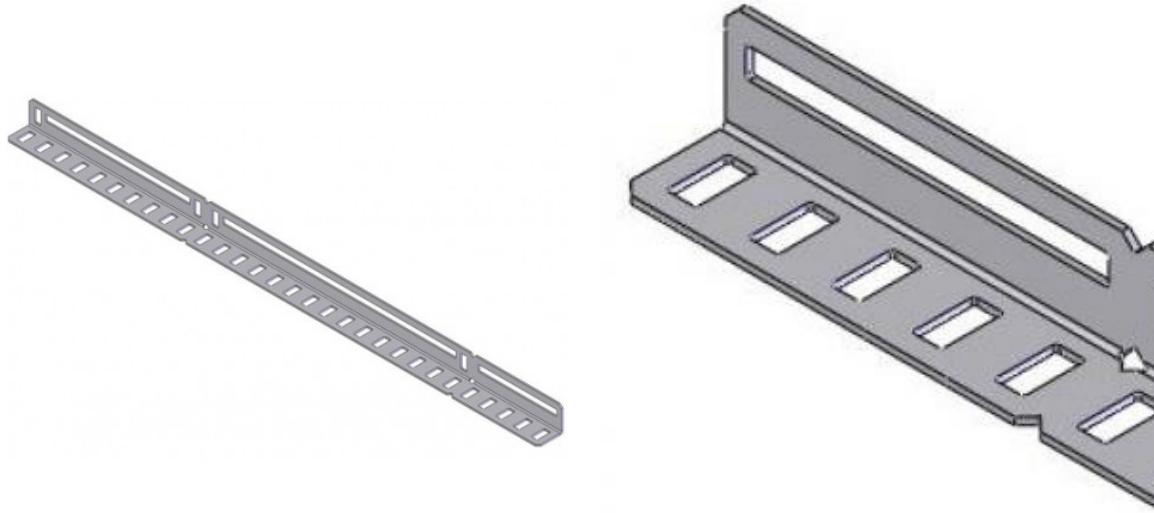
C-Channel (many different sizes)



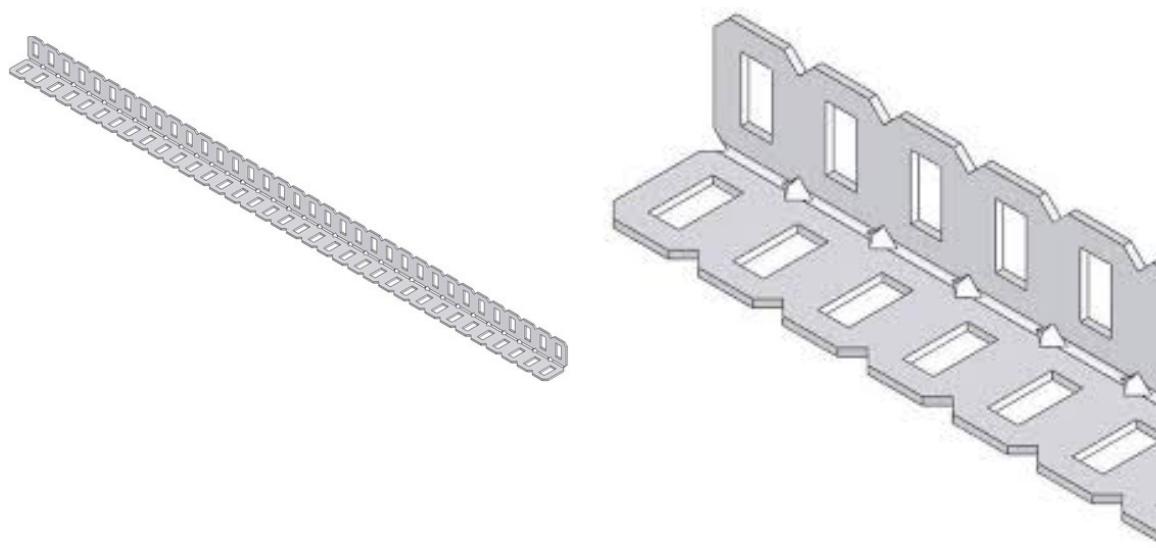
Angle (25 and 30 hole)



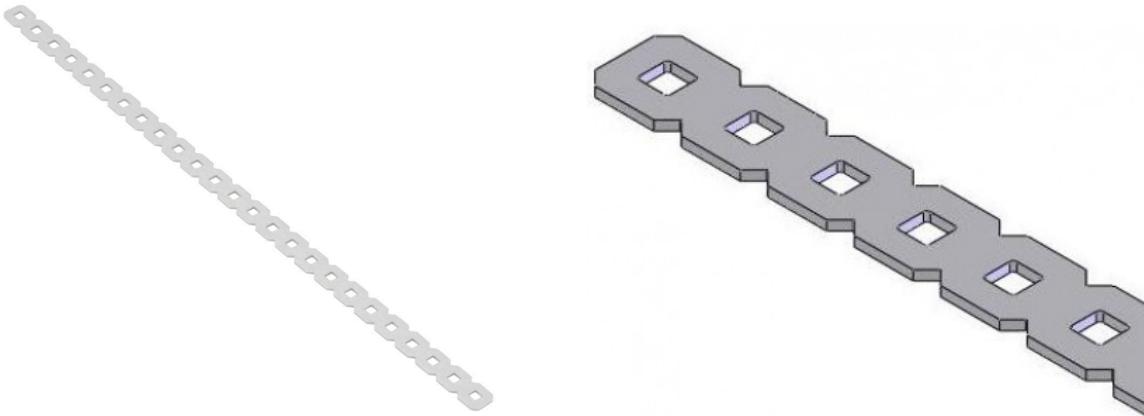
Inverse Angle/Slotted Angle (30 hole)



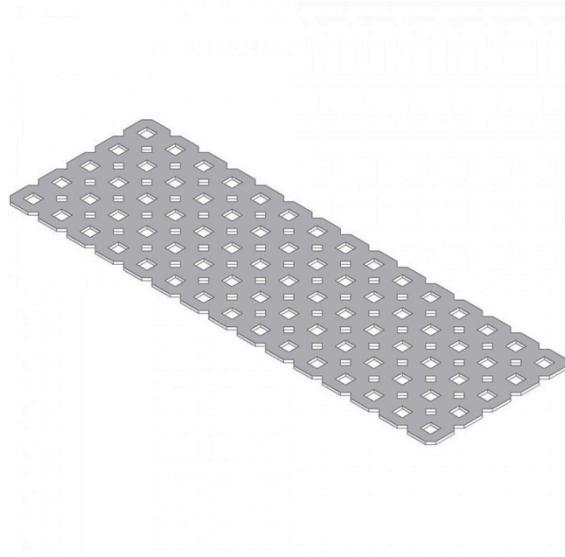
Angle Segmented (25 hole)



Bars (20 and 25 hole)



Base Plate and Plate (5x5 and 25x5 holes)



Structure: **Gussets**

- ◎ **Gussets** are used to **connect pieces of metal** that may not have been possible beforehand. Not only that, but they also serve as a great way to **strengthen your robot's joints**.

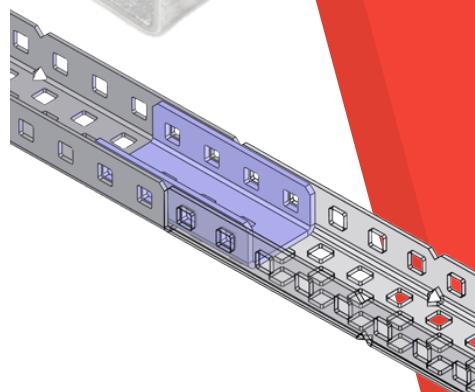
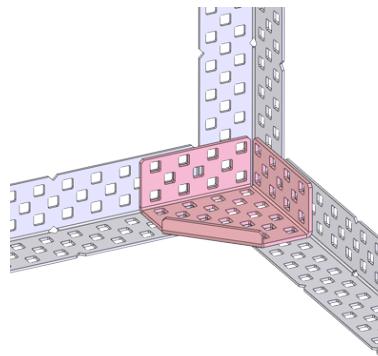
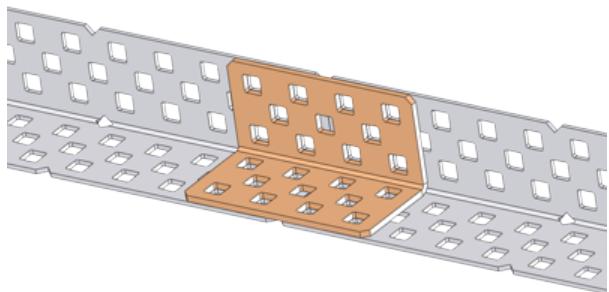
Angle Gussets (45° and 90° and “T joint”)



Pivot Gusset and Plus Gusset and Advanced Gearbox Bracket



Angle Coupler, Corner Coupler, and C-Channel Coupler Gusset

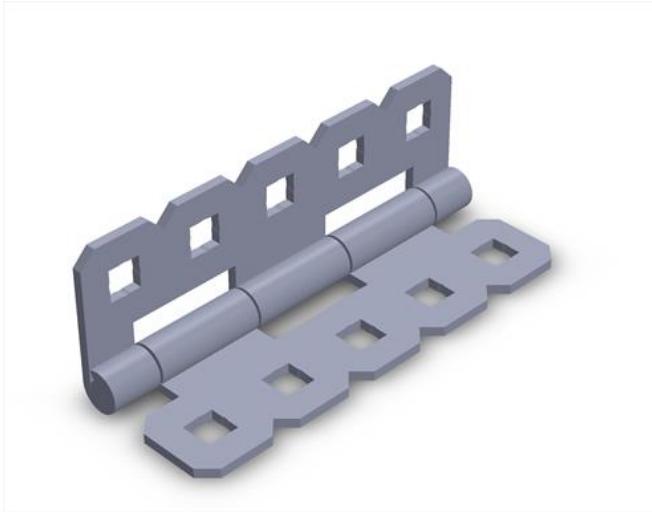


Structure: **Attachments**

Standoff (1/2, 1, 2, and 3, inch)



Hinge



Screw (8-32 and 6-32)



Nut and Nylock



Teflon and Steel Washers



Bearing Block and Lock Bars



Shafts



Shaft Spacer (Thin and Thick)



Agenda

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End of Day 2