Field Strategy

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Intro

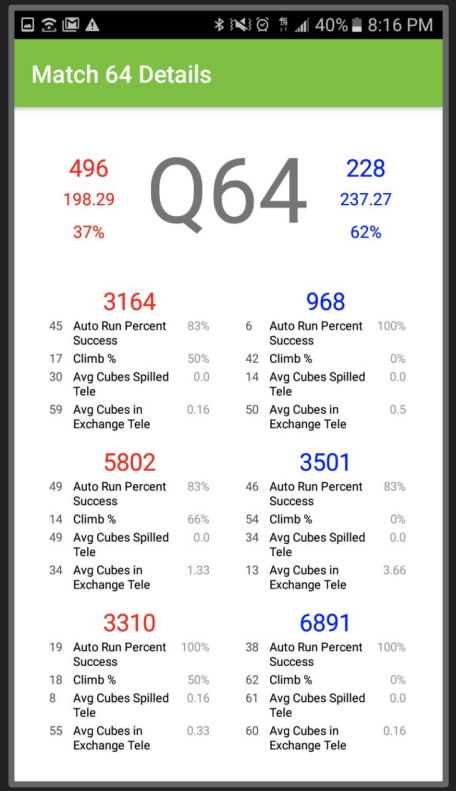
Match Strategy

Roles At Competition

- Scouts
- Super Scouts
- Stands Strategists
- Match Strategist
- Drive Coach

Scouting Data

- Match Data
  - Quantitative
  - Qualitative
- Pit Data
- Trends



Tele and Auto Roles

- Discuss with all teams present
  - Capabilities
  - Auto routines
  - Teleoperated roles
  - Alliance partner requests

Match Goals

- Quals
- Elims
- Bonus RP vs Win
- Match Schedule

Qualifications									
	Quals 1	6814	114	5089	867	1661	7415	114	22
	Quals 2	8129	6934	2465	580	973	691	60	130
	Quals 3	2659	2102	5818	8060	5285	7137	144	35
	Quals 4	3501	3309	3328	299	589	3863	27	129
	Quals 5	207	1159	4711	696	359	3257	62	104
	Quals 6	2584	1138	2429	115	4	4414	104	107
	Quals 7	4481	1388	5012	5869	6560	1678	74	149
	Quals 8	973	4711	3863	691	7137	2659	119	101
	Quals 9	1138	299	867	207	8060	8129	129	5
	Quals 10	6814	1388	5285	3309	6934	115	52	143
	Quals 11	4481	1678	7415	3501	3257	580	139	68
	Quals 12	1661	5012	2102	2429	359	4	20	73
	Quals 13	5818	114	589	5089	4414	1159	74	124
	Quals 14	2584	3328	6560	696	2465	5869	135	60
	Quals 15	359	2659	6934	115	5285	299	162	94

Robot Performance

Robot Design

- Consider match strategy with your robot’s design
  - What would our ideal match look like?
- 2018 - flip-over
- 2019 - passthrough
- 2020 - fit under tunnel
- Don’t try to do everything unless you need to

Robot Performance

- Things will go wrong!
  - You can make them go wrong less often
- Define pit process
  - Systems checks
- Drive team roles
  - i.e. Field setup, loadoff, DS
- Practice field

Scoring Efficiency

- Determine roles for alliance members
- 3 scorers vs 2 score 1 def
  - You can’t “outplay” defense
  - Strongest scorer needs to work through defense
- Other strategies to increase scoring
  - Funneling
  - Cheesing

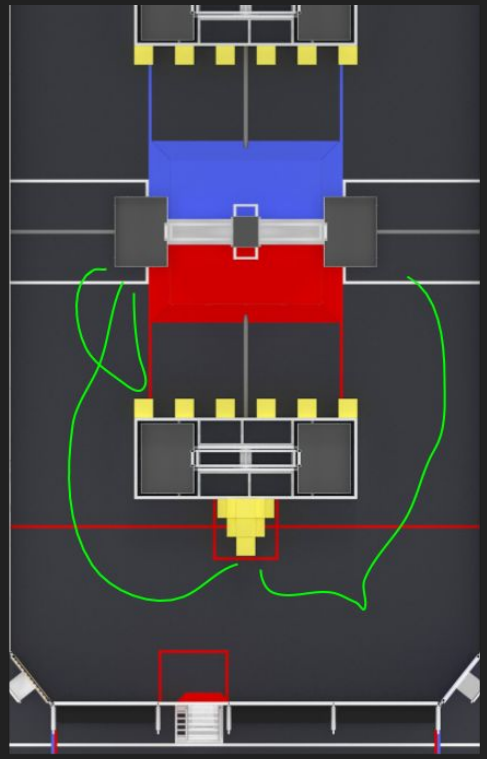
Drive Team

- Driver vs operator
- Drive team roles
  - Technician
  - Drive Coach
  - Human Player
- Drive team selection

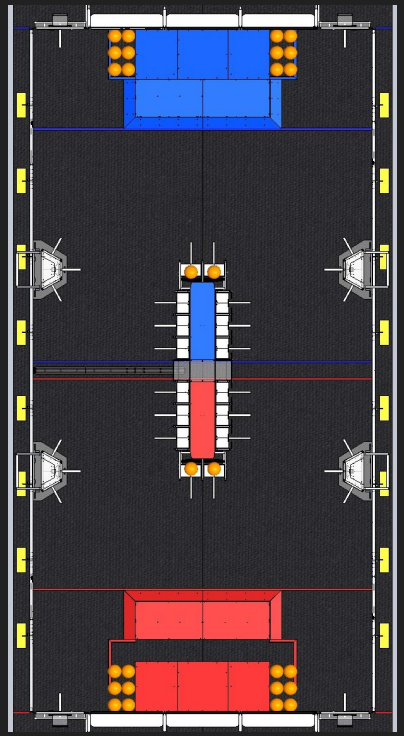
Driving Ability

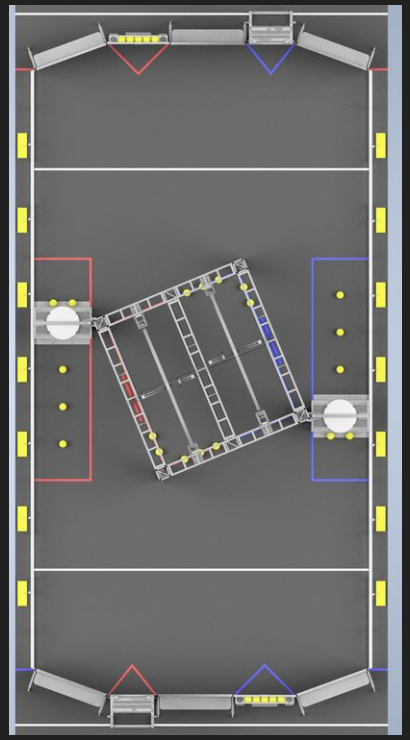
Driving Ability

- What kind of driving is present in this game?
  - Speed
  - Accuracy/placement
  - Defense/counterplay
- Cycles, paths, defense

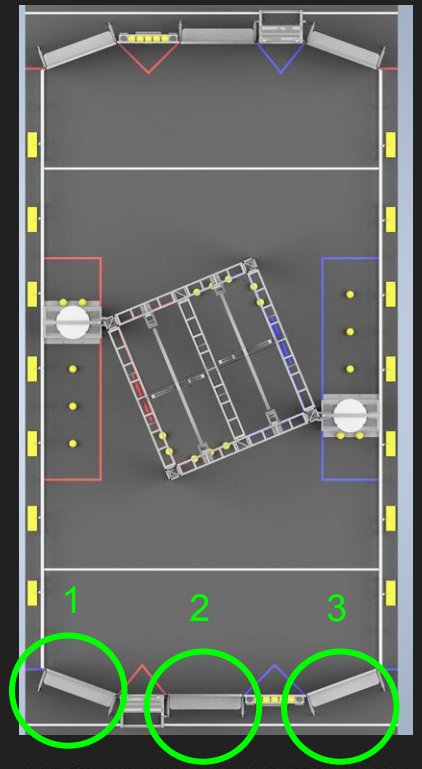


Field Layouts





Which Alliance Station Would You Pick?



Directpoll:
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Showing Your Skills

- Capabilities of good pick
- Ask high ranks what they look for
- Demonstrate collaboration skills
- Ask sooner than later

Picklist Process

- Attendees
- Spreadsheet
- Order/Ranking
- 2nd day of competition

B	C	D	E	F	G	H	I	J	K	L	M
Order	Pick Ability	Driver Ability	Climbs	Tele: Balls High	Tele: Balls Low	Auto: Balls High	Auto: Balls Low	Time Incap	Climber Installation Time	Drivetrain	Drivetrain Motor Type
1	61.2	-1.9	2	13.6	0.0	6.0	0.0	4	impossible		
2	42.9	-0.9	2	11.6	0.0	3.1	0.0	1	average	tank	falcon
3	45.6	-1.9	2	9.8	0.0	4.0	0.0	5	average	tank	falcon
4	22.1	0.5	1	3.6	0.0	2.9	0.0	0	average	tank	falcon
5	48.7	-0.7	2	10.2	0.0	5.0	0.0	0	average	tank	falcon
6	32.6	-0.9	1	9.8	0.0	2.5	0.0	0	impossible	tank	neo
7	28.8	-0.3	2	5.8	0.2	2.2	0.0	0	high	tank	neo
8	22.0	-1.1	2	6.8	0.0	0.0	0.0	0	high		
9	18.7	-0.3	1	3.8	0.2	1.7	0.0	3	average	tank	neo
10	17.7	-0.2	0	6.0	0.0	1.4	0.0	0	high	tank	falcon
11	16.6	0.7	2	0.9	0.3	1.9	0.0	7	average	tank	cim
12	16.6	-0.7	0	0.0	11.1	0.0	2.7	0	high	tank	falcon
13	16.2	0.6	2	0.0	4.2	0.0	1.8	8	high	mecanum	neo
14	16.1	0.1	1	2.9	0.0	1.7	0.0	0	high	tank	falcon
15	15.0	0.4	0	4.5	0.0	1.5	0.0	0	average	tank	falcon
16	14.7	-0.9	0	4.0	0.0	1.7	0.0	0	average	tank	cim
17	11.7	-0.5	0	3.2	0.0	1.3	0.0	2	low	tank	falcon
18	11.0	0.3	0	1.5	0.0	2.0	0.0	21	high	tank	falcon
19	9.5	0.7	2	1.6	0.0	0.0	0.0	6	low	tank	neo

Picking a Team

- Secure a high ranking
- Potential partners
- First Picks
- Second Pick

Which Robot for First Pick?

B	C	D	E	F	G	H	I	J	K	L	M
Order	Pick Ability	Driver Ability	Climbs	Tele: Balls High	Tele: Balls Low	Auto: Balls High	Auto: Balls Low	Time Incap	Climber Installation Time	Drivetrain	Drivetrain Motor Type
1	61.2	-1.9	2	13.6	0.0	6.0	0.0	4	impossible		
11	16.6	0.7	2	0.9	0.3	1.9	0.0	7	average	tank	cim
16	14.7	-0.9	0	4.0	0.0	1.7	0.0	0	average	tank	cim

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Which Robot for Second Pick?

B	C	D	E	F	G	H	I	J	K	L	M
Order	Pick Ability	Driver Ability	Climbs	Tele: Balls High	Tele: Balls Low	Auto: Balls High	Auto: Balls Low	Time Incap	Climber Installation Time	Drivetrain	Drivetrain Motor Type
1	61.2	-1.9	2	13.6	0.0	6.0	0.0	4	impossible		
11	16.6	0.7	2	0.9	0.3	1.9	0.0	7	average	tank	cim
16	14.7	-0.9	0	4.0	0.0	1.7	0.0	0	average	tank	cim

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Contact Us!

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Thank You!

Questions?