

# Team 1124 - The ÜberBots



## **Robot Features & Benefits**

## 2011 Robot & Controls System:

- Two speed transmissions allows for multiple mobility options, high maneuverability, and high torque
- Encoders 1 for each drive transmission, 1 for shoulder, and 1 for wrist (4 total)
- Arm complete with a "shoulder" and "wrist," allowing for great maneuverability for scoring
- Minibot can get up pole in 2.5 seconds
- Uses all interchangeable parts replacement parts ready
- We have identified failure modes and have countermeasures in place
- Bumpers securely fastened

## **During Autonomous Period:**

Can score on high pegs with high accuracy

## **During Teleoperated Period:**

- Can move quickly across the field
- Can pick up off the ground and the feeder station
- Is able to score on all of the pegs
- · Can score from any angle

#### **Practice:**

- Drivers have practiced for over 35 hours with an identical robot since ship date
- Practiced on a full size practice field
- Participated in multiple scrimmages and play dates

## **Recent Awards**

#### 2011

Quarter-Finalists at Chesapeake Regional
2010

- Semi-Finalists of Archimedes Division
- Undefeated Performance at Northeast Utilities Regional
- Northeast Utilities Regional Rockwell Automation Innovation in Control Award Winners
- Northeast Utilities Regional Coopertition™ Award Winners
- WPI Regional Chairman's Award Winners
- WPI Regional Excellence in Engineering Award Winners 2009
- Galileo Division Quarterfinalists
- CT Regional Rockwell Automation Innovation in Control Award Winners
- Suffield Shakedown Champions

#### 2008

- Ranked 4<sup>th</sup> Internationally
- Archimedes Division Champions
- CT Regional Champions
- CT Regional Kleiner Perkins Caulfield and Byers Entrepreneurship Award Winners

#### 2007

- Championship Event Newton Division Finalists
- UTC CT Regional Champions
- UTC CT Regional Rockwell Automation Innovation in Control Award Winners

#### **2006**

 UTC New England Regional Champions

