

**Robotics and Automation Technology**  
**MO SkillsUSA 2022**  
**Tool List**

**Supplied by the contestant:**

**Team Provides:**

Multi-meter with test leads  
Wire strippers (electronic)  
Long nose pliers (electronic)  
Small screwdriver set (common and Phillips)  
Diagonal pliers (side cutters)  
Power strip, 6 outlets, circuit breaker protected  
Extension cords, minimum 25'  
100' hookup wire (20-24 AWG)  
Tape, masking & electrical  
Jumper leads for troubleshooting  
2-#2 pencils (sharpened)  
12" ruler  
Safety glasses  
Any other tools specific to your equipment  
One page, typewritten resume per team member

1 Scorbot ER-4u Robot  
1 Scorbot Teach Pendant  
2 Solid Aluminum Block, 1.65" (# 31-0807-0010)  
2 Aluminum Block w/Hole, 1.65" (# 31-0807-0011)  
2 Solid Plastic Block, 1.65" (# 31-0807-0012)  
2 Plastic Block w/Hole, 1.65" (# 31-0807-0013)  
1 Competition Sensor Box (# 21-0006-0001)  
1 E-Stop/Light Stack (# 21-0006-0006)  
1 Gravity Feeder w/ Part Present Switch (# 10-1007-4000)  
1 Power Supply, 12V (# 21-0006-0005)  
1 Mounting board- 48"x48"x3/4" suggested

1 robot setup for each team of 2 students.

\*The above items highlighted in red are part of a package available from Intelitek:

**Item RAT-ER4U-1000**

**Robotics Automation Technology Skills Project**

-Robotics and Automation Project includes complete project hardware components including: Scorbot-ER 4u, teach pendant, conveyor with sensor, stack light with emergency stop, I/O controller interface, gravity parts feeder for plastic & aluminum blocks (included), continuity and limit detection test device, SK-AUTO-0001 kit including Siemens LOGO! PLC, I/O expansion unit, LOGO! Software, a 12VDC Power Supply. Needed cabling is supplied.

Hand tools

**Remember to prepare for the Professional Development (PDP) Knowledge test!**