
Technician Team

Draw Number

Team Name

Company Name

Instrument Model _____ Serial # _____

National Mine Rescue Contest - Discount Card
Technician Team

Working Time
Minutes Seconds
_____ : _____

SIGNATURES:

Timekeeper: _____

Written Examiners: _____

Judges: _____

Scorecard Examiners: _____

Chief Judge/Appeals Committee: _____

Air Calculation Worksheet

3. Air Calculation Worksheet discount will result in one (1) point discount for each of the following:
- a. Incorrect smoke tube velocity (___ FPM) 1 _____
 - b. Incorrect smoke tube area (___ SF)..... 1 _____
 - c. Incorrect smoke tube volume (___ CFM) 1 _____
 - d. Incorrect anemometer area (___ SF) 1 _____
 - e. Incorrect anemometer reading (___ corrected FPM)..... 1 _____
 - f. Incorrect anemometer volume (___ CFM)..... 1 _____
 - g. Incorrect magnehelic reading (___ inches) 1 _____
 - h. Incorrect magnehelic pressure (Positive or Negative)..... 1 _____

Gas Detector Problem

Sensor	Alarm Points		Comments	Incorrectly Set Alarms
	Reqd.	Set		
O ₂	Low	19.5	_____	_____
	High	23.5	_____	_____
CH ₄	Low	1.0	_____	_____
	High	1.5	_____	_____
CO	Low	50	_____	_____
	High	100	_____	_____
NO ₂	Low	3.0	_____	_____
	High	5.0	_____	_____

7. Alarm Point for incorrectly set alarms 20 x _____ = _____
 Functional (Bump) Test not performed if required (each infraction) 20 x _____ = _____
8. Each instance of incorrect procedure or equipment use during Calibration of instrument (each infraction) 20 x _____ = _____
10. "Unknown" gas mixture concentration not identified:
- | | | | |
|---------------------------------------|--------------|--------------------|---------|
| O ₂ Concentration (+0.5%) | Bottle _____ | % Team Found _____ | % _____ |
| CH ₄ Concentration (+0.2%) | Bottle _____ | % Team Found _____ | % _____ |
| CO Concentration (+/-10%) | Bottle _____ | % Team Found _____ | % _____ |
| NO ₂ Concentration (+3ppm) | Bottle _____ | % Team Found _____ | % _____ |
- Discounts for each gas: 15 x _____ = _____
11. Deficiency (bug) not corrected (each deficiency) 5 x _____ = _____
12. Multi-gas Instrument(s) not "ready for use" 5 x _____ = _____
13. Any action taken by a contestant that risk damage to the MX-6 will result in disqualification of the unit from the contest. 20 x _____ = _____

Air Measurement

Anemometer

1. Failure to provide anemometer, measuring tape and timing device..... 1 _____
2. Failure to give brief description of the anemometer (how to zero and turn on the anemometer) 1 _____
3. Failure to take a proper measurement of the area to be tested 1 _____
4. Failure to correctly zero the anemometer 1 _____
5. Failure to traverse the entry 1 _____
6. Failure to taking a 1-minute reading in the area 1 _____
7. Failure to calculate correctly the air reading for the area in cfm (air reading must be calculated with pencil or pen and submitted to the Judge)..... 1 _____

Smoke Tubes

1. Failure to provide smoke tubes with aspirator bulb, measuring tape and timing device 1 _____
2. Failure to measure off a distance of 10 feet 1 _____
3. Failure to take measurement of the area to be tested 1 _____
4. Failure of team members to verbally explain how smoke will be released and timed through each of the four quadrants..... 1 _____
5. Failure to apply smoke (discount per each quadrant) 1 _____
6. Failure to calculate the smoke air reading for the area in cfm (air reading must be calculated with pencil or pen and submitted to the judge) 1 _____

Magnehelic

1. Failure to provide a Magnehelic and necessary port hoses and fittings..... 1 _____
2. Failure to explain what the Magnehelic is used to measure . 1 _____
3. Failure to demonstrate how to zero the Magnehelic..... 1 _____
4. Failure to connect the hoses to Magnehelic properly and simulate the reading 1 _____
5. Failure to give and explain the proper reading of the Magnehelic to the Judge (positive or negative pressure should be included in the explanation) 1 _____

General Rules

1. Failure to comply with other written adopted National Rules not covered in the discount sheet (each infraction) 2 x _____ = _____

Written Examination

1. For each incorrect answer 1 x _____ = _____

Calc. Worksheet Discount

Gas Detector Discount

Air Measurement Discount

Total Discounts