JIG INSPECTOR & MANAGER WORKSHOPS

BENEFITS AND CHALLENGES OF IMPLEMENTING JIG4

Why use JIG Operating Standards?

- JIG Operating Standards are Internationally recognised, included in ICAO 9977
- JIG Operating Standards covers equipment, operation and fuel quality controls
- JIG Operating Standards are endorsed by IATA and IATA is represented in JIG Operating Committee.
- Not every country will have a standard that adequately cover all that the JIG Operating Standards cover – local standards may cover equipment requirements but are silent on any quality control requirements.

JIG Aviation Fuel Quality Controls and Operating Standards are well recognised and accepted by the Aviation Industry, they provide a minimum expectation for an Aviation facility and operation.

However, does JIG Operating Standard provide a benefit for a small Aviation operation? Is JIG fit for purpose for every size of operation?

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What do you know about JIG4 ?

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Workshop Interactive sections

- Using the hotel WiFi connection, please open **menti.com** on your mobile phone browser.
- Enter the 8 digit code to join

  2986 1926
- Answer questions when they are made “live” by the presenter

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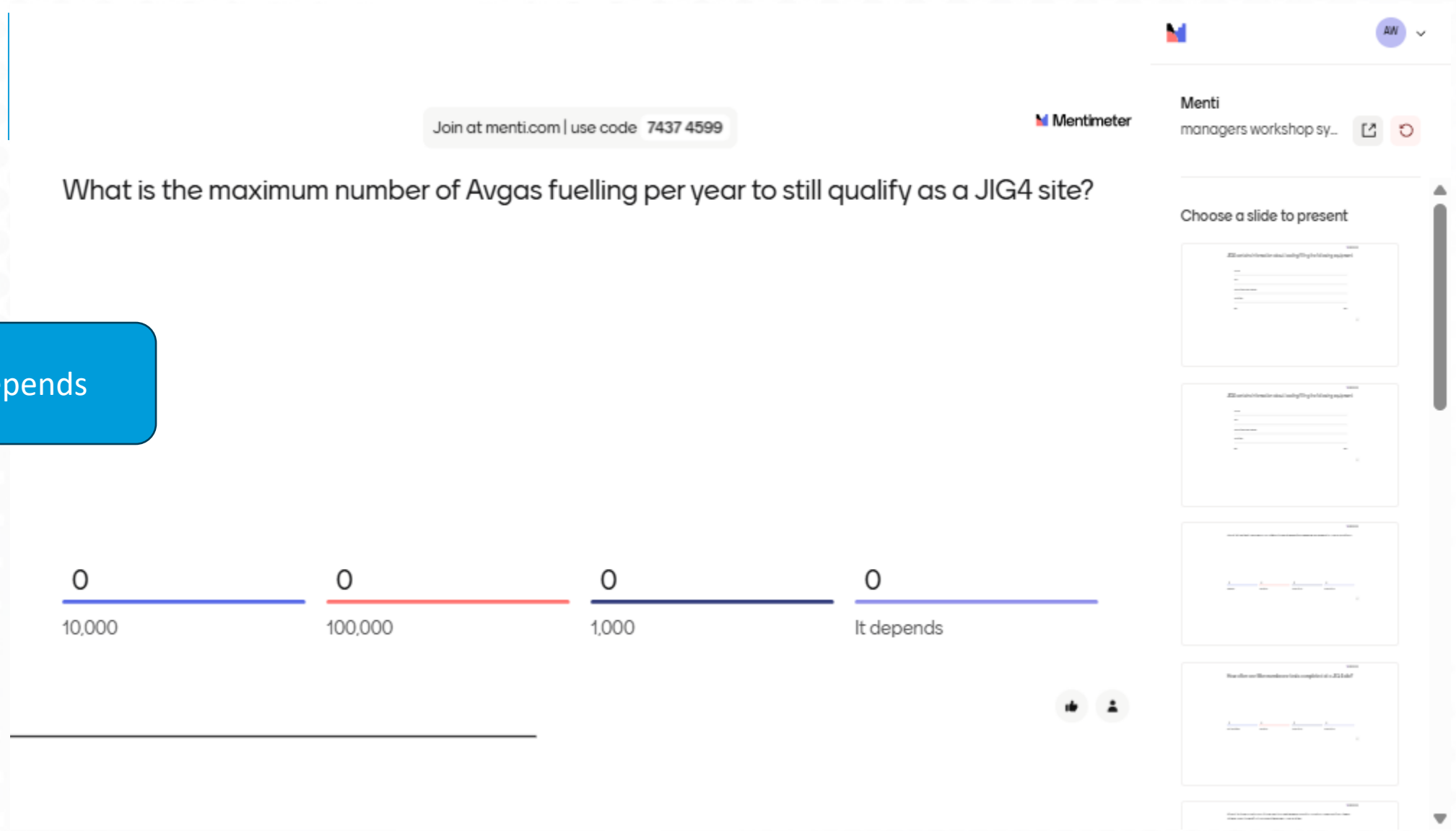

It depends

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Mentimeter

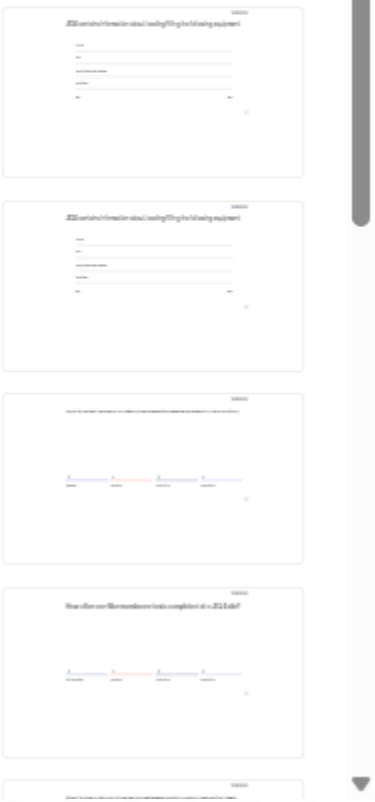
An Avgas facility within a JIG 1/2 site can be operated to JIG4

TRUE

TRUE	FALSE
0	0

Menti
managers workshop sy...

Choose a slide to present



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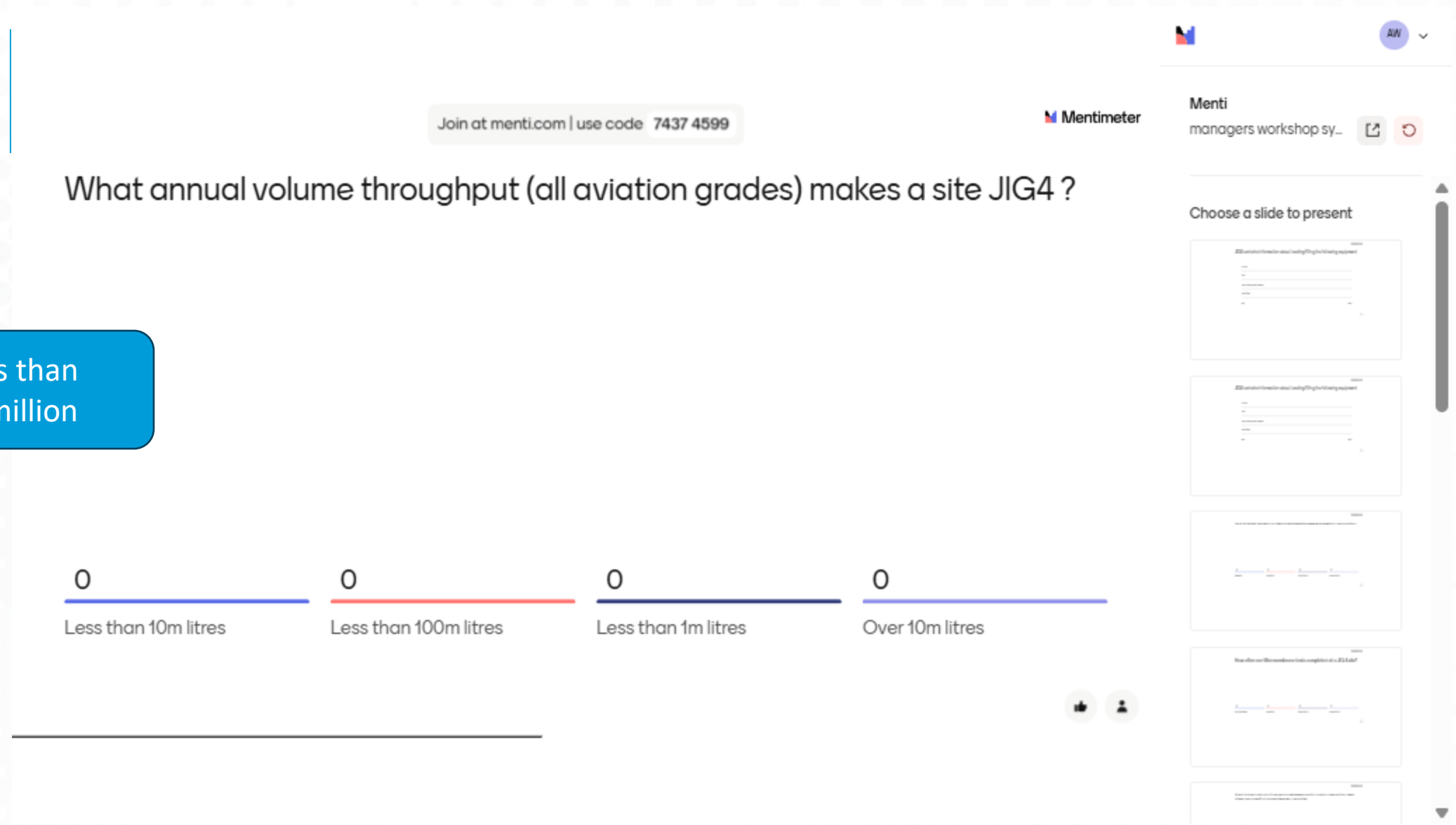

Less than 10million

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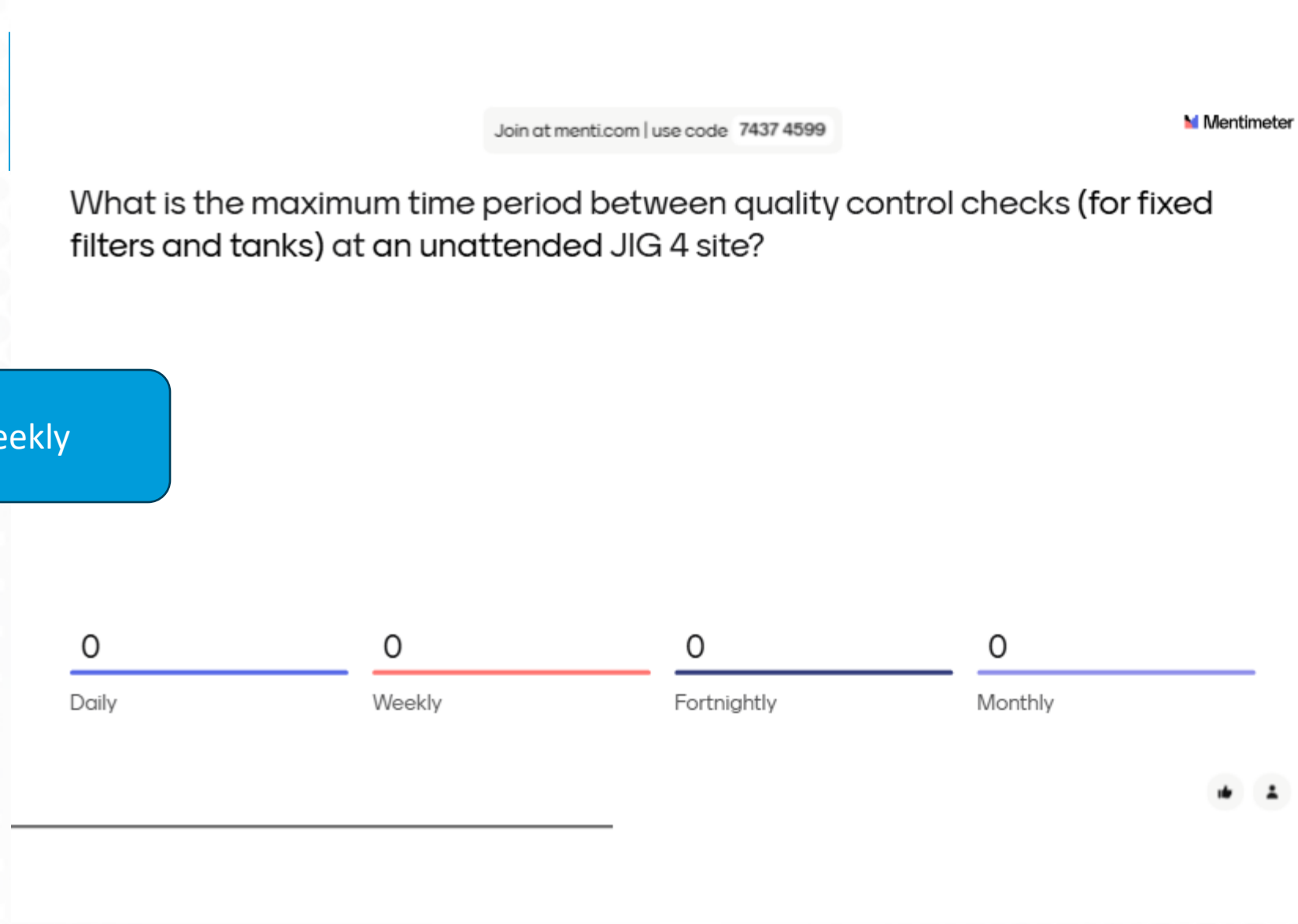

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Mentimeter

How often shall a JIG 4 site test the correct operation of pressure/surge control equipment?

6-monthly

Monthly	3-monthly	6-monthly	Annually
0	0	0	0

AW

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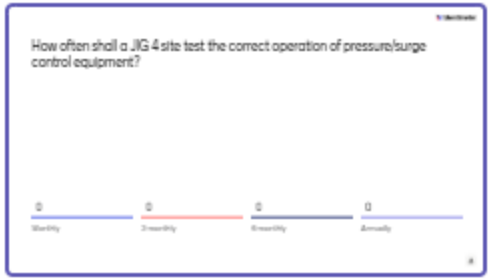

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Mentimeter

How often are filter membrane tests completed at a JIG 4 site?

Not required

0	0	0	0
Not required	Monthly	3-monthly	6-monthly

AW

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Choose a slide to present

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Mentimeter

What is the test frequency for piston type differential pressure gauges at a JIG 4 location?

Monthly

Weekly	Monthly	3-monthly	6-monthly
0	0	0	0

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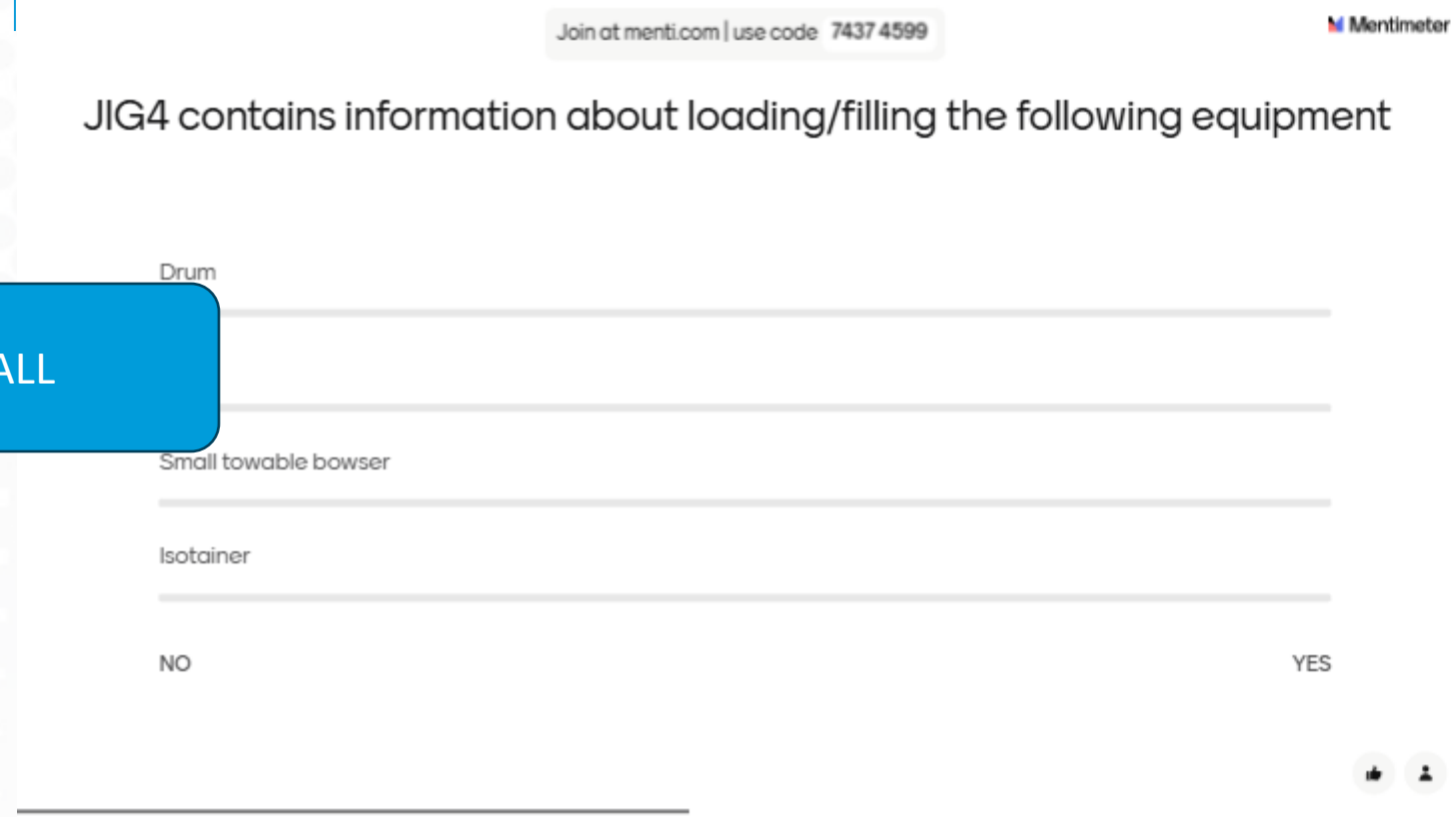
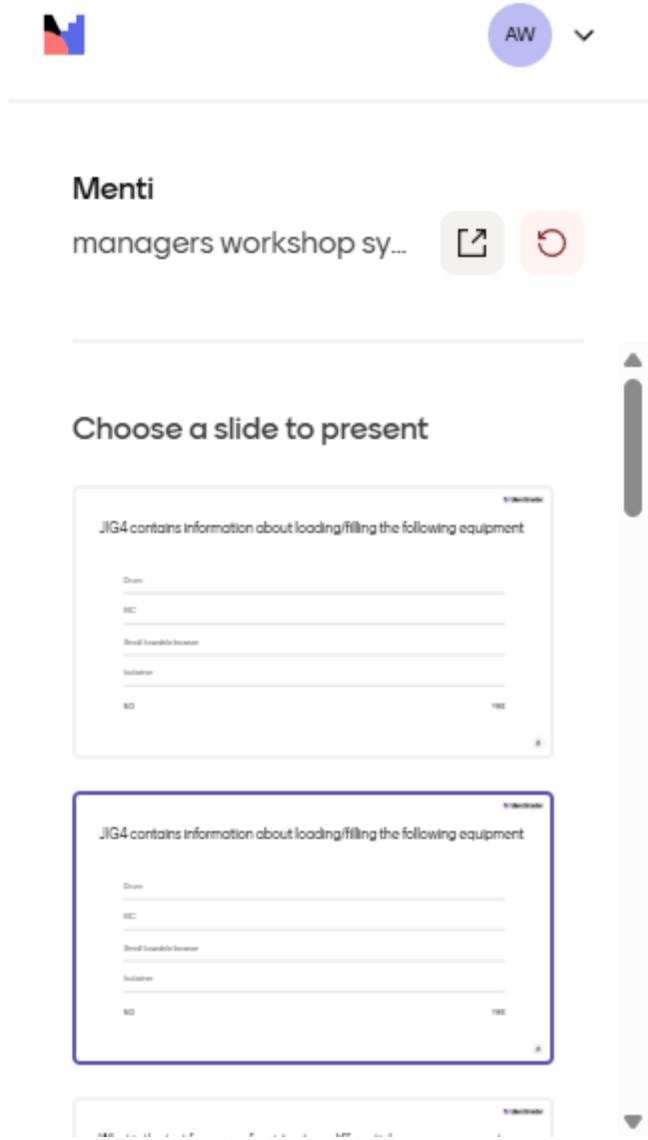
ALL





LEARNING

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JIG4 Quiz

JIG 4 – Aviation Fuel Quality Controls and Operating Standards for Smaller Airports

1. An Avgas facility within a JIG 1 / 2 facility can be operated to JIG 4?
   - **True**
   - Flase
2. What volume (throughput – all aviation fuel grades) makes a site JIG 4?
   - **Less than 10 million litres**
   - Less than 100 million litres.
   - Over 10 million litres
   - Over 1 million litres
3. What is the maximum time period between quality control checks (for fixed filters and tanks) at an unattended JIG 4 site?
   - Daily
   - **Weekly**
   - Fortnightly
   - Monthly
4. How often are filter membrane tests completed at a JIG 4 site?
   - **Not required**
   - Monthly
   - 3-monthly
   - 6-monthly
5. How often shall a JIG 4 site test the correct operation of pressure/surge control equipment?
   - Monthly
   - 3-monthly
   - **6-monthly**
   - Annually
6. How often is required to test the piston type differential pressure gauges at a JIG 4 location?
   - Weekly
   - **Monthly**
   - 3-monthly
   - 6-monthly
7. JIG 4 contains information on which of the following:
   - Drum filling
   - IBC filling
   - Small Towable Bowser Loading
   - Isotainer filling
   - **All above correct**
8. What is the one thing in JIG 4 you would change of you could? **(last question to be ask and the n discuss at the end – and box and cards to populate suggestions)**

JIG4 – why is it required?

JIG 4 – Aviation Fuel Quality Controls and Operating Standards for Smaller Airports

- JIG 4 is used for “smaller” airports which is defined in JIG 4:
  - Supplied by road or rail Transport
  - Maximum flowrate of 1,000 lpm per delivery hose
  - Number of Jet Fuelling operations per year is less than 10,000 per mobile fuelling equipment and total throughput of all aviation fuel grades is less than 10 million litres
  - Hydrant has a diameter of 150mm or less.
- There is also the ability to operate an Avgas facility according to JIG 4 – despite it being within a larger JIG 2 (Jet) facility.

The defining feature is that operation is smaller.

JIG 4 compared to JIG 1 and JIG 2

JIG 1 and JIG 2

- Supply methods have multiple options.
- Fuelling Aircraft Flowrates can greatly exceed 1,000 lpm
- Number of fuellings and throughput can greatly exceed 10,000 / 10 million litres
- Can be large hydrant operations

JIG 4

- Supply by Road or Rail Transport
- Fuelling Aircraft Flowrate can be comfortably less than 1,000 lpm
- The number of fuellings can be high however the throughput can be considerably below 10 million litres.

These operations do look very different – the CHALLENGES of both can look very different.

JIG 4 - Benefits

JIG 4 Aviation Fuel Quality Controls and Operating Standards for Smaller Airports

- Provides a great deal of detail of equipment and operating standard.
- Standard is consistent with customer expectations
- Includes items not included in other JIG Operating Standards:
  - Drum, ISO Tanks and IBC filling
  - Small towable bowser (trailer) filling
  - Fixed Fuelling Cabinets
  - Small hydrant systems
  - Drum storage

These features are much more common for smaller sites

- There is a relaxation on some JIG requirements from JIG 1 or JIG 2 sites:
  - Conductivity testing
  - Pressure control testing frequency reduced
  - Meter calibration frequency reduced
  - Ladder inspection frequency reduced
  - Filter membrane testing not routinely required
  - Hose testing relaxed for hoses operating at low pressure

JIG 4 – Example of acknowledging “smallness”

JIG 4 Aviation Fuel Quality Controls and Operating Standards for Smaller Airports

There is an acknowledgement in JIG 4 that some sites have a lower fuelling frequency and throughput.

Section 6.1 and 6.2 include the following around frequency of sampling:

- Sites attended daily
- Sites that are not attended daily or have filters not used daily – provides minimum draining frequency of weekly
- Unattended sites – maximum sampling frequency is weekly.

These sections detail what is expected if results of sampling are unsatisfactory. Example of Standard attempting to be fit for purpose.

JIG 4 Benefits in implementation

JIG 4 Aviation Fuel Quality Controls and Operating Standards for Small Airports

JIG 4 is an Operating Standard that provides some useful tools to assist with implementation at airports:

- Summary of test frequencies provided
- Minimum requirements that assist with development of company or site procedures
- Examples of forms provided
- Minimum expectations around HSSE provided. JIG HSSE MS is not mandatory for JIG 4 locations
- Clear guidance provided around items that are a mandatory requirement – such as filtration requirements.

JIG 4 Challenges for adaptation, implementation

JIG 4 Aviation Fuel Quality Controls and Operating Standards for Small Airports

JIG 4 is an Operating Standard for Smaller Airports, any items adopted into JIG 1 and JIG 2 Operating Standards may not be appropriate for JIG 4 sites. Example provided below which illustrates:

JIG 4 Issue 4 includes a requirement in section 4.1.4 around pump bunding which was not part of previous issue. This can be difficult to implement for older facilities, with limited ability to change layout. This perhaps does not recognise nor reflect the lower risk profile of a smaller facility.

The challenge is to ensure JIG 4 remains Fit for Purpose.

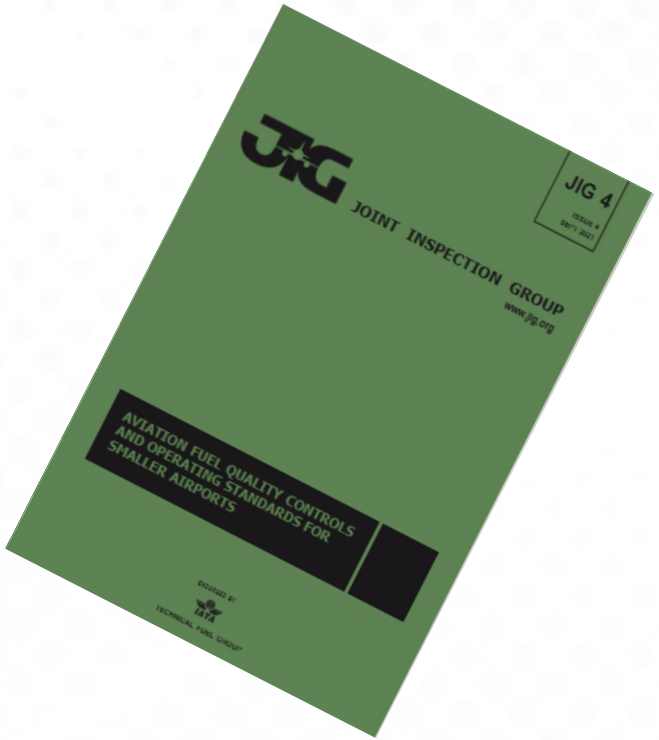
JIG 4 - Opportunities

JIG 4 Aviation Fuel Quality Controls and Operating Standards for Small Airports

- JIG 4 is an appropriate standard that covers a low throughput site up to larger sites.
- The change in the sampling frequency, along with appropriate controls, is an example of what could be implemented in other sections of JIG 4.
- The number of locations that fit in the JIG 4 definition is large – need to have an appropriate standard that is fit for purpose, while delivering high product quality and HSSE performance.
- JIG 4 has access to the wide JIG Network and expertise on operational and filtration updates.

Next Issue of JIG 4

What is the one thing you would **change**, **add** or **improve** in JIG4 ?



Please write on the cards provided.

JIG 4 – Benefits and Challenges

JIG 4 Aviation Fuel Quality Controls and Operating Standards for Small Airports.

Any questions?

Thank You!

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