Using the MRXL ‘micro-refueller’ trailer, developed by IGX® and Doosan Mobility Inc.®, ReadyH2® can:

Deliver 350 bar, ultra-high purity, compressed hydrogen to UAV customer’s site, allowing customers to:

- Stay on site for extended flight operations, ~ 40 tanks worth of fuel @ 2-hour flight time per tank
  - Pipeline inspections
  - Mass casualty events
  - Security for large crowd events
- Allow customers to focus on their flight operations vs. locating H2
- 6 tank, simultaneous filling capability – ~12 hours of flight time
CHALLENGES WITHIN THE H2 COMMERCIAL SPACE

1. The MRXL is a good, non-CDL solution, however, it still needs to be filled with high purity, high pressure H2
   - Tube trailer rental overhead costs
   - Cascade filling from 16 packs + onboard compressor
   - Partnerships with higher volume H2 users (not producers) being explored

2. ReadyH2 personnel are Hazardous Shipment Certified, allowing for:
   - Shipments of filled, DOT certified UAV tanks*, to customers nationwide
     - Ideal for customers with smaller fleet or mission profiles
   - Return of tanks to RH2 from customers still poses a challenge

3. Local fire regulations for H2 vary
   - Some cities fire marshals have no experience with H2, even larger cities

KEY TAKEAWAYS

The lack of availability of highly pure, high pressure H2 restricts wider adoption of fuel cell technology.

Regulatory differences between cities, counties & states adds complexity to fuel delivery on site. Federal codes would be helpful.

*One of first fuel cell drone tank OEMs to achieve DOT certification, via DMI®

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The general public usually fall into 2 categories:
- Worried / concerned with H2 as a fuel for safety reasons (this was me 18 months ago)
- Not worried at all due to lack of knowledge or experience using H2

Both above can be problematic
- Those worried will need to be “converted” and trained
- Those not worried will need to be trained to avoid negative consequences of apathy/carelessness when working with H2

Drone users will not be dealing directly w/ H2 per se, but handling, transport & storage of drone tanks requires training none the less.

**KEY TAKEAWAYS**

Fuel Cell Drone users need training on handling COPVs / drone tanks.
QUESTIONS?

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Link to Full Video