



# Airgas site visit Multi-Channel Distribution Network

Andy Cichocki, COO Airgas

Levittown Distribution Center,  
21 March 2017



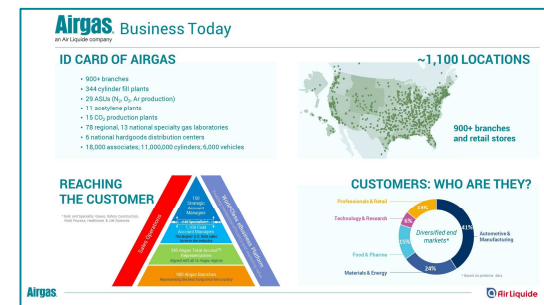
# U.S. Industrial Merchant Market - Airgas

## Market

- U.S., the **largest** gas market worldwide
- **Very fragmented** packaged gas market; ~50% independent distributors
- Broad territory; **proximity** with the end-user is key (>900 retail branches across the U.S.)

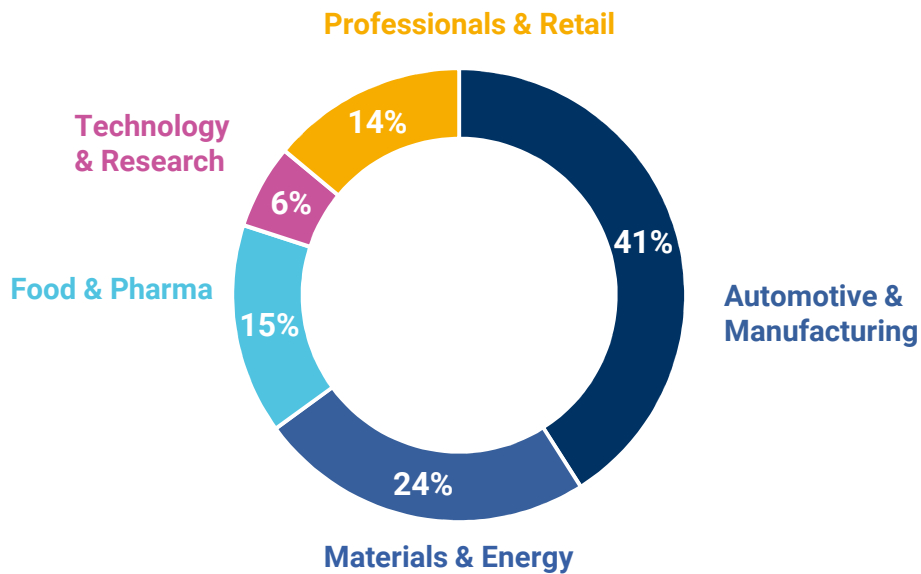


- U.S. packaged gas leader with **~25% market share**
- **Complete offering** including Hardgoods (Safety, consumables, welding equipments) and Services
- **National platform** supporting **multiple sales channels**
- Continued **bolt-on acquisitions**



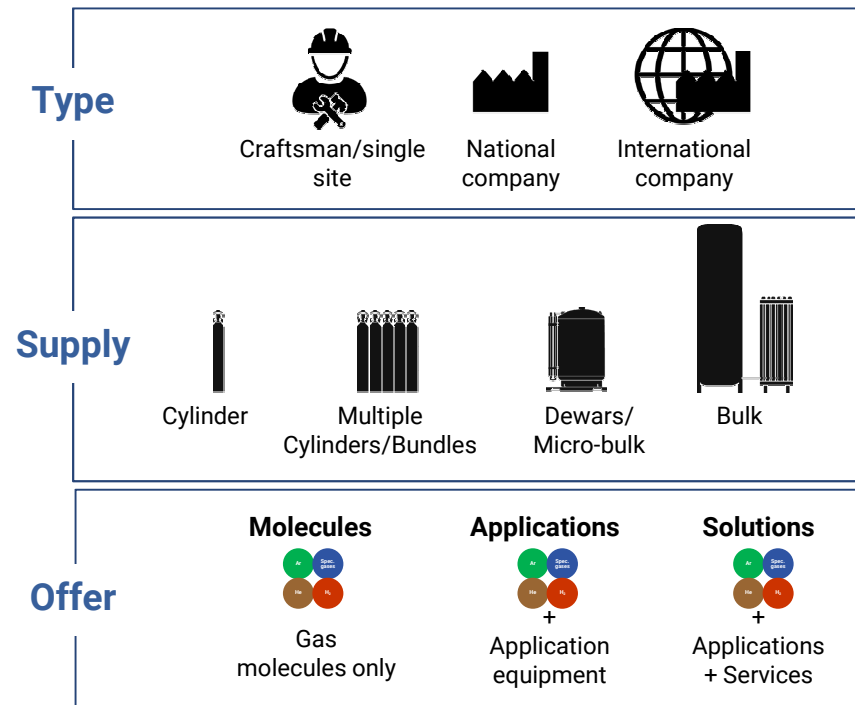
# IM Customers: Who Are They?

## Diversified end markets\*



\* Based on pro forma data, Industrial Merchant only

## Type of customers



# IM Customers: Automotive & Fabrication



- **Automotive & Cycles**
- **Transportation**  
Heavy truck & trailer  
Rail  
Shipyards
- **Machinery & Metal fabrication**  
Oil, gas & mining equipment  
Agriculture equipment  
Construction equipment
- **Construction**  
Hydrocarbon, power,  
infrastructure

Products	Use	Trend (2017)
Ar	Arc welding	→
O <sub>2</sub>	Flame cutting	→
Ar	Arc welding	→
Hard goods	O <sub>2</sub>	→
	N <sub>2</sub>	→
Hard goods	Ar	→

# IM Customers: Material & Energy



- **Extraction & Mining**  
Oil & Gas extraction  
Gold extraction
- **Refineries/Petrochemicals, Basic/Specialty Chemicals**
- **Steel mills**
- **Pulp & Paper**
- **Glass**  
Flat glass  
Technical & container glass
- **Utilities & Waste management**

Products	Use	Trend (2017)
$N_2$ $CO_2$ $O_2$	Enhanced Oil Recovery	Red arrow (down)
	Gold recovery yield	Yellow arrow (right)
$N_2$ Hard goods $O_2$	Inerting	Green arrow (right)
	Maintenance	Green arrow (right)
	Waste water treatment	Green arrow (right)
$O_2$	Reheating	Yellow arrow (right)
$O_2$	Chemical pulp bleaching	Yellow arrow (right)
$N_2$ $O_2$	Float glass	Yellow arrow (right)
	Glass melting	Yellow arrow (right)
$O_2$	Biological treatment	Green arrow (right)

# IM Customers: Food & Pharmaceuticals



- **Meat processing**

- **Ready meals, packaged foods**

- **Beverages**

- **Drugs**

## Products

## Use

## Trend (2017)



Cryogenics/  
Stunning

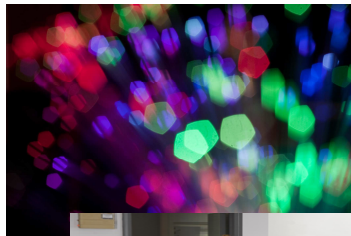
Modified  
Atmosphere  
Packaging

Packaging/dispense  
Carbonation/dispense

Inerting



# IM Customers: Technology & Research



- **Electronic components and products**

Products



Use

Stress test

Trend (2017)



- **Opto / Photonics**



Inerting



Carrier and process



- **Laboratories**



Process



Emission testing

Hard goods



Calibration



# IM Customers: Professionals & Retail



- **Plumbing, heating systems**

Hard goods



Welding



- **Air-conditioning**

Hard goods



Leaks test



- **Leisure**



Balloons



- **Garage**

Hard goods



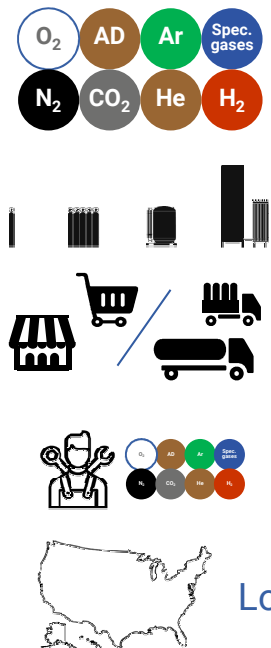
Welding



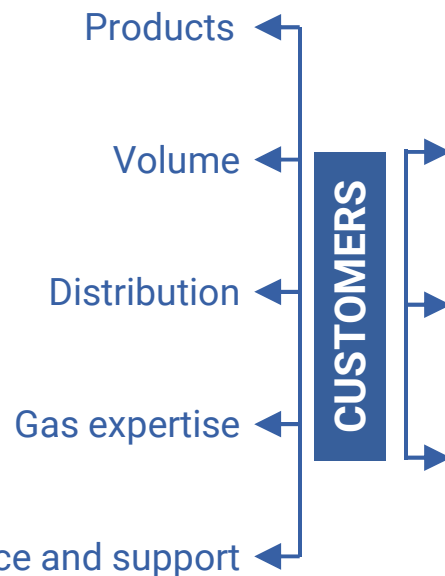


# IM Customers: What do they Want?

## Operations

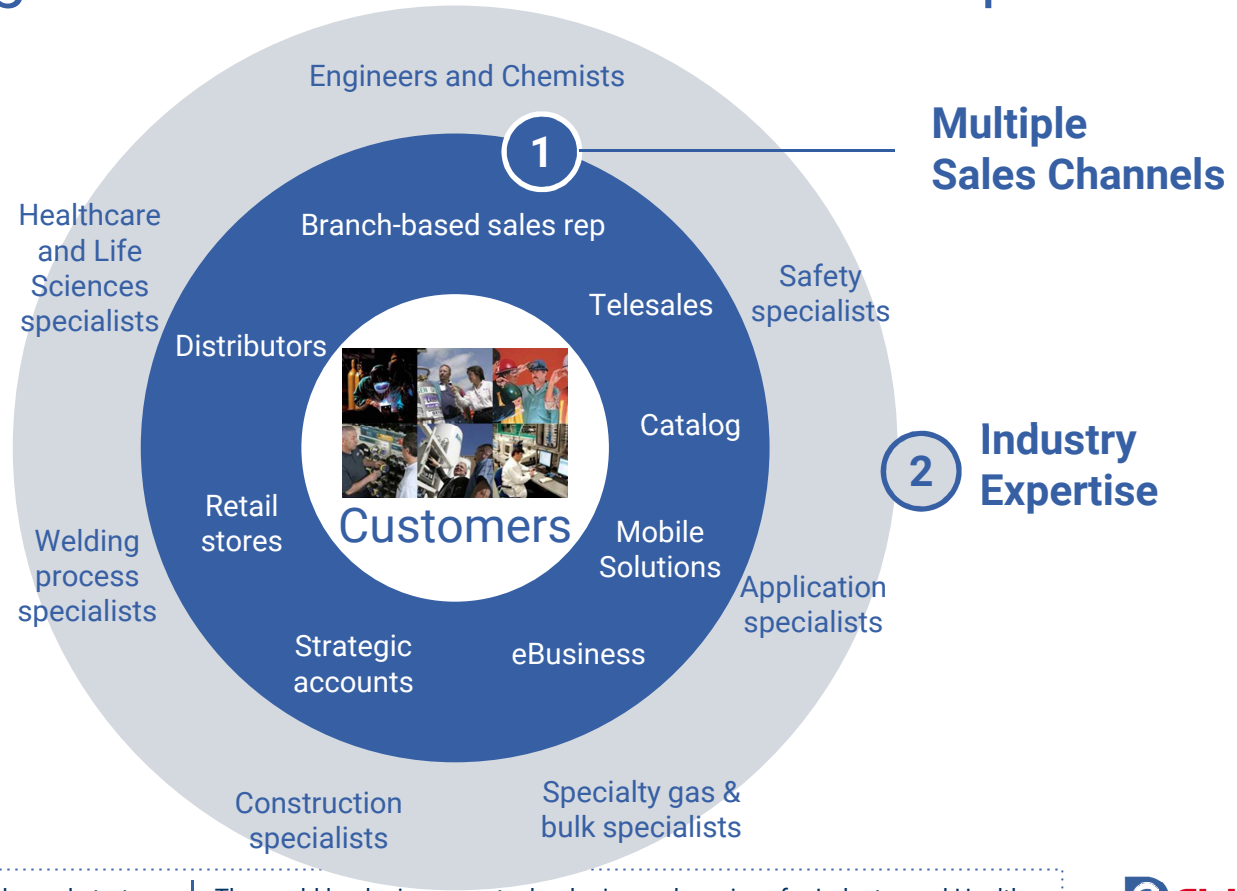


## Supplier Choice Criteria

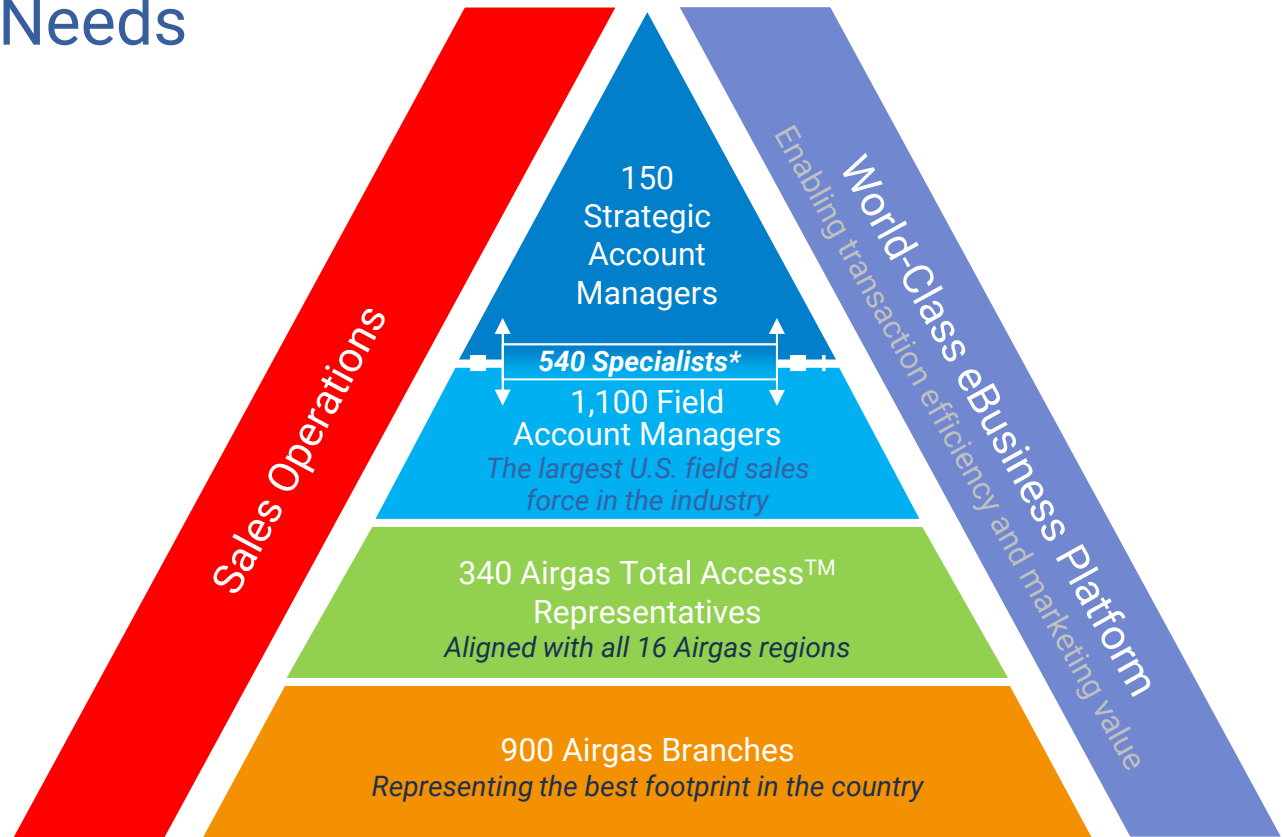


- Safety (hazardous products)
- Gas usage expertise
- Availability of products
- Reliability of logistics
- Right mode of supply
- Competitive pricing
- Proximity to operations
- Ease of doing business
- Ability to grow with them

# Sales Management: Multi-Channel Sales & Expertise



# Sales Management: Airgas Organization Fitting All Customers Needs



\* Bulk and Speciality Gases, Safety  
Construction, Weld Process, Life Sciences

# Distribution: Multiple Solutions Proposed

## Pick-up

- **Collect** gas cylinders and hardgoods
- From **>900 branches** all over the country

## Deliveries

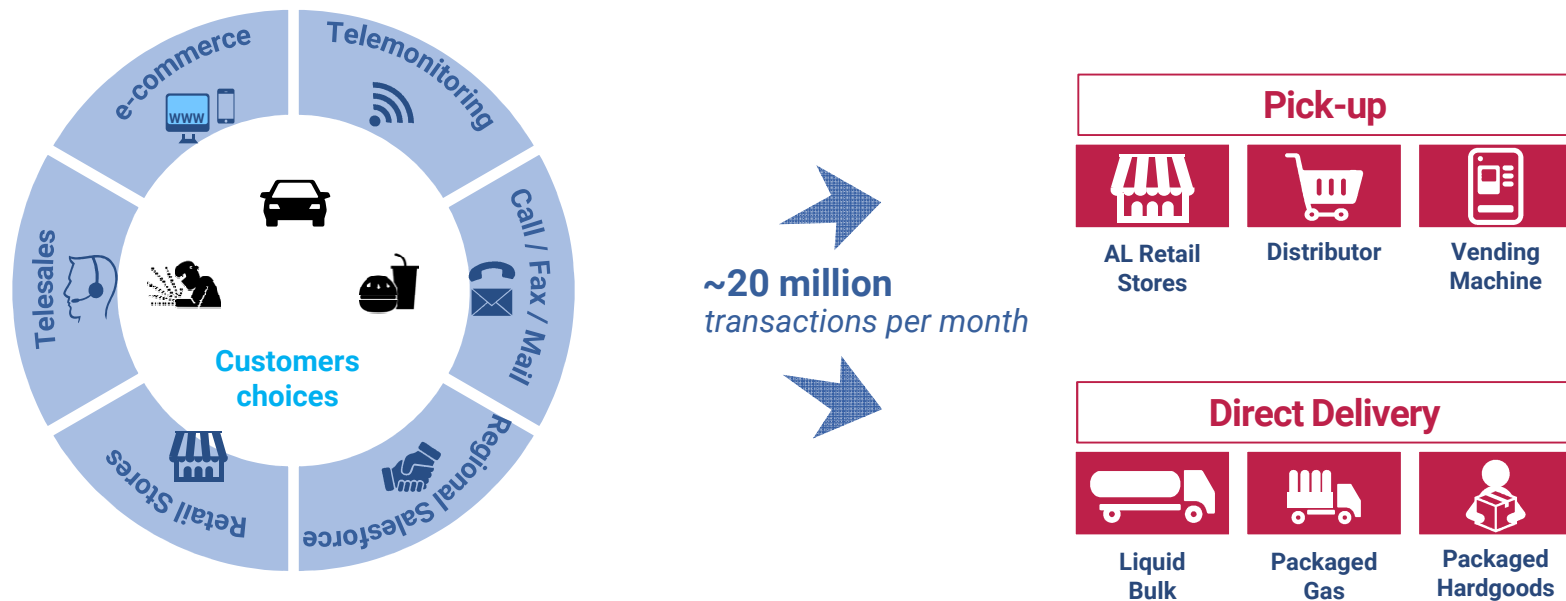
- **Gas delivery** to customer sites
  - **Cylinders:** from branches/filling stations
  - **Bulk:** from plants
- **Hardgoods distribution centers**
  - Next-day service → **60%** of the U.S. population
  - Within 2 days using third-party carrier → **95%** reached

## Customized Solutions

- **Total Gas Management** with Airgas representative stationed at customer site
- **Services** on weld process/efficiency
- **On-site** generators
- **Vending machines** for hardgoods

# Solid Back-Office: Supporting Multi-Choice Offer

Local solutions all over the country



➤ Strong ERP and solid processes supporting daily management of complexity

# Leveraging on a Strong Business Model to Create Value

## GAS NEEDED EVERYWHERE

- **Diversity** of customers end-markets
- **High number of customers**  
1 million+

## SUSTAINED REVENUE

- Gas sales + **Rental** fees
- Focus on **customer retention**
- Bulk & on-site: 3 to 15 year **contracts**

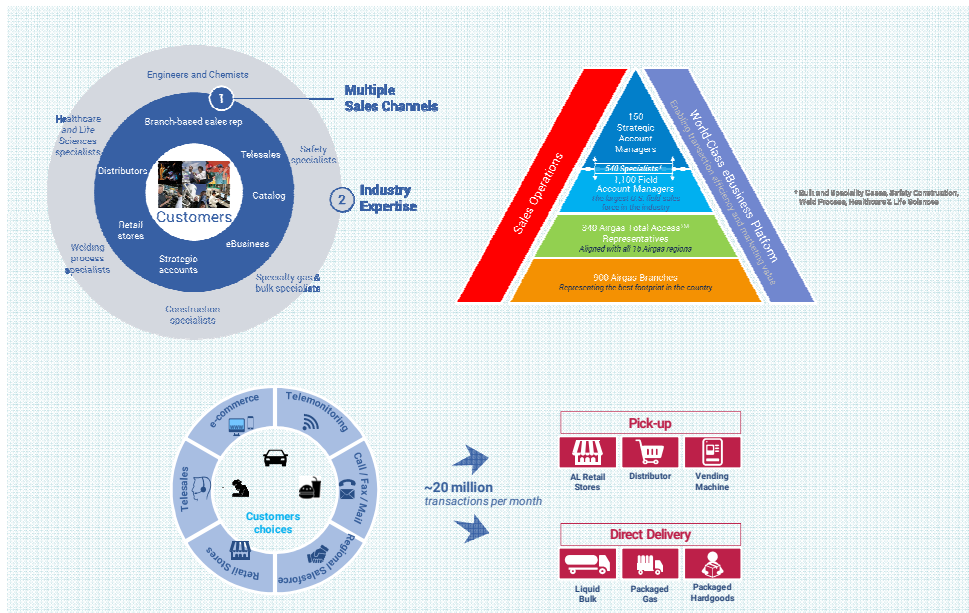
## ASSET MANAGEMENT

- **Circulating assets:** cylinders back to filling station
- **Optimal number** of cylinders and tanks by type and size
- KPIs: **cylinder turnover**, frequency of bulk delivery

## DISTRIBUTION

- **Density**
- **Optimum area of delivery:** <50 miles for cylinders and <250 miles for bulk
- **Truck loading**
- **Digital routing**
- KPI: **miles per delivered cylinder**

# Conclusion: Customer-Centric Organization



- Multi-channel sales & expertise
- Organization fitting all customers needs
- Multiple solutions for product collection
- Supported by solid back-office