Airgas site visit
Multi-Channel Distribution Network

Andy Cichocki, COO Airgas

Levittown Distribution Center,
21 March 2017
U.S. Industrial Merchant Market - Airgas

- 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**

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**Packaged Gases**
- Hardgoods
- Cylinders
- Dewars

**Bulk Gases**
- Bulk, Tube Trailers
- Onsite, Pipeline

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**Airgas**

- **Business Today**
- **ID CARD OF AIRGAS**
- ~1,100 LOCATIONS
- 900 branches and retail stores
- CUSTOMERS: WHO ARE THEY?
- REACHING THE CUSTOMER

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**21 March 2017**

- Multi-channel strategy
- The world leader in gases, technologies and services for Industry and Health
IM Customers: Who Are They?

**Diversified end markets***

- Automotive & Manufacturing: 41%
- Materials & Energy: 24%
- Food & Pharma: 15%
- Technology & Research: 6%
- Professionals & Retail: 14%

**Type of customers**

- Craftsman/single site: 41%
- National company: 6%
- International company: 14%

**Supply**

- Cylinder
- Multiple Cylinders/Bundles
- Dewars/Micro-bulk
- Bulk

**Offer**

- Molecules: Gas molecules only
- Applications: Application equipment
- Solutions: Applications + Services

* Based on pro forma data, Industrial Merchant only
IM Customers: Automotive & Fabrication

<table>
<thead>
<tr>
<th>Products</th>
<th>Use</th>
<th>Trend (2017)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ar</td>
<td>Arc welding</td>
<td>➤</td>
</tr>
<tr>
<td>O₂</td>
<td>Flame cutting</td>
<td>➤</td>
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<tr>
<td>Ar</td>
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<tr>
<td>O₂</td>
<td>Flame cutting</td>
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<tr>
<td>N₂</td>
<td>Heat treatment</td>
<td>➤</td>
</tr>
<tr>
<td>Ar</td>
<td>Arc welding</td>
<td>➤</td>
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</tbody>
</table>

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

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<tr>
<td>N₂</td>
<td>CO₂</td>
<td>Enhanced Oil Recovery</td>
</tr>
<tr>
<td>O₂</td>
<td></td>
<td>Gold recovery yield</td>
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<tr>
<td>N₂</td>
<td></td>
<td>Inverting</td>
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<tr>
<td>Hard goods</td>
<td>O₂</td>
<td>Maintenance</td>
</tr>
<tr>
<td>O₂</td>
<td></td>
<td>Waste water treatment</td>
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<tr>
<td>O₂</td>
<td></td>
<td>Reheating</td>
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<tr>
<td>O₂</td>
<td></td>
<td>Chemical pulp bleaching</td>
</tr>
<tr>
<td>N₂</td>
<td>O₂</td>
<td>Float glass</td>
</tr>
<tr>
<td>O₂</td>
<td></td>
<td>Glass melting</td>
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<tr>
<td>O₂</td>
<td></td>
<td>Biological treatment</td>
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The world leader in gases, technologies and services for Industry and Health
IM Customers: Food & Pharmaceuticals

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<tbody>
<tr>
<td>N₂</td>
<td>Cryogenics/ Stunning</td>
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<tr>
<td>CO₂</td>
<td>Modified Atmosphere Packaging</td>
<td>↑</td>
</tr>
<tr>
<td>N₂</td>
<td>Packaging/dispense</td>
<td>↑</td>
</tr>
<tr>
<td>CO₂</td>
<td>Carbonation/dispense</td>
<td>↑</td>
</tr>
<tr>
<td>N₂</td>
<td>Inerting</td>
<td>↑</td>
</tr>
</tbody>
</table>

- **Meat processing**
- **Ready meals, packaged foods**
- **Beverages**
- **Drugs**
IM Customers: Technology & Research

- Electronic components and products
  - N\textsubscript{2} Stress test

- Opto / Photonics
  - N\textsubscript{2} Inerting
  - He Carrier and process

- Laboratories
  - N\textsubscript{2} Process
  - N\textsubscript{2} Calibration
  - Emission testing

Products | Use | Trend (2017)
## IM Customers: Professionals & Retail

### Products

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<tr>
<td>Welding</td>
<td>↑</td>
</tr>
<tr>
<td>Leaks test</td>
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<tr>
<td>Balloons</td>
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### Use

<table>
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<tr>
<td>O₂</td>
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<tr>
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<tr>
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### Products

- Plumbing, heating systems
- Air-conditioning
- Leisure
- Garage
IM Customers: What do they Want?

Operations

- Products
- Volume
- Distribution
- Gas expertise
- Local service and support

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

Multiple Sales Channels:
- Branch-based sales rep
- Telesales
- Catalog
- Mobile Solutions
- eBusiness
- Strategic accounts
- Construction specialists
- Specialty gas & bulk specialists
- Welding process specialists
- Safety specialists
- Healthcare and Life Sciences specialists

Industry Expertise:
- Application specialists
- Customers
- Customers
- Industry
- Industry
- Expertise
- Mobile Solutions

Retail stores
Distributors
Strategic accounts
Construction specialists
Specialty gas & bulk specialists
Welding process specialists
Healthcare and Life Sciences specialists
Sales Management: Airgas Organization Fitting All Customers Needs

1,100 Field Account Managers

150 Strategic Account Managers

340 Airgas Total Access™ Representatives

900 Airgas Branches

* 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

- e-commerce
- Telemarketing
- Retail Stores
- Call / Fax / Mail
- Regional Salesforce

**Customers choices**

~20 million transactions per month

- Pick-up
  - AL Retail Stores
  - Distributor
  - Vending Machine

- Direct Delivery
  - Liquid Bulk
  - Packaged Gas
  - Packaged Hardgoods

➤ Strong ERP and solid processes supporting daily management of complexity

21 March 2017

Multi-channel strategy

The world leader in gases, technologies and services for Industry and Health
Leveraging on a Strong Business Model to Create Value

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

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

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

- **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

Airgas
an Air Liquide company

~20 million transactions per month