**Electronics “3 Pager” Datasheet**

* **Corporate Overview** 
  + Who is Air Products?
    - Company founded in 1940
    - FY 2012 revenue – USD 9.6 billion
    - Ranked 265 on Fortune 500 list of US companies
    - +20,000 employees worldwide
    - Operations in more than 50 countries
    - A tradition of safety leadership for over 60 years
    - Serving customers in industrial, energy, technology and healthcare markets worldwide with a unique portfolio of gases, performance materials, and equipment and services
* **Divisional Overview** FY 12 Financials (charts and graphs)- use FY11 FPO until Rob has final numbers
  + Narrative
    - We offer a reliable and sustainable source of high purity electronics gases and materials together with services and related equipment to enable silicon and compound semiconductors and LCDs to power our digital world. Providing a competitive advantage, we are focused on delivering value, reliability, innovation and consistency to our global customers through an extensive specialty materials portfolio for each step in the integrated circuit (IC) manufacturing process: (add “IC wheel” here)
* **Market Segments** 
  + We serve customers across market segments, including:
    - Integrated circuits (IC)
    - Flat panel displays
* **Technical Achievements**
  + Global leader in bulk supply of specialty gases. Our GASGUARD® Bulk Specialty Gas System (BSGS) technology safely delivers our specialty materials, providing lower costs, higher product consistency and reliability, and improved safety performance.
  + Nitrogen pipelines:
    - Today, our pipelines travel through the leading science parks in China, Korea and Taiwan supplying next-generation fabs with the high volumes of nitrogen necessary for semiconductor and TFT-LCD production. Our pipeline system in Silicon Valley, California has been providing major semiconductor manufacturers with reliable high-volume nitrogen supplies since the 1970s.
    - Advanced Deposition – LTO-520 double patterning – allows industry to avoid lithography process changes to achieve next technology node (talk to Karwacki or Suresh)
    - PolyFlow – developed new slurry distribution equipment for semiconductor industry (talk to Walton or Kurt Mitchke)
    - CMP technology advances with our Tungsten and Copper slurries (talk to Saifi)
    - ACT Strippers – innovated around Hydroxylamine (talk to Laura Matz)

**Advanced Materials R&D programs:**

|  |  |
| --- | --- |
| **Dielectrics** | * Low temperature ALD SiO2 precursors * Low temperature ALD SiN precursors * Flowable oxide precursors (TSA) |
| **High-k Dielectrics** | * Strontium, titanium and barium precursors * HtB in Octane (HfO2) |
| **Metals** | * GST precursors for PRAM * Tantalum precursors (PDMAT, TBTDET and TaCl5) * Copper precursors (Cu KI5) * Ru, Co, La, Ni and Mn precursors * CpCu(Co2) |
| **Low-k interconnect dielectrics** | * PDEMS® 2.2 and 2.0 ILD film * BCHD * Film hardening and damage resistant porogens |
| **Material recovery** | * XeCovery® xenon recovery service * Helium recovery |
| **Etching gases** | * Xenon DiFluoride (XeF2) |
| **3D packaging** | * TSV liner films |

* Growing our Business (strategic achievements)
  + Recent investments in our R&D capabilities offer our customers a collaborative relationship for joint development of new materials (add the photos of the two labs in Carlsbad and the one lab in Allentown, with captions for each of the photos)
* Market Growth Opportunities
  + Our integrated CMP Solutions provide a full portfolio of offerings to leading edge IC manufacturers
    - DA NanoMaterials: A broad range of advanced CMP slurries through recent acquisition of 100% interest in DA NanoMaterials. Offers advanced performance and reduced cost of ownership
    - Post-CMP Cleans: Optimized for use in combination with our DA Nano CMP slurry formulations
    - Our FlowMaster™ CMP slurry delivery equipment offers significant benefits in product delivery, consistency and reliability.
* Plants/Locations
  + (insert R&D technology locations here? I don’t think we have a global map showing all of our locations – if we have something sketchy, I can redraw) how about slide #5 from the “Competitive Advantage” presentation? It has R&D and Applications Labs locations.
* Elements of Market Success – here is the stuff Dow has, we need to come up with our own…..**John C. suggested using some SGI language in this section.**
  + Industry leadership in the global supply of Bulk/Specialty Gases and Advanced Materials for the Semiconductor (IC) and Display segments and targeted high growth markets where we are advantaged.
  + Offering our customers a reliable and sustainable source of high-purity gases and chemicals.
  + Understanding industry trends and customer challenges and leading with competitive cost-of-ownership and technical solutions.
* Competitive Advantage (elements of profitability) – here is the stuff Dow has, we need to come up with our own…..
  + Expansion into faster-growing markets that value innovation
  + Continuous innovation to maintain leading-edge technologies for rapidly changing industry dynamics and customer needs
  + Geographic presence of physical and intellectual assets to enhance customer intimacy
  + Close and multifaceted collaboration with customers who value innovative, customized solutions and speed
  + Accelerated investments to maximize new opportunities and customer growth
  + Strong intellectual property to provide the next generation of solutions
  + Opportunistic acquisitions to supplement organic growth and broden technology platforms
  + A portion of Dow’s equity earnings from Dow Corning corporation, a 50:50 joint venture

**Some other ideas we may want to incorporate?**

**Sustainability:** We are proud to be a Responsible Care® company. We take our commitment to sustainability and preserving the environment seriously. Our policies meet or exceed governmental environmental protection laws in the countries where we operate.

**Consistent and reliable delivery of products:** Ensuring the safety and security of global materials supply to our customers is very important. We have a strong focus on next generation supply chain principles that make sure we provide reliable and continuous flow of products to our customers.

**At Air Products, it’s all about the chemistry**…….talk to us, we’ll listen.