





COMPANY INTRODUCTION



AXS International, Inc. The only American research & development manufacturing company specializing in the production and marketing of the Aluminum Network Mesh (AXS). AXS products have many universal applications that are proven to protect humans, assets and the environment from explosions, fires, oil spills and the Green House Effect. AXS International's corporate office is located in the City of Dearborn, Michigan USA.

AXS RAW MATERIAL

The AXS raw material has gone through over 40 years of research and development to ensure the effectiveness of our special and tailor made applications. The AXS raw material is made of a special Aluminum Alloy that includes copper, silicon, and various other materials and plastics with foil thickness varying from 0.05 to 0.2 mm.





AXS PRODUCTS

AXS Rolls

AXS Rolls are obtained by cutting and expanding the AXS raw material. The AXS machine AXSR produces a three-dimensional mesh with a honeycomb structure. AXS Rolls can be produced with various shapes, widths and dimensions depending on the applications.

AXS Rolls are used for the protection of large storage tanks and

protecting from oil spills.





AXS PRODUCTS

AXS Cylinders

AXS Cylinders are manufactured by continuously processing the AXS ROLLS through a second machine AXSC, short strips are cut, wound up cylindrically and twisted at both ends obtaining a sturdy cylindrical body with homogeneous distribution.

AXS Cylinders are used in Gas Stations Venting Pipes, Gas Stations Pump Chambers, propane bottles, and most other common applications.



AXS PRODUCTION

AXSR

The AXSR forms a three-dimensional mesh, by cutting, stretching and twisting. The foil is fed to a cutting unit controlled by a self-regulating brake system for a precise tension. A sensor compensates and regulates the foil speed between the cutting unit and the Stretcher for an optimum stretching result.

Each AXSR can produce 7.2 million AXS liters per year based on

20 hours per day and 6 days per week.



AXS PRODUCTION

AXSC

The AXS Cylinders are produced by feeding the AXS Rolls into a separate machine AXSC. The main part of the AXSC is the rotating inner drum, fitted with two blades, which cuts the AXS mesh into strips. The strips are converted into cylinders between the rotating inner drum and the fixed outer drum.

TWO AXSCs can produce 7.2 million AXS Liters per year based on 20 hours per day and 6 days per week.





VALIDATIONS/APPROVALS

- ✓ NFPA National Fire Protection Association
- **✓ US ARMY**
- **✓ US NAVY**
- ✓ Federal Aviation Administration (FAA)
- ✓ Aero Safe (European Commission Program For Small Plane Safety)
- ✓ Fauske & Associates, LLC (World Leader in Nuclear & Chemical Process Safety)
- ✓ TÜV Austria (World Wide Certification Authority)
- ✓ Magna (Steyr-Daimler-Puch)





WORLDWIDE REFERENCES

ESSO TABRIZ TAGHTIR SHE KALA NAFT ULBI Taktar Engineering Company Bandar Emam Petrochemical Company TOYOTA TESTING NAPCO AVANTI AES Refinery ARECMA AUDI TESTING TOYOTA TESTING FK12 KOMET NGEN REFINERY **TEKNOTAR** SAIRAN INDUSTRY KEY SPAN ENERGY US ARMY PARS PAMCHAL CHEMICAL Wild Thing

Petrobras





ENVIROMENTAL BENEFITS

- ✓ AXS Reduces Hydrocarbon Emissions by 30 to 60%.
- ✓ AXS does not alter the physiochemical properties of any fuel
- ✓ AXS reduces Carbon Footprint
- ✓ AXS has no Life Limit
- ✓ AXS is re-useable
- ✓ AXS is recyclable







The problem

Most recent American and Canadian studies have concluded that each gasoline station can lose around 5,000 liters every year through the emission of gasoline vapor through the venting pipes into the atmosphere.

Imagine 900,000,000 liters are evaporated over 180,000 gasoline stations in the US and Canada.

According to a HARC study, the oil and condensate storage tanks lose

480,000 tons of vapor per year in EAST TEXAS **ALONE** causing billions of dollars in economical Loss AND huge impact on the OZONE level and the environment.

Environment Accounts and Statistics Analytical and Technical Paper Series

Gasoline Evaporative Losses from Retail Gasoline Outlets Across Canada, 2009



Environment Accounts and Statistics Division

Telephone: (613) 951-0297













The solution

AXS PIPES reduce the loss of vapor by approximately 60% and saves the gas station industry millions of dollars per year by simply replacing the customary venting pipes with AXS Pipes.

AXS PIPES are filled with AXS Cylinders. The AXS Cylinders Remain cooler than the surrounding environment and they capture the escaping vapor by condensing it and

returning it to the storage tank in liquid form while keeping safe the pressurized tanks.





The results of TWO YEAR Field Study

Exxon Gas station located at 13081 Merriman Road in Livonia Michigan Annual sales ONE million gallons.

Amazing Savings between 2017 and 2016 of 1644/5096=32.60% Amazing Savings between 2018 and 2017 of 2496/3452=72.60%



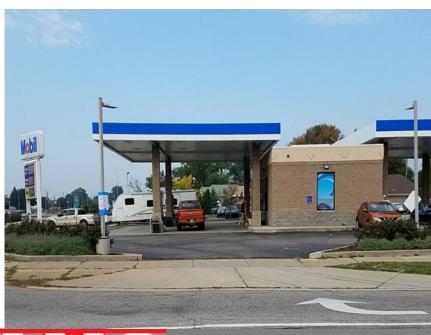




The results of TWO YEAR Field Study

Mobil Gas station located at 31420 Schoolcraft in Livonia Michigan Annual sales ONE million gallons.

Amazing Savings between 2017 and 2016 of 1263/4450=28.38% Amazing Savings between 2018 and 2017 of 2109/3187=66.18%



	Month	2016	2017	2018
	January	-315	-345	-65
	February	-257	-369	-62
	March	-682	-351	-99
	April	-336	-443	-44
	May	-300	-244	-231
	June	-519	-205	-10
	July	-380	-572	-220
	August	-424	-53	-83
	September	-587	-430	-65
	October	-54	-149	-101
	November	-331	-3	-35
	December	-365	-26	-63
	Totals	-4450	-3187	-1078
	Difference		+1263	+2109





Two year savings



Exxon Gas Station 1644+2496 4140 Gallons @ \$2.00 \$8,280.00



Mobil Gas Station 1263+2109 3372 Gallons @ \$2.00 \$6,744.00





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