

# INDIANA HORTICULTURAL CONGRESS and TRADE SHOW



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29 January 2007

# Evidence of Change

- Packaging trends in the retail beverage market
- Packaging trends for the wine market within and outside of North America
- Wine sales growth in North America
- The future

Convenient packaging.

Orange juice



Milk



Coffee



Water



Children's drinks



What's the Point?

# Lessons Learned

- Consumers accept new packaging when it delivers convenience or value
- New packaging can grow the segment by increasing the base

# Australia: The Results

- Bag-in-Box has 53% of all domestic sales
- Per capita consumption increased from less than 8 liters in the early '70's to over 18 liters today
- Extensive sales of Bag-in-Box brands in the UK, Scandinavia and the U.S

# The Trend in North America

- Premium wine versus the traditional 5-liter offering
- Extension of existing bottle brands
- New price points offering value to consumers but not extreme value

# The Consumer Perspective

- Convenience
  - 3 liters of wine in less space than 4 bottles
  - No cork screw needed
  - A glass at a time
- Value
  - The last glass is as fresh as the first glass
- Quality
  - Taste the wines

# Wine Market Council

*“Freshness and keepability are issues for a majority of marginal wine drinkers that tend to deter them from developing the habit of having an open bottle of wine on hand for by-the-glass enjoyment at home.”*

# The Wine Industry Perspective

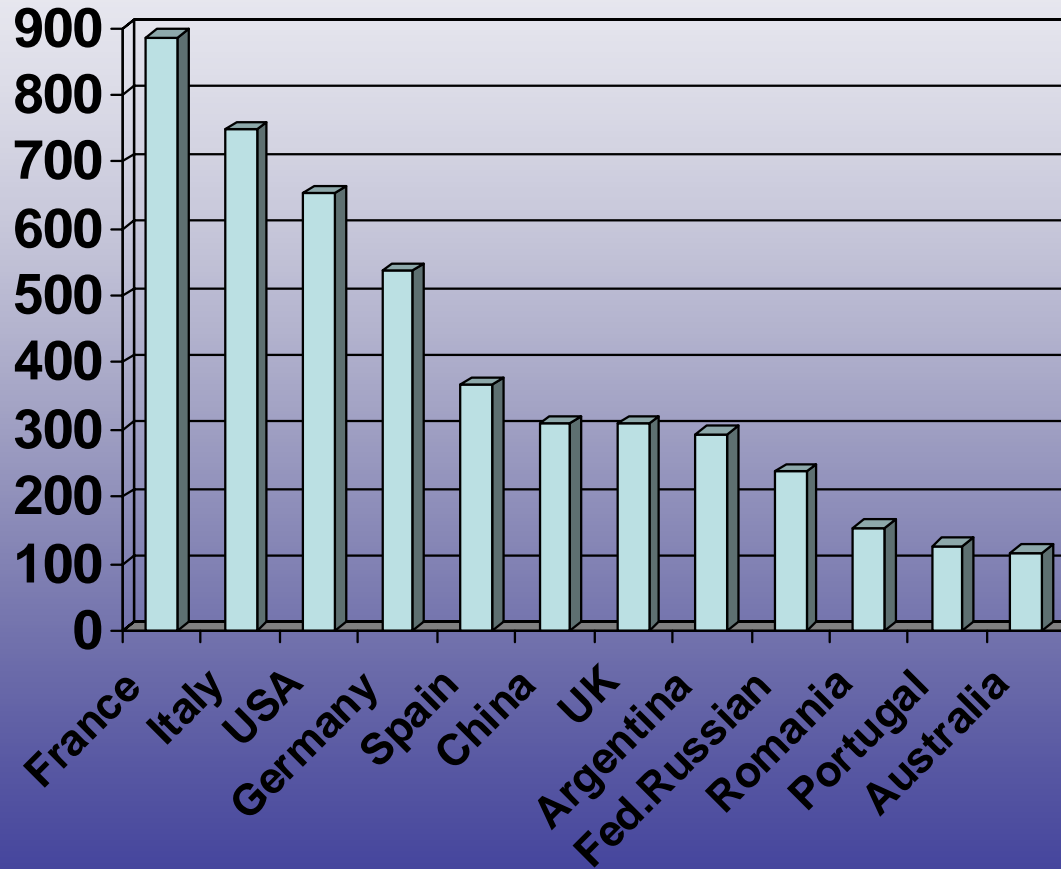
- Increased consumption among marginal wine drinkers
- A package that positions wine as a viable alternative to beer and other adult beverages

# GLOBAL CONSUMPTION SNAPSHOTS

# Top 12 Consumers

Gallons, million

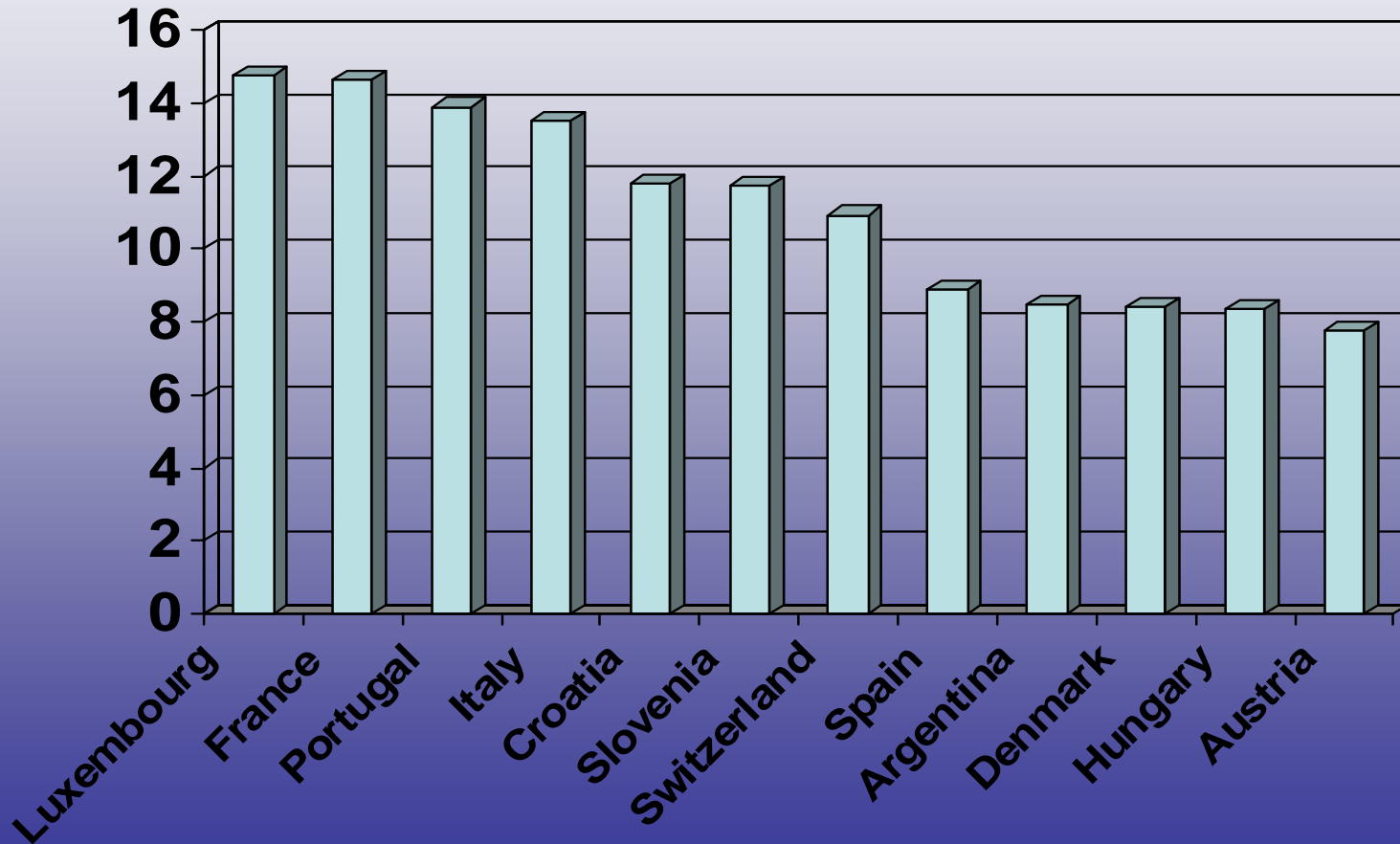
2005



# Top 12 Consumers (per capita)

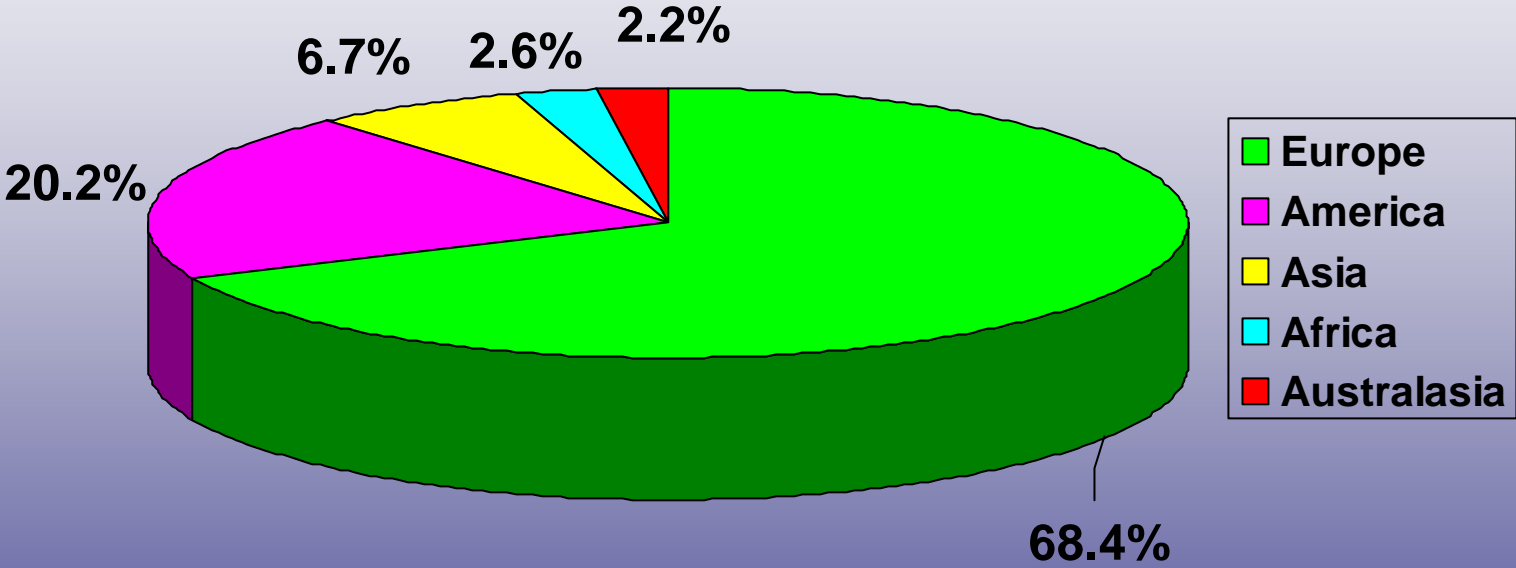
Gallons per capita / yr:

2005



# Global Share of Consumption

2005



# SNAPSHOT OF WINE and BIB

	Global Wine		
	2004	2005	Change
Global Production (Gal)	6.6b	7.4b	7.7%
Global Consumption (Gal)	6.0b	6.0b	2.5%
BIB Volume (Gal)	0.3b	0.321b	6.6%
BIB Market Share	4.9%	5.1%	4.0%

# GLOBAL CONSUMPTION

## Consumption by region:

### USA

10 liters/consumer/annum.  
**20% BIB**                      **Growing**

### Latin America

Up to 35 liters/consumer/annum.  
**1% BIB**                              **Starting**

### UK

20 liters/consumer/annum.  
**9% BIB**                              **Growing**

### Australia

20 liters/consumer/annum.  
**53% BIB**                              **Steady**

### Scandinavia

22 liters/consumer/annum.  
**48% BIB**                              **Steady**

### New Zealand

18 liters/consumer/annum.  
**25% BIB**                              **Growing**

### Continental Europe

Up to 50 liters/consumer/annum.  
**<5% BIB**                              **Growing**

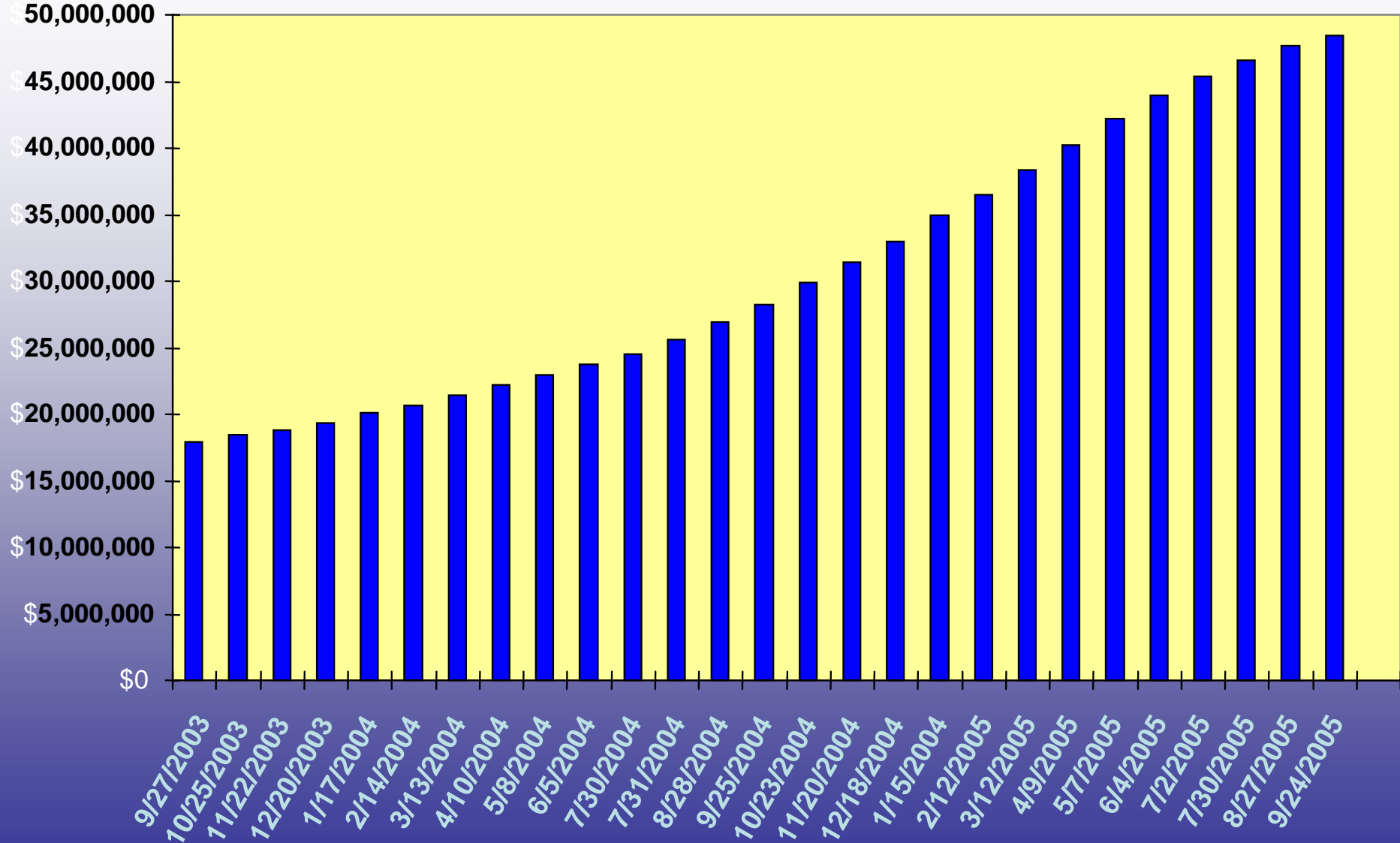
"3L cask wines growing faster  
than any other wine package segment"

*Source: ACNielsen "What's Hot" by the  
numbers*

The numbers are in...

# North American 3 L Cask - 52 week rolling \$

FROM SEPTEMBER 2003 TO SEPTEMBER 2005



# 2005 - US Trend A.C. Nielsen

**3 Liter "Cask" Wine Fastest Growing Segment in the US at 47.40%**

	\$ Volume, 52 wks ending 7/30/05	\$ Volume % Change vs. Year Ago	Equalized Unit (a) Volume 52 Wks Ending 7/30/05	Equalized Unit (a) Volume % Change vs. Year Ago
Total Table Wine	\$3,890,686,430.00	8.80%	63,775,926	3.50%
Total Boxed Table Wine	\$231,000,872.00	12.00%	11,436,020	3.70%
5L	\$199,083,397.00	5.40%	10,525,342	1.00%
3L	\$30,681,268.00	77.00%	890,904	47.40%
3L less Than \$12	\$18,060,006.00	24.80%	651,128	19.20%
3L \$12 - \$15.99	\$3,925,152.00	161.20%	82,784	155.30%
3L \$16+	\$8,696,255.00	536.70%	156,991	515.00%

(a): One Equalized Unit is equal to 9 liters

As the chart above shows, while the entire table wine category is enjoying strong growth, dollar volume of three-liter cask wines is growing nearly nine times faster than the overall category. The highest-priced segment of 3L cask wines - those selling for \$16 or more per unit - is growing nearly 61 times faster.

# 2006 Package Growth Led by 3L Premium Cask; Significantly by the Dominant/Traditional 750ml Package



TI Table Wine	\$ Share	% Chg - Current Year \$ vs YAG			
750 ML	65.7%			+10.5%	
1.5 L	22.9		+3.0%		
5 L	4.4		+3.1%		
3 L Glass	2.6	-2.2%			
4 L	1.7		+0.6%		
187 ML	1.3			+13.2%	
3 L Prem Cask	0.7				+44.2%
375 ML	0.1			+13.4%	

Source: Nielsen, Total U.S. Grocery & Drug, Liquor Mkt  
Aggregate + Select Liquor Retailers, 52 weeks ending 12/16/06

# What are we doing to improve our products for wine?



**FlexTap**

Continually improving key features through:

- New Innovations in processes and materials
- Customer Feedback
- Internal monitoring of processes

**Scholle**  
liquid packaging solutions

## Multi-Layer Film: DuraShield34ES

<input type="checkbox"/> Ind. Food	<input type="checkbox"/> Bulk	<input type="checkbox"/> Food Service	<input type="checkbox"/> Dairy Aseptic	<input type="checkbox"/> Egg ESL
<input type="checkbox"/> Tomato	<input checked="" type="checkbox"/> Wine	<input type="checkbox"/> Chemicals	<input type="checkbox"/> Dairy ESL	<input type="checkbox"/> Egg Frozen
<input type="checkbox"/> Citrus	<input type="checkbox"/> Syrup	<input type="checkbox"/> Oil	<input type="checkbox"/> Dairy Ref.	<input type="checkbox"/> Water

DuraShield34ES is a clear, three-layer, high barrier laminate film developed to provide strong seals, extraordinary bag toughness and superior flex crack resistance in ambient applications.

*DuraShield34ES film complies with USFDA food contact regulations.*

Performance properties	Test reference	Typical value	Performance properties	Test reference	Typical value
GAUGE	ASTM D-374	3.4 mils / 85 µ	OXYGEN TRANSMISSION	ASTM D-3985	0.025 cc/100 in <sup>2</sup> /day 0.387 cc/ m <sup>2</sup> /day
TENSILE STRENGTH	ASTM D-882	MD: 8,000 g TD: 9,000 g	MOISTURE TRANSMISSION	ASTM F-1249	0.3 g/100 in <sup>2</sup> /day 4.6 g/ m <sup>2</sup> /day
ELONGATION AT BREAK	ASTM D-882	MD: 125% TD: 80%	OPTICAL DENSITY	Tobias densitometer	N/A
PUNCTURE RESISTANCE	ASTM D-3420	1,600 g	KINETIC COF	ASTM D-1894	0.120

\* The information listed above is supplied in good faith and does not constitute a specification or warranty of any kind, either expressed or implied, including those of merchantability and fitness for purpose. Customers should determine the suitability of these materials for their specific use based upon their own internal criteria. Tests on individual samples may vary from those shown.

Technical Data Sheet: 121  
Release date: 3 May 2004

**Scholle - Supporting environmental responsibility**

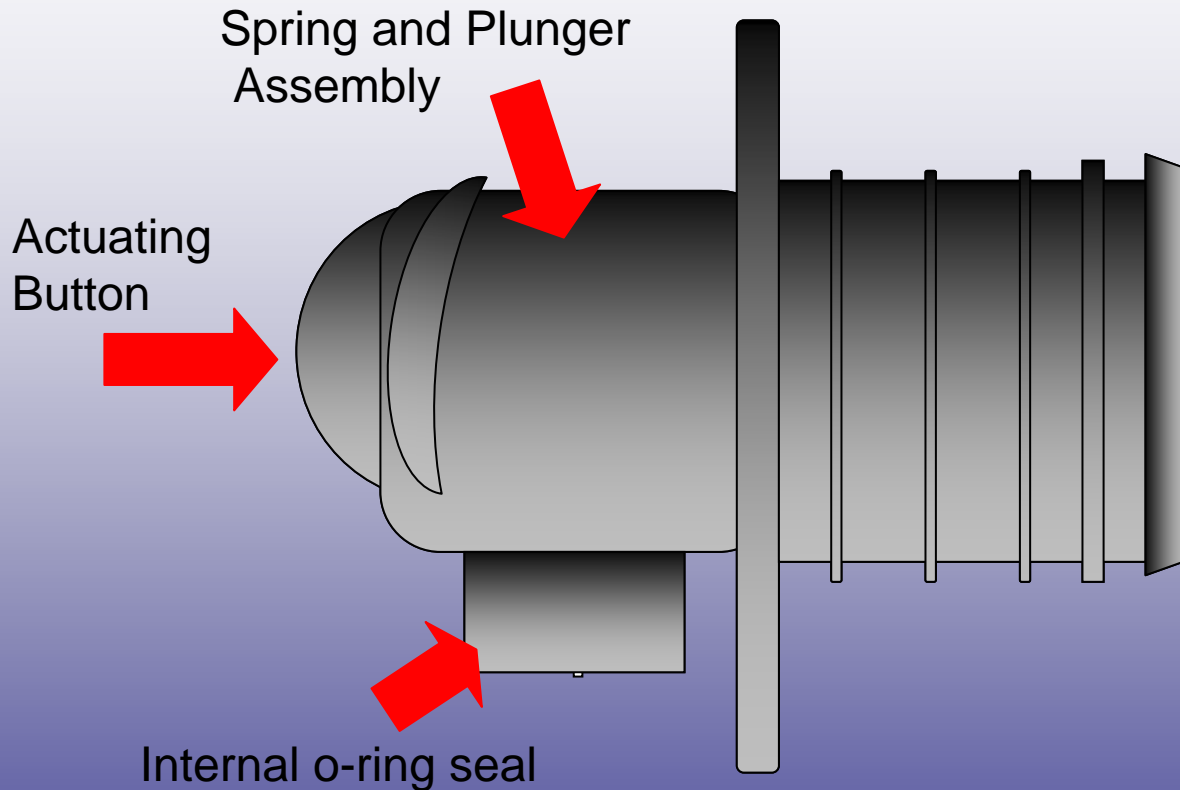
## Durashield 34 and Durashield 34ES

# Continuous Improvement: Closure



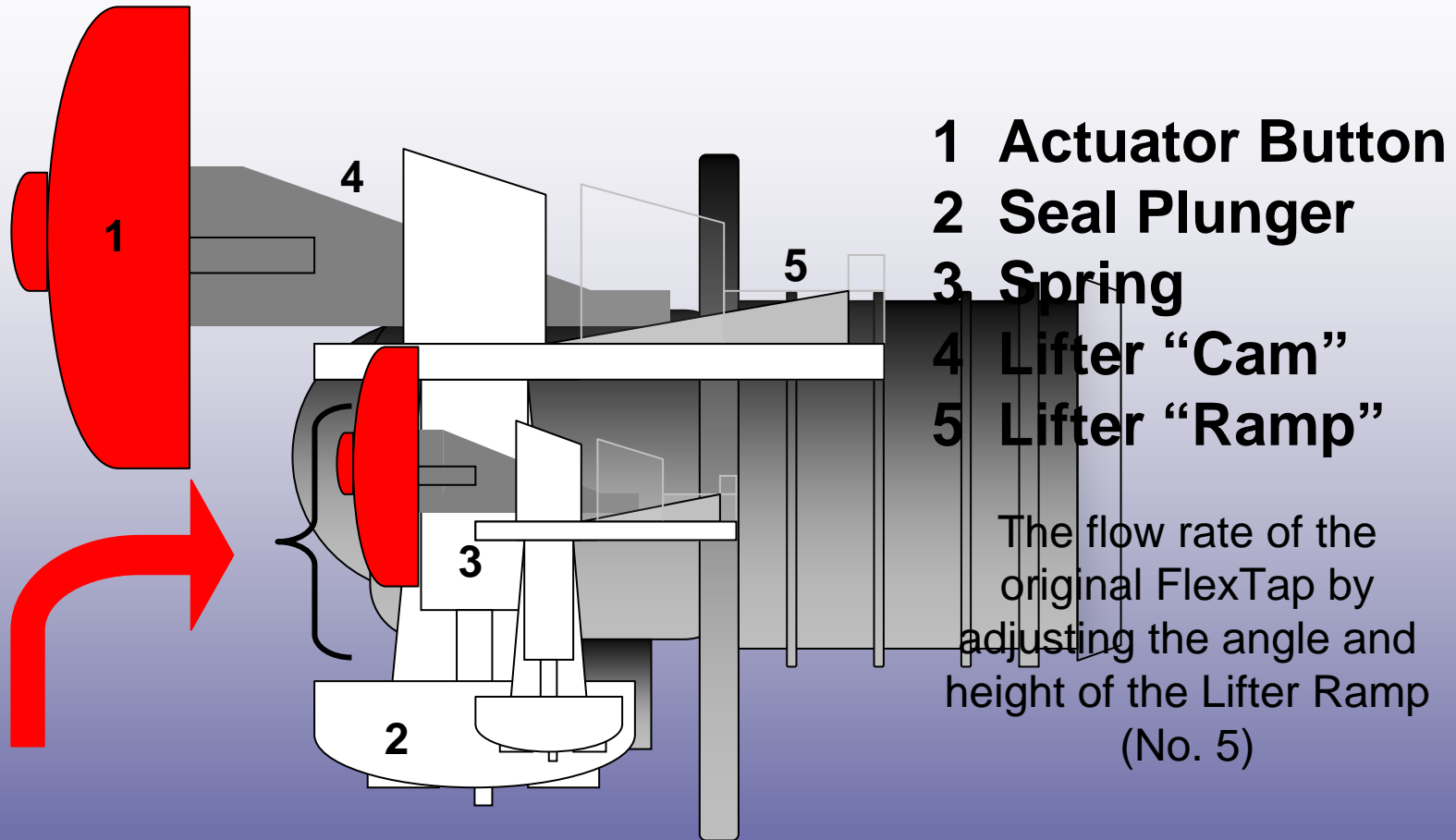
- Improvement of product flow rate
- Improvement of oxygen barrier properties of the actuating button
- Improvement of the oxygen barrier properties of the tap body

# TAP (Detail)



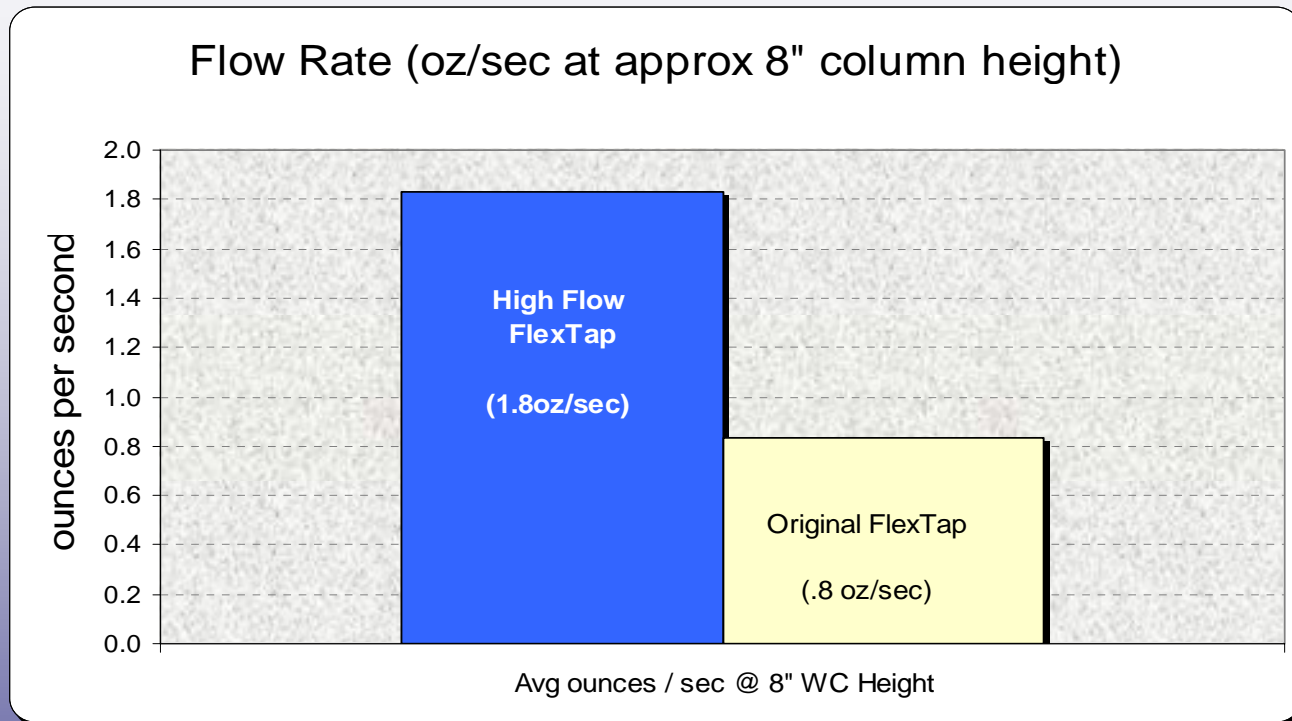
The FlexTap was the first front push tap created for bag-in-box wine dispensing. The unique, ergonomic design fits naturally in the hand, and in independent consumer studies was found to be more comfortable / intuitive to use than other tap types.

# FlexTap (Details)



A slight lengthening of the plunger stalk was also incorporated into the spring assembly to increase "tap closed" preload pressure on the o-ring seal (*further enhancing integrity of valve seal*).

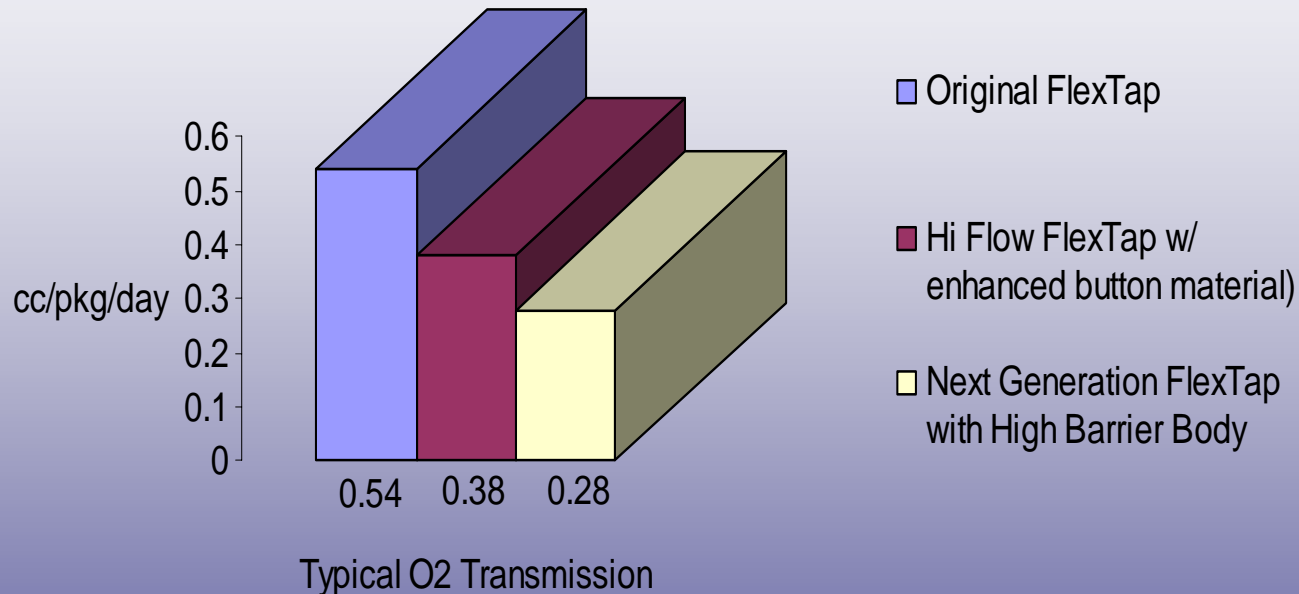
# Improved flow rate over original fitment



Ramp modifications more than doubled the average FlexTap Flow rate

*(From .8oz/sec @ 8" WC height to 1.8oz/sec @ 8" WC height)*

# FlexTap Continuous Improvement: Oxygen Barrier

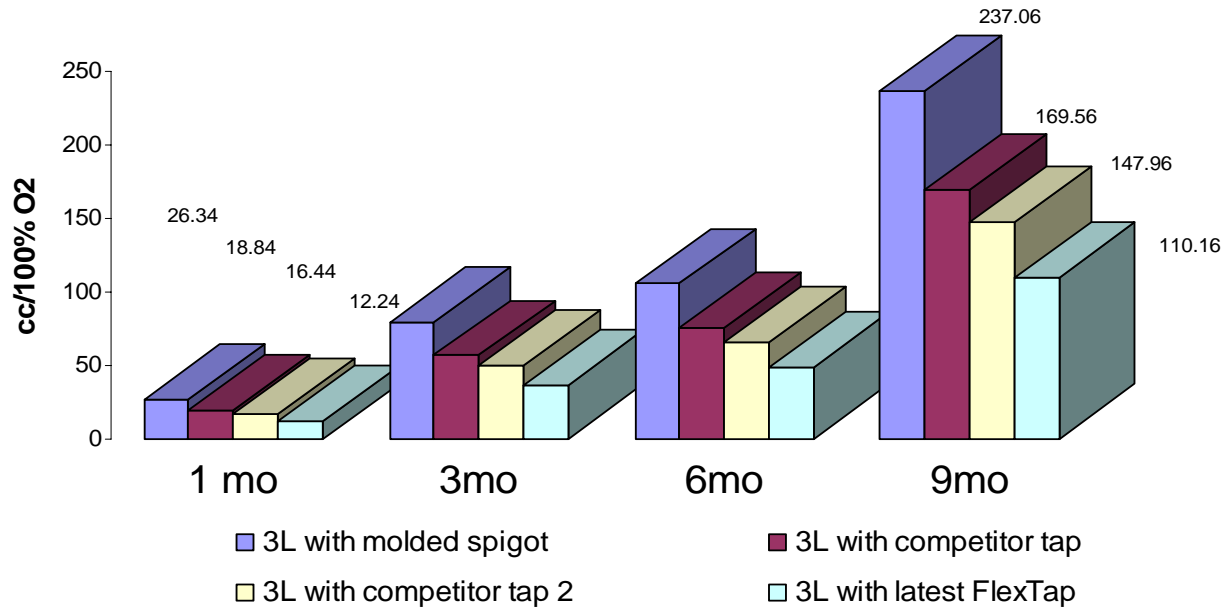


Improvement to the barrier properties of the FlexTap have been ongoing: The most recent Updates to the FlexTap (**High Barrier Body Material**) will bring the barrier of the tap down to The low O<sub>2</sub> transmission rates of taps made completely of rigid material.

Intuitiveness / ease of use, highest level of aesthetic appeal, and the O<sub>2</sub> barrier properties of Fitments of 100% rigid material. **Tamper Evident**. The best of all worlds, and still improving.

# Oxygen Ingress Over Time

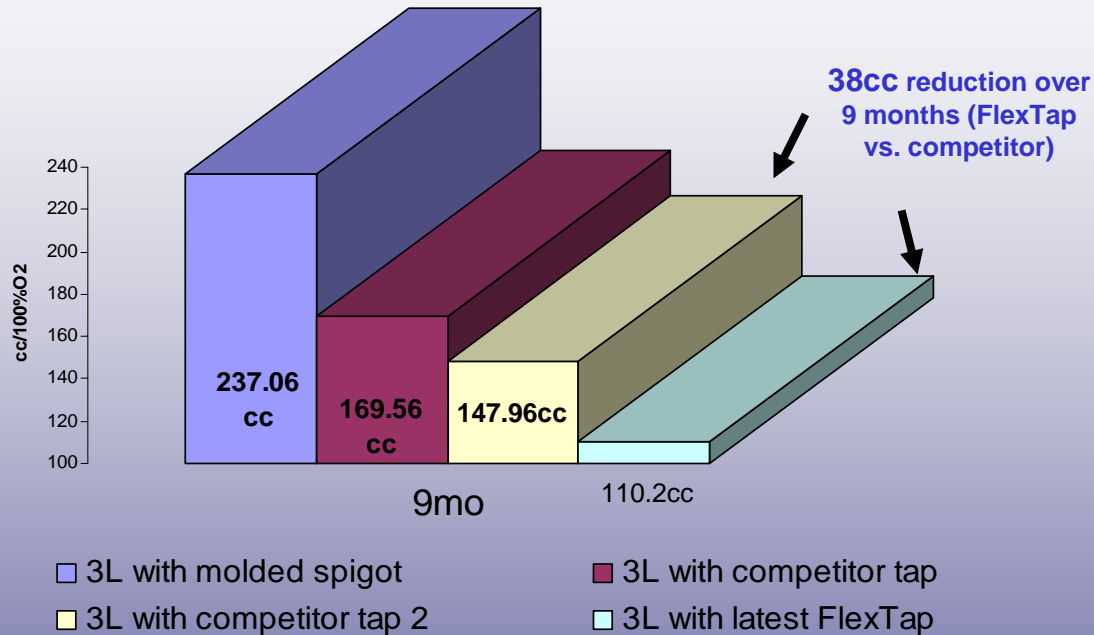
Estimated Package O<sub>2</sub> Ingress over 9 months: Latest version FlexTap vs. 1 piece molded spigot and competitor's taps



**Film Transmission Rate: .05cc/day @ 100% O<sub>2</sub> / 254mm x 254mm sample:** The area of a typical 3L bag(263mm x 314mm= 825.8cm) Multiplied by 2 (represents both sides of the bag) equals the base package

Transmission rate without fitment. Fitment Transmission rates (Spigot: .75cc/day, Competitor 1: .50cc/day, Competitor 2, .40cc/day, FlexTap: .28cc/day) were then added to the calculated bag transmission rate to complete the formula.

# Oxygen Ingress Over Time (Small reductions add up)



A 38 cc ingress reduction over 9 months might not seem significant, but if that difference is divided by the average daily O<sub>2</sub> Transmission rate of a FlexTap 3L bag (.408cc/day), an estimated 93 day's worth of O<sub>2</sub> ingress is saved

# Progressive Filling Solutions



## Web-Fed Inline Automatic

### Semi-Automatic



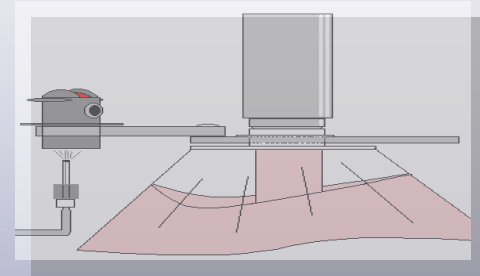
### Web-Fed Rotary Automatic



# Nitrogen “Puff” Tap Cavity Gassing System

- **Nitrogen flow controlled by the fill valve position sensor** (Fill valve in filling position – gas on, filling tap cavity. Fill valve in ready position – gas off).
- **Nitrogen flows under the uncapped tap to flush out resident air in the tap’s internal cavity.**
- **System is easily integrated into the existing nitrogen “puff” feature\*\* of the filling valve**

*\*\* N<sub>2</sub> puff feature on the filling valve itself purges the vacuum valve and “puffs” a small amount of nitrogen into the bag spout neck prior to bag recap.*



**Nitrogen Tap Gassing System**

- **Product is visible in the filled package**

- **Entrained air in the package is clearly visible**



- **User can see the product in the filled package**



# North American Customer Base

