

Techniques for Training: Educating Field Personnel on the Handling of SF₆



Phil Marshall February 4, 2009



Training Areas

- GHG Impact Awareness
- Safety
- Gas Management





GHG Impact Awareness Training

- SF₆ GHG potential is not known by everyone
- Providing information is key to change actions
- Field people will do the right thing given the proper tools
 - Knowledge
 - Proper equipment
 - Proper procedures



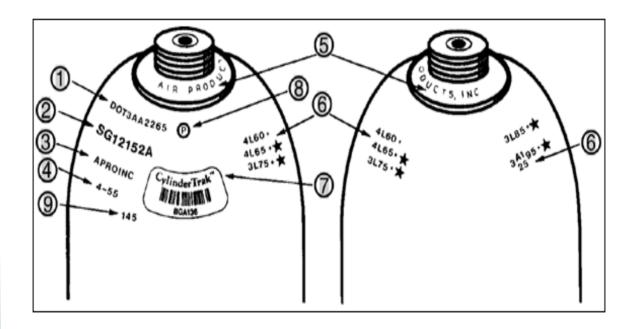
Safety Training

- Compressed Gas Cylinders
- Cylinder Identification Markings
- Inspecting for Damage
- Securing Cylinders
- Transporting Cylinders



Cylinder Identification Markings

Cylinder Identification







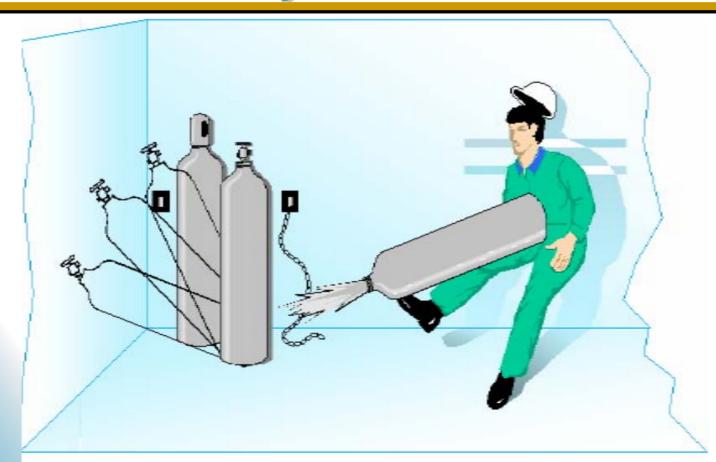
Cylinder Damage

- General Corrosion
- Isolated Pits
- Line Corrosion
- Dents
- Bulges
- Arc or Torch Burns
- Fire Damage
- Cuts, Digs or Gouges
- Lamination Separation





Don't Turn a Cylinder Into a Rocket



Secure & cap cylinders when not in use



Transporting Cylinders

- Loading
- Securing
- Regulations
- DOT
- HazMat Requirements



Tracking the Gas

- New Gas
- Reclaimed Gas
- Recycled Gas
- Refillable Valves
- RPV (Airgas)





New Gas From Supplier

	J	F	M	Α	M	J	J	Α	S	0	N	D	TOTAL	TOTAL \$
Alamitos													0	-
Barre													0	-
Big Creek													0	-
Center													0	-
Del Amo													0	-
Devers													0	-
El Dorado													0	-
Rialto - Recycled													0	\$ -
TOTALS	C		0	0 0		0	0	0	0	0	0	0	0	-



Reclaimed Gas

Appendix E Station Recycling Log

Date	Location	Equipment	Net Weight	% Purity	Cylinder #



Residual Gas

SF6 Gas Residual Log Location:

Date:

Bar Code #	Gross	Tare	Net
Total			

Subtract cylinder tare weight from the gross weight to get the net weight

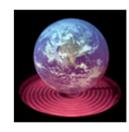


Benefits of Comprehensive Training

Improved worker safety



Lower emission rate



More efficient cylinder utilization ~
 lower costs



Questions



