

LOCKOUT STATION FOR TRAINING PURPOSES

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LOCKOUT TRAINING – THE PROBLEM

- From the point of view of an operator
 - Lockout activities are not frequent, mostly during regular maintenance
 - Classroom training does not give the feel for the job
 - Lack of confidence and concerns about complexity of the procedure.
- From the point of view of the organization
 - The lockout procedure is complex and the potential for error is real as demonstrated by some near miss events.
 - Time to execute lockout variable from person to person, mostly related to knowledge of the field

Understanding lockout procedures is an **essential requirement** in our work. It is the basis of work on a piece of equipment that is to be carried out safely. It is critical that the **competency** of our operators with regards to our lockout procedure is properly **developed and maintained**.

TRAINING IN LOCKOUT PROCEDURES

- **Simulation of lockout of equipment during operation by using a training lockout station**
 - Simulation tool for locking out equipment as similar as possible to the real thing;
 - Trainee can carry out lockout procedures autonomously without compromising operations or equipment;
 - Allows the trainer to verify the mastery obtained;
 - The lockout station used for training purposes is identical in form to our current lockout stations.



TWO STEP TRAINING :

- **Classroom training**
- **Hands-on training**

CLASSROOM TRAINING

Knowledge

- ❖ Detailed explanation of the lockout procedure from the Windsor plant Health and Safety Manual;
- ❖ Articles in the laws relating to lockout procedures.



Awareness

Outline the importance of the lockout procedure by making trainees aware of past incidents:

- ❖ At our plant;
- ❖ In our corporation;
- ❖ Or in the industry.

HANDS-ON TRAINING

Imitation locks will be used to simulate the lockout procedure. Thanks to them, there will be no need to interrupt the equipment or operations.

Lock tag to simulate electrician's lock for disconnect switches inside the electrical rooms

Action tag to simulate start test on a motor

Lock tag to simulate equipment lockout lock

Lock tag to simulate Employee's personal lock

Action tag to simulate opening of a valve

Action tag to simulate closing of a valve



LOCKOUT SIMULATION ACTIVITY

- The employee reads and understands the lockout sheet;
- Takes the required imitation locks;
- Gathers his PPE;
- Contacts those persons needed for the lockout procedure (e.g. electrician, millwright...).

FILTRE D'EAU CHAUDE RÉCUPÉRÉE 851-321 Page 1 de 1

O	D	C	Description	E	D	N
1		X	851-321 FILTRE D'EAU CHAUDE RÉCUPÉRÉE (SALLE 851-9997) 851-815-03 1 B			
2	X	X	VANNE D'EAU TIEDE D'ALIMENTATION DU SYSTÈME DE RÉCUPÉRATION DE CHALEUR, SITUÉE AU SOUS-SOL AU-DESSUS DE L'UNITÉ DE TRANSFERT D'HUILE 851-281 (COLONNE S-14) 851-64-0651			O
3	X	X	VANNE D'ALIMENTATION D'EAU DU FILTRE, VENANT DES POMPES 318-319 851-64-0656 (SITUÉE PLANCHER D'OPÉRATION CÔTÉ ARRIÈRE ENTRE LE FILTRE 851-321 ET LE MOTEUR 851-153, 4E SECTION SÈCHOIRS)			F
4	X	X	VANNE PRINCIPALE D'ALIMENTATION D'EAU DU FILTRE VENANT DES UNITÉS DE RÉCUPÉRATION DE CHALEUR (851-64-0623)			O
5	X	X	VANNE DE DÉRIVATION DU SYSTÈME DE RÉCUPÉRATION DE CHALEUR 851-64-0684			F
6	X	X	VANNE DE LA DOUCHE DE NETTOYAGE 851-64-0010			O
7	X	X	LE DRAIN DU FILTRE SITUÉ SOUS LE FILTRE 851-64-0631			F
8			««CONSIGNES PARTICULIÈRES»»			
9			ESSAYER DE DÉMARRER 851-321 FILTRE D'EAU CHAUDE RÉCUPÉRÉE AVEC LE BOUTON À-COUPS LOCAL			

Consignes particulières :
 SI ON CADENASSE LE FILTRE EN OPÉRATION, FERMER L'ALIMENTATION DU FILTRE ET OUVRIR LA VANNE DE DÉRIVATION AU DRAIN (SALLE DES POMPES À VIDE).
 VÉRIFIER LA PRESSION DE LA DOUCHE DE NETTOYAGE (35 PSI). LA VANNE DU SYSTÈME À VIDE (3) EST NORMALEMENT FERMÉE À MOINS QUE L'ON VEUILLE RÉCUPÉRER L'EAU DES POMPES À VIDE.

O : Ouvrez	F : Fermez	C : Cadenassez	E : Exécutez	D : Décadenassez
N : Position normale d'opération. O = Ouvert F = Fermé				
No de boîte(s) :		BT :		
Nbrs. Cadenas :	7	No série :	Nbrs. Chaînes :	
Date du cadennasse :		Cadenassé par :		

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LOCKING OUT IN THE ELECTRICAL MCC ROOMS

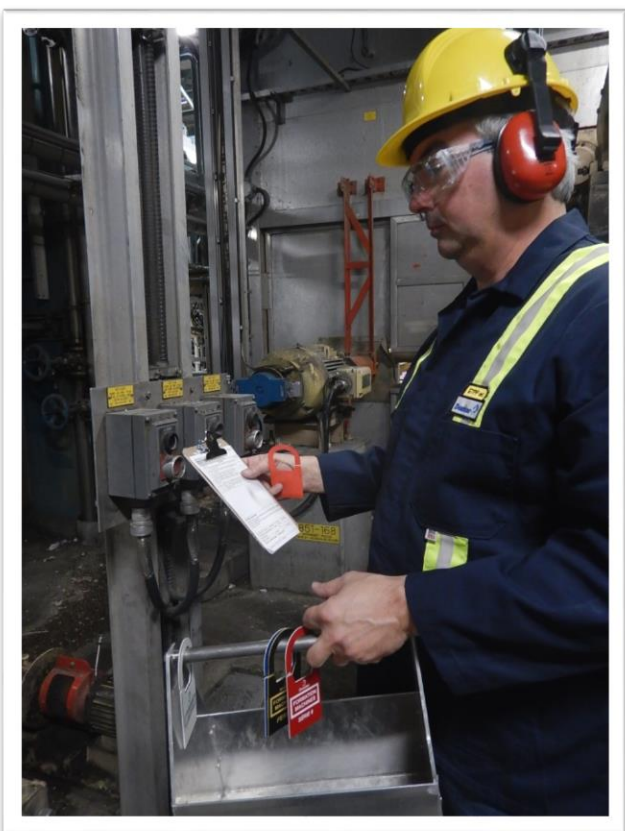
The employee and the electrician simulate the lockout of the appropriate disconnect switch in the electrical room using two tags:

- **An electrical lock tag and an equipment lock tag.**



SIMULATING A START TEST

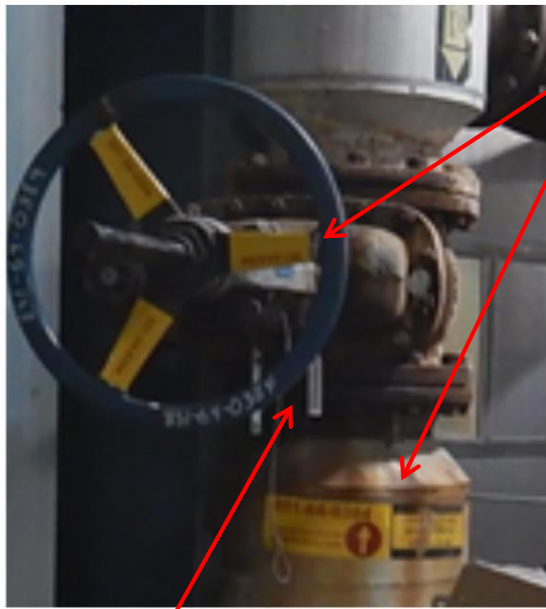
Find the **local jog button** of the equipment



Simulate start test

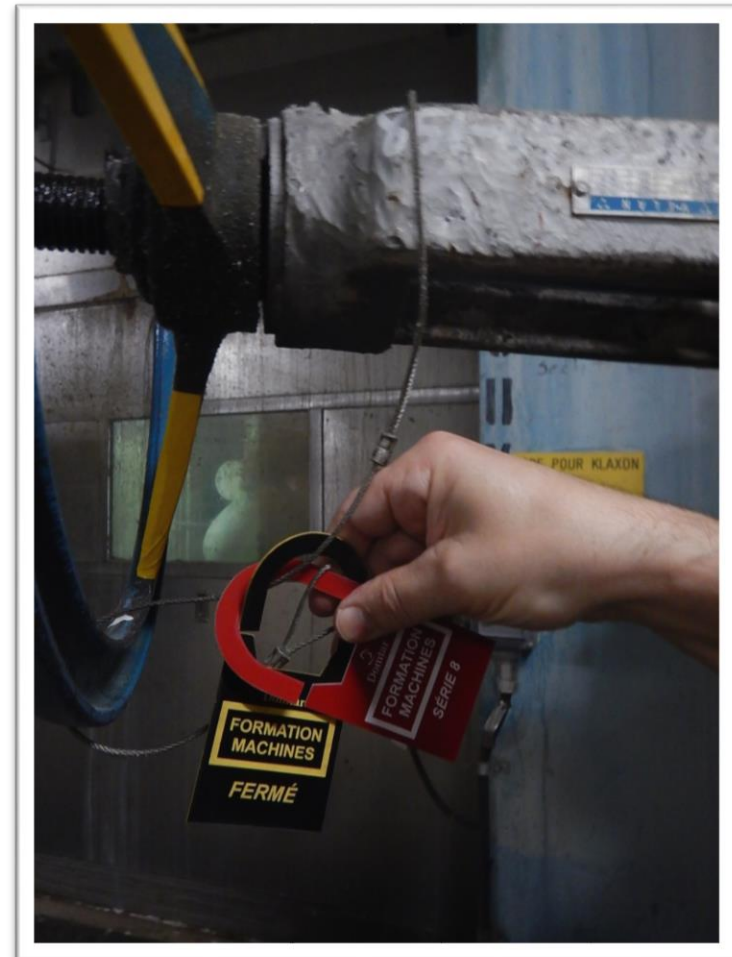
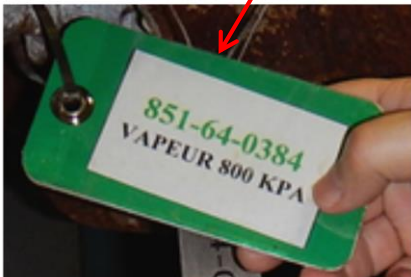


SIMULATING CLOSING AND LOCKING OUT OF A VALVE USING TWO TAGS



Find the valve to be locked out

The valve tag indicates the content of the line and its normal mode of operation (open or closed)

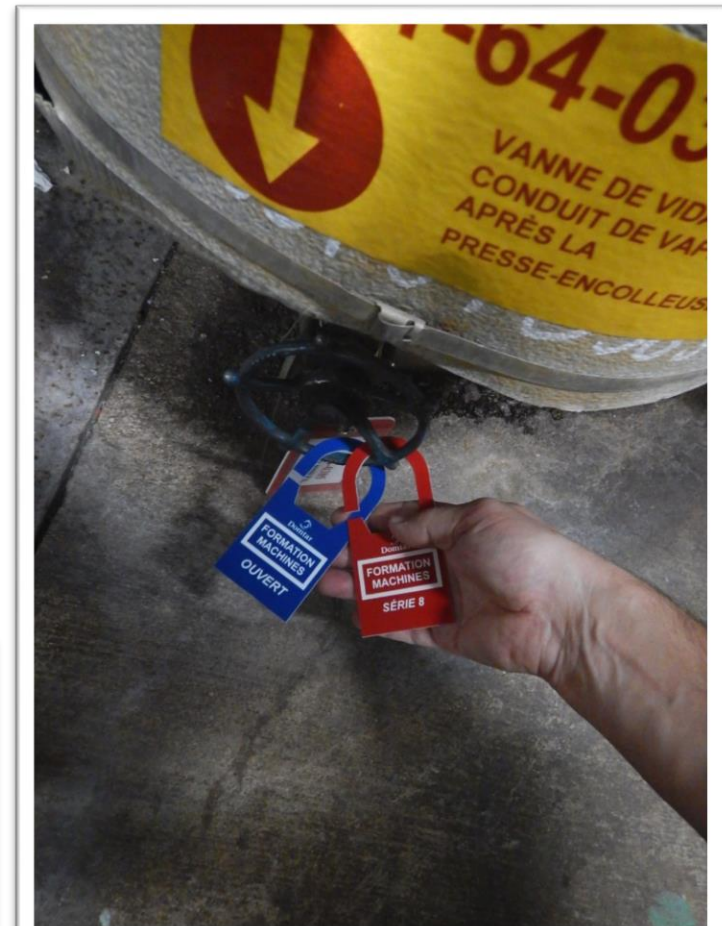


SIMULATING OPENING AND LOCKING OUT OF A DRAIN WITH TWO TAGS



Identify the drain to be locked out

The tag records the content of the line and its normal mode of operation



THE OPERATOR COMPLETES HIS LOCKOUT ON THE TRAINING LOCKOUT STATION

- The operator completes the lockout sheet;
- He ensures that everything is in compliance (checklist, signature, date);
- He inserts the key of the imitation equipment locks into the proper lockout box;
- He slides the lockout sheet in the slot in the lockout box;
- And locks the lockout box using the department's imitation lock.



CONCLUSION

- **Implementation of the lockout station for training purposes has been appreciated by the operators trained in this way to date.**
- **They have gained in both competency and confidence. In addition, the quality of lockout execution has increased significantly.**
- **The groups have acquired skills that exceed the initial objectives.**