

POMORSKI FAKULTET
SVEUČILIŠTE U RIJECI

Prezentacija gradiva

Tema: Načela procjene rizika radnog
postupka
(Tema: Oru-Tg-29)

Kolegij: Organizacija rada i upravljanje na brodu
Smjer studija: Elektroničke i informatičke tehnologije u pomorstvu
Studenti: Marina Sarić, Damir Horvat

Uvod

Ključni pojmovi:

Opasnost (*hazard*)- izvor potencijalne opasnosti ili situacije u kojoj do nje može doći

Rizik- sastoji se od dva elementa

1. Vjerojatnost opasnosti
2. Posljedice opasnosti

Principi procjene rizika

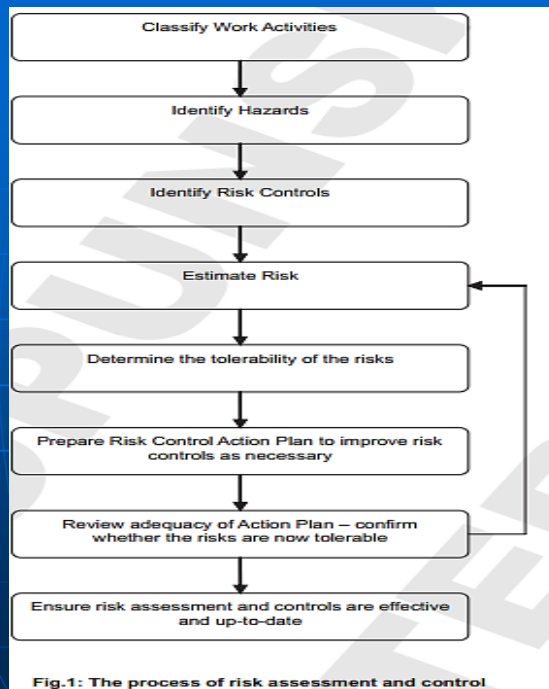
- Temeljito ispitivanje može li operacija ili radnja prouzročiti štetu
- Na temelju toga se donose odluke da li je prevencija dovoljno uzeta da bi se spriječila šteta
- Cilj je spriječavanje štete na brodu na minimum
- TLV (Threshold Limit Value)

Sigurnost na radnom mjestu



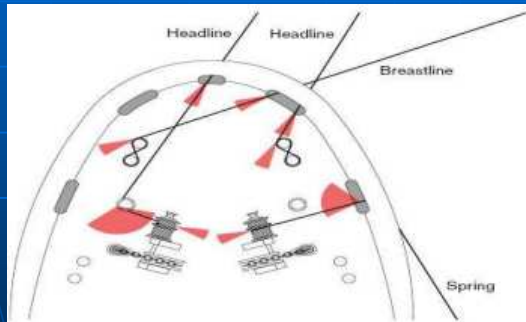
Elementi procjene rizika

- Podijeliti poslove
- Otkriti opasnosti i osoblje pod rizikom
- Procijeniti rizik
- Odrediti toleranciju rizika
- Pripremiti kontrolni plan
- Rezimirati adekvatnost plana
- Osigurati da su procjene rizika i kontrole efektivne i ažurirane



Otkrivanje opasnosti

- 1. Da li postoji izvor ozljeđivanja?
- 2. Tko može biti ozlijeđen?
- 3. Kako može doći do ozljede?



- Primjer opasnosti: mehanički, električki, radijacijski, vatrom i eksplozijom, kemijski, biološki, psihički

Opasnosti



Sustav kontrole rizika

- Upotrebom PTW (Permit-to-Work)

SAFE WORK PERMIT Work Order No. _____

Persons issuing or receiving plant Safe Work Permits must understand the procedures for issuing and receiving permits and must fully realize their responsibilities in this phase of plant operations.

Date Issued: _____ Time Issued: _____

Department: _____ Building: _____

Description of Work To Be Done: _____

Department or Contractor Doing Work: _____

Person in Charge of Work: _____

Notes: In the following, check Yes, No, or Not Applicable (N/A)

1. Have permits materials (haz. gas) been removed from the equipment?	YES	NO	N/A
2. Has the equipment been cleaned by:			
(a) Steam?			
(b) Flushing with water?			
(c) inert gas purge?			
(d) Air ventilation?			
3. Has the necessary equipment been adequately protected by:			
(a) Blanking/Blinding off?			
(b) Double Block and Bleed?			
(c) Disconnecting?			
(d) Draining and venting?			
4. Have all electrical switches been locked out?			
5. Is there an adequate supply of fresh air?			
6. Is it permissible to use:			
(a) Open flame/welding equipment?			
(b) Electrical equipment?			
(c) Gasoline, propane or diesel driven equipment?			
7. Can sparks ignite material around or below the tank?			
8. What fire protection is necessary?			
(a) Fire extinguisher: Dry Chem <input type="checkbox"/> CO ₂ <input type="checkbox"/> H ₂ O <input type="checkbox"/>			
(b) Firewatch:			
(c) Other (Specify):			
9. Have precautions been taken against falls/slips?			
10. Do atmospheric conditions and wind direction permit safe work near vents?			
11. Does the work involve entry?			
12. Has the confined space or vessel been prepared for safe entry?			
13. Is a gas test necessary?			

Frequency: Per Shift ☐ Per Hour ☐ Continuous ☐ Type of Gas Testing Equipment: MS-241 ☐ Gas Tester ☐

Time	Explosive Gas %	O ₂ %	CO ppm	CO ₂ %	H ₂ S ppm	NH ₃ ppm	SO ₂ ppm	Other (Specify)	Gas Tester's Signature

14. Identify materials normally in equipment:

(a) Toler: _____ (b) Flammable: _____ (c) Corrosive: _____ (d) Other (Specify): _____

15. What personal protective equipment is required? (Specify)

(a) Type of eye protection: _____ (b) Type of protective clothing: _____ (c) Type of respiratory protection: _____ (d) Type of ear protection: _____ Other (Specify): _____

Other hazards or special instructions: _____

THE PERMIT RECEIVER ACKNOWLEDGES THAT HE WILL INFORM ALL PERSONNEL WORKING UNDER THE AUTHORITY OF THIS PERMIT OF ALL INFORMATION CONTAINED HEREIN.

Permit issued by: _____ Job Title: _____ Time: _____

Permit received by: _____ Job Title: _____ Time: _____

Work Completed by: _____ Job Title: _____ Time: _____

Prepared Completed by: _____ Job Title: _____ Time: _____

The following person(s) acknowledges that this job is in progress during shift change and has checked both the permit and the nature of the job and understands the procedures to be followed:

Supervisor Signature: _____ Time: _____ Shift: _____

Supervisor Signature: _____ Time: _____ Shift: _____

DISPLAY AT WORKPLACE - MAINTENANCE COPY: _____ Permit NO: _____

Zaključak

- Uvijek učiniti procjenu rizika tijekom sastavljanja plana rada a svakako prije početka rada.
- Sigurnost članova radnog tima uvijek je na prvom mjestu.

