



산업 안전 I

Industrial Safety I

학습 목표 산업 안전표지 익히기 To master industrial safety signs and symbols,
 제조업 관련 안전 수칙 익히기 To master manufacturing industrial safety regulations
 어휘 산업 안전표지 Industrial safety signs and symbols,
 제조업 관련 안전 수칙 Manufacturing industrial safety regulations
 정보·문화 직업병 Occupational diseases

어휘 1 산업 안전표지 Industrial safety signs and symbols



출입금지
No entry



보행금지
No pedestrians



금연
No smoking



화기금지
No open fire



인화성 물질 경고
Warning: flammable material



산화성 물질 경고
Warning: oxidizing



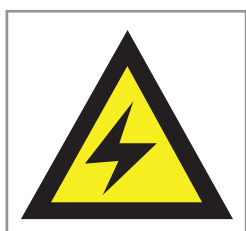
폭발성 물질 경고
Warning: explosive



급성독 물질 경고
Warning: acute toxic



방사선 물질 경고
Warning: radioactive



고압 전기 경고
Warning: high-tension electricity



매달린 물체 경고
Warning: hanging objects



낙하물 경고
Warning: falling objects



고온 경고
Warning: high temperature



저온 경고
Warning: low temperature



몸균형 상실 경고
Warning: loss of body balance



위험 장소 경고
Warning: hazardous site



어휘 2

제조업 관련 안전 수칙 Manufacturing industrial safety regulations

끼임! 재해 Jamming disaster

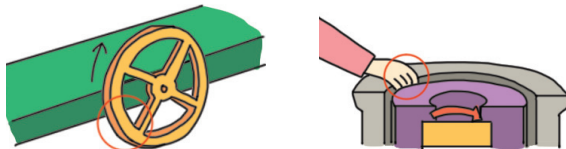
(1) 직선운동 중인 설비, 기계 사이에 끼임

Accident from being jammed between equipment or linear traveling machines



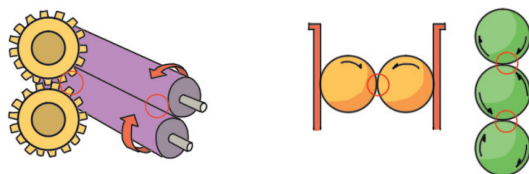
(2) 회전부와 고정물체 사이에 끼임

Accident from being jammed between rotating part and fixed object



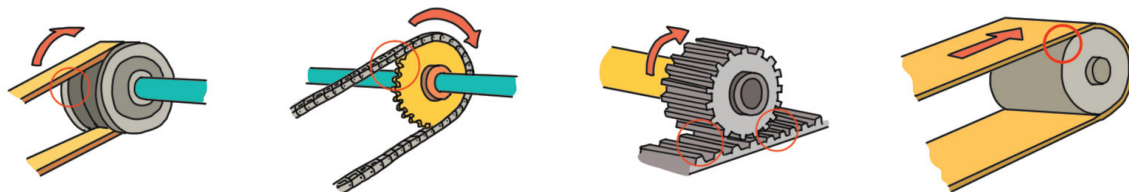
(3) 두 회전체의 물림점에 끼임

Accident from being jammed inconnection point between two rotating parts



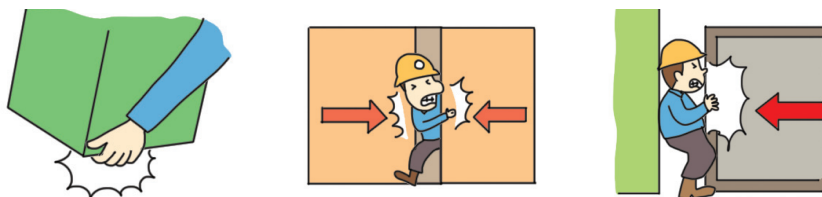
(4) 회전체 및 돌기부에 감김

Accident from being wound at rotating part or protruding section



(5) 인력 운반, 취급 중인 물체에 끼임

Accident from manually lifting heavy object, or by objects while handing them





넘어짐 재해

Falling disaster

(1) 계단, 사다리에서 넘어짐

Overturning on stairs or ladder



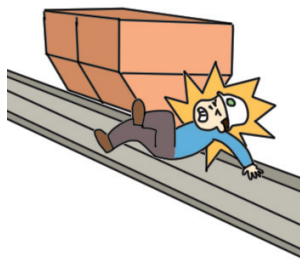
(2) 바닥에서 미끄러짐, 바닥의 돌출물 등에 걸려 넘어짐

Falling down on slippery floors, or stumbling over protrusion



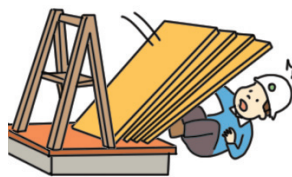
(3) 운송수단, 설비에서 넘어짐

Overturning on vehicle or facility



(4) 물체의 넘어짐

Overturning of object



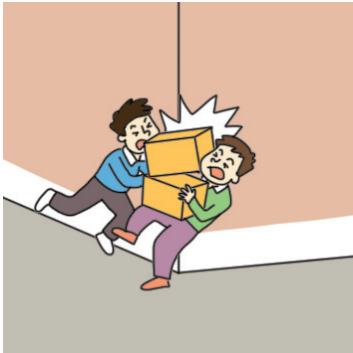


부딪힘 재해

Crash disaster

(1) 사람에 의한 부딪힘

Collision of worker by worker



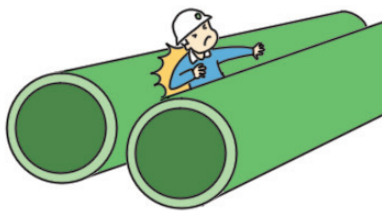
(2) 고속 회전체 등에 부딪힘

Collision with high-speed rotating part



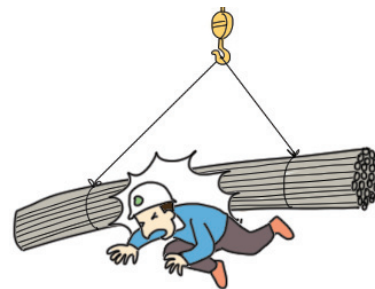
(3) 바닥에서 구르는 물체에 부딪힘

Collision with object rotating on the ground



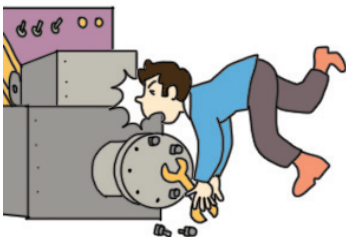
(4) 흔들리는 물체에 부딪힘

Collision with moving objects



(5) 취급사용 물체에 부딪힘

Collision with object under use



(6) 차량 등과의 부딪힘

Collision with vehicle





맞음 재해
Hitting disaster

(1) 중량물 운반 시 맞음

Hit by a heavy object dropped while carrying



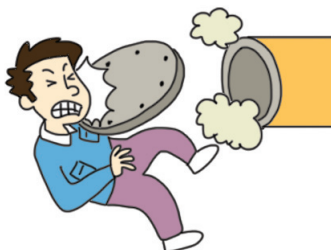
(2) 연삭기, 선반, 원심기 가공물에 맞음

Shot by fragment from a spinning grinder, lathe or centrifuge



(3) 내압을 받는 용기부품에 맞음

Hit by a component shot from a high-pressure container



(4) 보관된 부품에 맞음

Hit by an object dropped from storage



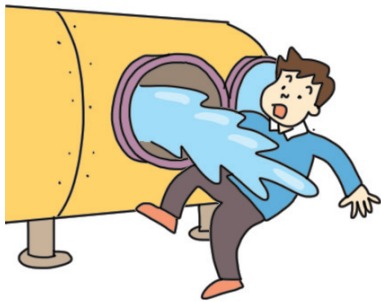


기타 재해

Other disaster

(1) 고온, 고압 물이 비산

Flying water at high temperature and pressure



(2) 교류아크용접 작업 중 감전

Electric shock during AC arc welding operation



(3) 지붕수리 중 떨어짐

Falling from the roof while repairing the roof



(4) 저장탱크 주유 중 화재

Fire while fueling oil into the storage tank



(5) 에어조끼에 화상

Burn by air jacket



(6) 연료통 절단 중 폭발

Explosion while cutting fuel tank



<http://www.slideshare.net/iglassbox/safety-education-for-migrant-workers-in-koreaeng> 참고함.

**직업병이란?** What is an occupational disease?

직업성 질환은 근로자의 질병이 “직업에 의하여 발생한 것”을 말합니다. 직업성 질환은 작업에서 노출되는 유해 인자에 의해 발생하는 전형적인 직업병과 비직업적 요인에 의해서도 발생되지만 직업적 요인에 의해 악화되는 작업 관련성 질환으로 구분됩니다.

An occupational disease is defined as the disease of a worker that takes place during and because of his/her occupation. Occupational diseases are classified into two categories: A typical occupational disease is caused by being exposed to harmful factors in the occupation; and occupation-relevant diseases are comprised of non-occupational factors, which are further worsened by occupational factors.

**소음성 난청** Noise-induced hearing loss

소음에 계속 노출되는 경우 영구적으로 청력이 손실되는 소음성 난청이 발생할 수도 있습니다. 또한 이명, 스트레스 증가, 면역체계 변화 등이 발생하여 작업 능률이 저하되거나 작업 중 부주의에 의한 사고를 유발할 수도 있습니다.

Continuous exposure to noise may cause reduction of work efficiency and accidents due to loss of concentration on work because of adverse effects to physiological systems such as noise-induced hearing loss from irrevocable (permanent) hearing loss, ear noise, increase of stress, or change in the immune system.

**방사선에 의한 건강 장애** Radiation and its health effect

방사선에는 발생 에너지가 물체를 이온화시킬 수 있는 전리 방사선과 에너지 수준은 낮으나 지속적인 반복적인 노출에 의해 건강상 나쁜 영향을 발생할 수 있는 비전리 방사선이 있습니다. 전리 방사선 노출에 의한 장애로는 백혈병, 갑상선암, 유방암, 폐암, 뼈암, 피부암 등이 있습니다.

Radiation is classified into two categories; ionized radiation with energy enough to ionize objects exposed to generate energy, and non-ionized radiation with relatively low energy but may give adverse effects to health upon consistent and repetitive exposure.

Adverse effects to health resulting from exposure to ionized radiation reported so far include leukemia, thyroid cancer, breast cancer, lung cancer, bone marrow cancer, and skin cancer.

