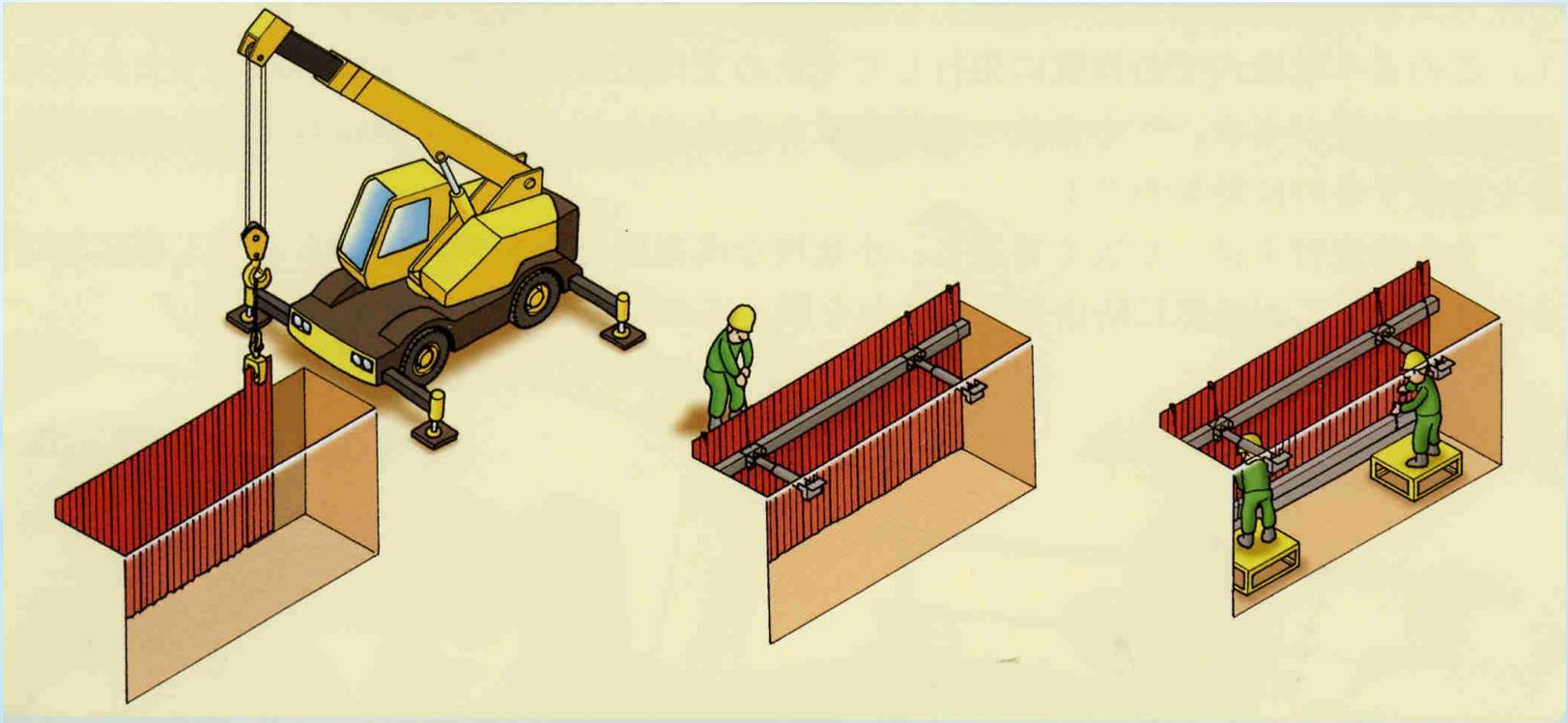


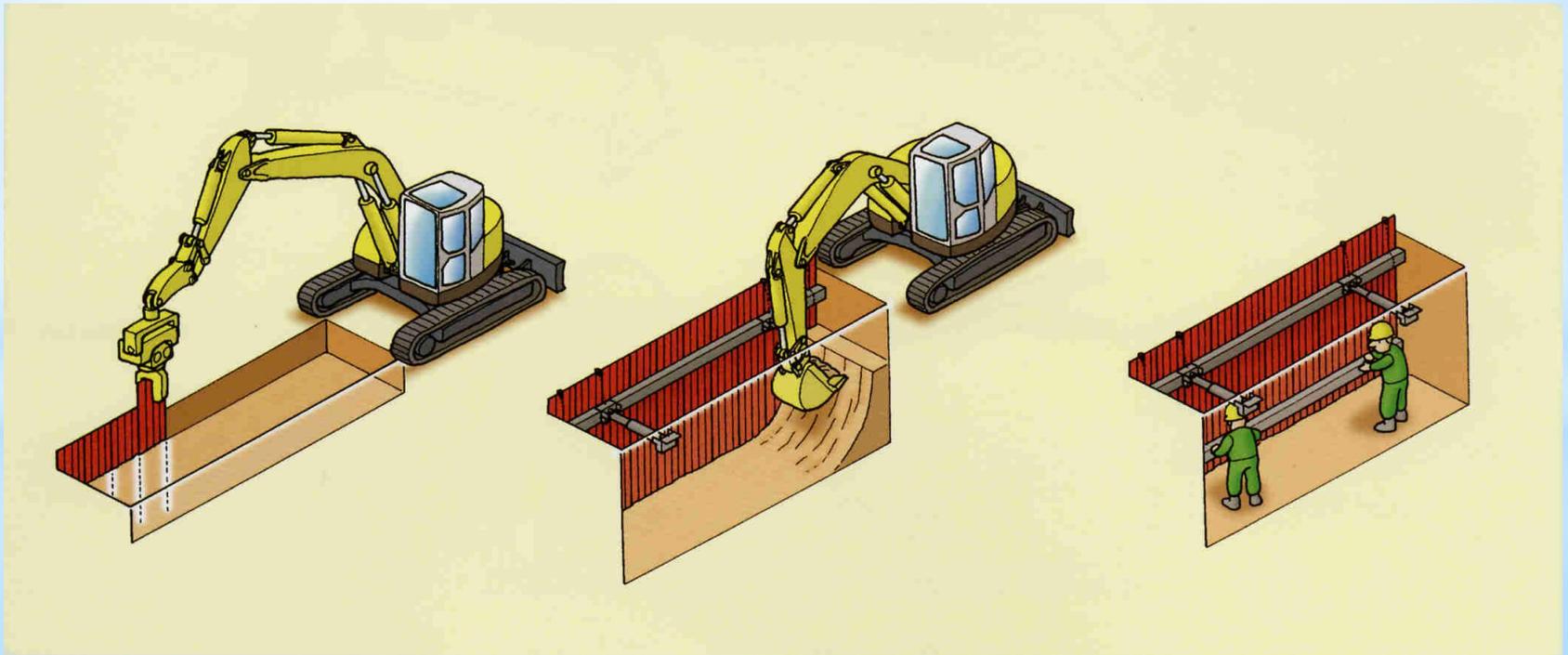
(1) Driving lightweight steel sheet piles into existing trench

This method is based on the assumption that the trench stands independently. After a trench is dug to a certain depth, the lightweight steel sheet piles are assembled and driven to a specified depth. The uppermost walers and struts are installed using a special tool from ground level. A special working stand is used for the installation of walers and struts at the next and lower levels.



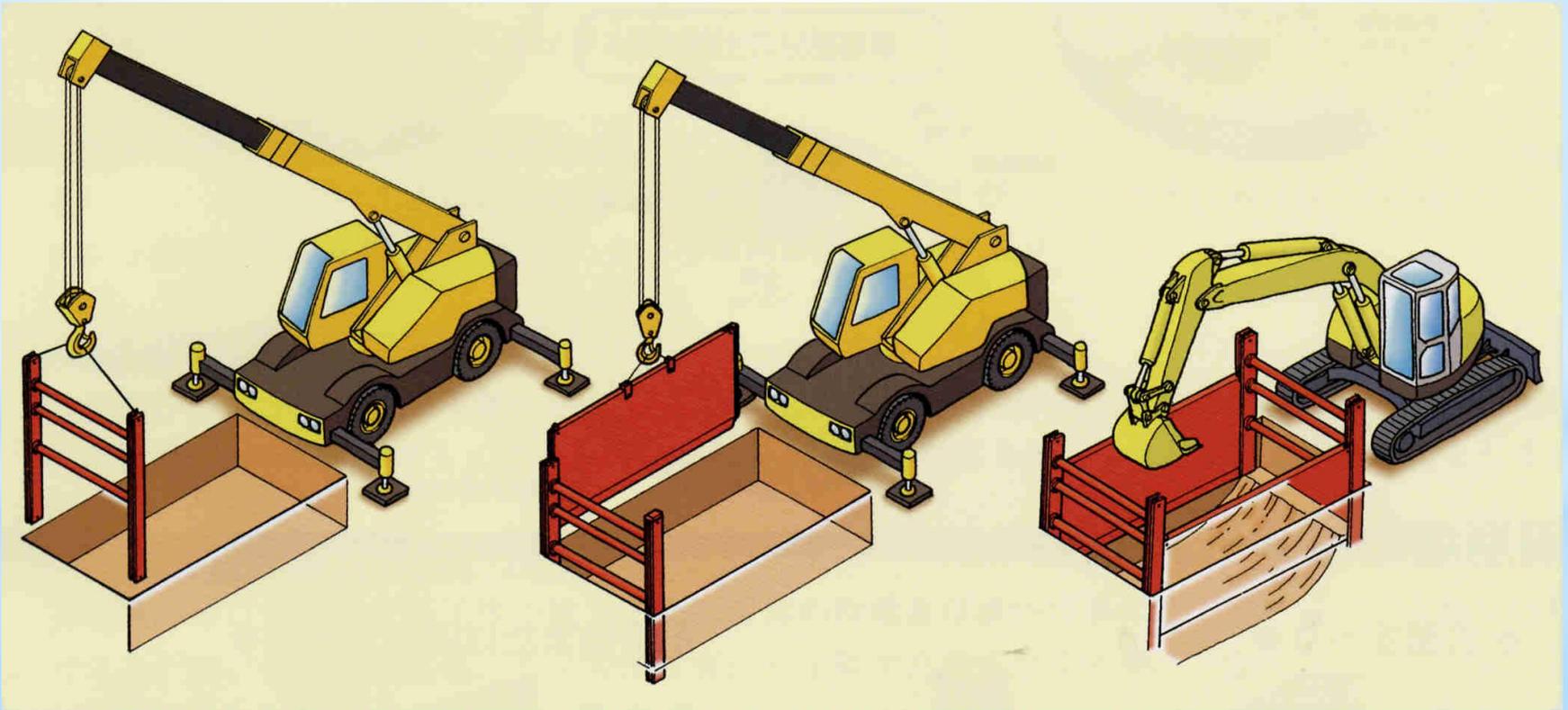
(2) Driving lightweight steel sheet piles prior to digging trench

This method is frequently used for digging of soft ground including sand or water. After a lightweight steel sheet pile wall is driven in with a pile driver according to the length of the trench, the ground is dug to a depth where the first walers can be installed. Then the uppermost walers and struts are installed using a special tool from ground level. When walers and struts are installed at the next and lower levels, a special working stand is used if necessary.



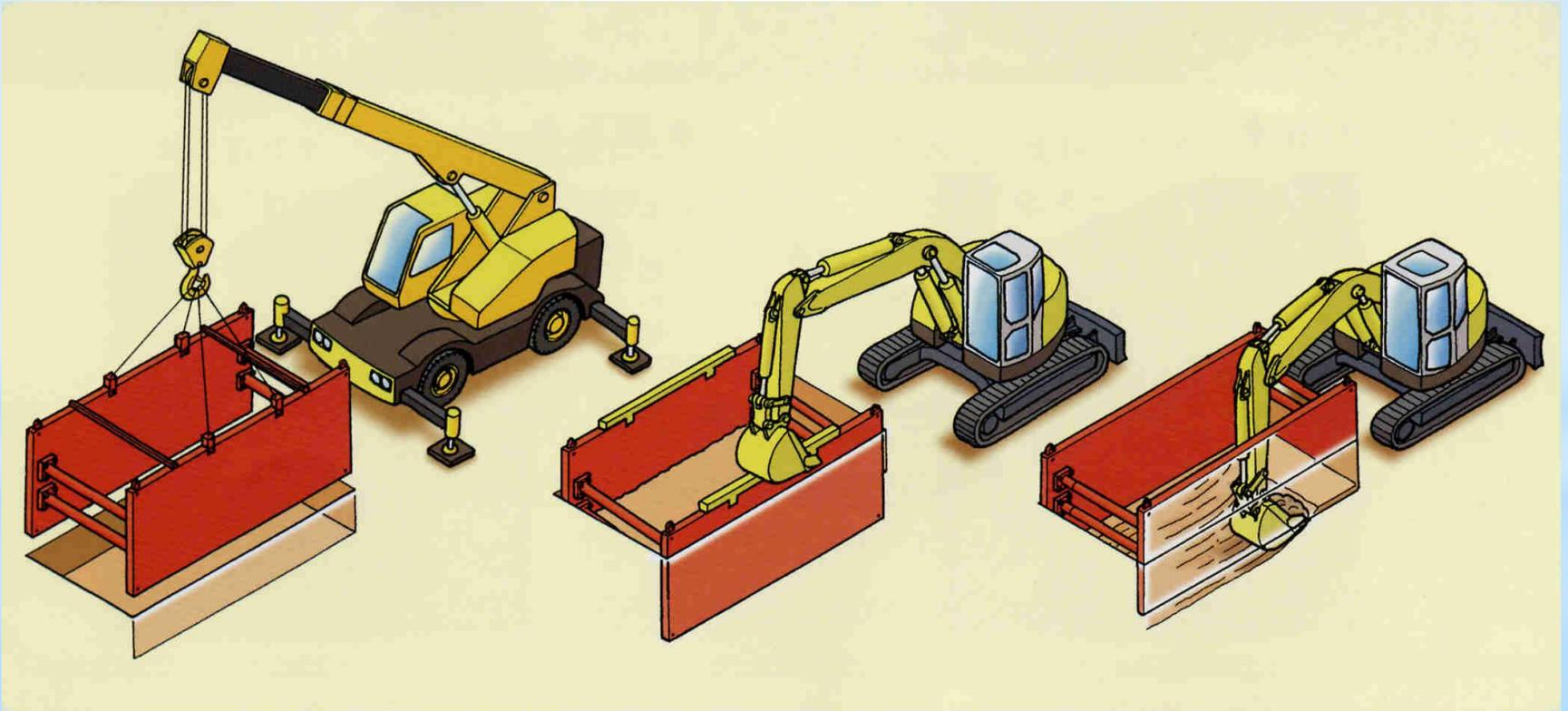
(1) Sliding rail method for installing simple trench supports

A number of struts are fixed to vertical columns called sliding rails according to the depth of the trench and the nature of the ground where the trench is dug. Plates called retaining panels are inserted into the rails and the panels and rails are driven in stages as the trench is dug.



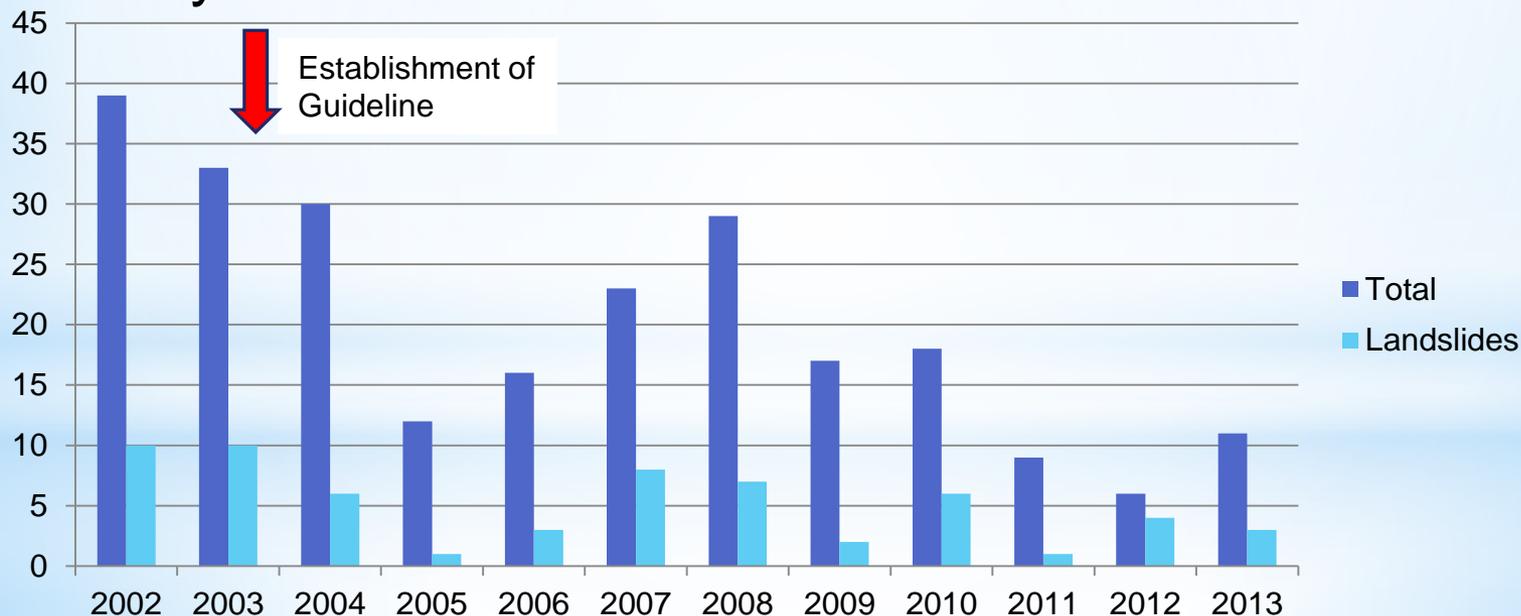
(2) Vertical plate method for installing simple trench supports

As in the sliding rail method, the number of struts is determined according to the nature of the ground and the depth of the trench. The struts are fixed to plate piles called vertical plates and the assembly is driven in stages as the trench is dug.



Spread by official notice

The MHLW established safety guidelines aimed to spread the use of this method in 2003, for the digging of small trenches (height of 1.5m-4.0m and width of less than 3.0m). As the results, fatal accidents at these sites are decreased drastically.



Fatal accidents during the construction of water and sewerage works, etc., 2002-2013.

(4) Contest on visible safety activities

This contest is executed in the theme, “Support of revitalization of safety activities in companies”, based on the strategy “**Raise spirits from safety**”, 2011.

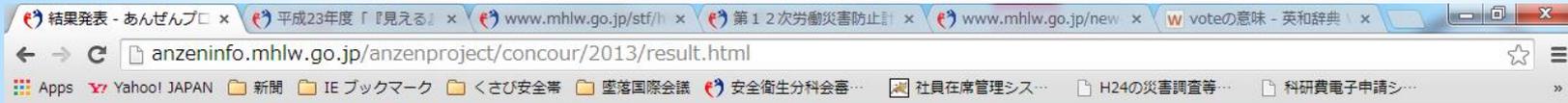
- To revitalize the safety activities in companies, introduce the good practices in other companies.
- For this purpose, invite the practices on visible safety activities, e.g. visualization of safety working procedure.
- Select the excellent practices by a vote from the people, etc.
- Publish the best practices in the web pages.

<http://anzeninfo.mhlw.go.jp/anzenproject/concour/2013/result.html>



It is expected that many companies implement the excellent practices, and industrial accidents will be decreased by the revitalization of safety activities in companies

Example of web page



I. 危険有害性の「見える化」

ア 労働災害や危険有害性そのものについて、再現、体感、実験などで理解、体感させることにより労働災害や危険有害性の危険有害な程度を理解させているもの。
 イ 危険有害性のある場所、機械、作業、安全衛生上配慮の必要な作業などについて、注意喚起をする語句、図絵、写真などや光、音などで注意喚起することによりその場所への接近やその機械の使用、作業の実施に当たっての安全対策の徹底を図っているもの。

【優良な活動事例】

| 「持運び判定早見表」による重量の見える化 | 社内通路の安全見える化 | 小型電動工具による災害防止の「見える化」 |
|---|--|--|
|  <p>持運び判定早見表</p> <p>社内作業禁止 積立 20kg以上の 人力運搬禁止 パーツ搬送の現場利用 禁止 パーツごとに重量を表示</p> |  <p>社内通路の安全見える化</p> <p>階段注意 手摺りを持って昇降 内を右側通行 スリッパ注意 玄関には、スリッパ注意や階段注意などの 注意表示 タイムも残り止め</p> |  <p>小型電動工具による災害防止の「見える化」</p> <p>教育修了者の 作業状況 小型電動工具 基本教育修了 教育修了者を ステッカーで確認</p> |
| <p>J F Eメカニカル（株）</p> <p>従来は個人の勘に頼っている作業を、みんなで見える化して災害防止を図っているのは良い 人力運搬による飛来・落下災害防止対策はなかなか難しい。その点に着目している</p> | <p>（株）オプテス</p> <p>我が国では中高年齢作業者が増加する中で一見気にしない段差、スリッパ、手摺り利用、社内における車での移動の安全のための追突、出会い頭での衝突などの不安全要因の安全化（キメ細かい危険判断方法と安全意識向上のための分かりやすい工夫がされているところを高く評価した。） 小さな改善の積み上げであるが応用範囲の広い改善である。</p> | <p>東亜建設工業（株）</p> <p>自らの事業場で発生した労働災害のデータ分析結果を基に、見える化の対象を特定した点が良い 小型電動工具に焦点を当てた「見える化」他の参考となる。</p> |
| 危険体感訓練を基軸とした安全衛生活動 | 単管バリケード色分けによる「見える化」 | 床転がし配管の危険防止 |
|  <p>危険体感訓練を基軸とした安全衛生活動</p> <p>安全体感訓練道場 安全の門・Gate of ANZEN 必ず安全の門を入ることで、気持ちを引き締める</p> |  <p>単管バリケード色分けによる「見える化」</p> <p>高 工機物工事エリア設置 高 集積作業エリア設置 低 作業区画・転倒区画</p> |  <p>床転がし配管の危険防止</p> <p>足もと注意</p> |
| <p>K Y B-Y S（株）</p> | <p>東亜建設工業（株）</p> | <p>東洋建設（株）</p> |

(5) Award for excellent foremen by Minister

Formerly, excellent work places, such as non-accident construction site, were only awarded.

Now, the foremen who have shown excellent achievement are awarded by the Minister of the MHLW every year.

The foremen supervise the workers directly and take a leading part of the safety and health activities in the construction sites. Therefore, this awards increase the motivation of the foremen to the safety and health activities.



This picture shows the awards ceremony on 10th January 2014. 133 persons are awarded for the excellent foremen in 2013.

2. Activities in Association

(1) Various Industrial Accident Prevention Activities by JCOSHA

Japan Construction Occupational Safety and Health Association (JCOSHA) implement the various industrial accident prevention activities.

http://www.kensaibou.or.jp/english/activity/public_relations.html

- National Safety Week: July 1-7
(preparatory period June 1-30)
- National Occupational Health Week: October 1-7
(preparatory period September 1-30)
- Year-end & New Year Construction Accident Prevention Period:
December 1- January 15
- Fiscal Year-end Construction Accident Prevention Month :
March 1-31
- Campaigns for the **Elimination of Three Major Causes of Accidents** and for the **Safety Work Cycle**
- The Promotion of Voluntary Safety and Health Activities and Training
- During the above period, the association issues "Implementation Guidelines" showing the primary targets and activities to further promote awareness for safety and health

**Safety patrol
and lecture
etc.**



Safety patrol



Safety Lecture