A Baker's Dozen of OSHA Moneymakers – SIC 3451 for 2006

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The safety of our employees, precision and quality workmanship have always been guiding principles in the precision machining industry. What are the areas that we need to focus on for continuous improvement? Here is a baker's dozen table of what the OSHA inspectors cited in our industry (SIC 3451; NAICS 332721 Precision Turned Products Manufacturing) for the last fiscal year (October 2005-September 2006). This data was current as of October 13, 2006.

Standard	# Cited	# Insp	$ Penalty	Description
1910.212	11	7	8175	General requirements for all machines.
1910.219	15	5	5302	Mechanical power-transmission apparatus.
1910.147	14	9	4400	The control of hazardous energy (lockout/tagout).
1910.95	2	1	2975	Occupational noise exposure.
1910.305	5	3	2450	Wiring methods, components, and equipment for general use.
1910.303	5	4	2433	General requirements.
1910.242	3	3	2013	Hand and portable powered tools and equipment, general.
1910.134	7	3	1775	Respiratory Protection.
1910.304	1	1	1750	Wiring design and protection.
1910.215	8	3	1745	Abrasive wheel machinery.
1910.1200	8	3	1395	Hazard Communication.
1910.184	3	2	1225	Slings.
1910.178	5	4	743	Powered industrial trucks.

General requirements for all machines, 1910.212, was cited 11 times, in seven inspections, and was number one in penalty dollars ($8,175). This is the standard that covers machine guarding, both general and point of use.

Mechanical power transmission apparatus, 1910.219, covers all types and shapes of power-transmission belts. This is the number one category by frequency, cited 15 times in five inspections and number two in penalty dollars at $5,302.

Control of hazardous energy – lockout/tagout, 1910.147, was the number two category cited by frequency and ranked third in penalty dollars, with 14 citations in nine inspections yielding $4,400 in penalties. Lockout/tagout should be your shop's emphasis for retraining.

Occupational noise exposure, 1910.95, is new to the top citations list this year, at 2 citations but $2,975 from a single inspection. Protection against the effects of noise exposure should be provided, and see especially the requirements in parts (c) through (g) at the following link for employer responsibilities:

http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_id=9735&p_table=STANDARDS

Wiring methods, components and equipment for general use, 1910.305, was cited 5 times in three inspections for $2,450 in penalty dollars. While this standard did not make the top five in frequency, its high dollar value per citation as well as total dollars cited for our industry make this an important item to address in our shops.

The area of general requirements for electrical, 1910.303, was sixth in penalty dollars for the precision turning industry – 5 citations in four inspections for $2,433 in penalties. This provision states, "Electrical equipment shall be free from recognized hazards that are likely to cause death or serious physical harm to employees..."

Hand and portable powered tools and equipment, general, 1910.242 were cited 3 times on three inspections yielding $2,013 penalty dollars. The general requirements

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Baker's Dozen....continued

are the following: "Each employer shall be responsible for the safe condition of tools and equipment used by employees, including tools and equipment which may be furnished by employees. Compressed air used for cleaning: compressed air shall not be used for cleaning purposes except where reduced to less than 30 psi and then only with effective chip guarding and personal protective equipment."

Respiratory protection, 1910.134, is a new citation to the top penalties listing this year for our industry. Seven violations in three inspections were cited for $1,775 in penalties. From the standard: "Respirators shall be provided by the employer when such equipment is necessary to protect the health of the employee. The employer shall provide the respirators, which are applicable and suitable for the purpose intended. The employer shall be responsible for the establishment and maintenance of a respiratory protection program…"

Wiring design and protection, 1910.304, was cited once in a single inspection with $1,775 in penalties. This section covers grounding of electrical equipment and maintenance of proper polarity of electrical connections. Are your electrical grounds conductors identified and readily distinguishable?

Abrasive wheel machinery, 1910.215, was tied for fourth place in terms of frequency cited in 2006 at 8 citations in three inspections for $1,745. The high frequency of this section being cited is partly because of the widespread use of grinders in our manufacturing shops. It is important for all of us to pay attention to these critical machines to assure their safe use in our shops. As the data shows, not every inspector will be turning a blind eye to grinders that are not secured, adjusted and properly guarded.

Hazard communication, 1910.1200, tied for fourth with abrasive wheel machinery this year in frequency of citation. This section was cited 8 times in three inspections for $1,395. Here are a couple of key questions: 1) Does everyone in your operation know where to find MSDS Sheets? 2) Are the MSDS sheets complete and up to date? 3) Do you have records of HazCom training for all of your employees? This is critical knowledge for your people to have. Compliance simply requires training and discipline to obtain and file these information sheets. Don't just audit the training and MSDS files. Audit your process to assure that your future will be violation free.

Slings, 1910.184, is an area that every shop owner should immediately investigate for themselves. Do not delegate this the first time. Your supervisors will want to 'save money' and will not want to reject a damaged sling. Slings are expensive so this will need your attention. Dropped lifts are even more expensive. In the steel mills, foremen are responsible for weekly observations and monthly, formal written inspections of all load-bearing devices including cables, wire rope slings and nylon straps in their area. Do you have a similar program? There are some abused-looking nylon straps in use in many shops today. If you see cuts, tears or frays on a strap, cut it into pieces and discard immediately. With lifts weighing as much as 2 to 5 tons, no one should be gambling on the integrity of the slings used for lifting.

Powered industrial trucks, 1910.178, contains safety requirements relating to fire protection, design, maintenance and use of fork trucks, tractors, platform lift trucks, motorized hand trucks and other specialized industrial trucks powered by electric motors or internal combustion engines. Five citations were made in four inspections for $743 in penalties in 2006. In some cases, damage to backup alarms and strobes, loose gas cylinders and missing safety equipment are the main concerns for this category. While we're on this subject, how about a review of your operator training?

That's it – a baker's dozen of OSHA's top money-making citations for the precision machining industry in fiscal year 2006. We suggest that you take this list and do a thorough, unbiased walk-through of your shop. If you were the OSHA inspector, what would you see? Let's make our shops as safe as we can, starting with this list of most frequent citations from the professionals at OSHA. Let's recommit our culture to safety first, by defining a process for maintaining a safe workplace with regular training, inspections and audits. Is there a process for safety in your shop? Is it effective? If there are, audits will tell. You can find a Roadmap to an Effective Safety Program on the PMPA Web site at: http://www.pmpa.org/technology/safety1_example.pdf

Your "Lucky 13" list for improving your shop's safety is in your hands. You can find the entire list of OSHA Penalty Citations for SIC 3451 at the following link:

http://www.osha.gov/pls/imis/citedstandard.sic?p_esize=&p_state=FEFederal&p_sic=3451