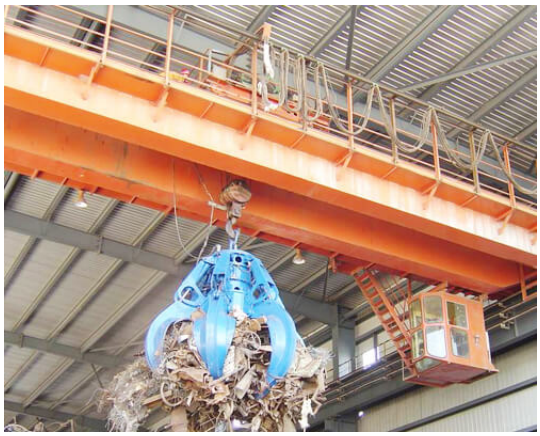
SCRAP & MATERIAL HANDLING GRAPPLE
Tool Box Talk

The objective of this Tool Box Talk is that it can be used as part of a safety meeting that focuses on the use of Scrap and Material Handling Grapples in the workplace. The ASME B30.20 standard has been referenced when compiling this document as this is the most recognized standard used in North America for selection, inspection, cautions to personnel, effects of environment, and rigging practices of scrap and material handling grapples.

Ask members of the meeting to give answers to the following, encouraging participation whether their answers are right or wrong.

LEGISLATION	ANSWER
1) WHAT STANDARDS SHOULD THE GRAPPLE COMPLY WITH?	**ASME B30.20 standard.**
2) WHAT OTHER INFORMATION MUST BE REFERENCED TO FIND INFORMATION?	**Manufacturers Specifications**
3) HOW OFTEN DO PERIODIC INSPECTIONS NEED TO BE CARRIED OUT?	**At least annually(ASME), *but state what your company rules are.***
MARKINGS	**ANSWER**
4) WHAT 9 ITEMS ARE REQUIRED TO BE MARKED ON THE GRAPPLE?	**1. Manufacturer, 2. Serial Number, 3. Grapple Weight, 4. Voltage requirements, 5. Operating Hydraulic Pressure, 6. Rated Load 7. Design Category, 8. Service Class, 9. Operating Controls.**
APPLICATION	**ANSWER**
5) WHAT ARE THE TEMPERATURE RANGES FOR THE GRAPPLE?	**Temperatures exceeding normal ambient temperatures can affect the grapple lifter, the temperature of the load shall not exceed the maximum allowable limits of the grapple. *The worker must confirm with the manufacturer.***
6) NAME SOME REASONS WHY THE GRAPPLE MAY HAVE TO BE REMOVED FROM SERVICE? 	**1. Structural members if deformed, cracked or worn,** **2. Pins and bushings for wear or damage,** **3. Hydraulic lines for leaking, blistering and excessive abrasion,** **4. Hydraulic cylinders for drifting, leakage, scores, nicks dents, loose or deformed rod eyes or connecting joints,** **5. Hydraulic motors for loose bolts or fasteners, leaks, unusual noises or vibration, loss of operating speed, excessive heating of the fluid or loss of pressure,** **6. Magnets if a combination magnet/grapple,** **7. Electrical components for correct operation of electrohydraulic grapples,** **8. Loose bolts,** **9. Missing or illegible operating control markings**

7) HOW MUST THE LOAD BE ATTACHED WHEN USING A GRAPPLE? 	**The grapple must be positioned above the loads center of gravity to achieve balance, and functions must be operated in a smooth controlled manner.** 
8) HOW MUST THE LOAD BE DISTRIBUTED WHEN USING A GRAPPLE? 	**The load must be as evenly distributed as possible, shall not be loaded in excess of the grapples rated load or handle any load for which it is not designed.** 
9) WHAT NEEDS TO BE CONSIDERED WHEN THE GRAPPLE IS SECURED TO THE LOAD? 	**Load size, balance, bending, thickness and temperature can affect the grapples load securement capabilities. The temperature of the load shall not exceed the maximum allowable limits of the grapple. Do not allow load or grapple to come into contact with any obstruction.** 
10) WHERE IS THE BEST PLACE TO STORE GRAPPLES?	**Where they will not be affected by mechanical damage, corrosion, moisture, or adverse temperatures.**