# SAFETY WORKSHOP MOLDS AND MACHINES



**ARM Fall Meeting** 

September, 2016

New Orleans, LA

# Two Safety Approaches

- Safety for Personnel
- Safety for the Molds

## Hand Safety

- Check for burrs
- Use thick cloth glove
- Touch all spots operators will touch
- Operate clamps
- Open and close mold
- Heavy loose pieces?







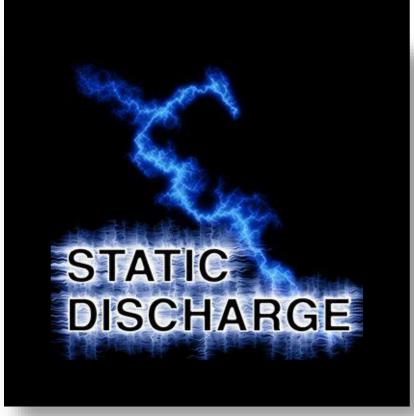
# Venting With Steel Wool





#### Static





## Static Discharge on Steel Wool





#### Static reduction

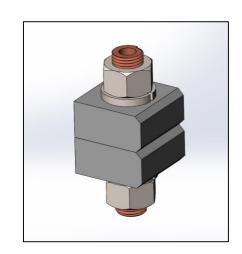


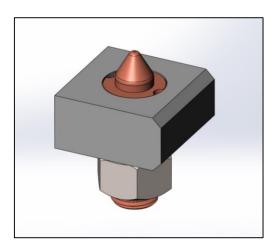


#### Static Reduction









#### Static Reduction

Keep mounting plates free of rust





#### Back Injuries - Leaning over large molds or spider

• Clamping large molds or spiders

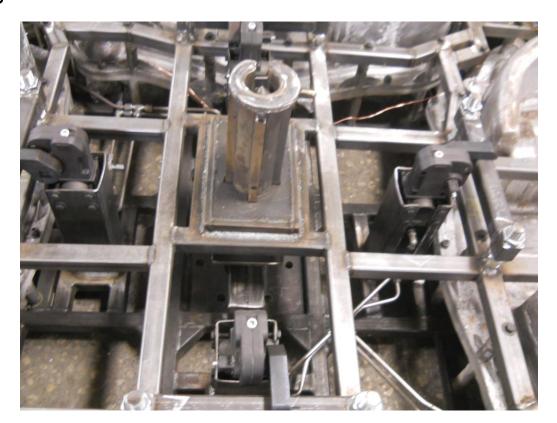






#### Back Injuries - Leaning over large molds or spider

- Eliminate the need to lean
- Use air clamps





#### Back Injuries - Lifting and moving heavy mold pieces



Slides Rollers





# Hand Injuries – The "Knucklebuster"







### Hand Injuries - Clamp Operation

- Adjust clamps properly
- Turn clamp handles sideways
- User-friendly clamp designs
- Use bolts and receivers



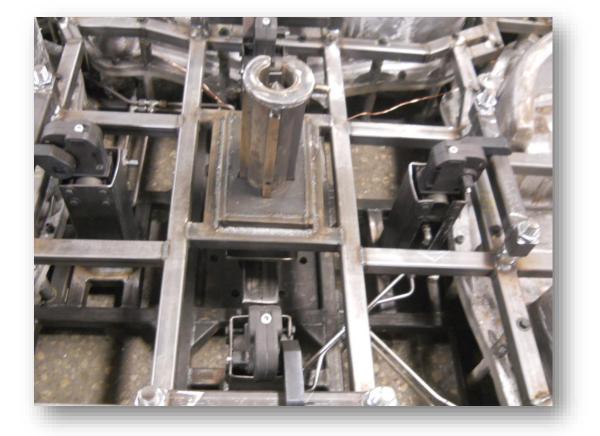






# Hand Injuries – Air Clamp Operation







#### Pin and Insert Holders





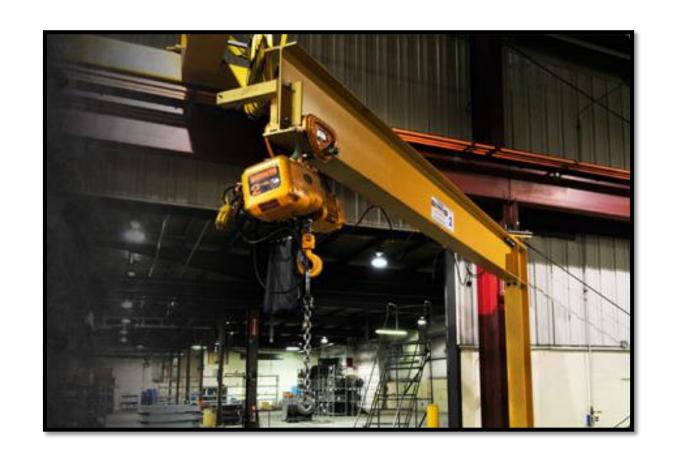






## Crane Safety

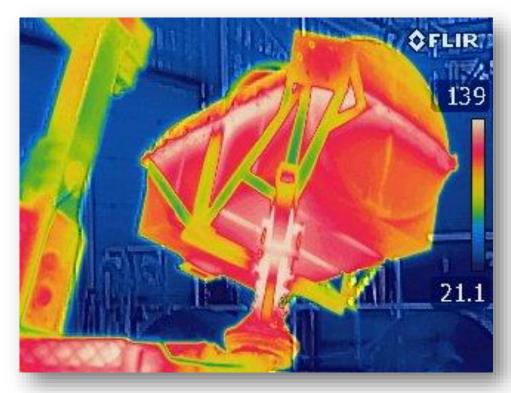
- Handling Hooks
- Handling Chains
- Proper lifting
  - Angles
  - Speed



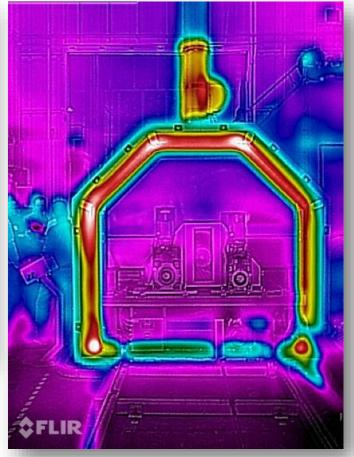


#### **Burn Protection**

- Burn begins at as little as 125° F
- First degree burns @ 140° F for 3 seconds, third degree for 6 seconds
- At 160° burns occur on contact



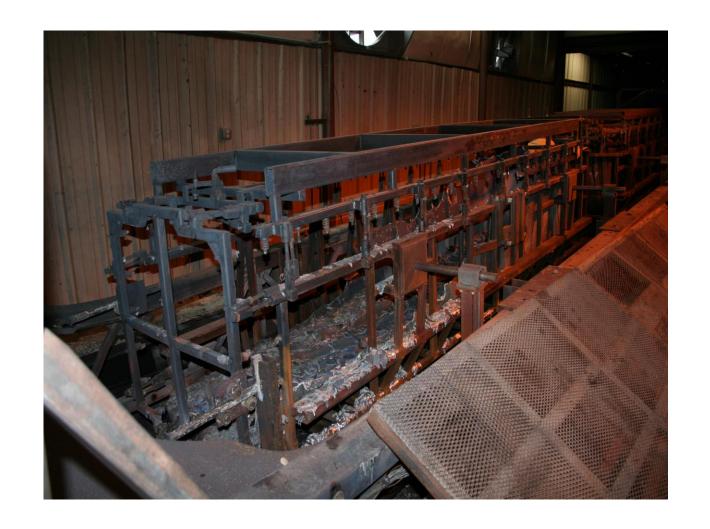
flir.com/store



#### **Burn Protection**

- Resin Burns
- Aluminum Melts





## Safety for Molds

- Treat Parting lines with respect
  - No scraping with steel or prying with steel bars
  - Clean off excess resin before closing
- Eliminate Static buildup
- Avoid blocked vents
- Do not overheat
- Do not attempt to burn off excess resin on outside

## Safety for Molds

- Keep clamps adjusted and in proper working order
- Remove rust from mounting plates
- Spray frames with rust inhibitor prior to storing
- Do not store molds with resin in them
- Do not store molds standing sideways on their parting lines

# "Be Safe and Prosper"

