



Machine Safety Guide

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Please contact DEMACO for parts, service and training.

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Introduction

We strongly believe that **safety is an attitude**. DEMACO has spent a great effort to make our equipment as safe as possible. However, it also takes a safety conscious attitude to operate, clean and maintain any piece of equipment safely. A safety conscious attitude requires an active effort where you always keep safety in the forefront of your mind with every action during every day. In an effort to foster a safety conscious attitude, this manual provides a guide to help promote safety as it relates to DEMACO machines. Although we attempt to cover as many issues as possible, no guide can ever be 100% complete, nor can it cover every situation. Therefore, it is imperative that you always remain aware of your surroundings and the possible hazards that are present. Always remember, complacency kills and letting your guard down for even a moment can have grave consequences.

This manual covers general guidelines for the safe use of DEMACO machines. Ensure all supervisors, machine operators, mechanics and maintenance personnel are familiar with the information covered in this manual in addition to any safety rules and guidelines of the using company. For this manual, “using company” means the company or food plant where the DEMACO machine is used.

This manual is intended to reinforce the safety procedures and regulations of the using company. Please contact DEMACO for clarification if this manual conflicts with any other safety procedure or regulation.

We encourage you to make suggestions to improve this safety manual or improve the safety of our machines. Please contact the DEMACO Safety Officer with suggestions or for any questions about DEMACO machines.

Professionals from across the pasta industry peer reviewed this manual. DEMACO would like to sincerely thank all stakeholders for helping us improve this product.

General Guidelines

- Follow all safety and health rules established by the using company, as well as all local, state and federal regulations.
- Ensure all safety devices are tested and remain operational. Do not operate a machine with a faulty or non-operational safety device.
- Ensure all devices, systems and/or machines attached to DEMACO machines comply with all local, state and federal regulations.
- Wear all personal protective equipment per the using company safety program at all times. At a minimum, all personnel shall wear safety glasses and slip resistant footwear.

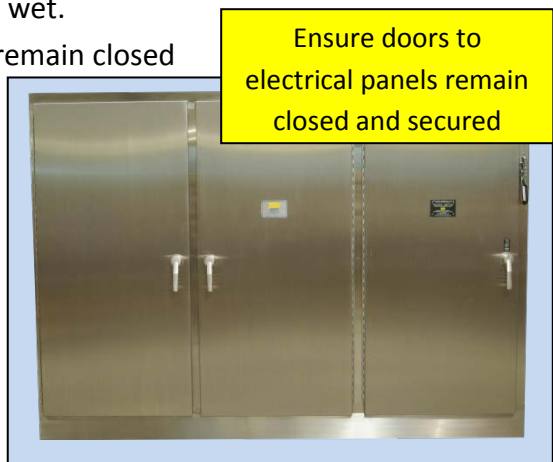
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- Follow all safety notices, placards and displays on or near the machine.
- Ensure all warnings are in place and remain visible. Immediately replace any warning label that is missing or not readable.
- Ensure you are fit for duty and alert when operating, cleaning or maintaining DEMACO machines. Personnel must not be tired, fatigued, sick, or under the influence of alcohol, drugs or any medication that could impair your judgment, alertness and/or ability to operate, clean or maintain machinery.
- Maintain high situational awareness at all times when around DEMACO machines. Be aware of other personnel in the vicinity. Make sure you communicate with others in the area about where you are and what you are doing as well as where they are and what they are doing. Do not assume others know what you are doing or that you know what others are doing.
- Stay on the platforms.
- Do not stand or place items on mixer doors.
- Keep the machine clear of trip and slip hazards. Ensure items such as boxes of ingredients are placed in areas clear of walkways and egress routes.
- Keep the area on or near the machine free from liquids to avoid slip or electrical hazards. Floors of food plants are slippery when wet.
- Ensure all doors and covers to electrical panels remain closed and secured. Only authorized electricians should open an electrical panel door and only when the machine is properly de-energized and locked out / tagged out.
- Get assistance when moving heavy or cumbersome items. Many items related to using DEMACO machines require at least two people to handle safely due to size and weight. Correctly balancing the load and using

Follow all safety notices and keep hands away from chute when cutter is in operation



Ensure doors to electrical panels remain closed and secured



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proper lifting equipment and techniques are critical for safe handling of items. Having good visibility and clear space in the path of movement are also critical.

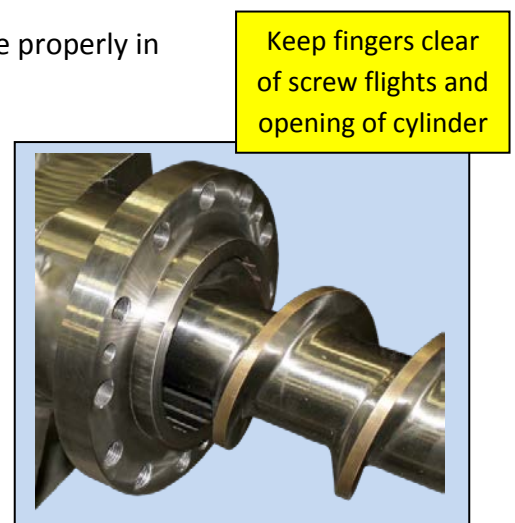
- Have a plan in mind for what to do in an emergency. Know how to get help and who to contact.
- Ensure the preventative maintenance program is followed to ensure all components are functioning properly and in safe operating order.
- Handle and dispose of waste oils and used components properly, in accordance with local, state and federal regulations.
- Always use wrenches of the correct size. Avoid using adjustable wrenches.

Authorized Personnel

- Develop and manage a training program for plant personnel qualified to operate, repair and maintain DEMACO machines. The using company is responsible for developing and supervising the training program as well as designating and managing qualified personnel. Only personnel trained and authorized by the using company shall operate, repair or maintain a DEMACO machine. Personnel not trained and authorized by the using company must stay clear of DEMACO machines unless supervised by personnel authorized by the using company. Contact DEMACO for assistance with training personnel in the safe use of DEMACO machines.

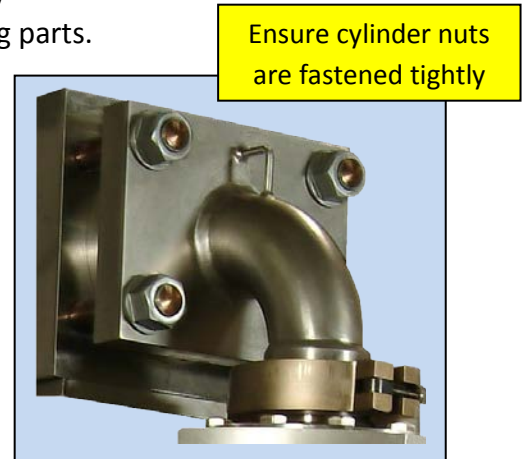
Before Operation

- Conduct a visual inspection of the entire machine. Walk around the machine and inspect above and below to see if any condition exists that may pose a risk of injury or damage. This includes inside of dryers for dry pasta lines. Always report to your supervisor anything that does not look right. Never start or operate a machine if something looks unsafe or just does not seem right.
- Ensure all guards are in good working condition and are properly in place and secured. A partial list of guards include:
 - all sheaves and belts on drive units with particular attention to the extruder main drive
 - all sprockets and chains on drive units
 - all gears
 - cutter devices or any unit with a cutting knife
 - sheetformer rollers
- Slide extrusion screw in slowly and carefully to avoid damage and injury. Wear gloves when handling screw flights. Keep fingers clear of screw flights and opening of cylinder.



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- Ensure cleaning equipment and tools are stowed and clear of machine. Ensure mixer basin is free of items.
- Ensure the premixer, feeders, and airlocks are properly installed so that fingers and other items are not exposed to moving parts.
- Ensure cylinder nuts are fastened tightly with no gap between the elbow block and the cylinder (at least 75 torque pounds / 100 newton meters).
- Place die on die platen slowly and carefully to avoid damage and injury. Keep fingers clear of area between die and die platen.
- Lock out / tagout the machine or unplug the cutter device before placing hands in the cutter chute, or before installing or removing the cutting knife. Check to ensure the cutting knife has stopped rotating. Use extreme caution when manually rotating the cutter.
- Place cutting knives on cutter devices carefully to avoid injury.
- Ensure all safety devices and alarms are intact and working properly.
- Test all safety switches to ensure they are operational. A partial list of safety switches includes:
 - mixer shutoff on mixer lid – it is imperative that the mixer paddles stop and do not operate when the mixer lid is open
 - cutting knife guard on cutter device
- Shout “CLEAR” before starting the machine. Wait at least 10 seconds after sounding “CLEAR” before either powering up the machine or pressing the start button.
- Once powered up, review operator panel to see if the machine reports any errors related to safety.



During Operation

- **IMPORTANT: never operate a DEMACO machine with a guard or mixer door open or missing. Operating a DEMACO machine with a guard or mixer door open or missing can be lethal.**
- Never bypass a safety switch or remove a guard while a machine is in operation.
- Use the proper procedure for turning off the machine. Do not use safety switches to



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stop a machine for adjustments or maintenance. Safety switches are meant to temporarily stop a machine, and not turn it off or power it down.

- Use the lock out / tagout procedure for placing a machine in a safe state when removing guards or covers.
- Make sure mixer completely stops after lifting mixer lid or cutter completely stops after opening a cutter guard.
- Use caution around steam/hot water lines or blast coils. Do not touch steam/hot water lines or blast coils in dry pasta dryers while in operation.

Post Operation: Shutdown, Cleaning and Maintenance

- Keep water away from electrical panels and motors. Never spray water directly on electrical panels.
- Use authorized lifting devices for moving extrusion screws and dies.
- Use the buddy system when using ladders or moving heavy items.
- Follow company lock-out / tag-out procedures prior to performing any cleaning or maintenance.
- Ensure steam/hot water lines and blast coils have fully cooled prior to performing any maintenance on them.

Ensure all guards are
in place and secure

