Fabrication and Reprocessing Guidelines for Extruded Polyethylene and Polypropylene Foams

Policy Statement

Nomaco, Incorporated (Nomaco) is dedicated to quality and safety and we take safe handling of our products seriously. Nomaco uses a hydrocarbon gas as a blowing agent to produce its polyethylene and polypropylene foam products. Residual amounts of this flammable gas may remain in the product and can accumulate at hazardous concentrations under certain fabrication and reprocessing conditions. The following precautions will help to ensure safety in your fabrication or reprocessing activities.

Foam Fabrication

Operations which cut, destroy, or heat foam cells release blowing agent and may allow localized areas of flammable concentrations of blowing agent to develop. Adequate ventilation is needed to dissipate blowing agent in these localized areas.

<u>Thermal Fabrication and Lamination</u>: Provide positive airflow in areas of thermal fabrication and lamination and keep foam and heat/flame sources moving in relation to each other.

<u>Skiving:</u> Direct air flow into the space behind the blade guide, between the two split foam layers, and in any areas where foam is stacked or stored after skiving operations.

Die Cutting/Band Sawing: Provide air flow in the die press and band saw areas and in any areas where foam is stacked or stored after cutting operations.

<u>Grinding/Routing/Shaping</u>: Provide positive air purge in any bins or hoppers which receive the shreddings from grinding, routing and shaping operations and monitor collection systems to ensure that high blowing agent concentrations will not develop when operations sit idle as a result of temporary shut down or malfunction.

Storing Foam Remnants (Scrap)

Store and ship all foam remnants and scrap foam in ventilated areas and vehicles. Never smoke or use ignition sources in areas where parts or scrap are being stored or loaded onto vehicles. Plastic bags used for foam storage should be adequately ventilated.

Reprocessing Foam Scrap

Grinding and/or densifying operations release residual blowing agent in polyethylene and polypropylene foam parts and foam scrap. Because of the potential to achieve flammable concentrations of blowing agent in these operations, DO NOT REPROCESS FOAM PARTS OR FOAM SCRAP UNLESS USING A REPROCESSING SYSTEM WHICH IS APPROPRIATELY DESIGNED AND OPERATED TO PREVENT THE CREATION OF A FLAMMABLE CONCENTRATION OF BLOWING AGENT.

We recommend a minimum air supply for a reprocessing system is at least 50 cubic feet per minute of adequately mixed positive air flow for every cubic foot per minute of foam fed into these reprocessing systems. Adequate air must be supplied throughout the entire reprocessing system, including any storage bins or hoppers receiving output from the reprocessing system. Reprocessing and collections systems must be monitored to ensure that high blowing agent concentrations do not occur during normal operations, temporary shutdown or malfunction. Consult your equipment manufacturer or contact a qualified foam reprocessor before reprocessing, grinding, or densifying foam parts or scrap.

Always refer to product Safety Data Sheets (SDS) for updated product and safety information. These can be found on our website at www.nomaco.com. Consult our Safe Shipping, Storage and Handling Guidelines for further information on safe shipping and storage procedures.

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