

# Shortening the industry supply chain



Association of Rotational Molders Annual Meeting • New Orleans, Louisiana



Tom Innis • President

# Agenda

- Group activity
- Case studies: successful supply chain collaboration: **Tenjam & Cordova Cooler**
- Summary of key takeaway thoughts
- Q & A



Objective: get inside the box

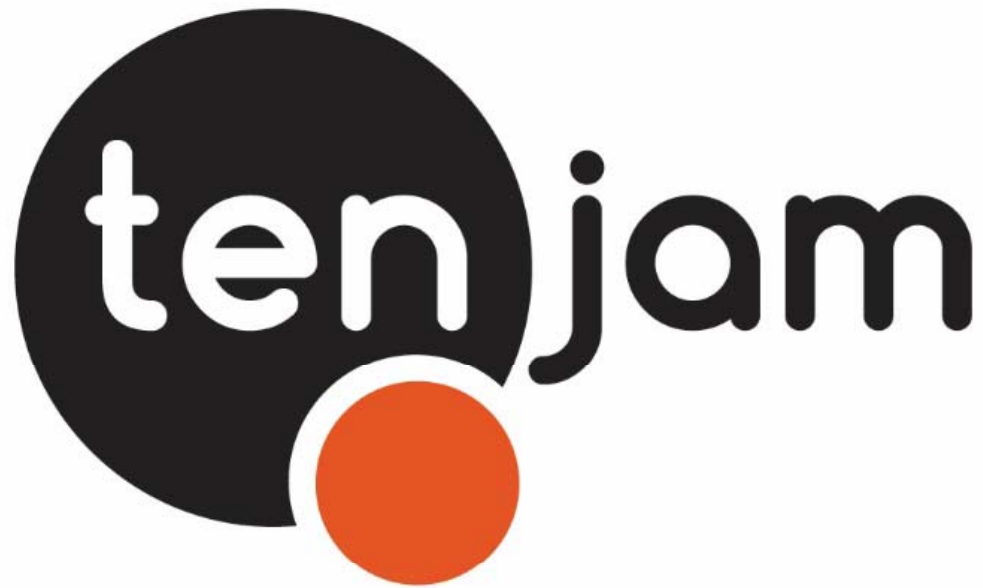


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What did we learn?



Journey to rotational molding: from *dysfunction* to *roto production*











# Tenjam: SprayFLEX™

- Traditional manufacturing process:
  - Cut shapes from polyurethane foam blocks
  - Rubberized spray-coat application
  - Multiple color options
- Pain points:
  - Lack of durability
  - Absorbed moisture; not suitable for outdoor applications
  - Difficult to clean
  - Costly to manufacture
- IDEAL CANDIDATE FOR CONVERSION TO ROTO.



Rotational molding: the ideal solution?

UV

FR

LLDPE

MI



OMG

IDK

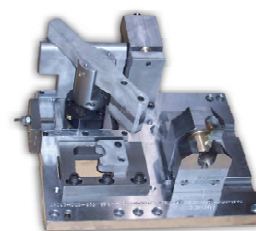
WTF?

TTYL



“Everything speaks.”

- Dennis Snow



# From dysfunction to roto production

- We recognized need to help connect the links in the supply chain:
  - Industrial designer
  - Rotational molder with key capabilities
    - Color capabilities
    - Desire to perform short runs of varied colors, shapes & sizes
    - Use Mold In Graphics™ for permanent warning verbiage
    - Flexibility in terms of “who’s invoicing whom for what”
    - End-to-end logistics.





# Tenjam DuraFLEX™

- Search for improved user experience → flexible material
- Connection with rotational molder with flexible material capabilities
- Collaboration among OEM, molder, material supplier, tool-builder, designer.
- Demand outpacing production.
- Tenjam is jammin'.











**DEADLIEST  
CATCH**

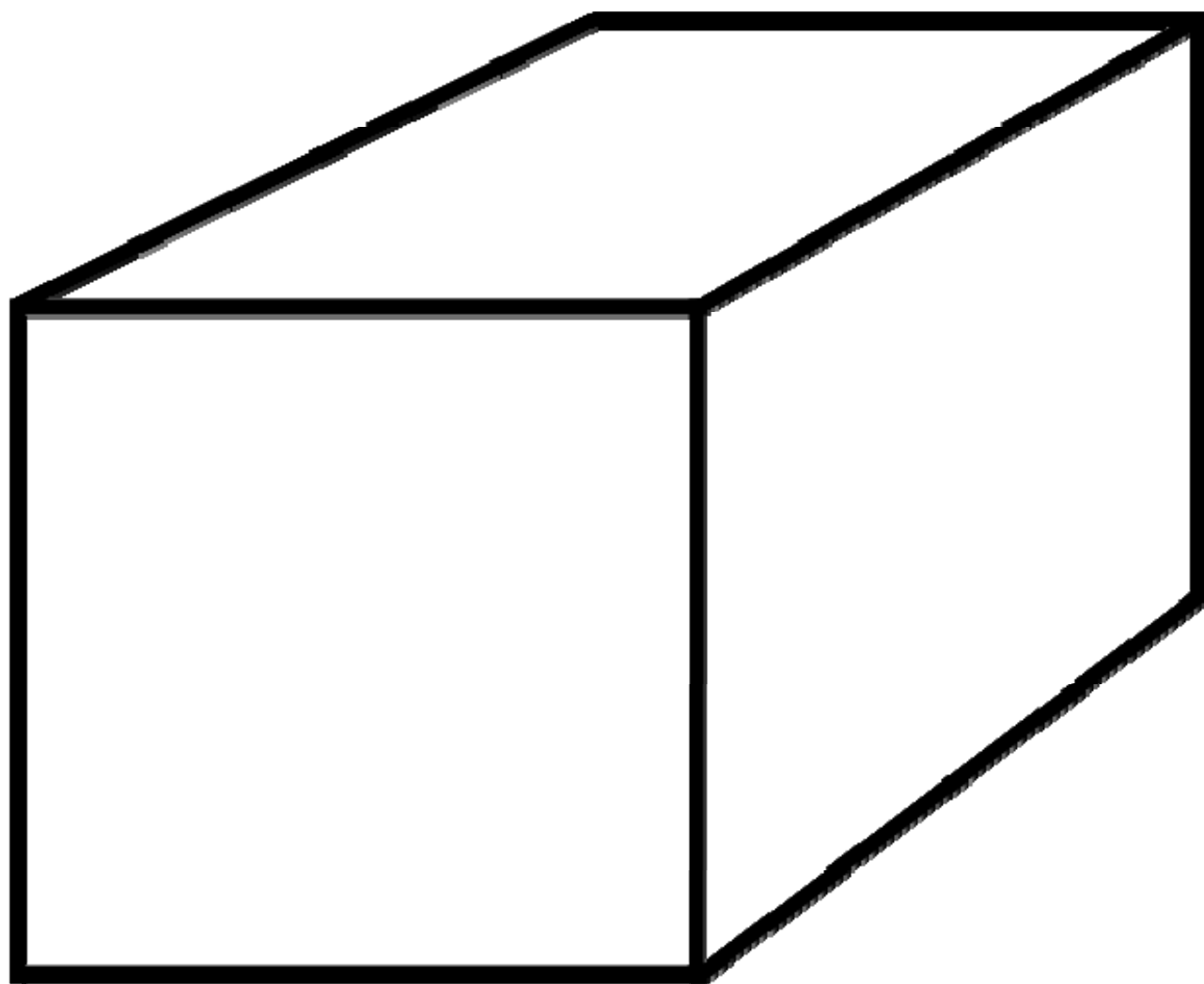
“I’m sitting on my \$125,000 MasterCraft boat drinking warm beer.

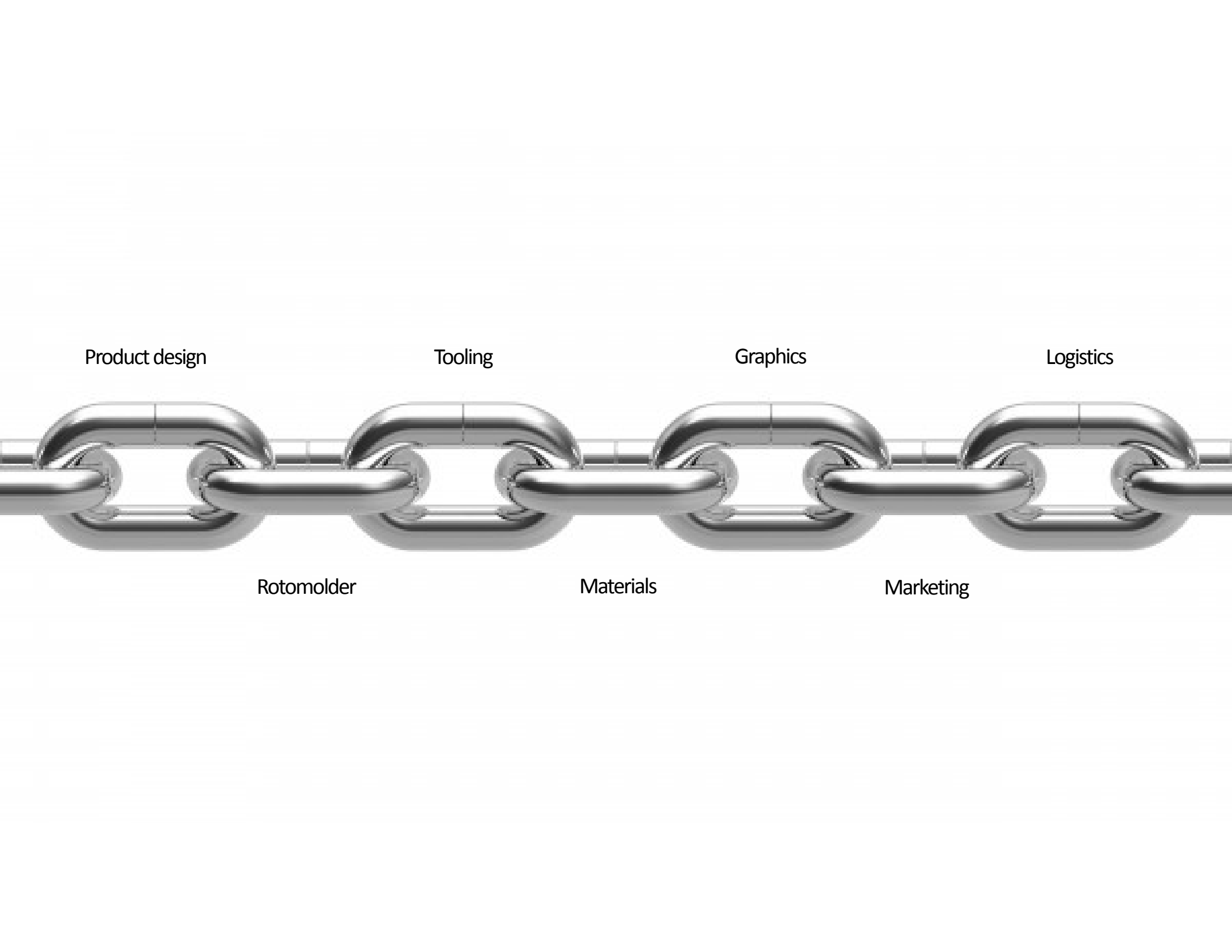
What’s wrong with this picture?”





“We have a design and we’re ready to go into tooling.”





Product design

Tooling

Graphics

Logistics

Rotomolder

Materials

Marketing









# Thank you for purchasing a Cordova Cooler!

This 100% made-in-the-USA Cordova Cooler represents a new standard of cool. Everything about a Cordova Cooler speaks to its quality craftsmanship: from superb design to superior materials and over-the-top performance, your Cordova Cooler will provide a lifetime of use and enjoyment. Because you've purchased the best, you'll surely want to read on to learn more about maximizing the performance of your Cordova Cooler.



## Preparing the Cordova Cooler

- Your Cordova Cooler is manufactured with unique eco-foam to provide superior insulation properties and keep your items either cold or warm. To keep items cold, it is important they are as cold as possible before placing them into the cooler.
- Cooling your Cordova Cooler: In the absence of a walk-in or commercial-size refrigerator, store your Cordova Cooler in the coolest place in your home for 24 hours before use. Depending on temperature and weather conditions, storing it outside overnight also works well.
- If you don't have a cool place to store your Cordova Cooler, place a block or bag of ice inside, close and latch the lid, and keep it away from direct sunlight. Chilling it for 12-24 hours will help maximize its cooling capabilities.
  - When you are ready to use the cooler, empty it of all water and ice. Replace with fresh ice that is completely frozen and not thawing, as ice already dripping water won't last long in any cooler.

## Selecting a coolant

Dry ice — When taking longer trips or choosing to freeze the contents of

your cooler, dry ice is an excellent choice. It also happens to be the lightest ice option, which makes carrying your cooler easier. Before using dry ice, familiarize yourself with proper handling techniques.

Block ice — Block ice takes longer to melt, but its block shape may not surround the items to allow sufficient and uniform cooling. Whether you're using commercially packaged block ice or frozen water-filled milk containers, we recommend a combination of block ice and smaller cubed ice to fill air gaps.

Cubed ice — Cubed ice can be an effective coolant by itself for shorter trips; to achieve best results, cubed ice should be used with dry or block ice.

## Ice retention recommendations

- Drain the water as the ice melts. While the water may feel ice-cold, it's not (or it would still be ice). Drain the water and your ice will last longer.
- As ice melts, refill the cooler with more ice, if possible. Cordova Coolers are designed to keep perishable items cold for many days, and adding fresh ice will optimize cooling performance.
- Maintain the cooler out of direct sunlight, if possible. Also, keep the cooler from directly contacting the ground. Cordova Coolers are equipped



with rubberized feet to keep it off the ground. Airflow under the cooler helps to maximize ice retention.

- Maintain your cooler lid closed with the latch properly fastened as much as possible. This will optimize ice retention and cooling performance of your cooler.
- Ensure a tight seal on the lid gasket. Over time and use of the Cordova Cooler, the lid gasket may settle. From time to time, run your fingers around the gasket seal to open up the flange edge and ensure a tight lid seal.

## Preparing items for the cooler

Before loading the Cordova Cooler, refrigerate and/or freeze as many of the items as possible. This helps optimize ice retention and performance of the cooler.



## Packing the cooler

Place block or dry ice in the center of the cooler and pack your items around it. Cover the items with ice cubes, and add another layer of items and ice until the cooler is filled to the top. If your items don't fill the cooler, add ice to fill the cooler to the top, as empty air space causes ice to melt faster.

## Cleaning the cooler

Maintain your cooler in top operating condition and appearance by washing with mild soap and water. For tough odors or following heavy-duty use, mix one (1) part bleach and three (3) parts water. With a sponge or slightly abrasive cloth, wipe out the cooler, including the areas around the gasket and drain plug where debris may be trapped. Rinse with plain water. After rinsing with water, keep the cooler lid open with the 'Lid-Lock' feature for 24 hours, allowing moisture inside the cooler to evaporate.

# Observations & takeaways

- For entrepreneur unfamiliar with roto, it's difficult to know where to start.
- They don't know what they don't know.
- Not always a shared language/effective communication among links in typically linear supply chain.
- Once things get started, it's difficult to keep momentum to reach finish line.
- When supply chain becomes more like a “web (i.e. collaborative & connected vs. fragmented & disconnected),” probability for success increases.
- Let's take more initiative to connect links in the supply chain for customers.

# Question & Answer