



# Alro *Plastics*

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## TIVAR® 88 & 88-2 LININGS



alro.com

**Your Source for Engineering Plastics**

# TIVAR® 88 & 88-2 Linings



## For Mining & Mineral Processing

Sticky bulk materials such as: coal, bauxite, copper concentrates, potash, clay, overburden and other such cohesive materials require a slippery surface to permit bulk materials to move from point A to point B. TIVAR® 88 and TIVAR® 88-2 have a low coefficient of friction that permits materials to move freely and discharge without hang-up.



Rail cars lined with TIVAR® 88-2 prevent sticking of sub-bituminous and ignite coals



TIVAR® 88-2 lined receiving hopper provides reliable bulk material flow

**TIVAR® 88-2: Silicone additives provide smooth surfaces for bulk materials to slide**

## Case Study: TIVAR® 88-2 Receiving Hopper Liner



Four outlet phosphate receiving hopper lined with TIVAR® 88-2

**Problem:** Original hopper liner was wearing, causing efficiency issues during production, prompting an immediate need for replacement.

**Solution:** Replace with 3/4" TIVAR® 88-2 for added wear resistance and rapid release technology.

**Benefits:** TIVAR® 88-2 liner was produced with oversize welded panels to eliminate seams and increase flow and production speeds.

### Key Benefits

- Promotes reliable bulk material flow
- Wear, chemical and corrosion-resistant
- Low coefficient of friction (C.O.F.)
- No moisture absorption
- Reduces and/or eliminates plugging & arching

### Applications

- Hoppers
- Bins
- Rail Cars
- Slider Beds
- Dribble Chutes
- Launder Boxes
- Heavy Mining Equipment

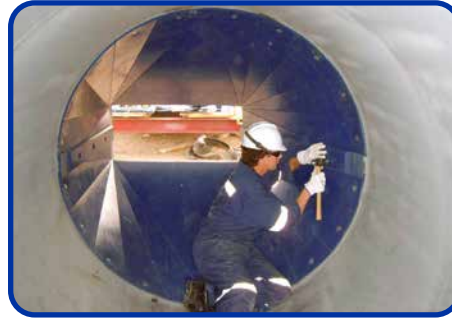


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Some conical hoppers can even be lined with a one piece TIVAR® 88-2 "drop in" liner for a fast, clean installation



TIVAR® 88 and 88-2 liners can be designed to fit into a variety of structures with various geometries



TIVAR® 88-2 tube liner inserted into a steel down comer or standpipe: eliminates sticking & bridging issues

## Mitsubishi Chemical offers Design, Fabrication & Installation

Mitsubishi Chemical Advanced Material's STE (SystemTIVAR® Engineering) is made up of specialty engineers with different degrees of experience that is second to none. Collectively, they have over 100 years of expertise in the design, fabrication and installation of various TIVAR® products into structures like hoppers, bins, chutes, standpipes, ash-conditioners, rail cars, ships and other such structures that move or store bulk materials.



**System TIVAR® Engineering & TIVAR® 88-2 Liners**

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**SINCE 1987**

## PRODUCTS

*All trademarks listed below are the property of their respective owners.*

ABS	Foamlite®	Nyloil®	PVDF	TIVAR® 1000
Acetal Copolymer	Fluorosint®	Nylon	Radel®	TIVAR® 88
Acetron® GP	G10 / FR-4	Optix®	Reprocessed UHMW	Tooling Board
Acrylic	GPO-3	Palight®	Rubber	Torlon® PAI
Boltaron®	HDPE	Palsun®	SafPlate®	Tuffak®
Cast Nylon	Hydex® 202/301	PBT	SafRail™	UHMW-PE
Chemgrate®	Hydex® 4101/4101L	PEEK	Sanalite®	Ultem®
Clear PVC	Hydlar®	PET	Semitron®	Urethane
Composolite®	Industrial Laminates	PETG	Sustarin® C	VHMW-PE
Corrugated	Ketron® PEEK	Phenolic	Tecaform®	Vivak®
CPVC	King ColorCore®	Plexiglas®	Tecasint™	Zelux®
Cutting Board	King Hy-Pact®	Polycarbonate	Techtron® PPS	
Delrin®	King StarBoard®	Polyethylene		
Densetec®	KomaALU®	Polypropylene		
Detectables	KomaTEX®	Polystone®		
DuraDek®	Kynar® PVDF	Polystyrene		
DuraGrate®	LDPE	Polysulfone		
DuraGrid®	Life Science Grades	PPS		
DuraTread®	LubX® C / CV	Precision Board Plus		
Duratron®	MC® 901/MC® 907	Profiles		
Ertalyte®	Medical Grades	Propylux®		
Extren®	Micarta®	Proteus® LF PP		
Extrusions	Noryl® PPO	PTFE / TFE		
Fiberglass Grating	Nyla-Glide GR™	PVC		
Films	Nylatron®	PVC Foam Sheet		



## PROCESSING



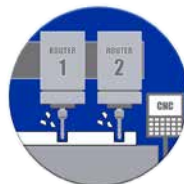
**Panel Saw Cutting**  
Sheets up to 8" thick



**Band Saw Cutting**  
Rounds up to 18" dia.



**Waterjet**  
Sheets up to 10" thick



**Routing**  
Sheets up to 4" thick



**Milling**  
Pieces up to 6" thick



**Welding**  
Hot Gas & Extrusion

## LOCATIONS

**JACKSON**  
2218 Enterprise  
Jackson, MI 49204  
Ph: (517) 787-5500

**DETROIT**  
1750 E. Heights Drive  
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