Check List

Hopper Car Unloading for Customers

Guidelines for unloading polyethylene

STEP	ACTIONS	OK
	INBOUND - SAFETY & SECURITY PROCEDURES	
1	**A** ❑ **Personal Protective Equipment (PPE) –** Always follow your company safety procedures.	☐
	B ❑ **Safety -** Ensure derail, blue caution flag/sign, and wheel chocks in place, and handbrake set.	
	C ❑ **Security Inspection** – No signs of tampering (e.g., broken/altered security seal), no visible pest contamination, suspicious items, vandalism, or other security concerns.	
	D ❑ **Hopper Car Damage Inspection** – No obvious signs of damage, inoperable, or missing parts.	
	SETUP – PREPARING HOPPER CAR FOR UNLOADING	
2	**A** ❑ If hopper car has **vented hatches**, ensure vents are clear of snow and ice. - **If no vented hatches:** Cut off top hatch seal, open hatch cover, and install hatch filter *(only if safe access to top of hopper car).*	☐
	B ❑ **Cut off seals** to bottom **draft tube end caps** on compartments to be unloaded.	
	C ❑ **Unlock and remove draft tube end caps** from both ends.	
	D ❑ **Purge/remove** any pellets or granular powder, and contamination from the inside of the draft tube.	
	E ❑ **Install inlet draft tube filter** on air intake side.	
	F ❑ **Connect offloading hose** to discharge side of draft tube.	
	G ❑ **Connect bonding and grounding cables** to hopper car, unloading hose/equipment, and grounding source.	
	H ❑ **Place pellet spill containment tray** under offloading hose and draft tube connection.	
	STARTING UNLOADING OPERATIONS	
3	**A** ❑ **Turn on conveying** system.	☐
	B ❑ **Open draft tube unloading valve** in small increments to prevent large fluctuations of air pressure. Always follow your company operating procedures.	
	COMPLETING UNLOADING OPERATIONS	
4	**A** ❑ **Use a rubber mallet** or plastic dead blow hammer to **tap the outer side wall** of the compartment to dislodge any pellets or granular powder that may be stuck/hung up.	☐
	B ❑ If safe access to top hatch, **visually check** the compartment to verify it is **empty** (< 500 kg/1100 lbs.) - If needed, use a non-metallic tipped rod/probe/pole through the hatch opening to move the resins into the draft tube. Reasonable care must be taken not to hit or damage the lining.	
	C ❑ **Turn off conveying** system.	
	D ❑ **If applicable, remove hatch filter**, and **close hatch.**	
	E ❑ **Close unloading valve**, disconnect offloading hose, and remove air intake filters. Always follow your company operating procedures.	
	F ❑ **Clean out the draft tube** of any pellets or granular powder.	
	G ❑ **Reinstall draft tube end caps, lock arm, install pin, and apply security seal.**	
	H ❑ **Clean up any spilled pellets or granular powder** released during unloading operations.	
	POST-UNLOADING / PRE-TRIP INSPECTION	
5	**A** ❑ **Safety** – Unloading tools, equipment, and accessories removed from hopper car and rail track. Always follow your company operating procedures.	☐
	B ❑ **Security Inspection** – All valves and hatches closed, locked, and sealed. No visible pest contamination, suspicious items, or other security concerns.	
	C ❑ **Environment** - Spilled pellets or granular powder cleaned up from floor/ground and hopper car.	
	D ❑ **Hopper Car Damage Inspection** – No obvious signs of damage, inoperable, or missing parts.	

NOVA Chemicals®

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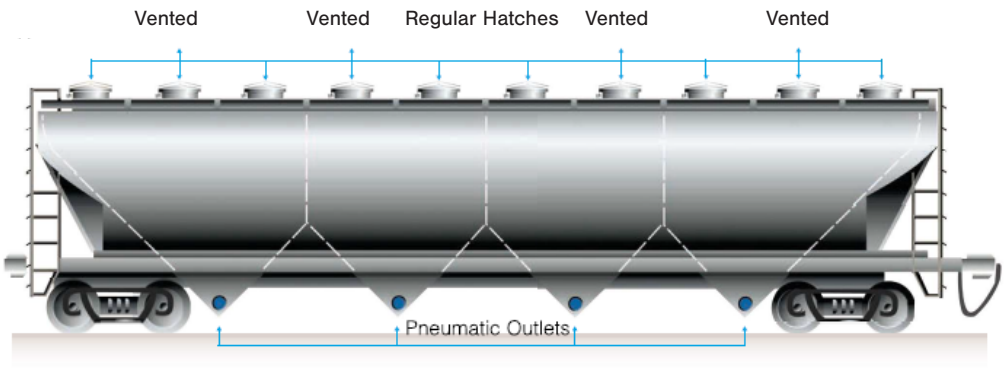
NOVA Chemicals

Take the OCS Pledge – Do your part to protect the environment.

Operation Clean Sweep® opcleansweep.org

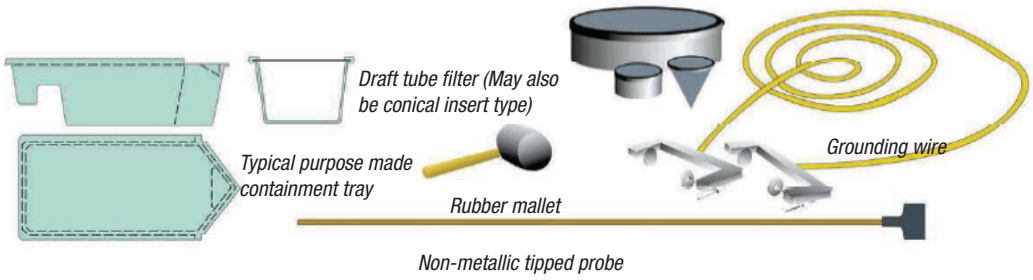


Typical NOVA Chemicals Hopper Car

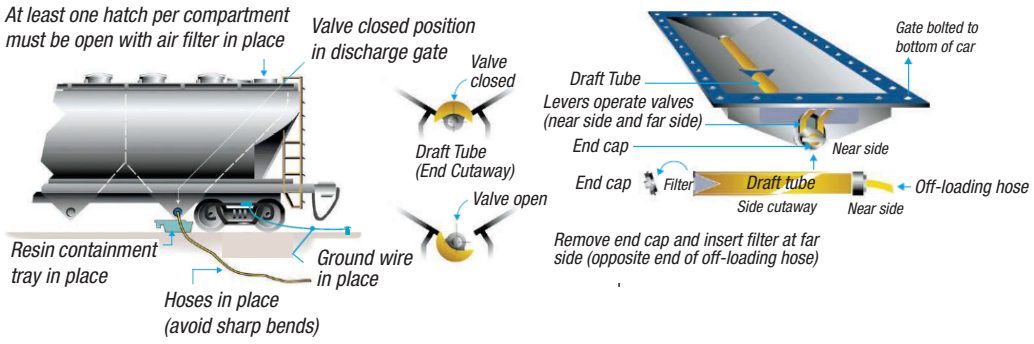
- State-of-the-art design
- Large (6200-6400 ft^3) payload capacity
- Each compartment is equipped with a vented hatch cover to prevent implosions

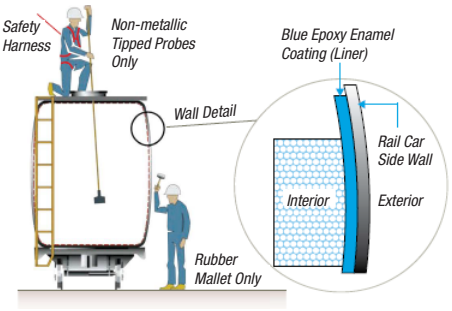
Suggested Accessory Kit for Unloading a Hopper Car

Air filters for top hatch opening are only required if top hatch is opened during unloading.



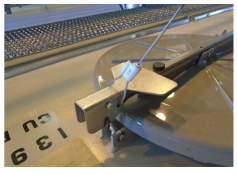
Unloading a Hopper Car





Securing/ Sealing End Caps & Top Hatch Covers

Draft Tube End Caps



Top Hatch Covers

REPORT INCIDENTS

Hopper car damage, spills, partial unload, safety, or security. Call NOVA Chemicals at

1.800.561.6682

US/Pittsburgh | +1.412.490.4170 | 800.222.7212 x4170 | **novachemicals.com**

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