PACS™

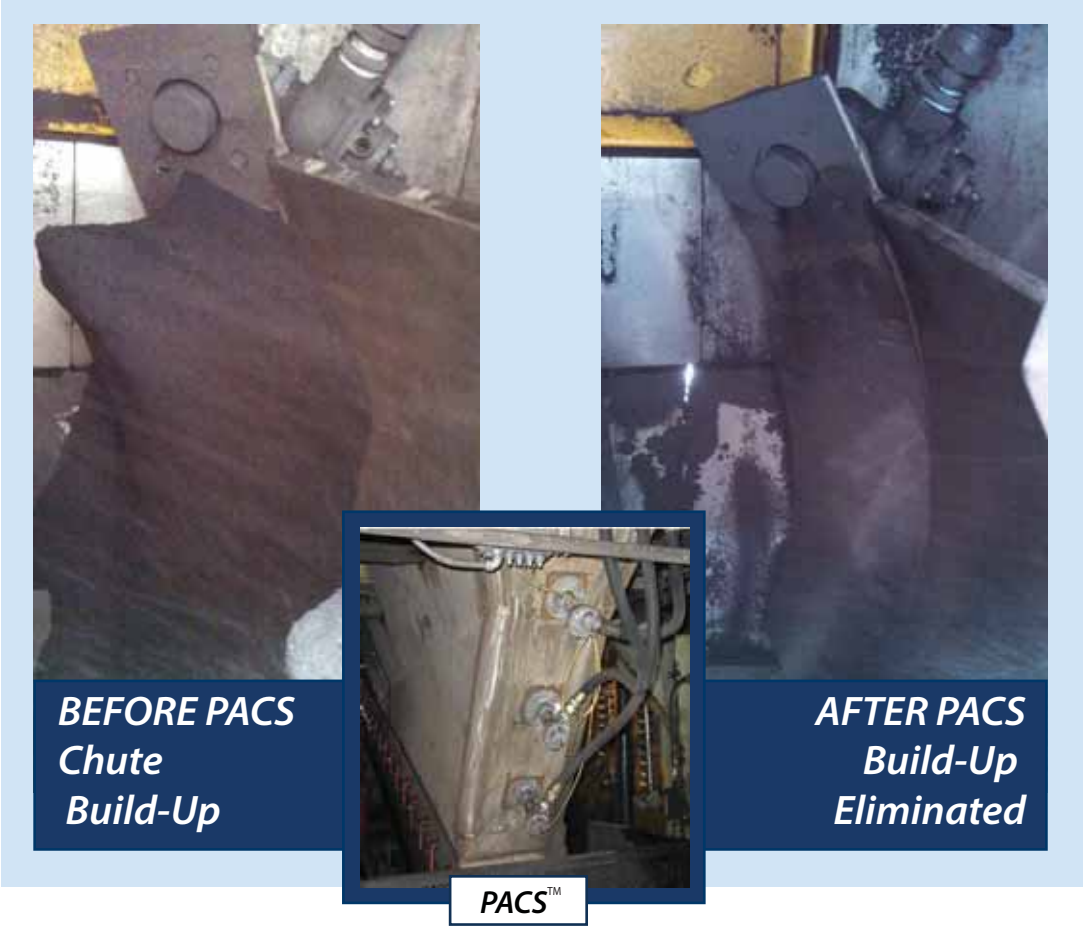
Pneumatic Air Cannon System

PLUGGAGE PROBLEM SOLVER

Eliminate Build-Up

Keep Material Free Flowing

The radial PACS automatic cleaning system prevents build-up and pluggage of transfer chutes, hoppers and silos. Easy to install and maintain, PACS is the trouble-free solution that ensures uninterrupted material flow.



- Reduce Housekeeping and Maintenance
- Less Material Waste
- Designed For Wet and Sticky Materials
- Perfect for Lignite, Coal, Grain, Fertilizer, Sand, Cement, Limestone, Wood Pellets and More

BENETECH®

Improved Efficiency

PACS air nozzles are specifically designed to handle bulk material. These automatic nozzles remove material accumulation before pluggage can occur. Buildup is eliminated at points of impact, prior to becoming large enough to break off and cause escalating cost and problems.

Ease-of-Use

Using standard plant compressed air at 80 to 100 psig, PACS removes buildup of wet, sticky, or frozen materials from the walls of chutes, bins, hoppers, silos, and bunkers. PACS works automatically, without supervision and without interfering with material handling operations. Loss of material-flow due to pluggage is virtually eliminated where PACS air nozzles are correctly positioned.

The system's electronic controls trigger PACS nozzles, firing in a predetermined order. Each nozzle is supplied with a precise burst of plant air through a quick open and close air-operated solenoid valve.

Each nozzle directs air 360˚ along the surface of the chute/bin/hopper wall for an adjustable distance of approximately two to three feet, preventing material from layering. PACS dislodges and breaks up material accumulations that are then carried away by gravity into material flow within the chute/bin/hopper.

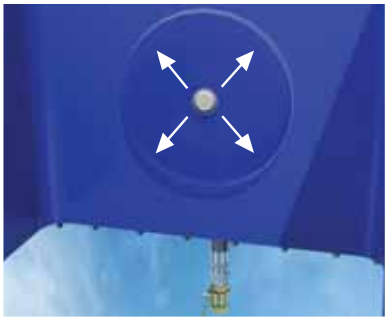
Large Compressed Air Usage is not Required

PACS requires standard 80 to 100 psig plant compressed air consuming 15 SCFM for 0.1 seconds and operates on 120 VAC single phase power.

PACS provide short, precise bursts of penetrating air, along the surface walls, in order to stop problems *before* they start.

A hardened, wear resistant **PACS** nozzle head mounted nearly flush with the chute wall.

Installed in areas where pluggage starts.

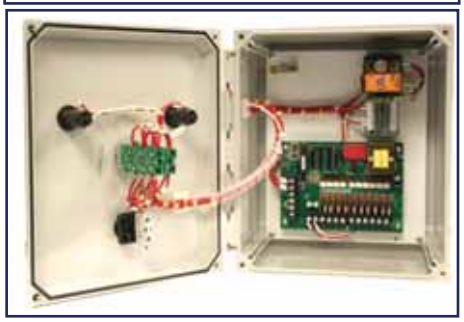


An activated radial **PACS** nozzle emits circlular burst along the chute wall for a tenth of a second.

Simple to Install and Easy to Maintain

PACS unique design includes a remote air tank and control station, conveniently accessible at ground level. There is no need to worry about the installation of large compressed air tanks on chutes, silos or bunkers.

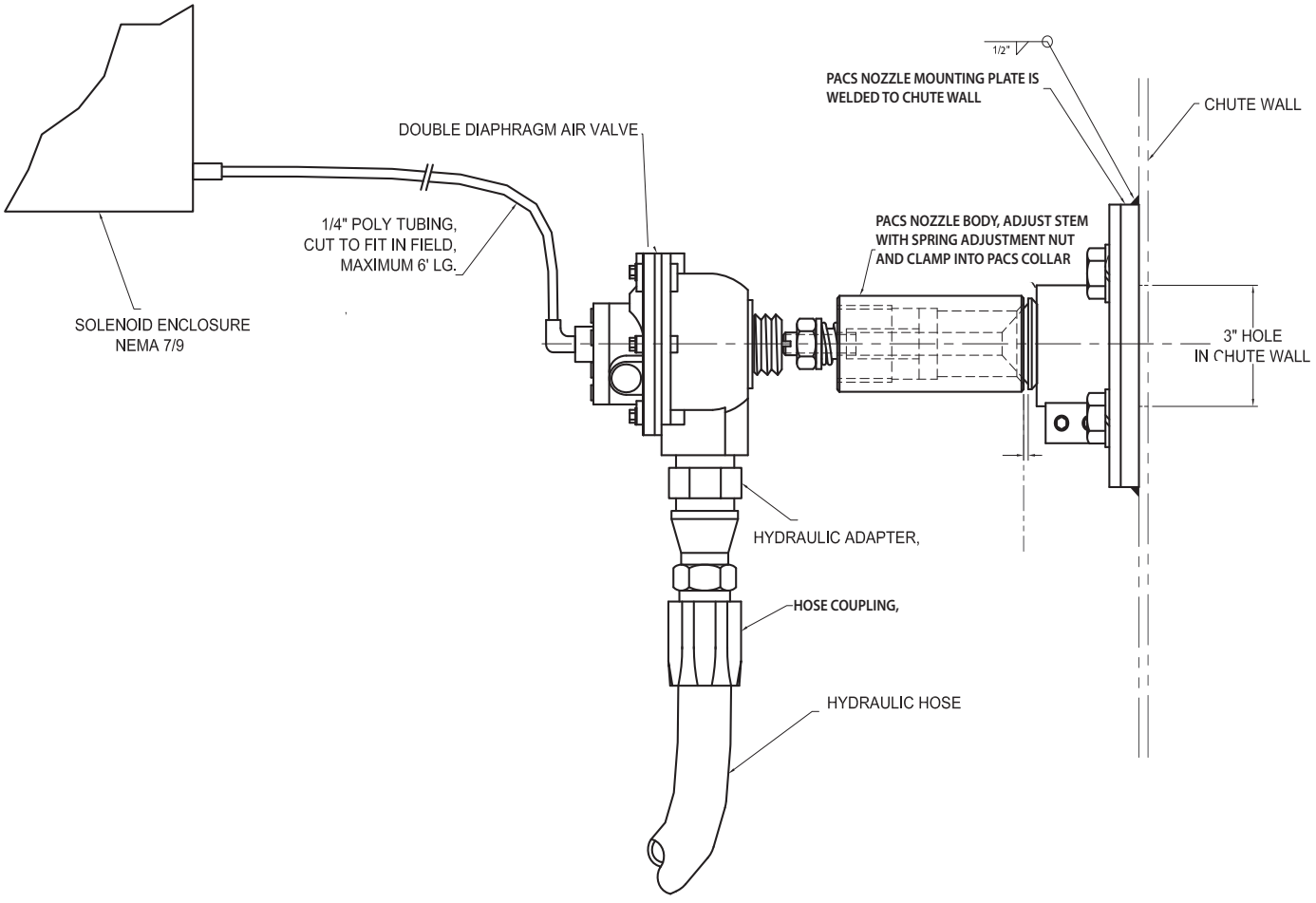
The **PACS** control system panel and sequential timers are designed to be located in an area convenient to operations, making it easy to change rate-of-nozzle firing sequences. Timing sequence and firing rates can be expanded (supporting up to 45 different nozzles) in order to accommodate a variety of configuration changes.



Automatic Cleaning

Unlike air lancing, which is labor intensive and can result in injury and insufficient cleaning, **PACS** systems clean automatically and do not require confined space permits to operate.

Nozzle faces are thermally hardened (Rockwell No. 50-55 RC) to extend life span.



Pneumatic Air Cannon System

NOZZLES	Kit	Nozzles		
Description	**NEMA Rating**	**per Kit**	**Kit Part No.**	**Descriptions**
Nozzle Equipment Kit	4	2	PACS-SYS-02-NEMA4	(2) NOZZLE PACS EQUIPMENT KIT, NEMA 4 PILOT VALVE ENCLOSURE*
	4	5	PACS-SYS-05-NEMA4	(5) NOZZLE PACS EQUIPMENT KIT, NEMA 4 PILOT VALVE ENCLOSURE*
	4	8	PACS-SYS-08-NEMA4	(8) NOZZLE PACS EQUIPMENT KIT, NEMA 4 PILOT VALVE ENCLOSURE*
	4	12	PACS-SYS-12-NEMA4	(12) NOZZLE PACS EQUIPMENT KIT, NEMA 4 PILOT VALVE ENCLOSURE*
	7/9	4	PACS-SYS-04-NEMA79	(4) NOZZLE PACS EQUIPMENT KIT, NEMA 7/9 PILOT VALVE ENCLOSURE*
	7/9	6	PACS-SYS-06-NEMA79	(6) NOZZLE PACS EQUIPMENT KIT, NEMA 7/9 PILOT VALVE ENCLOSURE*
				**INCLUDES NOZZLES AND MECHANICAL EQUIPMENT*

*WHEN ORDERING, PLEASE SPECIFY QUANTITY OF KITS AND OPTIONS REQUIRED **PER SYSTEM***

OPTIONS		# Nozzles		
Description	**NEMA Rating**	**To be Controlled**	**Part No.**	
Sequence Timer Panel For Automatic Operation	4X	2-10	PACS-CONT-10-NEMA4X	(10) CHANNEL CONTROL PANEL, NEMA 4X ENCLOSURE**
	4X	16-48	PACS-CONT-48-NEMA4X	(48) CHANNEL CONTROL PANEL, NEMA 4X ENCLOSURE**
	7/9	2-10	PACS-CONT-10-NEMA79	(10) CHANNEL CONTROL PANEL, NEMA 7/9 ENCLOSURE**
	7/9	16-48	PACS-CONT-48-NEMA79	(48) CHANNEL CONTROL PANEL, NEMA 7/9 ENCLOSURE**
				***WITH SELECTOR SWITCH, MANUAL ELECTRIC ACTIVATION SWITCH, INDICATING LIGHTS, PRE-WIRED, ASSEMBLED & TESTED*

Description	**NEMA Rating**	**# Nozzles To be Controlled**	**Part No.**	
Pushbutton Control For Manual Operation	N/A	1	96574	(1) NOZZLE MANUAL PUSHBUTTON CONTROL, AIR ACTUATED (NO ELECTRICAL)

Description	**NEMA Rating**	**# Nozzles To be Controlled**	**Part No.**	
Air Receiver Tank	N/A	2-10	PACS-TANK-30GAL	30 GALLON TANK KIT, ASME-Code***
	N/A	16-48	PACS-TANK-60GAL	60 GALLON TANK KIT, ASME-Code***

****INCLUDES TANK, BALL VALVES, PRESSURE REGULATOR, SAFETY VALVE, PRESSURE GAUGE, CONDENSATE SEPARATOR*

PACS Kit Includes limited travel, hardened (Rockwell No. 50-55 RC) steel nozzle with high-pressure hose, solenoid valves, flange mounting plate and weld plate with all the necessary connection hardware between nozzles and the system headers.

PACS-SYS-02-NEMA4 Nozzle Kit
(Pictured Below)

PACS-CONT-10-NEMA4
(Pictured Below)

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