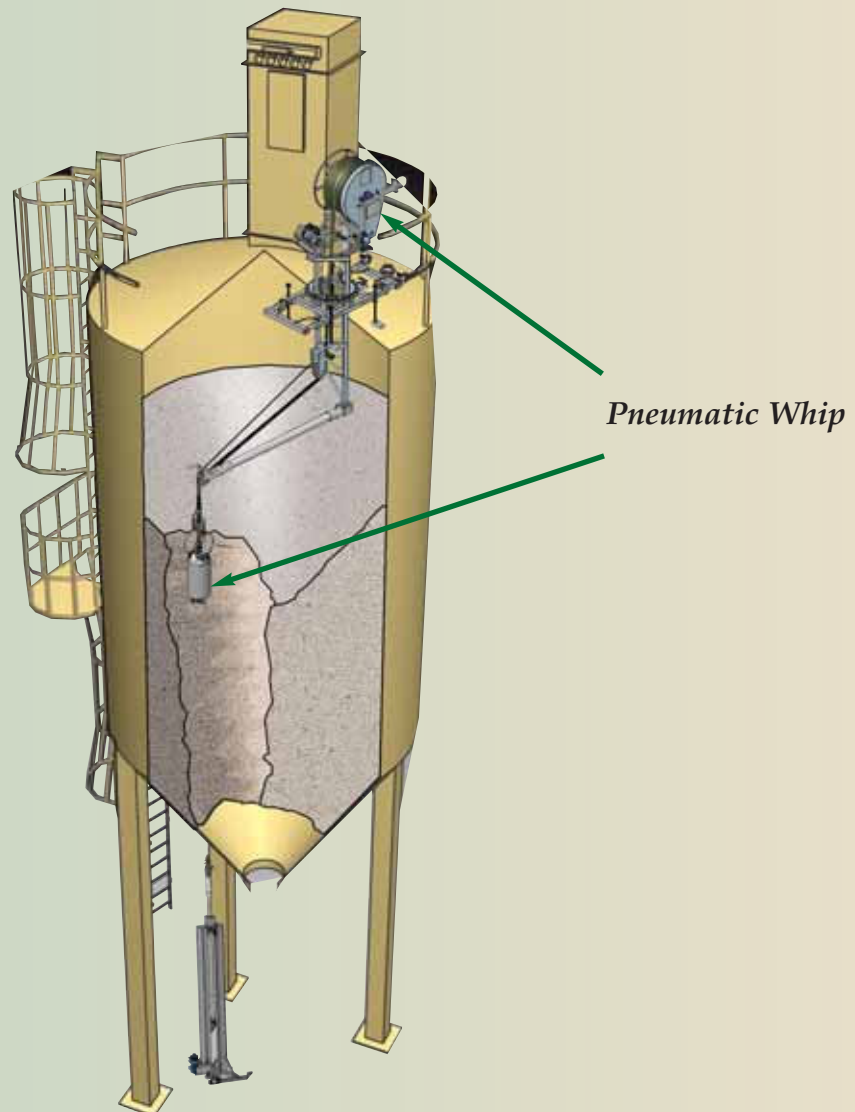


BUILD UP & BLOCKAGE CLEARING OF BINS AND SILOS



BIN AND AND SILO CLEANING SYSTEMS

Models Pneumatic Whip



Bin and Silo Cleaning Technology

P.O. Box 2519 • Bridgeview, IL 60455
708.974.2586 • Fax: 708.974.9429
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BIN AND SILO CLEANING SYSTEMS

PNEUMATIC WHIP

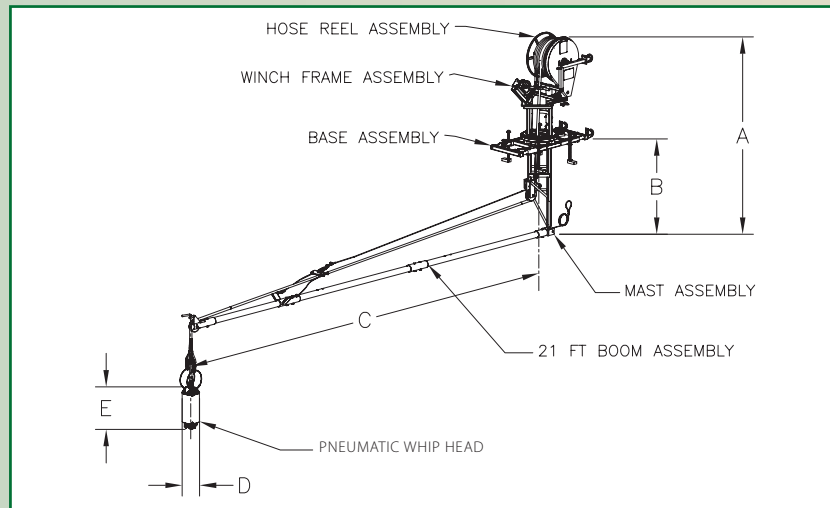
If your work involves keeping silos, storage bins and hoppers working efficiently or you manage cost effectiveness and productivity - you need **the Pneumatic Whip Bin Cleaning System**.

The Pneumatic Whip Bin Cleaning System is the safe alternative for cleaning blocked or compacted silos. It is a completely portable, remote-controlled tool that can be lowered into storage containers through a manhole opening. Powered by compressed air, the patented Gyro motor uses a variety of whips and cutting edges to knock down even the toughest materials without damaging the walls of the storage bins.

FEATURES:

- Eliminates blockages and hang-ups or build-ups – *faster, easier, and safely.*
- Knocks down solidly compacted materials no matter how difficult or dangerous.
- Within 20 minutes you can assemble and start the cleaning process.
- Easily accomplished by only 2 men.
- Portable/moves easily for use on various sizes and shapes of bins.
- When unexpected blockages occur, the equipment can be put into action immediately.
- Never a need to send a man inside a bin risking injury, burial, suffocation or fatality.
- Power requirements are low and simple.
- Used world-wide on large or small problems for: Grain and Feed, Cement, Mining, Chemical, and Pulp and Paper Industries.

SPECIFICATIONS



Pneumatic Whip Bin and Silo Cleaning System	Minimum Requirements				A		B		C		D		E		Weight	
	Pressure		Volume													
	psi	bars	cfm	l/min	ft	m	ft	m	ft	m	in	cm	in	cm	lbs	kg
Pneumatic Whip	85	5.8	100	2832	–	–	–	–	–	–	8.625	22.00	22	56.00	77	35
Standard Positioning Boom w/150 ft of Hose	–	–	–	–	8'-6.8"	2.61	3'-11.8"	1.22	20'-5.9"	6.25	–	–	–	–	411	187

Note: Preferred manhole size to be a minimum of 18 in. (46 cm) square or 19 in. (48 cm) round. If manholes are smaller please notify Deca Vibrator.

PREVENTS:

- High cost of material blockages
- Injury and fatality due to workers entering the container
- Container damage
- Loss of inventory - contamination or infestation
- Reduced storage capacities

BENEFITS:

- Cost effective
- Portable
- Flexible
- Reliable
- Fast and easy to use
- Safe

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REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
1	1	ADDED DIMENSIONS AND MATERIAL	7/18/23	RRH

WHIP HEAD CONTROL
MODEL #FRL MAT'L. CARBON STEEL

WHIP HEAD AIR SUPPLY
HOSE ASSEMBLY.
MAT'L. RUBBER HOSE.

HOSE REEL ASSEMBLY C/W 150FT OF HOSE
MODEL #HRAC MAT'L. ALUMINUM, MOTOR CARBON STEEL

CABLE WINCH ASSEMBLY
MAT'L. CARBON STEEL

WINCH TRI-POD FRAME ASSEMBLY
MODEL #WFTAC MAT'L. ALUMINUM

CUSTOM BEARING FOR 360° ROTATION.
MAT'L. CARBON STEEL

WHIP "H" FRAME
MAT'L. ALUMINUM

CLAMP FEET, QTY. 4
MODEL #HDC MAT'L. ALUMINUM THREADED RODS CARBON STEEL.

STAINLESS STEEL WINCH CABLE
MODEL #WFTA6-21FTBOOM

HEAVY DUTY WHIP HEAD AIR
HOSE ASSEMBLY, 150 FT.
MODEL #HR18.
MAT'L. DOUBLE WIRE BRAIDED
RUBBER COATED HOSE.

LOWER MAST ASSEMBLY
MODEL #LMAC
MAT'L. ALUMINUM

AIR MOTOR
CONTROL ASS'Y.
MOD.#AMC. MAT'L. CARBON STEEL.

BOOM ASSEMBLY
6FT, 8FT, 13FT,
16FT & 21 FT
MODEL #BA21FT
MAT'L. ALUMINUM

STAINLESS STEEL
BRAIDED CABLE

BOOM COUPLING & BRIDGE ASSEMBLY
MODEL #BBAC, MAT'L. ALUMINUM.

WHIP HEAD HANGER ASSEMBLY
MODEL #HHAC, MAT'L. ALUMINUM

WHIP HEAD ASSEMBLY
MODEL #WHAC
MAT'L. ALUMINUM

WHIP HEAD FLAILS (OPTIONS)
MODEL #BCFBC, BCFC & UCRF OR
URETHANE COATED ROPE.
MAT'L. OF FLAILS AND CHAINS, BRASS

SEE ENLARGED VIEW "A"

MAT'L. ALUMINUM
EYE BOLT
MAT'L. ALUM.
CHICAGO
AIR FITTING
GALVANIZED
STEEL.

AIR MANIFOLD
MAT'L. ALUM.

WHIP HEAD COVER
MAT'L. ALUMINUM

WHIP HEAD
MAT'L. ALUMINUM

ENLARGED VIEW "A"

CHAIN
MAT'L. BRASS

POWER REQUIREMENTS:
100 PSI @ 175 CFM

WHIP COMPONENTS	DWG. NO.	WEIGHT
WHIP HEAD CONTROL	FV-FRL-04	16 LBS
HOSE REEL ASSEMBLY	FV-SA-02	206 LBS
WINCH FRAME TRI-POD ASSEMBLY	FV-SA-02	32 LBS
HOSE REEL AIR MOTOR CONTROL ASSY	FV-AMC-05	14 LBS
CLAMP FEET	FV-HDC-08	4 LBS
LOWER MAST ASSEMBLY	FV-SA-02	118 LBS
21 FT. BOOM ASSEMBLY W/PINS	FV-BA21FT-03	53 LBS
BOOM COUPLING & BRIDGE ASSEMBLY	FV-BBAC-11	8 LBS
WHIP HEAD HANGER ASSEMBLY	FV-HHAC-10	4 LBS
WHIP HEAD ASSEMBLY	FV-WHAC-07	80 LBS
BRASS FLAIL BLOCK SET #BCFBC	FV-FLAIL-09	6 LBS
BRASS CHAIN FLAIL SET #BCFC	FV-FLAIL-09	5 LBS
URETHANE ROPE FLAIL SET #UCRF	FV-FLAIL-09	1 LBS
PWA SERIES FULL ASSEMBLY	FV-PWA-1	543 LBS
AIR MOTOR AIR SUPPLY HOSE ASSEMBLY	FV-RH-06	6 LBS

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CUSTOMER NOTE:

DIMENSION SHOWN ARE NOMINAL AND SUBJECT TO CHANGE.

UNLESS OTHERWISE
SPECIFIED ALL DIMENSIONS
IN INCHES.

TOLERANCES:
FRACTIONS: $\pm 1/32"$
XXX DECIMALS ± 0.005
XX DECIMALS ± 0.015
ANGLES $\pm 1/2^\circ$

FORCE VECTOR INC.
MOKENA, IL. 60448

**PNEUMATIC WHIP GENERAL ASSEMBLY
SERIES PWA**

DWG. NO. RRH DWG. NO. FV-PWA-1
SCALE: NONE DATE: 07-02-20 SHEET 1 OF 1

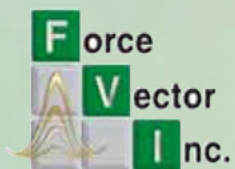
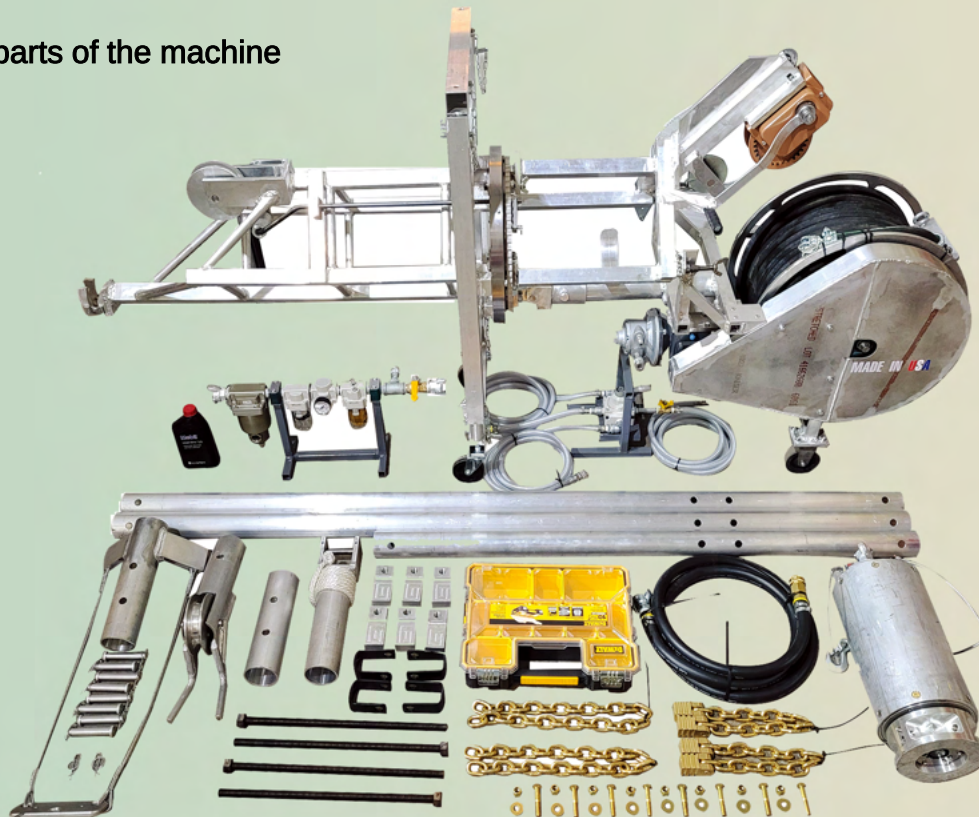
Technology	Power Source	Air Pressure (Max)	Air Usage (Max)	MATERIAL OF CONSTRUCTION
Bin and Silo Cleaning	Pneumatic	100 PSI	175	ALUMINUM
MINIMUM CONTAINER DIA.	OPTIONS & ACCESSORIES	Features & Benefits	Standard Positioning Boom assmby weight	Pneumatic Whip Head weight
3/4" ID	Brass Non sparking Chain, Brass Non sparking chain with Brass Cutting Knucle Blocks, Urethane Coat Ropes w/ Mylar plastic disks , Pnuematic Whip Purchase or Lease options available.	The only bin cleaning system with full 360 degree rotation without having to remove from opening to reposition machine. Machine is portable and easily moved.	411 Lbs	75 Lbs
Minimum Silo top access port size, and Air Required to run systems	Minimum Air Supply Hose	Manhole Opening Size	Weight of Machine less Cutting Head	Weight of Cutting Head
24" x 24" Access Hole, 100 PSI @175 CFM	3/4" ID	24" X 24"	411 LBS.	75 LBS.

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Full assembly picture of the machine



Pictures of whole parts of the machine



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