DELUMPER®

For Demanding Crushing Applications









FRANKLIN MILLER CRUSHERS

Cutting Down Solids in Plant Operations Worldwide

Since 1918, and for three generations, Franklin Miller Inc. has been providing a broad range of heavy-duty crushers, mills and shredders for a variety of applications. Today, Franklin Miller is a leader in size reduction technology with unparalleled experience, a dedicated team ranging from sales to production, a modern manufacturing facility and a strong commitment to quality and customer satisfaction.





DELUMPER® crushers break solids, lumps and agglomerates down to desired size with a once-through, non-churning, crushing action that produces minimal fines. They can reduce plant downtime, increase processing speed and improve product consistency.

These units are precision manufactured and aligned for smooth operation with low vibration or noise. They can handle a wide range of materials including agglomerates, animal feed, biosolids, chemicals, composites, fertilizers, fly ash, food processing, food waste, frozen food, glass, ice, limestone, lithium carbonate, lithium hydroxide, minerals, pallets, pharmaceuticals, plastics, resins, rubber, salts and rock salt, solid waste, sugar, tar sands, urea, wastewater, and much more. DELUMPER crushers are used for dry or wet applications in either in-line or gravity configurations as a stand alone unit or as part of a complete system.









PIPELINE DELUMPER®

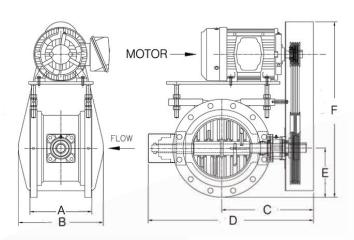
Powerful Inline Processor

The PIPELINE DELUMPER® is a proven in-line processor that chops, shreds, disperses and suspends solids directly in fully enclosed pipe systems. This straight-through, ultra-compact unit rectifies flow properties of heavy sludge, slurries and solids-laden streams.

The PIPELINE DELUMPER® alleviates blockages, works the stream to free flow and improves processing. It can prevent damage to pumps, piping, valves, nozzles and downstream equipment. This unit has proven itself as a valuable problem solver in process systems worldwide.



Easy to Install | Powerful Cutting Mechanism | Ultra-Compact Design Increases Process Efficiency | Heavy, Precision Construction | Effective in Liquid Systems



MODEL NO.	PIPE SIZE	Α	В	С	D	E	F	TYP HP
PD3	3	5.5" 140 mm	10.2" 259 mm	9.69" 246 mm	17" 432 mm	5.12" 130 mm	20" 508 mm	2
PD4	4	6" 152 mm	10.2" 259 mm	9.875" 251 mm	18" 457 mm	5.12" 130 mm	20.69" 525 mm	5
PD6	6	7" 178 mm	12" 305 mm	12.75" 324 mm	22.75" 578 mm	6" 152 mm	23" 584 mm	5
PD8	8	8" 203 mm	16" 406 mm	15" 381 mm	25.62" 651 mm	8" 203 mm	32" 813 mm	10
PD10	10	10" 254 mm	16.5" 419 mm	16" 406 mm	28.1" 714 mm	8" 203 mm	33.81" 859 mm	10
PD12	12	12" 305 mm	16.5" 419 mm	17.75" 451 mm	35" 889 mm	9.5" 241 mm	34 " 864 mm	15
PD14	14	14" 356 mm	16.5" 419 mm	17.75" 451 mm	36.25 921 mm	10.5" 267 mm	37" 940 mm	20
PD16	16	16" 406 mm	37" 940 mm	25.10" 637 mm	44" 1118 mm	18.25" 464 mm	52" 1321 mm	25
PD18	18	18" 457 mm	37" 940 mm	26.10" 663 mm	46" 1168 mm	18.25" 464 mm	52" 1321 mm	30
PD20	20	20" 508 mm	37" 940 mm	28" 711 mm	52" 1321 mm	16" 406 mm	62" 1575 mm	40
PD24	24	24" 610 mm	41" 1041 mm	31" 787 mm	55" 1397 mm	19.12" 486 mm	66.75" 1695 mm	50
PD30	30	30" 762 mm	55" 1397 mm	36" 914 mm	63" 1600 mm	27.5" 698 mm	78" 1981 mm	75
PD36	36	36" 913 mm	74" 1880 mm	45" 1143 mm	82.25" 2089 mm	37" 940 mm	98.5" 2502 mm	100



PD36 PIPELINE DELUMPER



Improves Product Consistency

The PIPELINE DELUMPER improves product quality, blend and consistency. It instantly reduces tough solids to a uniform output size and improves mixing, drying and dissolving operations. Nozzles are kept clear and sensitive media is protected. The result is reduced downtime, a process that is in better control, and substantial savings to the operation.



DELUMPER[®]L CRUSHER

Precision Crushers Built to Exacting Standards

DELUMPER® Crushers reduce product to desired output with a positive, oncethrough chopping action. They process agglomerates and chunks without overgrind, heat rise or fines. These units feature solid construction, smooth finish, and design features that make them truly a breed apart for unsurpassed performance and reliability.



15

25

13

(330 mm)

20

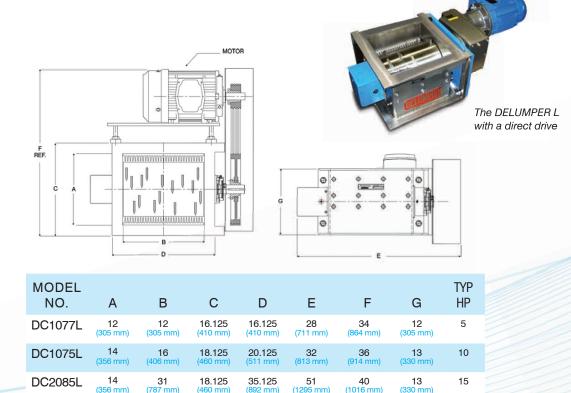
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Low Friction Cutter Design | Individual Replaceable Teeth | High Capacity Handles Sticky or Wet Solids | Heavy Duty Precision Construction | Minimal Fines



DELUMPER Crushers reduce lumps, crush minerals, improve product consistency, facilitate mixing, drying and conveying, and keep process lines running smoothly. These units have extraordinary processing capabilities on a wide range of materials including chemicals, sugar, food, minerals, urea, ammonium nitrate, salts, colors, plastics, pharmaceuticals and more.

These units feature a heavy, one piece rectangular body with wide connecting flanges, shaft seals, extra heavy bearings for long life and fully polished interior on stainless units. Each unit is precisely built, assembled, balanced, and aligned to exacting standards for smooth operation.



Consult factory for certified drawings. Other sizes available on request.

31 (787 mm)

20

(508 mm)

18.125

24.125

35.125

24.125

51

DC2085L

DC2020L

14

(356 mm)

20

DELUMPER® 54 CRUSHER

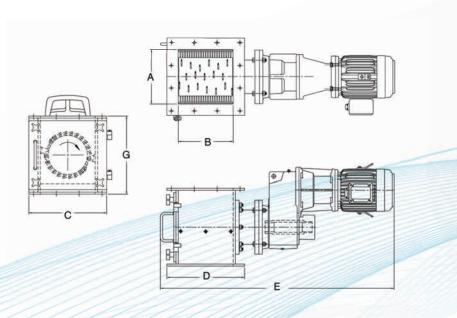
Ultra Sanitary Crushers with a Direct Drive

DELUMPER® \$4 Crushers feature precision operation, easy interior access, clean-in-place capability, and a meticulously polished finish. A convenient side door provides fast and easy access to the interior of the cutting chamber for maintenance. This eliminates the necessity of removing the drive in order to access or remove the interior cutting elements.

Designed and built to meet the highest quality standards, the DELUMPER S4 features a one-piece, stainless steel body with all surfaces and welds meticulously polished. There are no interior crevices where product can accumulate or stagnate. Precision machined and balanced for low vibration and noise, the DELUMPER S4 delivers the utmost in smooth and precise operation.



Precision Sanitary Design | Convenient Side Access Door | Cantilevered Drive Support Smooth Cylindrical Drum With Teeth | Polished Interiors | Low Profile Design



MODEL NO.	Α	В	С	D	E	G	TYPICAL HP
DC1077-S4	12 (305 mm)	12 (305 mm)	17 (432 mm)	17 (432 mm)	52 (1321 mm)	17 (432 mm)	5
DC1075-S4	14 (356 mm)	16 (406 mm)	18.25 (464 mm)	20.5 (521 mm)	63 (1600 mm)	19 (483 mm)	10



Consult factory for certified drawings. Other sizes available on request.



DELUMPER®LP CRUSHERS

Powerful Crushers with Unique Versatility

DELUMPER® LP crushers reduce hard or soft, heat sensitive, sticky or wet agglomerates and lumps at high volume. These straight-through units employ extended cutting teeth that rotate completely through a heavy bar cage. Oversized solids up to the unit's full input opening size are reduced by this powerful processor. With each rotation, the teeth clean the slot openings, making the unit automatically self clearing. The result is an efficient, exceptionally low-friction cutting action that is excellent for large quantities of sludge cake, agglomerated chemicals, fats, waxes, plants, waste and more.

Low-Friction Cutter Design | Individual Replaceable Teeth | High Capacity Handles Sticky or Wet Solids | Heavy Precision Construction



The DELUMPER® LP is also available in a direct drive.

MODEL NO.	SHAFT NO.	IN WIDTH	PUT LENGTH	OVERALL WIDTH	LENGTH	HEIGHT	TYP HP
DC1075LP	1	14 (356 mm)	16 (406 mm)	32 (813 mm)	36 (914 mm)	13 (330 mm)	10
DC2085LP	1	14 (356 mm)	31 (787 mm)	51 (1295 mm)	40 (1016 mm)	13 (330 mm)	15
DC2020LP	1	20 (508 mm)	20 (508 mm)	44 (1118 mm)	50 (1270 mm)	20 (508 mm)	25
DC1820LP	2	18 (457 mm)	20 (508 mm)	22 (559 mm)	62 (1574 mm)	10 (254 mm)	10
DC2830LP	2	28 (711 mm)	30 (762 mm)	33.5 (851 mm)	88 (2235 mm)	13 (330 mm)	15
DC2840LP	2	28 (711 mm)	40 (1016 mm)	36.8 (935 mm)	130 (3302 mm)	15 (381 mm)	25
DC3440LP	2	32 (813 mm)	43 (1092 mm)	55 (1397 mm)	201 (5105 mm)	18 (457 mm)	40
DC3456LP	2	34 (864 mm)	58 (1473 mm)	54.5 (1384 mm)	201 (5105 mm)	18 (457 mm)	25
DC4230LP	3	42 (1067 mm)	30 (762 mm)	49 (1245 mm)	97 (2464 mm)	15 (381 mm)	15
DC4240LP	3	42 (1067 mm)	40 (1016 mm)	49 (1245 mm)	107 (2718 mm)	15 (381 mm)	15
DC4856LP	3	48 (1219 mm)	56 (1422 mm)	70 (1778 mm)	212 (5385 mm)	18 (457 mm)	25

Consult factory for certified drawings. Other sizes available on request.

DELUMPER® TWIN-LP & TRIPLE-LP

Powerful Twin and Triple-Shaft Compact Crushers

The DELUMPER® TWIN-LP and TRIPLE-LP crushers process massive quantities of lumps or agglomerates with a powerful multi-shaft crushing mechanism. These mighty processors reduce dry, sticky or wet solids to a desired output size with unsurpassed performance and reliability.

DELUMPER LP models are provided in a number of configurations to fit many application requirements, in Standard (LP) and Ultra Heavy Duty (LP-HD) versions. These units feature: direct gear drives, shaft seals and heavy-duty bearings.

Dimensions

The standard LP models feature 2-3/8" diameter (60mm) shafts, heavy-duty roller bearings, individually replaceable "LP" teeth and heavy bar grating. These units are supplied with up to (3) 25 HP (18.75kw) direct-coupled gear drives and motors for a total power of 75HP (56.25kw).

The LP-HD features 4" diameter (101mm) shafts and bearings. These units provide for longer cutting chambers and heavy applications. They are available with up to (3) 75HP motors for a total power of 225 HP (168kw). Units are available with or without a stand and hopper.



Construction

The DELUMPER Multi-shaft LP is ruggedly constructed of heavy plate and channel for low vibration and noise. Input and output flanges are provided for easy connections. Units are available in carbon steel, T304 or T316 stainless steel, and nickel based alloys on special order.

OPTIONS & SYSTEMS

A Variety of Additions to Enhance Versatility

Franklin Miller has extensive engineering know how and manufacturing capabilities to meet your processing needs. We can provide a variety of options and accessories for our wide range of standard DELUMPER® models or we can provide a fully custom engineered solution. Our equipment can be provided as a stand alone unit with stand, hopper and controller, or as part of a complete engineered system. This system can include conveyors, feeders, bag dump and unload stations and more. Our test facility can be your resource for determining the best size reduction solution to meet your needs.

High Temperature Capability | Hardfacing
Electrical Controls and VFDs | Multiple Stages
Outboard Bearings & Packaging | Sizing Screens
Hoppers, Stands & Adapters | Access Doors
Zero Speed Indicator | Drilled Flanges
Pneumatic or Mechanical Conveyors | Direct Drive
Complete Systems

Chrome Boride Hardfacing



Franklin Miller hardfacing provides a solution for applications with high concentration of abrasives. This fused coating is capable of withstanding tough abrasion and providing extended service life. A heavy coating of chrome boride in

a nickel-based matrix is fused to working surfaces at close to 2000 degrees F. This hardfacing is fused to the base metal with a unique, precision process. The result is a surface 15-20 times more abrasion resistant than stainless steel, which can't be scratched by a normal file.

The DELUMPER S4 supplied complete with stand, hopper and controller. Franklin Miller can supply an Automatic Control System and/or VFDs in a variety of configurations for single units as well as full systems.



The DELUMPER LP is shown as a completely engineered system with its own conveyor for efficient transport of processed particles.



The DELUMPER
Bagstation™ is a preengineered bag dump
system designed for
efficient unloading,
deagglomerating and
freshening of lumpy
bagged solids while
efficiently introducing
them into a production
process.



The DELUMPER BBU Bulk Bag Unloader is designed to efficiently discharge bulk bags (FIBC) and reduce agglomerates and solids to a smooth free-flowing condition.



