



Design & Manufacturing Ltd.

Horizontal Directional Drilling & Cable Installation Tools



Line Blowing

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SPOOLMASTER

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POWER BLOWER



58400 SERIES

The DCD Power Blower is unique, a portable unit with the maximum pressure available in this class of line blowers: up to 30% higher. While there are several other similar products on the market, the DCD unit offers an excellent list of special features including:

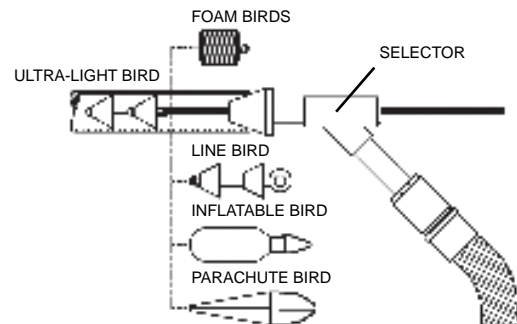
- Acceptable for outdoor use (not in rain).
- Heavy duty industrial three-stage motor with sealed bearings and delivering up to 95 cfm and 5 psi.
- A heavy-duty 2" hose made of crush resistant polyethylene, 15' long, which will stand up in temperatures from -40 to +140 deg F.
- The blowers operate at 110/120VAC and require 15 amp source. A 220V/110V voltage converter and a plug adapter are also available.



Although other manufacturers have a higher cfm rating, that will only increase the speed of the dart. The higher pressure rating is key because this will allow a dart carrying pull tape or twine to travel further with higher loads, even though it might take a few seconds longer (see below for a full explanation).

DCD also offers a full line of blowing accessories detailed on the following pages, available as kits or individually to build your own toolbox. DCD Line Blowing products feature a range of innovations to suit your application and go farther.

Part No.	Description
58400-000	POWER BLOWER 110V
58400-110	POWER BLOWER c/w SEAL-OFFS FOR 1/2" TO 6" DUCT AND HOSE 2" DIA. X 15 FT. LONG. 110V INCLUDES 30 AMP TWIST PLUG.
58400-200	POWER BLOWER - 58400-000 WITH VOLTAGE CONVERTER 58400-201
58400-201	VOLTAGE CONVERTER - TO CONVERT 220V POWER TO 110V. THIS ALLOWS THE STANDARD 110V LINE BLOWER TO BE USED IN COUNTRIES WHERE 220V IS STANDARD SUPPLY.
58400-220	POWER BLOWER - 58400-000, VOLTAGE CONVERTER - 58400-201, SEAL OFFS FOR 1/2" TO 6" DUCT AND HOSE 2" DIA. X 15 FT LONG.
58410-025	2" DIA. X 25 FT. OPTIONAL HOSE



UNDERSTANDING BLOWER PERFORMANCE

The output of a blower is usually specified in terms of (i) its flow rate (cfm), and (ii) its pressure (psi). The flow rate determines how fast the blower can move a projectile, and the pressure determines how much load the projectile can pull and how far it can pull it.

When a blower is running with an unrestricted outlet, it will produce its maximum specified flow rate because there is no resistance against it.

If the blower is attached to a length of empty conduit, the blower has to move all the air in the conduit to push any through. Friction against the conduit wall will resist that movement. As the blower works against this backpressure, its flow rate drops.

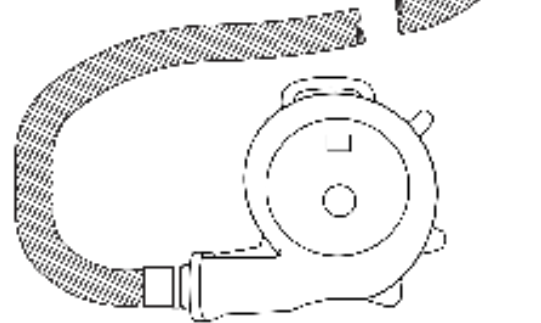
Therefore a blower can never produce its maximum advertised flow rate in a practical application due to air friction in the duct.

As the length of conduit increases, friction increases, backpressure increases, and flow rate decreases. At some point, the backpressure will increase to a point at which it equals the maximum pressure that the blower can generate, and the flow rate will be zero.

When a projectile is inserted, it blocks the conduit. As more air is pushed in behind the projectile, the backpressure rises until it exceeds the projectile's drag and it begins to move along the conduit. Therefore the drag creates the backpressure, which, in turn, determines the blower flow rate and ultimately the speed of the projectile.

As the projectile moves down the conduit, the drag force increases because of the weight and friction of the line being pulled is increasing. At some distance, the increasing backpressure equals the maximum pressure that the blower can develop, and the projectile will stall.

Because only blowing pressure can overcome backpressure, a blower with higher blowing pressure capability will ultimately go farther. The DCD Power Blower is designed around a high-pressure motor to go farther. More pressure, more distance.



HOSE & SEAL OFFS

58410 SERIES

The 3 Seal Off sizes are designed to cover all duct sizes from 1/2" to 6". Each of the units will attach directly onto the Seal Off Body which, in turn, attaches onto the Hose Assembly.

The Hose Assembly is made from crush-proof 2" hose and is 15' or 25' in length. At the end where the Seal Off Body attaches, there is a swivel connector allowing the body to be turned in any direction.

Part No.	Description	Weight
58410-015	HOSE ASSEMBLY - 2" DIA X 15' LONG	7.10 LB
58410-025	HOSE ASSEMBLY - 2" DIA X 25' LONG	10.50 LB
58410-100	CARRYING BAG FOR HOSE	1.93 LB
58420-010*	SEAL OFF ADAPTER - 1/2" TO 1-1/2"	0.36 LB
58420-020*	SEAL OFF ADAPTER - 1-1/2" TO 3"	0.72 LB
58420-030*	SEAL OFF ADAPTER - 2-1/2" TO 6"	2.01 LB
58420-040*	SEAL OFF BODY	1.46 LB
58420-000	KIT - INCLUDES ABOVE PARTS MARKED *	4.55 LB



FOAM BIRDS

58230 SERIES

DCD Foam Birds are one of the more common ways to carry pull tapes through empty ducting. The product can also be used to spread lubricant through the duct before pulling cable. Sizes are standard and will fit duct sizes 2" through 6".

Part No.	Nom. Duct Size	Weight
58230-200*	2"	0.06 LB
58230-250*	2-1/2"	0.06 LB
58230-300*	3"	0.09 LB
58230-350	3-1/2"	0.12 LB
58230-400*	4"	0.14 LB
58230-500	5"	0.27 LB
58230-600*	6"	0.39 LB
58230-KT1	KIT - INCLUDES ABOVE PARTS MARKED*	2.02 LB



LINE DARTS

58300 SERIES

DCD Line Darts are unique for several reasons. The colour coded cones match the seal kits, series 58200. The edges of the cones are tapered to allow better flexing when required to go around bends etc. The thin edges will also flare out to give better sealing and faster blowing once under pressure. Spare cones are available and replacement is simple.

Part No.	Nom. Duct Size	Color Code	Weight	Spare Cones
58300-100	1"	RED	0.04 LB	58350-100
58300-125	1-1/4"	YELLOW	0.06 LB	58350-125
58300-150	1-1/2"	BLACK	0.07 LB	58350-150
58300-200*	2"	GREEN	0.17 LB	58350-200
58300-250*	2-1/2"	RED	0.18 LB	58350-250
58300-300*	3"	YELLOW	0.27 LB	58350-300
58300-400*	4"	BLUE	0.39 LB	58350-400
58300-500	5"	ORANGE	0.75 LB	58350-500
58300-600*	6"	BLACK	0.94 LB	58350-600
58300-KT1	KIT - INCLUDES ABOVE PARTS MARKED*		0.85 LB	



ULTRA LIGHT BIRDS

58320 SERIES

Ultra-Light birds are unique to DCD. They are made out of polyurethane and, as the name implies, are about half the weight of the regular Line Darts.

The cones are very tough yet extremely thin – so thin, in fact, that they can be easily inverted in the event that the dart gets stuck and it is necessary to pull them back out.

Part No.	Nom. Duct Size	Weight
58320-200*	2"	0.04 LB
58320-250*	2-1/2"	0.04 LB
58320-300*	3"	0.08 LB
58320-350	3-1/2"	0.11 LB
58320-400*	4"	0.14 LB
58320-500	5"	0.19 LB
58320-600*	6"	0.34 LB
58320-KT1	INCLUDES ABOVE PARTS MARKED*	1.02 LB



INFLATABLE BIRDS

58330 SERIES

Although many companies offer this Inflatable style of bird, DCD's unit are made of coated nylon, and stitched for greater strength. The purpose of the inflatable is to be able to blow through ducting already containing cable.

Part No.	Nom. Duct Size	Weight
58330-075	3/4" - 1-1/4"	0.01 LB
58330-150	1-1/2" - 2-1/2"	0.03 LB
58330-300	3" - 4"	0.06 LB
58330-500	5" - 6"	0.07 LB
58330-KT1	INCLUDES ALL ABOVE PARTS	0.62 LB



PARACHUTE BIRDS

58335 SERIES

With a large open mouth, these Parachutes are able to grab all the air blown into the duct and will travel faster and further than any other model. They are made out of coated nylon, and can be used in occupied duct.

Part No.	Nom. Duct Size	Color Code	Weight
58335-100	1" - 2"	RED	0.04 LB
58335-200	2" - 3"	BLUE	0.15 LB
58335-300	3" - 4"	BROWN	0.12 LB
58335-400	4" - 6"	GREEN	0.15 LB
58335-KT1	INCLUDES ALL ABOVE PARTS		0.89 LB



CONTROL VALVE

58000 SERIES

The Control Valve is an integral part of the DCD blowing system. A ball valve allows control of air flow and quick disconnect fittings are attached both ends. Three Rope Guides are included with each Control Valve purchased.

Part No.	Description	Weight
58000-000	CONTROL VALVE c/w ROPE GUIDES	2.47 LB
58000-188	ROPE GUIDE - 3/16"	0.10 LB
58000-250	ROPE GUIDE - 1/4"	0.10 LB
58000-375	ROPE GUIDE - 3/8"	0.04 LB



The Control Valve Adapter allows connection of the Control Valve to the 58420 Seal Off Adapters.

Part No.	Description	Weight
58000-100	CONTROL VALVE - SEAL OFF ADAPTER	4.0 LB



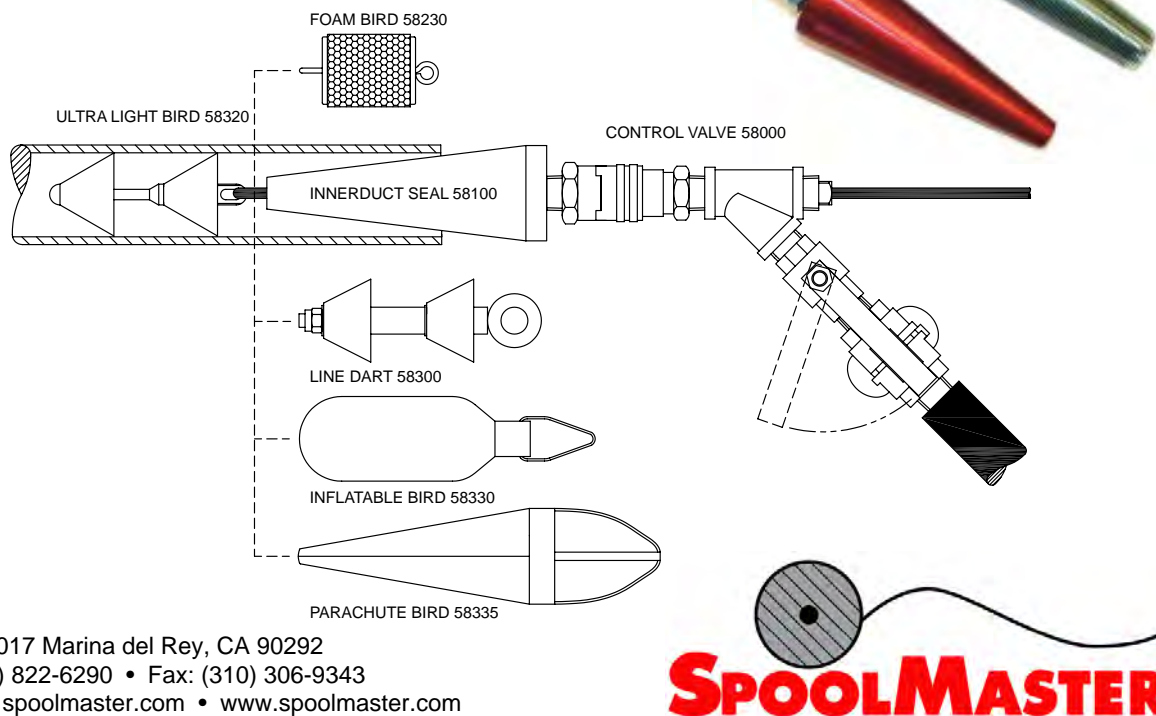
INNERDUCT SEALS

58100 SERIES

DCD offers two types of seals. The Innerduct Seal is a screw-in type that requires one product for each duct size. The second type is a Universal Seal which is a tapered product suitable for all duct sizes from 1" to 2". This is for use on short distance blowing where simply holding the seal against the end of the duct will do the job and save time.

The Kit comprises all four Innerduct Seals plus the Universal Seal. A Control Valve and Rope Guides are also included.

Part No.	Description	Nom. Duct Size	Weight
58100-000	UNIVERSAL SEAL	1" - 2"	1.50 LB
58100-100	INNERDUCT SEAL	1"	1.40 LB
58100-125	INNERDUCT SEAL	1-1/4"	2.20 LB
58100-150	INNERDUCT SEAL	1-1/2"	3.02 LB
58100-200	INNERDUCT SEAL	2"	3.96 LB
58150-000	UNIVERSAL KIT c/w CONTROL VALVE, 4 INNERDUCT SEALS & 1 UNIVERSAL SEAL	1" - 2"	18 LB



DUCT SEALS

58200 SERIES

Duct Seals are unique for several reasons. The expandable seals are colour coded for easy recognition. They are made from a specially formulated polyurethane designed to give maximum sealing and expansion properties.

While a single seal is difficult to align properly, a double seal is expensive.

The DCD unit has a single seal, but supports it with an alignment washer. Economical but effective. All seal sizes fit over the same Handle Assembly and changing the size of seal used is a breeze. Just unscrew two nuts, slide off one Seal Kit and slide on the next one.

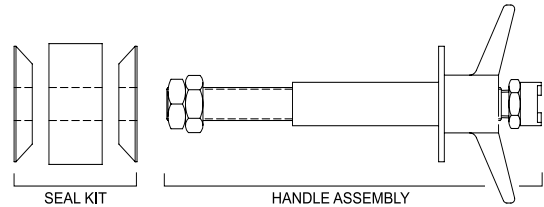
The end of the unit is fitted with a quick release coupling. Each Seal Kit comes complete with the polyurethane seal, two compression washers and one stabilizing washer. Just order the size of seal you need plus one Handle Assembly. Next time, just order the new size of seal you need.

Note: All seals have been tested to at least 15% higher than stated values. The actual pressure attained may depend on the condition of both the duct and the Seal Kit. Care should be taken at all times when working with pressurized systems.



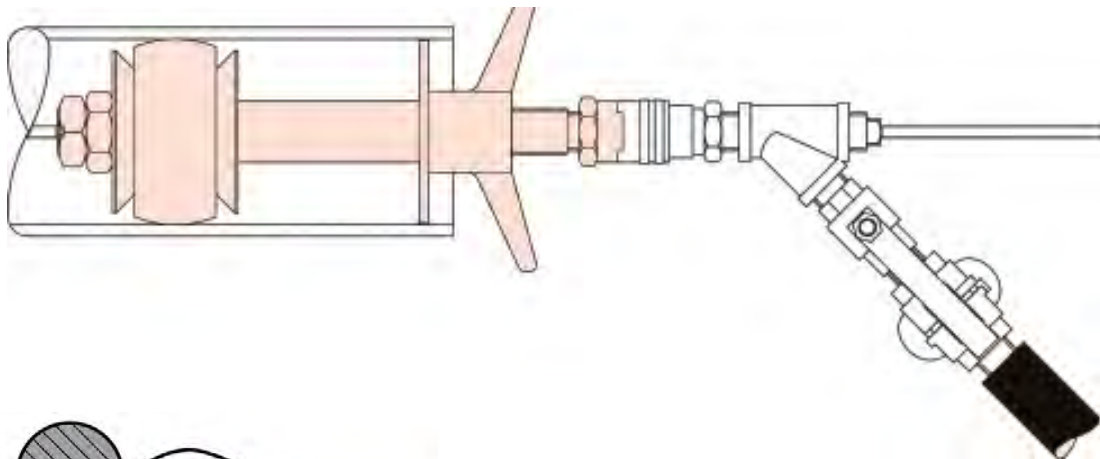
HANDLE ASSEMBLY

Part No.	Weight
58200-000	3.0 LB



APPLICABLE SEAL KIT SIZES

Part No.	Nominal Duct Size	Min Duct Inside Dia.	Max. Duct Inside Dia.	Color Code	*Max. Tested Pressure	Weight
58200-200	2"	1-13/16"	2-5/16"	GREEN	40 PSI.	0.23 LB
58200-250	2-1/2"	2-3/16"	2-3/4"	RED	35 PSI.	0.45 LB
58200-300	3"	2-13/16"	3-3/8"	YELLOW	30 PSI.	0.93 LB
58200-350	3-1/2"	3-1/4"	3-13/16"	WHITE	25 PSI.	1.23 LB
58200-400	4"	3-5/8"	4-1/4"	BLUE	20 PSI.	1.59 LB
58200-500	5"	4-1/2"	5-1/8"	ORANGE	15 PSI.	2.67 LB
58200-600	6"	5-3/8"	6-1/16"	BLACK	10 PSI.	3.81 LB
58200-800	8"	7-5/8"	8"	RED	10 PSI.	9.40 LB



TAPES AND TWINE

58500 SERIES

DCD partnered with A-D Technologies (Arnco) in handling a wide range of high performance Bull-Line™ Pull Tape products to expedite cable installation. Choose from woven polyester tape products which are available in a variety of strength and lengths. A single pull tape eliminates the additional labor required for string, rope or winch line combinations. All Bull-Line™ tape is manufactured with the Stiff-Tape™ lubricated coating, resulting in the highest performance pull table available in the industry. Whatever the choice, Bull-Line™ Pull Tapes have continually provided a superior alternative to plastic pull ropes in cable installations through all types of conduit. A-D Technologies Bull-Line™ Pull Tapes meet or exceed all pull line requirements of Bellcore GR-356-CORE. Polyester Bull-Line™ is the most economical pull tape, very strong and durable and the elongation at yield is about 12 to 15%. Detectable tape have a 22 gauge solid copper wire woven into the tape.



* Note: Wood reel standard.

Note: Can be pulled with our new Fiber Cable Puller (42700-000).

Note: Other sizes available upon request. Wood reels available in pallet quantities only.

Part No.	Description	Tensile Strength	Weight
58500-530	PULL TAPE-PRE-LUBRICATED - 1/2" x 3,000 FT	1,250 L B	24.5 LB
58500-630	PULL TAPE PRE-LUBRICATED - 5/8" x 3,000 FT	1,800 L B	32.5 LB
58500-665	PULL TAPE PRE-LUBRICATED - 5/8" x 6,560 FT (2000M)	1,800 L B	78.0 LB
58500-730	PULL TAPE PRE-LUBRICATED - 7/8" x 3,000 FT	2,500 L B	48.5 LB
58500-765*	PULL TAPE PRE-LUBRICATED - 7/8" x 6,560 FT (2000M)	2,500 L B	109 LB
58510-550	DETECTABLE PULL TAPE - 1/2" x 5,000 FT	1,250 L B	54.5 LB
58510-650	DETECTABLE PULL TAPE - 5/8" x 5,000 FT	1,800 L B	70.5 LB
58520-001	MEASURING TAPE - 3/16" x 3,000 FT	160 L B	3.7 LB
58530-001	BLOWING TWINE C/W PAIL & LID - 7,000 FT	180 L B	12.0 LB
58530-002	BLOWING TWINE C/W PAIL & LID - 3,000 FT	400 L B	12.5 LB



LIMITED WARRANTY

DCD Design & Manufacturing Ltd. extends the following warranty to the original purchaser of these goods for use, subject to the applications indicated: DCD Design & Manufacturing Ltd. warrants to the above party for use that the goods or any component manufactured by DCD Design, will be free from defects in workmanship for a period of 1 year from the date of purchase if the goods are installed, maintained, and used in accordance with DCD Design & Manufacturing's written instructions.

The following is the LIMITED WARRANTY POLICY for DCD DESIGN & MANUFACTURING LTD. (DCD) as it pertains to all Products in this catalog shipped to any market place including USA, Europe or elsewhere unless otherwise specified on any given order

1. DCD warrants only that all Products supplied by them will be free of defects in design, material or workmanship and will conform to DCD's published configurations and specifications therefore.
2. This limited warranty shall be effective for a period of 12 months from the initial delivery of the product, either by DCD or a distributor to the end user for all Cable Installation Products and for a period of 3 months for Directional Drilling Swivels and Duct Pullers.
3. Upon receipt of written notice from the distributor or customer within the said 12 month period, if any such defect, DCD shall promptly repair or replace the defective product without charge to distributor or customer or at the sole discretion of DCD, may refund the price paid by the distributor for such defective product, provided it is clearly shown that such defects were caused by poor design, workmanship or materials. It is understood that the environment in which these products are used may be extremely hazardous and damage or excessive wear to the product can be caused by any one of many known or unknown elements. This warranty will not be in effect if an unreasonable amount of damage or wear or careless use of the product is found to be the cause of the defect.
4. All other warranties either express or implied for this product including, but not limited to, any warranties of merchantability and fitness for a particular purpose, are hereby disclaimed. If this product is not free of defects as warranted in paragraph 1 above, your sole and exclusive remedy shall be repair, replacement, or refund as provided in paragraph 3 above. In no event shall DCD or any of its authorized distributors be liable to any distributor or customer or any third party for any damages in excess of the purchase price of the product. This limitation applies to damages of any kind including direct or indirect damages, lost profits, lost savings or other special, consequential or incidental damages whether for breach of contract, tort or otherwise and whether arising out of the use of or inability to use such product even if DCD or an authorized distributor has been advised of the possibility of such damages or if any claim by any other party. The foregoing limitation of liability applies to DCD and all authorized distributors and is required to be, and will be deemed to be, included in any warranty express or implied, provided by such authorized distributors.



IMPORTANT: All DCD products are designed and manufactured in a manner to satisfy both the design requirements and claimed capacities. At no time should any product be modified, neither should any replacement parts not supplied and approved by DCD Design & Manufacturing Ltd. be used on DCD products. Such instances as using a standard Hexagon Bolt in place of a specially designed Clevis Pin can result in damage to the product and/or to property and may result in severe injury or death to operators or persons near by. In any such instances, the terms of this warranty will be voided and DCD will accept no responsibility for product failure or personal injury.

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