ENGINEERING TOMORROW



Contamination control

Danfoss contamination control products





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Introduction

Danfoss's FT1355 and FT1455 series projectile cleaning systems, and the FT1555 series CapSeal system are new additions to Danfoss's family of hose assembly equipment focused on eliminating contamination in hydraulic systems. Contamination control is crucial during the preparation processes in assembling fittings on hose, tubes, and pipes.

The FT1355 and FT1455 series projectile cleaning systems offer industry leading contamination control during hose assembly preparation. The FT1455 series projectile cleaning system is available in both a hand-held and bench mount configuration. These systems shoot the FT1355 series cleaning projectiles though hose, tubes, and pipe assemblies. The FT1455 and FT1355 series projectile cleaning systems successfully remove rubber dust and metal particles arising from the hydraulic hose cutting process, remove metal flashings from the hose assembly process (crimping), and remove contaminated oil from hoses, tubes and pipes prior to installation in hydraulics systems.

In industry standard contamination measurement tests, the FT1355 and FT1455 series projectile cleaning systems yielded an industry leading cleanliness level of 13 to 18 (less than 2,500 ppml) in the 4μ to 14μ contaminant range.*

The FT1555 CapSeal system is intended to be used in conjunction with the FT1355 and FT1455 series projectile cleaning systems to prevent recontamination of hose, tube, and pipe assemblies. The FT1555 CapSeal system utilizes heat shrink technology to encapsulate the end of a hose or tube assembly with an FT1555 CapSeal capsule. Traditional capping and plugging methods increase the possibility of recontamination when ill-fitting caps and plugs are forced onto fittings, causing plastic particles to shear off, therefore contaminating a hose or tube assembly. Additionally, traditional capping and plugging methods require the exposed caps and plugs to be decontaminated prior to installation to minimize recontamination. The FT1555 CapSeal system eliminates recontamination issues, and provided a tightly sealed contaminant free assembly. The FT1555 system is also more user friendly during the capping and uncapping process versus using the traditional styles of caps and plugs.

Danfoss's FT1555 series CapSeal system is available in both bench mount and hand-held options. The FT1555 capsules are also designed to encapsulate a broad variety of hose fittings and adapters with a minimal number of capsule sizes resulting in an overall less expensive capping solution.

Typical applications for Danfoss's FT1355 and FT1455 series projectile cleaning systems, and the FT1555 series CapSeal system are outlined in the next section.

* ISO 4406:99 and ISO 4405 tests







FT1455 Series

Projectile cleaning system



FT1455 Series projectile cleaning system

FT1455 Series is focused on eliminating contamination in hydraulic systems. Contamination control is crucial during the preparation processes in assembling fittings on hose, tubes, and pipes. These systems shoot the FT1355 Series cleaning projectiles through hose, tubes, and pipe assemblies to successfully remove rubber dust and metal particles arising from the hydraulic hose cutting process, remove metal flashings from the hose assembly process (crimping), and remove contaminated oil from hoses, tubes and pipes prior to installation in hydraulics systems.

Features

- Provides industry leading ISO cleanliness levels
- Simple and robust construction
- Available in hand-held and bench-mount configurations
- Ideal for portable small volume applications, and large volume production applications
- Broad variety of projectile and nozzle types and sizes to match application needs
- Minimal setup, works off shop air (80–110 psi)
- Capability: 1/8" to 4 1/2" ID hose, tube or pipe
- Available in kits or individual replacement hardware components
- Kits available with and without projectiles

Typical applications			
Hydraulics	Removes rubber dust and metal particles from the hydraulic hose cutting process		
	• Removes metal flash from the crimping process on hose and tubes		
	 Removal of contaminated oil from hoses, tubes and pipes in hydraulic systems 		
Pneumatics	Eliminates rubber contamination, metal particles, contaminated oil and moisture that causes breakdowns and inefficiency		
Heat exchangers & condenser	Eliminates contamination that reduces heat transfer resulting in low level performance		
Steam boilers	Removes most scaling in steam pipes for maintenance servicing		
Air conditioning & refrigeration	• Eliminates minute particles in copper tubes and coolant lines that affect system performance		
Oxygen & gas	Eliminates oil, grease and other contaminants from copper or S/S tubing		
Oil, gas & chemical processing	Efficient cleaning of pipes as part of service maintenance		
Earthmoving equipment	Maintenance reduction in flushing time and filter usage		
Automotive & servicing	Cleaning of fuel lines and brake lines prior to assembly and servicing of components		
Food & beverage	Product recovery retrieval of product from lines. Reducing or eliminating solvents or detergents		
Gun barrels	To remove rust, scale or powder residue much faster than brushing or swabbing		





FT1455 Series

Hardware









NOTE: For proper operation the following are required:

- 80 psi (5.5 Bar) minimum to 110 psi (7.5 Bar) maximum air pressure
- 1/2" ID air hose with a minimum of 55 SCFM $(1.6 \text{ m}^3/\text{min})$ air flow rate†

FT1455-L1

Hand held projectile cleaning hardware for small hose diameters (up to 1-1/4 " hose ID)

- Capability For use with 1/8" through 1-1/4" ID hose, tube or pipe assemblies
- Construction Simple construction with durable brass and aluminum parts with rigid plastic handle
- Form factor Hand-held, portable ideal for mobile applications
- Typical applications: small volume hose shop environments
- Includes hand-held launcher hardware only. Does not include adapter rings and nozzles for operation. Intended for replacement purposes only

FT1455-L2

Hand held projectile cleaning hardware for medium hose diameters (up to 2" hose ID)

- Capability For use with 1/8" through
 2" ID hose, tube or pipe assemblies
- Construction Precision machined aluminum with fully anodized components
- Form factor Hand-held, portable ideal for harsh environments and heavy
- Typical applications: Production hose and tube shops, mobile hose fabricators and mobile applications
- Includes hand-held launcher hardware only. Does not include adapter rings and nozzles for operation. Intended for replacement purposes only

FT1455-L3

Hand held projectile cleaning hardware for large hose diameters (up to 3-1/2" hose ID)*

- Capability For use with 1/8" through 3-1/2" ID hose, tube or pipe assemblies
- Construction Precision machined aluminum with fully anodized components
- Form factor Hand-held, portable ideal for harsh environments and heavy use
- Typical applications: Production hose and tube shops, mobile hose fabricators and mobile applications
- Includes hand-held launcher hardware only. Does not include adapter rings and nozzles for operation. Intended for replacement purposes only

FT1455-L4

Bench mount projectile cleaning hardware kit for small hose diameters (up to 1-1/4" hose ID)*

- Capability For use with 1/8" through 1-1/4" ID hose, tube or pipe assemblies
- Construction Stainless steel housing with anodized aluminum components
- Form factor Bench mount ideal for production assemblies (1.2 second cycle time)
- and tube shopsIncludes bench mount launcher hard-

• Typical applications: Production hose

- Includes bench mount launcher hardware, 5 micron air filter, pneumatic foot switch and twin line air hose and 7 nozzles for hose ID ranging from 1/4" through 1-1/4"
- 5 micron air filter and regulator with gauge are strongly suggested
- A large industrial compressor is strongly recommended
- A compressed air dryer is strongly recommended

†A minimum of 38 SCFM (1.1 m³/min) air flow rate at 80 psi (5.5 bar) is required for FT1455-L3 launcher

*FT1455-L3 can be converted to work on hose ID up to 4" with the addition of FT1455-N-45 4-1/2" aluminum locking nozzle.



FT1455 series

Projectile cleaning system kit



FT1455-K3

Hand held projectile cleaning kit for medium hose diameters (up to 2" hose ID)

- Capability For use with 1/4" through 2" ID hose, tube or pipe assemblies
- Construction Precision machined aluminum with fully anodized components
- Form factor Hand-held, portable ideal for harsh environments and heavy use
- Typical applications Production hose and tube shops, mobile hose fabricators and mobile applications

FT1455 series

Cleaning nozzles



FT1455-N-HXX Nozzles for hose assemblies

- Universal nozzle for use with hoses
- Also work on pipe, heavy walled tubing and many fitting configurations

Broad variety of nozzles are available allowing the operator to select the ideal nozzle for each application based on the different size and type of hoses, hose fittings, tube and pipe assemblies. All nozzle sizes are denoted by the projectile exit diameter (mm).

FT1455-N-HXX nozzles		
Part #	Description	
FT1455-N-HXX	Nozzles for hose assemblies	
FT1455-N-H06	Hose nozzle (1/4")	
FT1455-N-H08	Hose nozzle (5/16")	
FT1455-N-H10	Hose nozzle (3/8")	
FT1455-N-H13	Hose nozzle (1/2")	
FT1455-N-H16	Hose nozzle (5/8")	
FT1455-N-H19	Hose nozzle (3/4")	
FT1455-N-H25	Hose nozzle (1")	
FT1455-N-H32	Hose nozzle (1-1/4")	
FT1455-N-H38	Hose nozzle (1-1/2")	
FT1455-N-H50	Hose nozzle (2")	
FT1455-N-U55	Universal hose nozzle (1-1/8" thru 3-1/2")	
FT1455-N-45	4-1/2" aluminum locking nozzle	



FT1455-J-XX Nozzles for hose assemblies with JIC fittings

• Nozzles molded with 37° male flare on tip to fit female JIC fittings on hose assemblies

FT1455-J-XX nozzles		
FT1455-J-XX	Nozzles for tube assemblies (Metric) Outside diameter X wall thickness	
FT1455-J-06	JIC nozzle (4-1/2")	
FT1455-J-10	JIC nozzle (4-1/2")	
FT1455-J-13	JIC/TUBE nozzle (-8, 1/2")	
FT1455-J-16	JIC/TUBE nozzle (-10, 5/8")	
FT1455-J-19	JIC/TUBE nozzle (-12, 3/4")	
FT1455-J-25	JIC/TUBE nozzle (-16, 1" & 7/8")	
FT1455-J-32	JIC/TUBE nozzle (-20, 1-1/4" & 1")	
FT1455-J-38	JIC/TUBE nozzle (-24, 1-1/2")	
FT1455-J-50	JIC/TUBE nozzle (-32, 2")	



FT1455 series (cont.)

Cleaning nozzles

Broad variety of nozzles are available allowing the operator to select the ideal nozzle for each application based on the different size and type of hoses, hose fittings, tube and pipe assemblies. All nozzle sizes are denoted by the projectile exit diameter (mm).



FT1455-NT-XX Nozzles for tube assemblies (Inch)

• Nominal inch tube nozzles have a lip on the inside that forms an airtight seal when tube is fully inserted into the nozzle

FT1455-NT-XX nozzles		
FT1455-NT-XX	Nozzles for tube assemblies (Inch)	
FT1455-NT-32	TUBE nozzle 1-1/4" OD	
FT1455-NT-06	TUBE nozzle 1/4" OD	
FT1455-NT-03	TUBE nozzle 1/8" OD	
FT1455-NT-10	TUBE nozzle 3/8" OD	
FT1455-NT-08	TUBE nozzle 5/16" OD	



FT1455-NT-XXXXX Nozzles for tube assemblies (Metric)

- Metric tube nozzles have a lip on the inside that forms an airtight seal when tube is fully inserted into the nozzle
- Metric tube nozzle designations utilize the largest wall thickness for a given outside diameter, but fit all smaller wall thicknesses as well

FT1455-NT-XXXXX nozzles		
FT1455-NT-XX	Nozzles for tube assemblies (Metric) Outside diameter X wall thickness	
FT1455-NT-06x1.5	Metric tube nozzle UC-6 X 1.5	
FT1455-NT-08x1.5	Metric tube nozzle UC-8 X 1.5	
FT1455-NT-10x1.5	Metric tube nozzle UC-10 X 1.5	
FT1455-NT-12x2.0	Metric tube nozzle UC-12 X 2.0	
FT1455-NT-14x2.0	Metric tube nozzle UC-14 X 2.0	
FT1455-NT-15x2.0	Metric tube nozzle UC-15 X 2.0	
FT1455-NT-16x2.5	Metric tube nozzle UC-16 X 2.5	
FT1455-NT-18x2.5	Metric tube nozzle UC-18 X 2.5	
FT1455-NT-20x3.0	Metric tube nozzle UC-20 X 3.0	
FT1455-NT-22x2.0	Metric tube nozzle UC-22 X 2.0	
FT1455-NT-25x3.0	Metric tube nozzle UC-25 X 3.0	
FT1455-NT-28x2.5	Metric tube nozzle UC-28 X 2.5	
FT1455-NT-30x4.0	Metric tube nozzle UC-30 X 4.0	
FT1455-NT-35x3.0	Metric tube nozzle UC-35 X 3.0	
FT1455-NT-38x5.0	Metric tube nozzle UC-38 X 5.0	
FT1455-NT-42x3.0	Metric tube nozzle UC-42 X 3.0	
FT1455-NT-50x5.0	Metric tube nozzle UC-50 X 5.0	
FT1455-4FFORX	Nozzle for use with flat face O-Ring seal fittings (FORS)	



FT1455 series

Adapter & locking rings



FT1455-L2-AR1 Adapter ring

Adapter ring for FT1455-L2 launcher to receive 1/8" thru 1-1/4" nozzles

• FT1455-L2-AR1 adapter ring fits the FT1455-L2 hand held launcher and all nozzle types and sizes between 1/8" and 1-1/4"



FT1455-L3-AR2 Adapter ring

Adapter ring for FT1455-L3 launcher to receive 1/8" thru 1-1/4" nozzles

• FT1455-L3-AR2 adapter ring fits the FT1455-L3 hand held launcher and all nozzle types and sizes between 1/8" and 1-1/4"



FT1455-L3-LR Locking ring

3-1/2" aluminum locking ring for FT1455-L3 launcher FT1455-L3-LR locking ring fits

• FT1455-L3 hand held launcher, both FT1455-L3-AR2 & FT1455-L3-AR3 adapter rings, and FT1455-N-U55 Universal hose nozzle



FT1455-L3-AR3 Adapter ring

Adapter ring for FT1455-L3 launcher to receive 1-1/2" thru 2" nozzles

• FT1455-L3-AR3 adapter ring fits the FT1455-L3 hand held launcher and all nozzel types and sizes between 1-1/2" and 2".





FT1455 series

Accessories



FT1455-NH25 Desktop nozzle holder

The desktop nozzle holder is a great alternative to storing the nozzles in the carrying case

- Can be easily attached to the workbench and offers easy access during change overs and operation
- Accommodates all types of nozzles ranging from 1/4" to 2"



FT1455-QC

Quick release coupling

- Quick release coupling offers a quick disconnect and exchange of air supply to all three models of hand held projectile launchers
- Ideal for portable applications that require frequent disconnects



FT1455-CC Carrying case

- Convenient carrying case to store and carry the hand held projectile launchers and relevant nozzles
- Works will all 3 models of hand held projectile launchers

FT1455 Operating Instructions

Manuals

FT1455-L1

Operators Manual

Doc #: AQ445452721726en-000101

FT1455-L3

Operators Manual

Doc #: AQ445452770728en-000101

FT1455-L2

Operators Manual

Doc #: AQ445452746727en-000101

FT1455-L4

Operators Manual

Doc #: AQ445452791729en-000101



FT1455 & FT1355 series

Recommended nozzles and cleaning projectiles for hoses and hose assemblies

Recommendations for hoses: nominal hose diameter					
Inches	mm	Nozzle part #	Cleaning projectile part#		
3/16	05	FT1455-N-H06	FT1355-H-06		-
1/4	06	FT1455-N-H06	FT1355-H-10	or	FT1355-H-12
5/16	08	FT1455-N-H08	FT1355-H-12	or	FT1355-H-14
3/8	10	FT1455-N-H10	FT1355-H-14	or	FT1355-H-16
1/2	13	FT1455-N-H13	FT1355-H-18	or	FT1355-H-20
5/8	16	FT1455-N-H16	FT1355-H-22		-
3/4	19	FT1455-N-H19	FT1355-H-26		-
1	25	FT1455-N-H25	FT1355-H-33	or	FT1355-H-36
1-1/4	32	FT1455-N-H32	FT1355-H-40	or	FT1355-H-45
1-1/2	38	FT1455-N-H38	FT1355-H-50	or	FT1355-H-55
2	50	FT1455-N-H50	FT1355-H-60	or	FT1355-H-65
2-1/2	63	FT1455-N-U55	FT1355-H-75		-
3	76	FT1455-N-U55	FT1355-H-85		-
3-1/2	89	FT1455-N-U55	FT1355-H-100		-
4	102	FT1455-N-45	-		-
4-1/2	114	FT1455-N-45	-		-

Recommendations for hose assemblies with ORS fittings				
ORS fitting dash size	Nozzle part #	Cleaning project	tile paı	rt#
-4	FT1455-4FFORX	FT1355-H-06	or	FT1355-H-07
-6	FT1455-N-H06	FT1355-H-12		-
-8	FT1455-N-H10	FT1355-H-16		-
-10	FT1455-N-H13	FT1355-H-22		-
-12	FT1455-N-H16	FT1355-H-26		-
-16	FT1455-N-H19	FT1355-H-33		-
-20	FT1455-N-H25	FT1355-H-40		-

Recommendations for hose assemblies with Code 61 or 62 flanges				
Code 61 or 62 flange dash size	Nozzle part #	Cleaning projectile part #		
-8	FT1455-N-H10	FT1355-H-16		
-10	FT1455-N-H13	FT1355-H-22		
-12	FT1455-N-H16	FT1355-H-26		
-16	FT1455-N-H19	FT1355-H-33		
-20	FT1455-N-H25	FT1355-H-40		
-24	FT1455-N-H32	FT1355-H-50		
-32	FT1455-N-H32	FT1355-H-60		

Recommendations for hose assemblies with JIC fittings			
JIC fitting dash size	Nozzle part # Cleaning projectile part #		
-4	FT1455-J-06	FT1355-H-06 or FT1355-H-07	
-6	FT1455-J-10	FT1355-H-12	
-8	FT1455-J-13	FT1355-H-16	
-10	FT1455-J-16	FT1355-H-22	
-12	FT1455-J-19	FT1355-H-26	
-16	FT1455-J-25	FT1355-H-33	
-20	FT1455-J-32	FT1355-H40	
-24	FT1455-J-38	FT1355-H-50	
-32	FT1455-J-50	FT1355-H-60	



FT1455 & FT1355 series

Recommended nozzles and cleaning projectiles for pipes and tubes

	Recommended nozzles and cleaning projectiles for pipes (inch)				
SCH 40	Nozzle part #	Cleaning projectile part #	Abrasive projectile part #		
1/4"	FT1455-N-H08	FT1355-H-14	FT1355-A-12		
3/8"	FT1455-N-H13	FT1355-H-18	FT1355-A-16		
1/2"	FT1455-N-H16	FT1355-H-20	FT1355-A-18		
3/4"	FT1455-N-H19	FT1355-H-30	FT1355-A-26		
1	FT1455-N-H25	FT1355-H-36	FT1355-A-33		
1-1/4"	FT1455-N-H32	FT1355-H-45	FT1355-A-40		
1-1/2"	FT1455-N-H38	FT1355-H-55	FT1355-A-50		
2"	FT1455-N-H50	FT1355-H-65	-		
2-1/2"	FT1455-N-U55	FT1355-H-75	-		
3"	FT1455-N-U55	FT1355-H-85	-		
3-1/2"	FT1455-N-U55	FT1355-H-100	-		

SCH 80	Nozzle part #	Cleaning projectile part #	Abrasive projectile part #
1/4"	FT1455-N-H06	FT1355-H-12	FT1355-A-10
3/8"	FT1455-N-H10	FT1355-H-16	FT1355-A-14
1/2"	FT1455-N-H13	FT1355-H-20	FT1355-A-16 or FT1355-A-18
3/4"	FT1455-N-H19	FT1355-H-26	FT1355-A-22
1"	FT1455-N-H25	FT1355-H-36	FT1355-A-30
1- 1/4"	FT1455-N-H32	FT1355-H-45	FT1355-A-40
1-1/2"	FT1455-N-H38	FT1355-H-50	FT1355-A-45
2"	FT1455-N-H38	FT1355-H-60	FT1355-A-55
2-1/2"	FT1455-N-H50	FT1355-H-70	-
3"	FT1455-N-U55	FT1355-H-85	-
3-1/2"	FT1455-N-U55	FT1355- H-100	-

SCH 160	Nozzle part #	Cleaning projectile part #	Abrasive projectile part #
1/2"	FT1455-N-H10	FT1355-H-16	FT1355-A-14
3/4"	FT1455-N-H16	FT1355-H-20	FT1355-A-18
1"	FT1455-N-H19	FT1355-H-30	FT1355-A-26
1-1/4"	FT1455-N-H25	FT1355-H-36	FT1355-A-33
1-1/2"	FT1455-N-H32	FT1355-H-45	FT1355-A-40
2"	FT1455-N-H38	FT1355-H-55	FT1355-A-45 or FT1355-A-50
2-1/2"	FT1455-N-H50	FT1355-H-65	FT1355-A-60
3"	FT1455-N-U55	FT1355-H-75	-
4"	FT1455-N-U55	FT1355-H-100	-

Recommend projectiles fo		_		
Outside diameter x wall thickness	Nozzle part #	Cleaning projectile part #	Abrasive projectile part #	Tube projectile part #
1/8" X 0.030"	FT1455-NT-3	-	-	-
1/4" X 0.035"	FT1455-NT-6	FT1355-H-10	FT1355-A-07	FT1355-T-06
1/4" X 0.049"	FT1455-NT-6	FT1355-H-08	FT1355-A-07	FT1355-T-06
1/4" X 0.065"	FT1455-NT-6	FT1355-H-07	-	FT1355-T-06
5/16" X 0.035"	FT1455-NT-8	FT1355-H-12	FT1355-A-10	FT1355-T-07
3/8" X 0.035"- 0.049"	FT1455-NT-10	FT1355-H-14	FT1355-A-12	FT1355-T-10
3/8" X 0.065"	FT1455-NT-10	FT1355-H-12	FT1355-A-10	FT1355-T-10
1/2" X 0.035"	FT1455-J-13	FT1355-H-16	FT1355-A-16	FT1355-T-14
1/2" X 0.049"	FT1455-J-13	FT1355-H-16	FT1355-A-16	FT1355-T-12
1/2" X 0.065"	FT1455-J-13	FT1355-H-16	FT1355-A-14	FT1355-T-12
1/2" X 0.083"	FT1455-J-13	FT1355-H-14	FT1355-A-12	FT1355-T-12
5/8" X 0.049"	FT1455-J-16	FT1355-H-22	FT1355-A-20	FT1355-T-16
5/8" X 0.065"	FT1455-J-16	FT1355-H-20	FT1355-A-18	FT1355-T-16
5/8" X 0.083"	FT1455-J-16	FT1355-H-20	FT1355-A-18	FT1355-T-14
3/4" X 0.049"- 0.065"	FT1455-J-19	FT1355-H-26	FT1355-A-24	FT1355-T-20
3/4" X 0.095"	FT1455-J-19	FT1355-H-22	FT1355-A-20	FT1355-T-18
7/8" X 0.049"	FT1455-J-25	FT1355-H-33	FT1355-A-30	FT1355-T-26
7/8" X 0.065"	FT1455-J-25	FT1355-H-30	FT1355-A-28	FT1355-T-22
7/8" X 0.095"	FT1455-N-H16	FT1355-H-28	FT1355-A-26	FT1355-T-22
1" X 0.065"	FT1455-J-32	FT1355-H-33	FT1355-A-30	FT1355-T-28
1" X 0.083"- 0.095"	FT1455-J-32	FT1355-H-33	FT1355-A-30	FT1355-T-26
1" X 0.120"	FT1455-J-32	FT1355-H-30	FT1355-A-28	FT1355-T-26
1 1/4" X 0.065"	FT1455-NT-32	FT1355-H-40	FT1355-A-40	FT1355-T-33
1 1/4" X 0.083"	FT1455-NT-32	FT1355-H-40	FT1355-A-36	FT1355-T-33
1 1/4" X 0.095"	FT1455-NT-32	FT1355-H-40	FT1355-A-36	FT1355-T-33
1 1/4" X 0.109"	FT1455-NT-32	FT1355-H-36	FT1355-A-36	FT1355-T-33
1 1/4" X 0.120"	FT1455-NT-32	FT1355-H-36	FT1355-A-33	FT1355-T-33
1 1/2" X 0.065"- .120"	FT1455-J-38	FT1355-H-50	FT1355-A-45	FT1355-T-40
1 1/2" X 0.134"- 0.148"	FT1455-J-38	FT1355-H-45	FT1355-A-40	FT1355-T-40
2" X 0.065"- 0.120"	FT1455-J-50	FT1355-H-60	FT1355-A-55	FT1355-T-50
2" X 0.134"- 0.188"	FT1455-J-50	FT1355-H-55	FT1355-A-50	FT1355-T-50



FT1455 & FT1355 series

Recommended nozzles and cleaning projectiles for tubes (metric)

Nozzles	Nozzles & cleaning projectles for tubes							
Outside diameter x wall thickness	Nozzle part #	Cleaning projectile part #	Abrasive projectile part #	Tube projectile part #				
6 X 1.0	FT1455-NT-06x1.5	FT1355-H-07	FT1355-A-06	FT1355-T-06				
6 X 1.5	FT1455-NT-06x1.5	FT1355-H-07	FT1355-A-06	-				
8 X 1.0	FT1455-NT-08x1.5	FT1355-H-10	FT1355-A-07	FT1355-T-07				
8 X 1.5	FT1455-NT-08x1.5	FT1355-H-10	FT1355-A-07	FT1355-T-07				
10 X 1.0	FT1455-NT-10x1.5	FT1355-H-14	FT1355-A-12	FT1355-T-12				
10 X 1.5	FT1455-NT-10x1.5	FT1355-H-14	FT1355-A-12	FT1355-T-12				
12 X 1.0	FT1455-NT-12x2.0	FT1355-H-16	FT1355-A-14	FT1355-T-14				
12 X 1.5	FT1455-NT-12x2.0	FT1355-H-16	FT1355-A-14	FT1355-T-14				
12 X 2.0	FT1455-NT-12x2.0	FT1355-H-14	FT1355-A-12	FT1355-T-12				
14 X 1.0	FT1455-NT-14x2.0	FT1355-H-18	FT1355-A-16	FT1355-T-16				
14 X 1.5	FT1455-NT-14x2.0	FT1355-H-16	FT1355-A-14	FT1355-T-14				
14 X 2.0	FT1455-NT-14x2.0	FT1355-H-16	FT1355-A-14	FT1355-T-14				
15 X 1.0	FT1455-NT-15x2.0	FT1355-H-20	FT1355-A-18	FT1355-T-16				
15 X 1.5	FT1455-NT-15x2.0	FT1355-H-18	FT1355-A-16	FT1355-T-16				
15 X 2.0	FT1455-NT-15x2.0	FT1355-H-16	FT1355-A-14	FT1355-T-14				
16 X 1.0	FT1455-NT-16x2.5	FT1355-H-22	FT1355-A-20	FT1355-T-18				
16 X 1.5	FT1455-NT-16x2.5	FT1355-H-20	FT1355-A-18	FT1355-T-16				
16 X 2.0	FT1455-NT-16x2.5	FT1355-H-18	FT1355-A-16	FT1355-T-16				
16 X 2.5	FT1455-NT-16x2.5	FT1355-H-16	FT1355-A-14	FT1355-T-14				
18 X 1.0	FT1455-NT-18x2.5	FT1355-H-24	FT1355-A-22	FT1355-T-20				
18 X 1.5	FT1455-NT-18x2.5	FT1355-H-24	FT1355-A-20	FT1355-T-18				
18 X 2.0	FT1455-NT-18x2.5	FT1355-H-22	FT1355-A-20	FT1355-T-18				
18 X 2.5	FT1455-NT-18x2.5	FT1355-H-20	FT1355-A-18	FT1355-T-16				
20 X 1.5	FT1455-NT-20x3.0	FT1355-H-26	FT1355-A-24	FT1355-T-22				
20 X 2.0	FT1455-NT-20x3.0	FT1355-H-24	FT1355-A-22	FT1355-T-20				
20 X2.5	FT1455-NT-20x3.0	FT1355-H-24	FT1355-A-20	FT1355-T-18				
20 X 3	FT1455-NT-20x3.0	FT1355-H-22	FT1355-A-20	FT1355-T-18				

Nozzles & cleaning projectles for tubes							
Outside diameter x wall thickness	Nozzle part #	Cleaning projectile part #	Abrasive projectile part #	Tube projectile part #			
22 X 1	FT1455-NT-22x2.0	FT1355-H-30	FT1355-A-28	FT1355-T-26			
22 X 1.5	FT1455-NT-22x2.0	FT1355-H-30	FT1355-A-28	FT1355-T-26			
22 X 2	FT1455-NT-22x2.0	FT1355-H-30	FT1355-A-28	FT1355-T-26			
25 X 2	FT1455-NT-25x3.0	FT1355-H-33	FT1355-A-30	FT1355-T-28			
25 X 2.5	FT1455-NT-25x3.0	FT1355-H-30	FT1355-A-28	FT1355-T-26			
25 X 3	FT1455-NT-25x3.0	FT1355-H-30	FT1355-A-28	FT1355-T-26			
28 X 2	FT1455-NT-28x2.5	FT1355-H-36	FT1355-A-33	FT1355-T-33			
28 X 2.5	FT1455-NT-28x2.5	FT1355-H-36	FT1355-A-33	FT1355-T-30			
30 X 2	FT1455-NT-30x4.0	FT1355-H-36	FT1355-A-33	FT1355-T-33			
30 X 2.5	FT1455-NT-30x4.0	FT1355-H-36	FT1355-A-33	FT1355-T-30			
30 X 3	FT1455-NT-30x4.0	FT1355-H-36	FT1355-A-33	FT1355-T-30			
30 X 4	FT1455-NT-30x4.0	FT1355-H-36	FT1355-A-33	FT1355-T-30			
35 X 2	FT1455-NT-35x3.0	FT1355-H-45	FT1355-A-40	FT1355-T-40			
35 X 3	FT1455-NT-35x3.0	FT1355-H-40	FT1355-A-36	FT1355-T-36			
35 X 4	FT1455-N-H25	FT1355-H-40	FT1355-A-36	FT1355-T-33			
35 X 5	FT1455-N-H25	FT1355-H-36	FT1355-A-33	FT1355-T-30			
38 X 2.5	FT1455-NT-38x5.0	FT1355-H-50	FT1355-A-45	FT1355-T-40			
38 X 3	FT1455-NT-38x5.0	FT1355-H-50	FT1355-A-45	FT1355-T-40			
38 X 4	FT1455-NT-38x5.0	FT1355-H-45	FT1355-A-40	FT1355-T-40			
38 X 5	FT1455-NT-38x5.0	FT1355-H-40	FT1355-A-36	FT1355-T-36			
42 X 2	FT1455-NT-42x3.0	FT1355-H-55	FT1355-A-50	FT1355-T-50			
42 X 3	FT1455-NT-42x3.0	FT1355-H-50	FT1355-A-50	FT1355-T-45			
50 X 3	FT1455-NT-50x5.0	FT1355-H-60	FT1355-A-55	FT1355-T-55			
50 X 5	FT1455-NT-50x5.0	FT1355-H-55	FT1355-A-55	FT1355-T-50			
50 X 6	FT1455-NT-50x5.0	FT1355-H-55	FT1355-A-50	FT1355-T-50			





FT1355 series

Cleaning projectiles for hose, tube and pipe assemblies

FT1355 cleaning projectiles work by being compressed against the internal surface of the hose, tube or pipe. Cleaning projectile selection should favor a diameter 20% to 30% larger than the internal diameter of the hose, tube of pipe being cleaned.

Projectiles are available in 3 variations as outlined below, and are manufactured from virgin materials with a specific cell structure and density to match the application's needs. Appropriate selection of the cleaning projectile based on the type of application ensures effective cleaning.



FT1355-H-XX Hose cleaning projectiles for hose assemblies

- Universal cleaning projectile for use with hose, tube and pipe assemblies
- Removes fine particles of loose contaminants after cutting operations
- Can also be used for product purging prior to assembly

FT1355-H-10 Hose cleaning projectile (5mm FT1355-H-06 Hose cleaning projectile (6mm FT1355-H-07 Hose cleaning projectile (7mm FT1355-H-08 Hose cleaning projectile (8mm FT1355-H-10 Hose cleaning projectile (10mm FT1355-H-12 Hose cleaning projectile (12mm FT1355-H-14 Hose cleaning projectile (14mm FT1355-H-16 Hose cleaning projectile (16mm FT1355-H-18 Hose cleaning projectile (18mm FT1355-H-20 Hose cleaning projectile (20mm FT1355-H-24 Hose cleaning projectile (22mm FT1355-H-24 Hose cleaning projectile (24mm FT1355-H-26 Hose cleaning projectile (26mm FT1355-H-28 Hose cleaning projectile (28mm FT1355-H-30 Hose cleaning projectile (30mm)
FT1355-H-05 Hose cleaning projectile (5mm) FT1355-H-06 Hose cleaning projectile (6mm) FT1355-H-07 Hose cleaning projectile (7mm) FT1355-H-08 Hose cleaning projectile (8mm) FT1355-H-10 Hose cleaning projectile (10mi) FT1355-H-12 Hose cleaning projectile (12mi) FT1355-H-14 Hose cleaning projectile (14mi) FT1355-H-16 Hose cleaning projectile (16mi) FT1355-H-18 Hose cleaning projectile (18mi) FT1355-H-20 Hose cleaning projectile (20mi) FT1355-H-24 Hose cleaning projectile (22mi) FT1355-H-24 Hose cleaning projectile (24mi) FT1355-H-26 Hose cleaning projectile (26mi) FT1355-H-28 Hose cleaning projectile (28mi))
FT1355-H-06 Hose cleaning projectile (6mm FT1355-H-07 Hose cleaning projectile (7mm FT1355-H-08 Hose cleaning projectile (8mm FT1355-H-10 Hose cleaning projectile (10mm FT1355-H-12 Hose cleaning projectile (12mm FT1355-H-14 Hose cleaning projectile (14mm FT1355-H-16 Hose cleaning projectile (16mm FT1355-H-18 Hose cleaning projectile (18mm FT1355-H-20 Hose cleaning projectile (20mm FT1355-H-24 Hose cleaning projectile (22mm FT1355-H-24 Hose cleaning projectile (24mm FT1355-H-26 Hose cleaning projectile (26mm FT1355-H-28 Hose cleaning projectile (28mm)
FT1355-H-08 Hose cleaning projectile (7mm FT1355-H-08 Hose cleaning projectile (8mm FT1355-H-10 Hose cleaning projectile (10mm FT1355-H-12 Hose cleaning projectile (12mm FT1355-H-14 Hose cleaning projectile (14mm FT1355-H-16 Hose cleaning projectile (16mm FT1355-H-18 Hose cleaning projectile (18mm FT1355-H-20 Hose cleaning projectile (20mm FT1355-H-24 Hose cleaning projectile (22mm FT1355-H-24 Hose cleaning projectile (24mm FT1355-H-26 Hose cleaning projectile (26mm FT1355-H-28 Hose cleaning projectile (28mm	·
FT1355-H-08 Hose cleaning projectile (8mm FT1355-H-10 Hose cleaning projectile (10mm FT1355-H-12 Hose cleaning projectile (12mm FT1355-H-14 Hose cleaning projectile (14mm FT1355-H-16 Hose cleaning projectile (16mm FT1355-H-18 Hose cleaning projectile (18mm FT1355-H-20 Hose cleaning projectile (20mm FT1355-H-24 Hose cleaning projectile (22mm FT1355-H-24 Hose cleaning projectile (24mm FT1355-H-26 Hose cleaning projectile (26mm FT1355-H-28 Hose cleaning projectile (28mm	ı)
FT1355-H-10 Hose cleaning projectile (10mi) FT1355-H-12 Hose cleaning projectile (12mi) FT1355-H-14 Hose cleaning projectile (14mi) FT1355-H-16 Hose cleaning projectile (16mi) FT1355-H-18 Hose cleaning projectile (18mi) FT1355-H-20 Hose cleaning projectile (20mi) FT1355-H-22 Hose cleaning projectile (22mi) FT1355-H-24 Hose cleaning projectile (24mi) FT1355-H-26 Hose cleaning projectile (26mi) FT1355-H-28 Hose cleaning projectile (28mi)	
FT1355-H-12 Hose cleaning projectile (12mi FT1355-H-14 Hose cleaning projectile (14mi FT1355-H-16 Hose cleaning projectile (16mi FT1355-H-18 Hose cleaning projectile (18mi FT1355-H-20 Hose cleaning projectile (20mi FT1355-H-22 Hose cleaning projectile (22mi FT1355-H-24 Hose cleaning projectile (24mi FT1355-H-26 Hose cleaning projectile (26mi FT1355-H-28 Hose cleaning projectile (28mi	n)
FT1355-H-14 Hose cleaning projectile (14mi FT1355-H-16 Hose cleaning projectile (16mi FT1355-H-18 Hose cleaning projectile (18mi FT1355-H-20 Hose cleaning projectile (20mi FT1355-H-22 Hose cleaning projectile (22mi FT1355-H-24 Hose cleaning projectile (24mi FT1355-H-26 Hose cleaning projectile (26mi FT1355-H-28 Hose cleaning projectile (28mi	m)
FT1355-H-16 Hose cleaning projectile (16mm) FT1355-H-18 Hose cleaning projectile (18mm) FT1355-H-20 Hose cleaning projectile (20mm) FT1355-H-22 Hose cleaning projectile (22mm) FT1355-H-24 Hose cleaning projectile (24mm) FT1355-H-26 Hose cleaning projectile (26mm) FT1355-H-28 Hose cleaning projectile (28mm)	m)
FT1355-H-18 Hose cleaning projectile (18mm) FT1355-H-20 Hose cleaning projectile (20mm) FT1355-H-22 Hose cleaning projectile (22mm) FT1355-H-24 Hose cleaning projectile (24mm) FT1355-H-26 Hose cleaning projectile (26mm) FT1355-H-28 Hose cleaning projectile (28mm)	m)
FT1355-H-20 Hose cleaning projectile (20mi) FT1355-H-22 Hose cleaning projectile (22mi) FT1355-H-24 Hose cleaning projectile (24mi) FT1355-H-26 Hose cleaning projectile (26mi) FT1355-H-28 Hose cleaning projectile (28mi)	m)
FT1355-H-22 Hose cleaning projectile (22mi FT1355-H-24 Hose cleaning projectile (24mi FT1355-H-26 Hose cleaning projectile (26mi FT1355-H-28 Hose cleaning projectile (28mi	m)
FT1355-H-24 Hose cleaning projectile (24mi FT1355-H-26 Hose cleaning projectile (26mi FT1355-H-28 Hose cleaning projectile (28mi	m)
FT1355-H-26 Hose cleaning projectile (26mi FT1355-H-28 Hose cleaning projectile (28mi	m)
FT1355-H-28 Hose cleaning projectile (28mi	m)
	m)
FT1355-H-30 Hose cleaning projectile (30mi	m)
	m)
FT1355-H-33 Hose cleaning projectile (33mi	m)
FT1355-H-36 Hose cleaning projectile (36mi	m)
FT1355-H-40 Hose cleaning projectile (40mi	m)
FT1355-H-45 Hose cleaning projectile (45mi	m)
FT1355-H-50 Hose cleaning projectile (50mi	m)
FT1355-H-55 Hose cleaning projectile (55mi	m)
FT1355-H-60 Hose cleaning projectile (60mi	m)
FT1355-H-65 Hose cleaning projectile (65mi	m)
FT1355-H-70 Hose cleaning projectile (70mi	m)
FT1355-H-75 Hose cleaning projectile (75mi	m)
FT1355-H-80 Hose cleaning projectile (80mi	m)
FT1355-H-85 Hose cleaning projectile (85mi	m)
FT1355-H-90 Hose cleaning projectile (90mi	m)
FT1355-H-95 Hose cleaning projectile (95mi	m)
FT1355-H-100 Hose cleaning projectile (100n	11)



FT1355 series

Cleaning projectiles for tube and pipe assemblies



FT1355-A-XX Abrasive cleaning projectiles for tube and pipe assemblies

- For use with tubes or pipe assemblies
- Removes mild to medium amounts of contaminants including surface rust and scale build-up
- Can be used multiple times

FT13555-A-XX abrasive cleaning projectiles for tube and pipe assemblies					
Part #	Description				
FT1355-A-06	Abrasive cleaning projectile (6mm)				
FT1355-A-07	Abrasive cleaning projectile (7mm)				
FT1355-A-10	Abrasive cleaning projectile (10mm)				
FT1355-A-12	Abrasive cleaning projectile (12mm)				
FT1355-A-14	Abrasive cleaning projectile (14mm)				
FT1355-A-16	Abrasive cleaning projectile (16mm)				
FT1355-A-18	Abrasive cleaning projectile (18mm)				
FT1355-A-20	Abrasive cleaning projectile (20mm)				
FT1355-A-22	Abrasive cleaning projectile (22mm)				
FT1355-A-24	Abrasive cleaning projectile (24mm)				
FT1355-A-26	Abrasive cleaning projectile (26mm)				
FT1355-A-28	Abrasive cleaning projectile (28mm)				
FT1355-A-30	Abrasive cleaning projectile (30mm)				
FT1355-A-33	Abrasive cleaning projectile (33mm)				
FT1355-A-36	Abrasive cleaning projectile (36mm)				
FT1355-A-40	Abrasive cleaning projectile (40mm)				
FT1355-A-45	Abrasive cleaning projectile (45mm)				
FT1355-A-50	Abrasive cleaning projectile (50mm)				
FT1355-A-55	Abrasive cleaning projectile (55mm)				
FT1355-A-60	Abrasive cleaning projectile (60mm)				



FT1355-T-XX Tube cleaning projectiles for tube and pipe assemblies

- Cleaning projectiles for use with tube and pipe assemblies
- Removes mild to medium amounts of contaminants including surface rust and scale build-up
- Removes mandrel lubricants, grease and other oils typically used in bending processes
- Strongly recommended for cleaning stainless steel tubes

FT1355-T-XX tube cleaning projectiles					
for tube assemblies					
Part #	Description				
FT1355-T-06	Tube cleaning projectile (6mm)				
FT1355-T-07	Tube cleaning projectile (7mm)				
FT1355-T-10	Tube cleaning projectile (10mm)				
FT1355-T-12	Tube cleaning projectile (12mm)				
FT1355-T-14	Tube cleaning projectile (14mm)				
FT1355-T-16	Tube cleaning projectile (16mm)				
FT1355-T-18	Tube cleaning projectile (18mm)				
FT1355-T-20	Tube cleaning projectile (20mm)				
FT1355-T-22	Tube cleaning projectile (22mm)				
FT1355-T-24	Tube cleaning projectile (24mm)				
FT1355-T-26	Tube cleaning projectile (26mm)				
FT1355-T-28	Tube cleaning projectile (28mm)				
FT1355-T-30	Tube cleaning projectile (30mm)				
FT1355-T-33	Tube cleaning projectile (33mm)				
FT1355-T-36	Tube cleaning projectile (36mm)				
FT1355-T-40	Tube cleaning projectile (40mm)				
FT1355-T-45	Tube cleaning projectile (45mm)				
FT1355-T-50	Tube cleaning projectile (50mm)				
FT1355-T-55	Tube cleaning projectile (55mm)				
FT1355-T-60	Tube cleaning projectile (60mm)				





FT1355 series

Cleaning projectile selection ordering guidelines

Order quantity is one bag (ex.. A 1 piece order will be for the full bag quantity noted below)

FT1355 proje	ectile ordering guide	
Danfoss		
projectile	Description	Oty / bag
part # FT1355-A-06	Description ABRASIVE (06mm) (Pkg 100)	Qty / bag
FT1355-A-07	ABRASIVE (07mm) (Pkg 100)	100
FT1355-A-10	ABRASIVE (10mm) (Pkg 100)	100
FT1355-A-12	ABRASIVE (12mm) (Pkg 100)	100
FT1355-A-14	ABRASIVE (14mm) (Pkg 100)	100
FT1355-A-16	ABRASIVE (16mm) (Pkg 100)	100
FT1355-A-18	ABRASIVE (18mm) (Pkg 100)	100
FT1355-A-20	ABRASIVE (20mm) (Pkg 50)	50
FT1355-A-22	ABRASIVE (22mm) (Pkg 50)	50
FT1355-A-24	ABRASIVE (24mm) (Pkg 50)	50
FT1355-A-26	ABRASIVE (26mm) (Pkg 50)	50
FT1355-A-28	ABRASIVE (28mm) (Pkg 40)	40
FT1355-A-30	ABRASIVE (30mm) (Pkg 40)	40
FT1355-A-33	ABRASIVE (33mm) (Pkg 40)	40
FT1355-A-36	ABRASIVE (36mm) (Pkg 30)	30
FT1355-A-40	ABRASIVE (40mm) (Pkg 30)	30
FT1355-A-45	ABRASIVE (45mm) (Pkg 20)	20
FT1355-A-50	ABRASIVE (50mm) (Pkg 20)	20
FT1355-A-55	ABRASIVE (55mm) (Pkg 15)	15
FT1355-A-60	ABRASIVE (60mm) (Pkg 15)	15
FT1355-H-05	Low density hose projectile (5mm)	100
FT1355-H-06	Low density hose projectile (6mm)	100
FT1355-H-07	Low density hose projectile (7mm)	100
FT1355-H-08	Low density hose projectile (8mm)	100
FT1355-H-10	Low density hose projectile (10mm)	100
FT1355-H-12	Low density hose projectile (12mm)	100
FT1355-H-14	Low density hose projectile (14mm)	100
FT1355-H-16	Low density hose projectile (16mm)	100
FT1355-H-18	Low density hose projectile (18mm)	100
FT1355-H-20	Low density hose projectile (20mm)	50
FT1355-H-22	Low density hose projectile (22mm)	50
FT1355-H-24	Low density hose projectile (24mm)	50
FT1355-H-26	Low density hose projectile (26mm)	50
FT1355-H-28	Low density hose projectile (28mm)	40
FT1355-H-30	Low density hose projectile (30mm)	40

FT1355 projectile ordering guide						
Danfoss						
projectile part #	Description	Qty / bag				
FT1355-H-33	Low density hose projectile (33mm)	40				
FT1355-H-36	Low density hose projectile (36mm)	30				
FT1355-H-40	Low density hose projectile (40mm)	30				
FT1355-H-45	Low density hose projectile (45mm)	20				
FT1355-H-50	Low density hose projectile (50mm)	20				
FT1355-H-55	Low density hose projectile (55mm)	15				
FT1355-H-60	Low density hose projectile (55mm)	15				
FT1355-H-65	Low density hose projectile (60mm)	10				
FT1355-H-70	Low density hose projectile (65mm)	10				
FT1355-H-75	Low density hose projectile (70mm)	10				
FT1355-H-80	Low density hose projectile (80mm)	10				
FT1355-H-85	Low density hose projectile (85mm)	10				
FT1355-H-90	Low density hose projectile (90mm)	10				
FT1355-H-95	Low density hose projectile (95mm)	10				
FT1355-H-100	Low density hose projectile (100mm)	10				
FT1355-T-06	Tube projectile (06mm)	100				
FT1355-T-07	Tube projectile (07mm)	100				
FT1355-T-10	Tube projectile (10mm)	100				
FT1355-T-12	Tube projectile (12mm)	100				
FT1355-T-14	Tube projectile (14mm)	100				
FT1355-T-16	Tube projectile (16mm)	100				
FT1355-T-18	Tube projectile (18mm)	100				
FT1355-T-20	Tube projectile (20mm)	50				
FT1355-T-22	Tube projectile (22mm)	50				
FT1355-T-24	Tube projectile (24mm)	50				
FT1355-T-26	Tube projectile (26mm)	50				
FT1355-T-28	Tube projectile (28mm)	40				
FT1355-T-30	Tube projectile (30mm)	40				
FT1355-T-33	Tube projectile (33mm)	40				
FT1355-T-36	Tube projectile (36mm)	30				
FT1355-T-40	Tube projectile (40mm)	30				
FT1355-T-45	Tube projectile (45mm)	20				
FT1355-T-50	Tube projectile (50mm)	20				
FT1355-T-55	Tube projectile (55mm)	15				
FT1355-T-60	Tube projectile (60mm)	15				



FT1355 series

Cleaning projectile selection ordering guidelines

Order quantity is one bag (ex. A 1 piece order will be for the full bag quantity noted below)

FT1355 cleaning projectile ordering							
FT1355 foam projectile part #'s for FT1455 projectile launchers	Order quantity is one bag (ex. A 1 piece order will be for the full bag quantity noted below)	Inner Diameter (ID) in inches of cut hose, and Hose assembly Dash siz					
FT1355-H-06	100	3/16" (-03)					
FT1355-H-10 (or)	100	1/4" (-04)					
FT1355-H-12*	100	1/4 (-04)					
FT1355-H-12 (or)	100						
FT1355-H-14*	100	5/16" (-05)					
FT1355-H-14 (or)	100						
FT1355-H-16*	100	3/8" (-06)					
FT1355-H-18 (or)	100						
FT1355-H-20*	50	1/2" (-08)					
FT1355-H-22	50	5/8" (-10)					
FT1355-H-26	50	3/4" (-12)					

FT1355 cleaning	FT1355 cleaning projectile ordering							
FT1355 foam projectile part #'s for FT1455 projectile launchers	Order quantity is one bag (ex. A 1 piece order will be for the full bag quantity noted below)	Inner Diameter (ID) in inches of cut hose, and Hose assembly Dash size						
FT1355-H-33 (or)	40	1" (-16)						
FT1355-H-36*	30	. (19)						
FT1355-H-40	30	1-1/4" (-20)						
FT1355-H-45*	20	, . (= 5,						
FT1355-H-50 (or)	20	1-1/2" (-24)						
FT1355-H-55*	15	,_ (,						
FT1355-H-60 (or)	15	2" (-32)						
FT1355-H-65*	10	2 (32)						
FT1355-H-75	10	2-1/2" (-40)						
FT1355-H-85	10	3" (-48)						
FT1355-H-100	10	3-1/2" (-64)						

NOTE: *Use the larger projectile size for maximum cleaning on hose cut with an abrasive wheel





FT1555 CapSeal system



FT1555 Series CapSeal system

The FT1555 CapSeal system is intended to be used in conjunction with the FT1355 and FT1455 series projectile cleaning systems to prevent recontamination of hose, tube, and pipe assemblies. The FT1555 CapSeal system utilizes heat shrink technology to encapsulate the end of a hose or tube assembly with an FT1555 CapSeal capsule.

Features

- Provides industry leading ISO cleanliness levels
- Robust construction for use in heavy duty applications
- Available in hand-held and bench-mount configurations
- Ideal for portable small volume applications, and large volume production applications
- Optimum CapSeal capsule design to meet a broad variety of applications
- Minimal setup
- Capability: 3/8" (10mm) to 3" (78mm OD) hose and fitting ends
- Available in kits or individual replacement hardware components
- Kits available with and without Capseal capsule

Capsule shrink time for CapSeal Systems at multiple intervals										
Machine warm-up time from cold start (minutes)	1	2	3	4	5	6	7	8	9	10
Machine	Seal time	(seconds)								
FT1555-BM230 Danfoss	3.5	2.5	2	1.5	1.25	1	1	0.75	0.75	0.75
FT1555-BM120	17	10	4.5	3.25	2.5	2.25	2	1.75	1.5	1.5
FT1555-HH	10	12	6	4	3	3	2.5	2	1.75	1.75



FT1555 CapSeal system

Hardware



FT1555-HH Hand held electric heat gun

- Variable temperature electronic heat gun with electronic thermocouple control.
- Duratherm heating element ensure long life and even heat temperature range of 120°F (49°C) to 1100°F (593°C) and a builtin cool down switch.
- Capable of sealing multiple hoses simultaneously.
- Operates on 120V AC power, draws 1500 watts, and can produce 17.6CFM.
- Cool down switch renders gun immediately cool-to-the-touch.

FT1555-BM120

120v Ak hand held heat gun with air knife



- A cradle holds and locks the 120V heat gun into place for bench top shrinking of capsules.
- The heat gun can be easily removed from the cradle for remote capsule shrinking.
- Magnetic puck holds the capsule onto the fitting for a perfect seal during the shrinking process.
- Magnetic puck pulls the swivel nut forward on 90° and 45° fittings for easy insertion into the air knife for capsule shrinking.
- Air knife has heat guard and large 110mm center opening that can be accessed from either side.
- Can seal single or multiple hose or tube assemblies.
- CapSeal capsules will seal hose or tube fitting from 3/8"OD (10mm) through 3"OD (78mm).



FT1555-BM230

CapSeal system with air knife

- Enables sealing of single or multiple hose or tube assemblies at one time.
- Magnetic puck holds capsule onto carbon steel fitting for a perfect seal during sealing process.
- Magnetic puck holds the nut forward on 90° and 45° fittings for easy insertion into the air knife.
- Air knife has heat guard and large 110 mm center opening accessible from either side.
- Capsules fit and seal hose and tube fittings from 3/8" OD (10mm) through 3" OD (78mm).
- 230v single-phase AC power at 50/60Hz draws < 5 amps.

- ON/OFF rocker switch illuminates green when "on."
- Built in external air filter minimizes heat gun clogging and maintenance, increasing heat gun longevity.
- Heat side of machine is fully insulated.
- Dedicated air filter prevents airborne contamination during sealing.
- Please note that a L6 -15 NEMA twist loc receptacle (not supplied) is required for operation.
- Durable, long-lasting brushless motor for high-volume production environments.





FT1555 CapSeal system

Kits



FT1555-HH-K1 Hand held electric heat gun

basic kit

- Typical applications Hose shops and mobile hose fabricators
- Capsules fit and seal hose and tube fittings from 3/8" OD (10mm) through 3" OD (78mm)

FT1555-HH-K1 kit includes

- FT1555-HH heat gun and air knife with 1 ½" connection
- FT1555-SMP small magnetic puck
- FT1555-LMP large magnetic puck



FT1555-HH-K2

Hand held electric heat gun starter kit

- Typical applications Hose shops and mobile hose fabricators
- Capsules fit and seal hose and tube fittings from .55" OD (14mm) through 1.73" OD (44mm)

FT1555-HH-K1 kit includes in addition to contents of FT1555-HH-K1 kit

- FT1555-1824UP CapSeal Capsules 18mm x 24mm (ID x LNGTH)
- FT1555-2030UP CapSeal Capsules 20mm x 30mm (ID x LNGTH)
- FT1555-2540UP CapSeal Capsules 25mm x 40mm (ID x LNGTH)
- FT1555-2840UP CapSeal Capsules 28mm x 40mm (ID x LNGTH)
- FT1555-3140UP CapSeal Capsules 31mm x 40mm (ID x LNGTH)
- FT1555-3440UP CapSeal Capsules 34mm x 40mm (ID x LNGTH)
- FT1555-3840UP CapSeal Capsules 38mm x 40mm (ID x LNGTH)
- FT1555-4650UP CapSeal Capsules 46mm x 50mm (ID x LNGTH)



FT1555-HH-K3

Hand held electric heat gun premium starter kit

- Typical applications Hose shops and mobile hose fabricators
- Capsules fit and seal hose and tube fittings from .55" OD (14mm) through 3.07" OD (78mm)

FT1555-HH-K3 kit includes in addition to contents of FT1555-HH-K1 kit

- FT1555-1824UP CapSeal Capsules 18mm x 24mm (ID x LNGTH)
- FT1555-2030UP CapSeal Capsules 20mm x 30mm (ID x LNGTH)
- FT1555-2540UP CapSeal Capsules 25mm x 40mm (ID x LNGTH)
- FT1555-2840UP CapSeal Capsules 28mm x 40mm (ID x LNGTH)
- FT1555-3140UP CapSeal Capsules 31mm x 40mm (ID x LNGTH)
- FT1555-3440UP CapSeal Capsules 34mm x 40mm (ID x LNGTH)
- FT1555-3840UP CapSeal Capsules 38mm x 40mm (ID x LNGTH)
- FT1555-4650UP CapSeal Capsules 46mm x 50mm (ID x LNGTH)
- FT1555-5260UP CapSeal Capsules 52mm x 60mm (ID x LNGTH)
- FT1555-5860UP CapSeal Capsules 58mm x 60mm (ID x LNGTH)
- FT1555-6760UP CapSeal Capsules 67mm x 60mm (ID x LNGTH)
- FT1555-8060UP CapSeal Capsules 80mm x 60mm (ID x LNGTH)



FT1555 CapSeal system

Capsules

FT1555 CapSeal capsules eliminate contamination by forming a clean and secure seal around hose and tube ends. FT1555 CapSeal system eliminates the need to stock multiple plastic threaded caps with just 19 CapSeal capsule sizes to meet all type of hose and tube end configurations.

Additionally, the quick and easy pull-off tab on each capsule eliminates the need for additional tools that could further contaminate the assemblies.

FT1555 CapSeal capsules are available in 19 sizes of varying diameter and length to match needs of all assemblies, and are available in both unit packaged and bulk packaged packaging.

Unit packaged CapSeal packages		Bulk packaged CapSeal packages	CapSeal capsule size	Hex sizes covered		Fitting		
CapSeal part #		CapSeal part #	Packaged quantity	(mm, ID X length)	(mm)	(Inches)	Straight	Elbow*
FT1555-1424UP	960	FT1555-1424BP	12,320	14x24	10mm to 13mm	.39" to .51"	Х	X
FT1555-1624UP	840	FT1555-1624BP	9,000	16x24	12mm to 15mm	.47" to .59"	Х	Х
FT1555-1824UP	840	FT1555-1824BP	7,360	18x24	14mm to 17mm	.55" to .67"	X	Х
FT1555-2023UP	810	FT1555-2023BP	23,400	20 X 23	12mm to 18mm	0.47" to 0.71"		Х
FT1555-2030UP	810	FT1555-2030BP	23,400	20 X 30	12mm to 18mm	0.47" to 0.71"	Х	
FT1555-2224UP	810	FT1555-2224BP	22,500	22 X 24	16mm to 21mm	0.63" to 0.63"		Х
FT1555-2527UP	800	FT1555-2527BP	17,600	25 X 27	18mm to 23mm	0.71 to 0.91"		Х
FT1555-2540UP	800	FT1555-2540BP	17,600	25 X 40	18mm to 23mm	0.71" to 0.91"	Х	
FT1555-2840UP	720	FT1555-2840BP	15,200	28 X 40	22mm to 26mm	0.87" to 1.02"	Х	
FT1555-3133UP	640	FT1555-3133BP	12,240	31 X 33	24mm to 29mm	0.94" to 1.14"		X
FT1555-3140UP	640	FT1555-3140BP	12,240	31 X 40	24mm to 29mm	0.95" to 1.14"	Х	
FT1555-3440UP	640	FT1555-3440BP	10,240	34 X 40	27mm to 32mm	1.07" to 1.26"	X	
FT1555-3840UP	560	FT1555-3840BP	7,800	38 X 40	30mm to 36mm	1.19" to 1.42"	Х	Х
FT1555-4345UP	480	FT1555-4345BP	6,240	43 X 45	32mm to 41mm	1.26" to 1.61"	Х	X
FT1555-4650UP	480	FT1555-4650BP	5,760	46 X 50	34mm to 44mm	1.34" to 1.73"	Х	Х
FT1555-5260UP	400	FT1555-5260BP	4,400	52 X 60	41mm to 50mm	1.62" to 1.97"	Х	Х
FT1555-5860UP	400	FT1555-5860BP	3,600	58 X 60	49mm to 56mm	1.93" to 2.20"	Х	Х
FT1555-6760UP	320	FT1555-6760BP	2,560	67 X 60	55mm to 65mm	2.16" to 2.56"	Х	Х
FT1555-8060UP	320	FT1555-8060BP	1,736	80 X 60	64mm to 78mm	2.52" to 3.07"	Х	Х

^{*} Shorter length CapSeal capsules are recommended for elbow and angled fittings (45° and 90°)

FT1555 CapSeal system

Accessories



FT1555-HH-AK15

1-1/2" connection

- 110mm air knife to shrink CapSeal capsules
- Accommodates all CapSeal capsules



FT1555-HH-AK20

2" connection

- 110mm air knife to shrink CapSeal capsules
- Accommodates all CapSeal capsules



Magnetic puck

FT1555-LMP- Large magnetic puck FT1555-SMP- Small magnetic puck

Magnetic puck pulls nut forward on hose or tube assemblies to allow proper sealing while being placed in air knife.



EC declaration of conformity

EC DECLARATION OF CONFORMITY FOR MACHINERY Directive 73/23/EEC, 89/336/EEC

Manufacturer: Ultraclean Technologies Corp. Address: 746 Shiloh Pike, Bridgeton NJ 08302, USA

Herewith declares that the Clean Seal System Heat Shrink Machine Model: **UC-CSS-230**, production year 2010 is in conformity with the requirements of the Machinery Directive 73/23/EEC, 89/336/EEC

Bridgeton, NJ 08302 USA, October 2010

Mark of Conformity \bigcirc



Bruce Riley, Owner

About

Danfoss Power Solutions

Danfoss Power Solutions is a global manufacturer and supplier of high-quality hydraulic and electric components. We specialize in providing state-of-the-art technology and solutions that excel in the harsh operating conditions of the mobile off-highway market as well as the marine sector. Building on our extensive applications expertise, we work closely with you to ensure exceptional performance for a broad range of applications. We help you and other customers around the world speed up system development, reduce costs and bring vehicles and vessels to market faster.

We offer you expert worldwide support for ensuring the best possible solutions for outstanding performance. And with an extensive network of Global Service Partners, we also provide you with comprehensive global service for all of our components.

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- Synflex Optimum by Danfoss
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Go to www.danfoss.com for further product information.

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