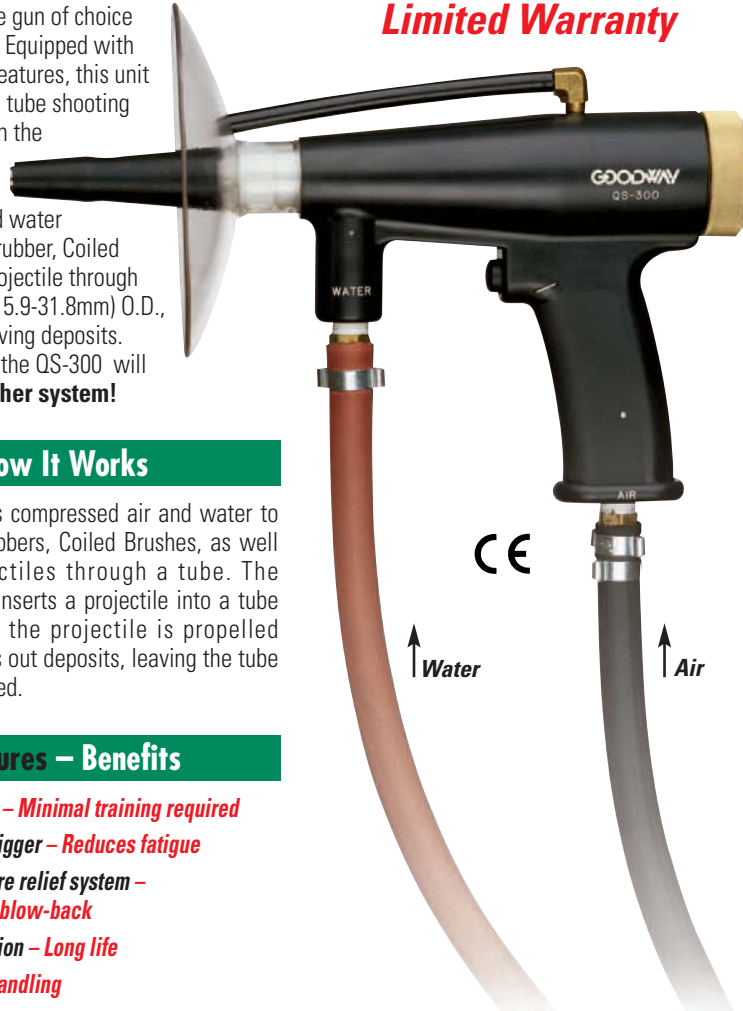


Quick Shot Tube Cleaning System

QS-300

The QS-300 is the gun of choice for power plants. Equipped with state-of-the-art features, this unit holds the edge in tube shooting technology. When the touch-activated trigger is squeezed, air and water propel a Tube Scrubber, Coiled Brush or other projectile through a tube $\frac{5}{8}$ "-1 $\frac{1}{4}$ " (15.9-31.8mm) O.D., effortlessly removing deposits. By far the best – the QS-300 will **outshoot any other system!**

**Three-Year
Limited Warranty**



How It Works

The QS-300 uses compressed air and water to shoot Tube Scrubbers, Coiled Brushes, as well as other projectiles through a tube. The operator simply inserts a projectile into a tube and shoots. As the projectile is propelled forward, it forces out deposits, leaving the tube thoroughly cleaned.

Features – Benefits

- Simple to operate – Minimal training required**
- Power assisted trigger – Reduces fatigue**
- Automatic pressure relief system – Minimizes risk of blow-back**
- Rugged construction – Long life**
- Compact – Easy handling**
- Simple construction – Reliable**
- High pressure – Maximum cleaning power**

FIELD REPORT

"The report I got back from the guys using the Quick Shot was unbelievable! They were very impressed with its mobility, ease of operation, power and fantastic results.

When we opened our condenser, our first thought was that the tubes were not too fouled. However, after shooting a few tubes and seeing

the results in the catch trap, it was apparent that the tubes were in desperate need of cleaning. The QS-300 is a powerful piece of equipment."

Kenny Cloinger,
Plant Supervisor
East Syracuse, NY



Specifications

Air Requirements:	50-150 PSI at 50 CFM
Water Requirements:	Maximum 150 PSI at 5 GPM
Hoses:	10' air hose and 10' water hose supplied
Dimensions:	9" long
Weight:	3 lbs
Carrying Case:	14 $\frac{1}{2}$ " high x 19" wide x 5 $\frac{1}{2}$ " deep



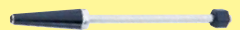
QS-300 Quick Shot Tube Cleaning Gun including safety shield, 10' air hose, 10' water hose, tapered nozzle and carrying case

Optional:

QA-1051
Replacement Nozzle



QA-1051-12
Extension Nozzle 12" long



QSP-1212
Mesh Tarp
12' high x 12' wide



Condenser Cleaning Station

QS-UTC-2

The QS-UTC-2 Condenser Cleaning Station is the **ideal platform** for cleaning power plant condenser tubes. The unit can be equipped with up to three Quick Shot Tube Cleaning Guns, and features a heavy duty welded aluminum frame with stainless steel cabinetry, 6" heavy-duty lockable casters, and two low voltage work lights with 50' retractable power cords and magnetic anchors. It also features two lockable storage compartments, eight hooks, two shelves, a 4½" work vise, three recessed work areas with rubberized pads, and a standard water outlet to connect a washdown hose. Two additional compartments allow for storage of up to four 5 gallon buckets of scrubbers or brushes, and a large tarp. 50' combined air and water hoses for each gun allow for maximum mobility of the guns to reach every tube in most water boxes, without having to move the unit.

**Three-Year
Limited Warranty**

NEW



Note: Condenser Cleaning Station above shown with two optional QS-300 Quick Shot Tube Cleaning Guns.



Quick Connect (Chicago) Fittings



Control Panel with Gauges



Work Vise



Low Voltage Work Lights



Two Lockable Compartments



6" Lockable Casters



115 Volt AC Power Outlets



Auxiliary Water Faucet



5 Gallon Bucket Storage



Tarp Storage

Specifications

Input Power: 15 amps, 115 V, 60 Hz AC
Output Power: 13 amps, 115 V, 60 Hz AC
Power Supply Cord: 35', 14-3 NEMA 5-15 GFCI
Air Requirements: Recommended 90 PSI at 100 CFM
Water Requirements: Recommended 50 PSI at 10 GPM
Hoses: Up to three ¾" x 50' combined air and water outlet
Dimensions: 43" high x 33" wide x 48" deep
Weight: 210 lbs net dry lbs

QS-UTC-2 Condenser Cleaning Station including quick connect (chicago) fittings for two guns, air and water pressure gauges, 4½" work vise, two low voltage work lights, two 115 V power outlets, standard water outlet, three recessed work areas, two lockable compartments, four-bucket storage compartment, tarp storage compartment, eight storage hooks, two storage shelves and four 6" lockable casters – **call for customization options and prices**

Optional:
QSP-1212
 Mesh Tarp 12' high x 12' wide



CONDENSER MAINTENANCE

Tube Scrubbers

Goodway Tube Scrubbers are **the ultimate design** in tube cleaning devices. They are available in sizes to fit tubes 5/8"-1 1/4" (15.9-32mm) O.D. When shot with a QS-300 Quick Shot Tube Cleaning Gun they provide the fastest method for removing soft deposits from tubes.

Features – Benefits

- Scraping disks – Will not leave streaks in tubes**
- Safe – Will not damage tubes**
- They float – Easy retrieval**
- Reusable – Can be shot several times**
- Color-coded – Easy identification**



	Part Number	Color	Type	Tube I.D. Range (in)	Tube I.D. Range (mm)
	TS-560-S	Yellow	Soft	0.495-0.541	12.57-13.74
	TS-560	Yellow	Hard	0.527-0.555	13.39-14.10
	TS-630-S	Brown	Soft	0.570-0.620	14.50-15.75
	TS-630	Brown	Hard	0.590-0.630	15.00-16.00
	TS-695-S	Red	Soft	0.620-0.675	15.75-17.15
	TS-695	Red	Hard	0.652-0.694	16.56-17.63
	TS-750-S	Purple	Soft	0.660-0.730	16.76-18.54
	TS-750	Purple	Hard	0.710-0.750	18.03-19.05
	TS-825-S	White	Soft	0.730-0.800	18.54-20.32
	TS-825	White	Hard	0.777-0.819	19.74-20.80
	TS-870-S	Green	Soft	0.780-0.850	19.81-21.59
	TS-870	Green	Hard	0.825-0.870	20.96-22.10
	TS-960-S	Blue	Soft	0.870-0.944	22.10-23.98
	TS-960-M	Blue	Medium	0.886-0.950	22.50-24.13
	TS-960	Blue	Hard	0.902-0.956	22.91-24.28
	TS-1100-S	Black	Soft	1.000-1.085	25.40-27.56
	TS-1100	Black	Hard	1.027-1.106	26.09-28.09
	TS-1250-S	Gray	Soft	1.100-1.190	27.94-30.23
	TS-1250	Gray	Hard	1.190-1.250	30.23-31.79

All Tube Scrubbers are available in either soft or hard material to cover the complete range of tube sizes and most tube cleaning conditions. In most cases hard Tube Scrubbers are recommended. On the lower end of the hard Tube Scrubber size range, in extreme conditions, the user may have to use soft Tube Scrubbers.

Call for prices and quantity discounts.

Stainless Steel Condenser Brushes

Goodway Bi-Directional Stainless Steel Condenser Tube Brushes provide a unique combination of **aggressive brushing and wiping** action. They are color coded for easy identification, feature stainless steel bristles set in a coil, and capped at both ends by three wiping blades. They are ideal for removing medium to hard deposits from condenser and component heat exchanger tubes.

Features – Benefits

- Bi-directional – Shoot brush from either end**
- Hybrid design – Maximum cleaning power**
- Reusable – Can be shot several times**
- Color-coded – Easy identification**

NEW

	Part Number	Piston Color	Tube O.D.	Gage	Tube I.D.
	CBS-075-18	White	0.750"	18	0.652"
	CBS-075-20	Red	0.750"	20	0.680"
	CBS-075-22	Blue	0.750"	22	0.694"
	CBS-087-18	White	0.875"	18	0.777"
	CBS-087-20	Red	0.875"	20	0.805"
	CBS-087-22	Blue	0.875"	22	0.819"
	CBS-100-16	Yellow	1.000"	16	0.870"
	CBS-100-18	White	1.000"	18	0.902"
	CBS-100-20	Red	1.000"	20	0.930"
	CBS-100-22	Blue	1.000"	22	0.944"



Stainless Steel Condenser Tube Brushes are available for tubes 5/8"-1 1/4" (15.9-32mm) O.D. with BWG ranges 16-22.

Additional sizes available – call for prices and quantity discounts.

Coiled Brushes

Goodway Coiled Tube Brushes incorporate a **revolutionary piston design**. They feature durable nylon bristles set in a coil, wrapped around a wear resistant polymer core. Superior to wooden dowel cores, Goodway's piston design allows the brushes to be quickly inserted into the tubes and helps maximize the cleaning effectiveness of the bristles. They are ideal for removing soft to medium deposits from condenser and component heat exchanger tubes.

Features – Benefits

Piston design – Maximum speed

Safe – Will not damage tubes

Reusable – Can be shot several times

Color-coded – Easy identification



Part Number	Piston Color	Tube O.D.	Gage	Tube I.D.
CB-062-18	White	0.625"	18	0.527"
CB-075-18	White	0.750"	18	0.652"
CB-075-20	Red	0.750"	20	0.680"
CB-075-22	Blue	0.750"	22	0.694"
CB-087-18	White	0.875"	18	0.777"
CB-087-20	Red	0.875"	20	0.805"
CB-087-22	Blue	0.875"	22	0.819"
CB-100-16	Yellow	1.000"	16	0.870"
CB-100-18	White	1.000"	18	0.902"
CB-100-20	Red	1.000"	20	0.930"
CB-100-22	Blue	1.000"	22	0.944"



Coiled Tube Brushes are available for tubes 5/8"-1 1/4" (15.9-32mm) O.D. with BWG ranges 16-22.

Additional sizes available – call for prices and quantity discounts.

Goodway Bi-Directional Coiled Tube Brushes can be **shot from either end**. They are color coded for easy identification and feature durable nylon bristles set in a coil, wrapped around a wear resistant 3" polymer core. This design allows the brushes to be quickly inserted into the tubes, with out regard to direction, and helps maximize the cleaning effectiveness and the life of the bristles. They are ideal for removing soft to medium deposits from condenser and component heat exchanger tubes.



Part Number	Piston Color	Tube O.D.	Gage	Tube I.D.
CB3-075-18	White	0.750"	18	0.652"
CB3-075-20	Red	0.750"	20	0.680"
CB3-075-22	Blue	0.750"	22	0.694"
CB3-087-18	White	0.875"	18	0.777"
CB3-087-20	Red	0.875"	20	0.805"
CB3-087-22	Blue	0.875"	22	0.819"
CB3-100-16	Yellow	1.000"	16	0.870"
CB3-100-18	White	1.000"	18	0.902"
CB3-100-20	Red	1.000"	20	0.930"
CB3-100-22	Blue	1.000"	22	0.944"
CB3-112-16	Yellow	1.125"	16	0.995"
CB3-112-18	White	1.125"	18	1.027"
CB3-112-20	Red	1.125"	20	1.055"
CB3-112-22	Blue	1.125"	22	1.069"
CB3-125-16	Yellow	1.250"	16	1.120"
CB3-125-18	White	1.250"	18	1.152"
CB3-125-20	Red	1.250"	20	1.180"
CB3-125-22	Blue	1.250"	22	1.194"
CB3-137-16	Yellow	1.375"	16	1.245"
CB3-137-18	White	1.375"	18	1.277"
CB3-137-20	Red	1.375"	20	1.305"
CB3-137-22	Blue	1.375"	22	1.319"
CB3-150-16	Yellow	1.500"	16	1.370"
CB3-150-18	White	1.500"	18	1.402"
CB3-150-20	Red	1.500"	20	1.430"
CB3-150-22	Blue	1.500"	22	1.444"

Features – Benefits

Bi-directional – Shoot brush from either end

3" long – Large cleaning surface

Piston design – Maximum speed

Safe – Will not damage tubes

Reusable – Can be shot several times

Color-coded – Easy identification



Bi-directional 3" Coiled Tube Brushes are available for tubes 3/4"-1 1/2" (19.1-38mm) O.D. with BWG ranges 16-22.

Additional sizes available – call for prices and quantity discounts.

Big Shot Tube Cleaning System

BFP-3510

The BFP-3510 Big Shot is the ultimate surface condenser tube cleaning system. The unit comes fully equipped with a 10 HP motor, a triplex plunger two gun pump, Goodyear™ water inlet and outlet hoses, and two guns all on a heavy-duty, custom fabricated cart. When the trigger is squeezed, low pressure water propels a Super Scrubber, Coiled Brush or other projectile through a tube 5/8"-1 1/2" (15.9-38mm) O.D. When used in conjunction with Goodway's Super Scrubbers, the BFP-3510 is capable of removing even the toughest scale. It is the power plant professional's **system of choice for hard deposits!**

How It Works

The BFP-3510 uses pressurized water to shoot Super Scrubbers or Coiled Brushes, as well as other projectiles through a tube. The operator simply inserts a projectile into a tube and shoots. As the projectile is propelled forward, it forces out deposits, leaving the tube thoroughly cleaned.

Features – Benefits

- Simple to operate – Minimal training required**
- Comfort grip gun – Reduces fatigue**
- Two gun pump – Allows for two operators**
- Rugged construction – Long life**
- Up to 400 PSI – Maximum cleaning power**

Three-Year Limited Warranty



Specifications

- Motor Power:** 10 HP
- Input Power:** Standard: 26 amps, 230 V, 50/60 Hz AC, three phase (Optional: 13 amps, 460 V, 50/60 Hz; 12 amps, 380 V, 50/60 Hz)
- Water Requirements:** 0-70 PSI at 35 GPM
- Output Water Pressure:** 275-400 PSI at 35 GPM
- Hoses:** 1 1/2" x 50' inlet and 3/4" x 50' outlet
- Pump:** Triplex plunger running in oil bath
- Dimensions:** 40" high x 32" wide x 60" deep
- Weight:** 600 lbs, net dry

BFP-3510-230-R2 Big Shot Tube Cleaning System, 230 V, 50/60 Hz, including 1 1/2" x 50' inlet hose, two 3/4" x 50' outlet hoses with reels, two guns and cart – **call for customization options and prices**

Optional:
QSP-1212
Mesh Tarp
12' high x 12' wide



Super Scrubbers

Goodway Super Scrubbers are the most advanced tube cleaning projectiles available. They come equipped with either **high tensile carbon steel or wear resistant polymer blades** and resilient nitrile bushings. Each projectile features a patented force adjustment, preset by the factory, to match both the type of deposit and the tube material. Carbon steel blades are available for tubes 5/8"-1 1/4" (15.9-32mm) O.D., and polymer blades are available for tubes 7/8" and 1" (22.2 and 25.4mm) O.D. When shot with a BFP-3510 Big Shot Tube Cleaning System they provide the best method for removing hard deposits from power plant condenser tubes.



Features – Benefits

- Precision crafted, high tensile carbon steel or wear resistant polymer blades – Will not damage tubes**
- Resilient nitrile bushings – Will not break down during oil soak between uses**
- Pressure reactive core – Maintains uniform pressure of blades against tube wall to prevent streaking**
- Patented force adjustment and twin 6 point blade system preset at factory to match the type of deposit and tube material – Thoroughly removes even the hardest deposits**
- Reusable – Can be shot several times**
- Color-coded – Easy identification**



Carbon Steel Blades



Polymer Blades

When placing your order, please specify your tube size (O.D. and BWG), tube material and type of deposit.

Call for prices and quantity discounts.

Hose/Tube Cleaning Guns

JetLoad®

The JetLoad is the **ideal choice** for production operations or volume cleaning of hoses, tubes and pipes from 3/16"-2" (4.8-51mm) ID. The JetLoad's unique trap door allows the operator to "speed-load" projectiles for applications up to 1" (25.4mm) I.D. Special formulated foam projectiles fired from the JetLoad will clean hydraulic hoses up to an ISO 13/10 level of cleanliness, or remove oils, chips, sediments and other residues from the insides of hoses, tubes and pipes.

Features – Benefits

- Simple to operate – Minimal training required**
- Quick loading of projectiles – Saves time**
- Cleans straight, curved and coiled tubes, pipes and hoses – Versatile**
- Pressure relief valve – Eliminates back pressure**
- Trigger guard – Added safety**
- Quick connect fittings – No tools required**



Patented



Specifications

- Air Requirements:** Minimum 60 PSI, Maximum 100 PSI
- Dimensions:** 8"-10" long (depending on nozzle)
- Weight:** 1 3/4 lbs
- Carrying Case:** 16" high x 18" wide x 5 1/2" deep

- JL-5010** JetLoad Pneumatic Cleaning Gun Only
 - JCL-3000** Adapter Ring for nozzles 3/16"-1 1/4" (4.8-32mm)
 - JL-5030** JetLoad Pneumatic **Hose** Cleaning Gun including 9 standard hose nozzles (see page 39) and carrying case
 - JLC-5030** JetLoad Pneumatic **Hose Assembly** Cleaning Gun including 9 standard coupling nozzles (see page 39) and carrying case
 - JLT-5060** JetLoad Pneumatic **Tube** Cleaning Gun including 9 standard tube nozzles (see page 39) and carrying case
- Note: Projectiles not included – see page 47.

JetLaunch

The JetLaunch is the **tool of choice** for mobile and shop fabrication of hoses, tubes and pipes from 3/16"-2" (4.8-51mm) ID. Like the JetLoad, the unit shoots special formulated foam projectiles to clean hydraulic hoses up to an ISO 13/10 level of cleanliness. It will even shoot the projectiles through couplings, valves and 90° bends to thoroughly clean an entire system.

Features – Benefits

- Simple to operate – Minimal training required**
- Hinged faceplate – Easy to load**
- Cleans straight, curved and coiled tubes, pipes and hoses – Versatile**
- Pressure relief valve – Eliminates back pressure**
- Trigger guard – Added safety**
- Quick connect fittings – No tools required**



CE



Specifications

- Air Requirements:** Minimum 90 PSI, Maximum 120 PSI
- Dimensions:** 3"-5" long (depending on nozzle)
- Weight:** 1 1/2 lbs
- Carrying Case:** 16" high x 18" wide x 5 1/2" deep

- JCL-2010** JetLaunch Pneumatic Cleaning Gun Only
 - JCL-3000** Adapter Ring for nozzles 3/16"-1 1/4" (4.8-32mm)
 - JCL-2030** JetLaunch Pneumatic **Hose** Cleaning Gun including 9 standard hose nozzles (see page 39) and carrying case
 - JIC-2030** JetLaunch Pneumatic **Hose Assembly** Cleaning Gun including 9 standard coupling nozzles (see page 39) and carrying case
 - JCL-2060** JetLaunch Pneumatic **Tube** Cleaning Gun including 9 standard tube nozzles (see page 39) and carrying case
- Note: Projectiles not included – see page 47.

www.goodway.com

For Sales Call: +1-203-359-4708
Fax: +1-203-359-9601

Nozzles and Projectiles

Nozzles

Nozzles are available for cleaning any tube, pipe or hose 3/16"-2" (4.8-51mm) I.D. Hose nozzles are tapered to fit inside the ends of hoses. Tube nozzles are designed to butt up against the ends of tubes and pipes for complete end to end cleaning. JIC nozzles are available for thorough cleaning of hoses with attached couplings.

	For Hose I.D.
JCN-2100	1/4" (6.4mm)
JCN-2120	3/8" (9.5mm)
JCN-2130	1/2" (12.7mm)
JCN-2140	5/8" (15.9mm)
JCN-2150	3/4" (19.1mm)
JCN-2160	1" (25.4mm)
JCN-2170	1 1/4" (32mm)
JCN-2180	1 1/2" (38mm)
JCN-2190	2" (51mm)

	For Tube/Pipe O.D.
JCN-02505	1/4" (6.4mm)
JCN-03705	3/8" (9.5mm)
JCN-05010	1/2" (12.7mm)
JCN-06207	5/8" (15.9mm)
JCN-07508	3/4" (19.1mm)
JCN-10012	1" (25.4mm)
JCN-12512	1 1/4" (32mm)
JCN-15012	1 1/2" (38mm)
JCN-20012	2" (51mm)

	For Coupling Sizes
JIC-2100	1/4" (6.4mm)
JIC-2120	3/8" (9.5mm)
JIC-2130	1/2" (12.7mm)
JIC-2140	5/8" (15.9mm)
JIC-2150	3/4" (19.1mm)
JIC-2160	1" (25.4mm)
JIC-2170	1 1/4" (32mm)
JIC-2180	1 1/2" (38mm)
JIC-2190	2" (51mm)



Note: Custom nozzles available.

Standard Projectiles

Goodway's Standard Projectiles are specially formulated for use with pneumatic guns. As a projectile is shot, it is compressed, loosening and propelling dirt and deposits through the hose, tube or pipe. Projectiles are oversized to ensure proper compression for maximum cleaning action.

	For Hose/Tube I.D.	Qty
JR-07	3/16" (4.8mm)	100
JR-09	1/4" (6.4mm)	100
JR-10	1/4" (6.4mm)	100
JR-12	5/16" (7.9mm)	100
JR-14	3/8" (9.5mm)	100
JR-16	7/16" (11.1mm)	100
JR-18	1/2" (12.7mm)	100
JR-20	9/16" (14.3mm)	100
JR-22	5/8" (15.9mm)	100
JR-26	3/4" (19.1mm)	50
JR-28	13/16" (20.6mm)	50
JR-30	7/8" (22.2mm)	50
JR-33	1" (25.4mm)	50

	For Hose/Tube I.D.	Qty
JR-36	1 1/8" (29mm)	50
JR-38	1 1/8" (29mm)	50
JR-40	1 1/4" (32mm)	50
JR-45	1 3/8" (35mm)	25
JR-50	1 1/2" (38mm)	25
JR-55	1 3/4" (45mm)	25
JR-60	2" (51mm)	25



Note: Abrasive and Grinding Projectiles, and custom sizes available.



Cut-a-way of projectile shot through hydraulic hose.

Coupling Projectiles

Goodway's Coupling Projectiles are made from a soft, dense packed foam, designed to allow the projectile to be shot through a hose, tube or pipe with couplings.

	For Coupling I.D.	Qty
JC-07	3/16" (4.8mm)	100
JC-09	1/4" (6.4mm)	100
JC-10	5/16" (7.9mm)	100
JC-12	3/8" (9.5mm)	100
JC-14	7/16" (11.1mm)	100
JC-16	1/2" (12.7mm)	100
JC-18	9/16" (14.3mm)	100
JC-22	5/8" (15.9mm)	100
JC-26	3/4" (19.1mm)	50
JC-30	7/8" (22.2mm)	50

	For Coupling I.D.	Qty
JC-33	1" (25.4mm)	50
JC-40	1 1/4" (32mm)	50
JC-50	1 1/2" (38mm)	25
JC-55	1 3/4" (45mm)	25
JC-60	2" (51mm)	25



Note: Custom sizes available.



Cut-a-way of projectile shot through hydraulic hose with couplings.