

NEWSBLAST

December 2000

BJV Handles Big Slurry Line at Utah's Biggest Copper Mine

At Kennecott's Magna, Utah copper mine, a 72 inch diameter tailings line was plugged to depth of nearly 4 feet in some places, with hard mineral precipitate. To avoid shutting down the entire operation it was necessary to clean the line while a slurry of tailings continued to flow. In the past, several different mechanical pigs were used, and a 3D nozzle in a cage - all with limited success. The Kennecott engineers teamed up with StoneAge to develop a better technique last spring.

Submerged jetting operations are not new, but jet power deteriorates ten times as fast as when projected through air. So jets must be positioned much closer to the deposits when submerged. Since the material flowing was a solid/liquid slurry, it made power loss a very significant factor. In this case, the brute power approach worked with 80 gpm at 10,000 psi.



BJV-H 2-D
Nozzle



Cleaned Tailings Line

Shown here is the heavy steel skid that is towed through the pipe with a cable. Cleaning is thorough at speeds up to 15 ft/minute. Ultimately, cleaning performance is limited by pressure drop in the hose. Even so, cleaning runs average 500 to 800 ft.



Dual BJV-H Nozzles



2001 Waterjet Tools Catalog Available

New catalogs have been mailed to everyone on our mailing list. If you don't have one yet, call or e-mail us for one. It covers every tool or system in current production, with maintenance kits, and accessories.

So you received a crate, skid and a couple of long tubes - and need to turn them into a rigid lancing system! A step-by-step, narrated video is now available to help you with assembly. We now send a video and Operator's Manual with each system. Call if you need a copy.

Lancing System Assembly Video



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STONEAGE

WATERJET TOOLS

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20,000 psi CyClean 3D



The new **CyClean Nozzle** brings 20,000 psi power to 3-D vessel cleaning, in a versatile, compact, and lightweight package. At only 23 lb, the **CyClean 3-D** fits through a 7 in. ID opening. Its tough spherical, polyurethane covers prevent damage to the nozzle without heavy steel cages often used with other 3-D nozzles. Pumps from 10 gpm to 40 gpm and 5,000 to 20,000 psi can be handled with only a simple adjustment of nozzle arms, and new jets.

Vessel cleaning requires the waterjet power to be projected over a long distance. It's a game requiring technology to retain as much of that power as possible. With the **CyClean 3-D**, starting with more power means more power carried by the jet to the vessel walls and internals. No longer do operators of today's popular 20,000 psi pumps have to drop overpressure protection levels to 10,000 or 15,000 psi to protect the 3-D nozzle.

The **CyClean 3-D** is a perfect alternative to the slow, and expensive provisions required by OSHA to protect workers who enter hazardous confined spaces.

HRS Powered Hose Reel



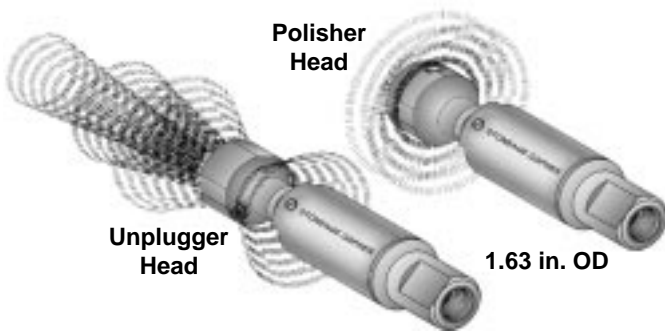
New for 2001, the **HRS** ends struggling with hoses while cleaning evaporator tubes - especially in pulp plant black liquor evaporators. Simple hand controls stroke the **Marten Tube Nozzle** down, then back up, at controlled speeds, with sensitivity to feel plugs. The **HRS** disassembles without tools to fit through an 18 in. ID manway. Users report up to 100% productivity improvement compared with manual hose-handling methods. It allows the contractor to reduce rest schedules, and minimize standby personnel. Ease of operation allows water pressure to be applied on both down and up strokes, resulting in cleaner tubes.

The **HRS** is best used with rotary nozzle such as the **RJV**, **Gopher**, **Marten** and **Ferret Nozzles**.



1.25 in. OD

20,000 psi Gopher Tube Nozzle

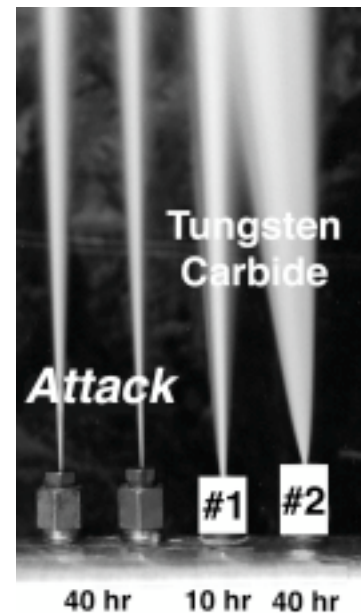
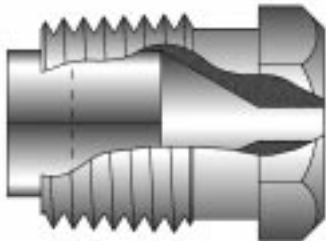


StoneAge has developed a complete family of tube nozzles. They have proven to be the best choice tool for cleaning tubes of 1.25 to 4.0 in. ID because of their rotating jet power. The **Gopher** combines the proven and reliable centrifugal rotation speed control used in the **Barracuda Shotgun Nozzle**, with 20,000 psi capability, and a line mole head. Two different style heads are available, with replaceable 1/8 npt nozzle tips. The unplugging style has front jets at different angles that penetrate a plug, and back jets to balance the thrust. The polisher style head is the answer for de-scaling tube walls in the most productive way possible.

Attack Tips - Deliver Power & Long Life

Thanks to high efficiency nozzle design and StoneAge's unique 7-step manufacturing process, the *Attack Tips* are the best quality, longest lasting tips we have found. The flow straightener corrects power-robbing turbulence, insuring excellent jet quality. Reducing turbulence is especially important in back-facing jets in small diameter nozzle heads. In such cases, jet power improvement up to 20% can be achieved. Tests show that the Attack tip even outlasts tungsten carbide tips. The difference in life is especially dramatic in small orifice sizes.

Attack Tips are currently available only in 1/8 npt threads, and will be supplied with all Warthog Sewer Nozzles, RJV 2-D, and Gopher Tube Nozzles starting in January.



Clean Subway by RJV's



Many thanks to Gardner Denver Waterjetting Systems for this photo of a subway cleaning railcar using **RJV 2D Nozzles** and a **Partek** pump. It is used to clean the subway tunnels in Philadelphia, Pennsylvania. We think this is a record number of StoneAge tools used in a single system.

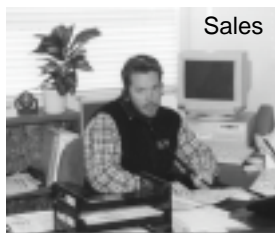
Warthog WS-1/2 Now Available for Flows as Low as 7 gpm!

Since its introduction at last year's Pumper/Cleaner Environmental Exposition in Nashville, this popular tool has been limited to pumps of at least 10 gpm capacity. We now have a new nozzle head for the **WS-1/2** that extends operating range to as low as 7 gpm. The new head is useful in meat packing plants, commercial building drains, and other factory sewer systems - and pumps of 15-20 HP, with 300 ft. of 3/8" hose.



Note also that the lead hose fitting has been rounded off, to prevent getting stuck in elbows. Customers continue to report great results with the **WS-1/2** in 4" sewer systems with elbows.

Expanded Offices & Warehouse



Sales

We moved into the second floor of the StoneAge Building, nearly doubling doubling office and warehouse floor space.



Computer Systems



Inside Stock Room



Management



Engineering & QC

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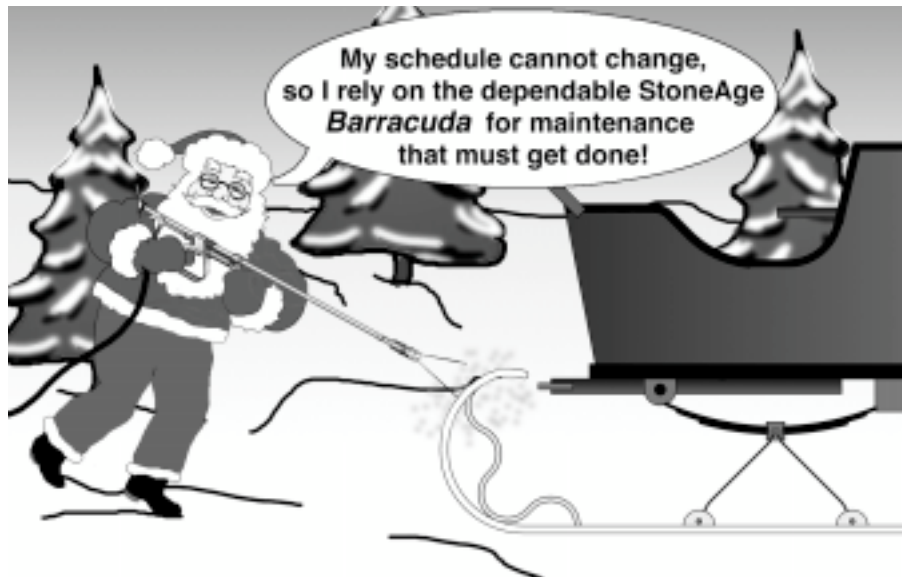


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The **Barracuda Rotary Shotgun Nozzle** has become the first choice for powerful, dependable surface cleaning. At only 2.9 lb, the **Barracuda** is easy to handle. Thanks to contractors' enthusiastic response, we were able to achieve volume-related cost savings, which we passed along as a price reduction last summer. The 20 Kpsi **Barracuda** sells for \$ 996, complete with nozzle tips.

No matter how demanding your schedule becomes, you can depend on the **Barracuda!**



New Employee - Scott Normandin
Stocking Clerk

StoneAge Trade Show Plans

Come visit us at the following trade shows in 2001. We look forward to seeing customers, and hearing how we can help solve your waterblast challenges.

Pumper/Cleaner Feb.15-17 Nashville, TN
Environ. Expo

Offshore Tech. Apr. 30 - May 3 Houston, TX
Conference

WJTA 2001 Aug. 18-21 Minneapolis, MN
Conference

See our website for further information. © 12/00

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