

SUGAR MILL CUTTER HEADS

1 1/4" - 4"
I.D.



**SINGLE LAYER
'H' TOOL**

**TWO LAYER
'H' TOOL**

**THREE LAYER
'H' TOOL**

**CLOSE 'HZ' TOOL
(HZ-10 TO HZ-11)**

**OPEN 'HZ' TOOL
(HZ-11A TO HZ-16)**

'H' TYPE CUTTER HEADS

for Tubes/Pipes 1.1/4"-4" (31.7mm-101.6mm) I.D.

These Cutter Heads are designed for cleaning straight and curved tubes as found in Boilers, Air Heaters, Economizers, etc. Cutter Heads are provided with 3 cutter wheels, one each of straight teeth, teeth cut right hand, teeth cut left hand, for quicker cleaning and prevention of scale grooving.

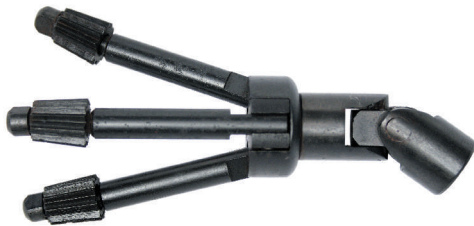
Model NO.	Tube I.D.		Cutter Wheels Set (3)	Spare Spindle
	mm	inch	Model No.	Model No.
H-10	31.7	1.1/4	HSRL-1	HA-1
H-11	35.0	1.3/8	HSRL-1	HA-1
H-12	38.1	1.1/2	HSRL-1	HA-1
H-13	41.3	1.5/8	HSRL-2	HA-2
H-14	44.5	1.3/4	HSRL-2	HA-2
H-15	47.6	1.7/8	HSRL-2	HA-2
H-16	51.0	2	HSRL-2	HA-2
H-17	54.0	2.1/8	HSRL-2	HA-2
H-18	57.1	2.1/4	HSRL-3	HA-3
H-20	63.5	2.1/2	HSRL-3	HA-3
H-22	70.0	2.3/4	HSRL-4	HA-3
H-24	76.2	3	HSRL-4	HA-3
H-26	82.5	3.1/4	HSRL-5	HA-3
H-28	88.9	3.1/2	HSRL-5	HA-3
H-30	95.2	3.3/4	HSRL-6	HA-4
H-32	101.6	4	HSRL-6	HA-4

'HZ' TYPE CUTTER HEADS

for Tubes/Pipes 1.1/4"-2" (31.7mm-51.0mm) I.D.

These spring loaded, self expanding Cutter Heads are designed for rapid removal of hard and obstinate scale formation in straight tubes as found in Evaporators, Juice Heaters, etc. It consists of 3 bevel, 4 straight cutter wheels, 4 left cutter wheels and 4 right cutter wheels, fitted on 3 bridge type arms.

Model NO.	Tube I.D.		Cutter Wheels Set (15)	Spare Arms
	mm	inch	Model No.	Model No.
HZ-10	31.7	1.1/4	HZSRL-1	HZA-1
HZ-10A	33.3	1.5/16	HZSRL-1	HZA-1
HZ-11	35.0	1.3/8	HZSRL-1	HZA-1
HZ-11A	36.5	1.7/16	HZSRL-1	HZA-2
HZ-12	38.1	1.1/2	HZSRL-1	HZA-2
HZ-12A	39.7	1.9/16	HZSRL-1	HZA-2
HZ-13	41.3	1.5/8	HZSRL-1	HZA-2
HZ-13A	42.9	1.11/16	HZSRL-1	HZA-2
HZ-14	44.5	1.3/4	HZSRL-2	HZA-3
HZ-14A	46.0	1.13/16	HZSRL-2	HZA-3
HZ-15	47.6	1.7/8	HZSRL-2	HZA-3
HZ-15A	49.2	1.15/16	HZSRL-2	HZA-3
HZ-16	51.0	2	HZSRL-2	HZA-3

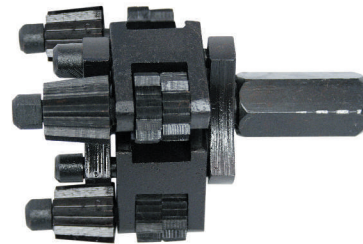


'WA' TYPE CUTTER HEADS

for Tubes/Pipes 1.1/2"-4" (38.1mm-101.6mm) I.D.

These Cutter Heads produce excellent results in curved or straight tubes. Pivoted arms of Cutter Heads swing out by centrifugal force so that the cutters contact every part of the tube wall.

Model NO.	Tube I.D.		ConeCutter Set (3)	Spare Arms	Universal Joint
	mm	inch	Model No.	Model No.	Model No.
WA-12	38.1	1.1/2	WAL-1	WAA-1	WAUJ-1
WA-14	44.5	1.3/4	WAL-1	WAA-1	WAUJ-1
WA-16	51.0	2	WAL-1	WAA-1	WAUJ-1
WA-18	57.1	2.1/4	WAL-2	WAA-1	WAUJ-2
WA-20	63.5	2.1/2	WAL-2	WAA-1	WAUJ-2
WA-22	70.0	2.3/4	WAL-2	WAA-1	WAUJ-2
WA-24	76.2	3	WAL-3	WAA-2	WAUJ-2
WA-28	88.9	3.1/2	WAL-3	WAA-2	WAUJ-2
WA-32	101.6	4	WAL-4	WAA-2	WAUJ-2



'SA' TYPE CUTTER HEADS

for Tubes/Pipes 2"-4" (51.0mm-101.6mm) I.D.

These Cutter Heads have 3 to 5 freely pivoted arms, activated centrifugally, which swing out to give access to any part of tube wall.

Model NO.	Tube I.D.		Cone & Flat Cutter Set (9)	Arms	Universal Joint
	mm	inch	Model No.	Model No.	Model No.
SA-16	51.0	2	SAFC-1	SAA-1	SAUJ-1
SA-18	57.1	2.1/4	SAFC-2	SAA-2	SAUJ-2
SA-20	63.5	2.1/2	SAFC-2	SAA-2	SAUJ-2
SA-22	70.0	2.3/4	SAFC-3	SAA-2	SAUJ-2
SA-24	76.2	3	SAFC-3	SAA-2	SAUJ-2
SA-28	88.9	3.1/2	SAFC-4	SAA-2	SAUJ-2
SA-32	101.6	4	SAFC-5	SAA-3	SAUJ-2