

ROLLING MILL

HW / AH

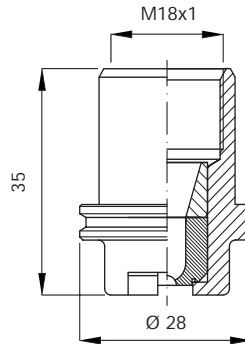
DESCALING TIPS / BROACH FIT, STANDARD, SHORT

The modern design of these nozzles offers the convenience of a more rational alignment system which allows a copper seal to be used between nipple and nozzle tip.

The nozzle efficiency is enhanced by means of a carefully designed flow stabilizer, which minimizes turbulence due to sharp direction change at the inlet from the main manifold.

Provision is also made for a filter to be mounted at the nozzle inlet, to avoid nozzle orifice to be clogged or damaged by foreign particles.

Materials      Body    B1    AISI 303 Stainless Steel  
                   Tip     C1    Aisi 420 hardened  
                          F1    Tungsten Carbide



Tip Code	D mm	D1 mm	Capacity at different pressure values (lpm) (bar)							
			80	90	100	120	140	160	180	200
• • • 2106 xx AH	1.5	1.2	10.6	11.4	12.0	13.1	14.2	15.2	16.1	17.0
• • • 2134 xx AH	1.8	1.4	13.4	14.2	15.0	16.4	17.7	19.0	20.1	21.2
• • • 2162 xx AH	2.0	1.5	16.2	17.1	18.0	19.5	21.3	22.8	24.0	25.0
• • • 2208 xx AH	2.1	1.8	20.8	21.8	23.0	25.2	27.2	29.1	30.8	35.5
• • • 2250 xx AH	2.5	1.9	25.0	26.5	28.0	31.0	33.0	35.4	37.5	39.0
• • • 2320 xx AH	2.8	2.4	32.0	34.2	36.0	39.4	42.6	45.5	48.3	50.9
• • • 2402 xx AH	3.0	2.5	40.2	42.7	45.0	49.0	53.0	57.0	60.0	63.0
• • • 2520 xx AH	3.5	2.7	52.0	55.0	58.0	63.5	68.6	73.3	77.8	82.0
• • • 2642 xx AH	3.8	3.2	64.2	68.3	72.0	78.0	85.0	91.0	96.0	101
• • • 2798 xx AH	4.3	3.6	79.8	84.4	89.0	98.0	105	112	119	126
• • • 2996 xx AH	4.7	4.0	99.6	106	112	122	132	141	150	158
• • • 3112 xx AH	5.0	4.2	112	119	125	137	148	158	168	177
• • • 3120 xx AH	5.2	4.4	120	127	134	147	158	169	180	189

CODE	ANGLE
HWE	26°
HWF	30°
HWL	40°

COMPLETE CODE

HW nozzle tips and tip accessories can be ordered separately or with a group code as shown in the table below.

Codes including the several options available as follows.

Tip Code	Assembly
HWX 1234 XX AH	nozzle, no accessories
HWX 1234 XX BH	nozzle with flow stabilizer L=74.0
HWX 1234 XX DH	nozzle with filter & flow stabilizer L=110.5
HWX 1234 XX EH	nozzle with filter & flow stabilizer L=130.5

ALIGNMENT NOZZLE

Alignment nozzle HWZ 01Cx B1 allows for fast and safe positioning of the nipples onto the manifold prior to welding.

Please ask for Data Sheet TFTI HWACC3 to identify the precise part you need.

The nipples are aligned in place by means of a straight rod and welded to assure the right jet direction.



DISASSEMBLING TOOL

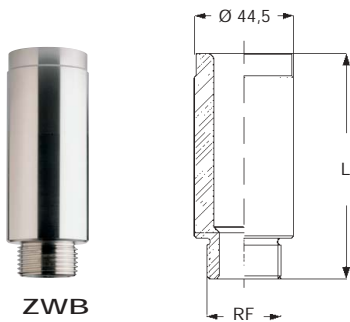
The disassembling tool makes it easier to extract a nozzle from inside the nipple, for replacement or inspection.

The clamping tip (HWZ 03C0 B1) and the handle (HWZ 04A0 B1) are sold and must be ordered separately.



## ROLLING MILL

## ASSEMBLY PARTS / STANDARD, SHORT



ZWB

## WELDING NIPPLES

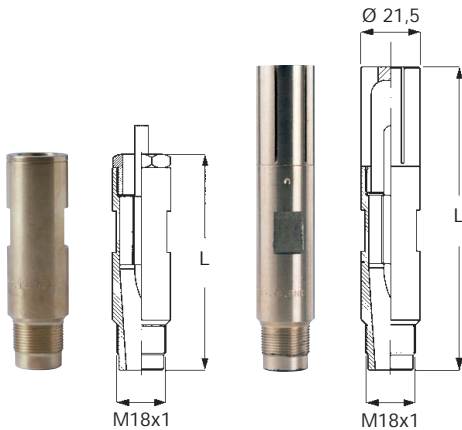
HW nozzles can be assembled on a series of three different nipples, with the same inlet and three different lengths.

The precision machined nipple inlet port assures precise positioning of the nozzle flat jet to the specified offset angle value of 15° with regard to the manifold center line.

This makes it possible to obtain uniform impact distribution and better descaling results.

Material B2 AISI 304 Stainless steel

Tip Code	RF inch	L mm	W kg
ZWB 0073 B2	1	73	0,49
ZWB 0100 B2	1	100	0,71
ZWB 0120 B2	1	120	0,85



M18x1

M18x1

## FLOW STABILIZER

The flow stabilizer is a critical component for a good descaling job, since by reducing flow turbulence losses, a larger fraction of the water flow energy can be used for generating impact on the surface to be descaled.

The design consist of a cylindrical body in brass with polished inner surface, housing a cast stainless steel flow stabilizer which straightens the liquid path to minimize turbulence.

Different length nipples are available, with or without inlet filter.

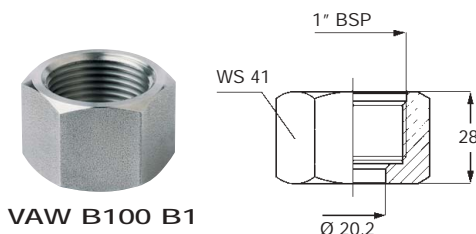
The codes beside always include the multifin flow straightener (XHW DL00 B3).

Materials Nozzle inlet T1 Brass  
Filter T1 Brass  
Flow stabilizer B3 AISI 316 Stainless steel

Code	L mm	Weight kg	Notes
XHW CG10 T1	74.0	0.08	without filter
XHW CG20 T1	110.5	0.11	with filter
XHW CG21 T1	130.5	0.14	with filter



XHW CL00 B3

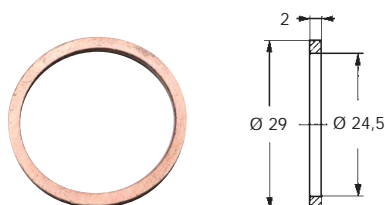


VAW B100 B1

## LOCKNUT

The locknut for ZWB series descaling nipples has been designed profiting from a long experience on the field. The sturdy design and the generous dimensions give the maximum protection to the nozzle and the nipple thread. One locknut size fits all standard size ZWB series nipples of any length. See page 21 for special models allowing very tight nozzle pitch.

Material B1 AISI 303 Stainless steel



VDA 24C1 T3

## SEAL

The round seal provides proper assembly between nozzle and nipple. One size fits all standard size ZWB nipple types.

Material T3 Copper