

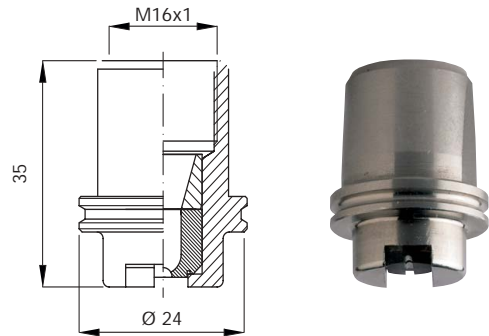
ROLLING MILL

HW / AA

DESCALING TIPS / BROACH FIT, MINI, SHORT

The modern design of these nozzles offers the same advantages as the full size HW tips, and in addition it makes possible to use a smaller pitch between the nozzles allowing an higher impact value per unit length. 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 AA	1.5	1.2	10.6	11.4	12.0	13.1	14.2	15.2	16.1	17.0				
2134 xx AA	1.8	1.4	13.4	14.2	15.0	16.4	17.7	19.0	20.1	21.2				
2162 xx AA	2.0	1.5	16.2	17.1	18.0	19.5	21.3	22.8	24.0	25.0				
2208 xx AA	2.1	1.8	20.8	21.8	23.0	25.2	27.2	29.1	30.8	35.5				
2250 xx AA	2.5	1.9	25.0	26.5	28.0	31.0	33.0	35.4	37.5	39.0				
2320 xx AA	2.8	2.4	32.0	34.2	36.0	39.4	42.6	45.5	48.3	50.9				
2402 xx AA	3.0	2.5	40.2	42.7	45.0	49.0	53.0	57.0	60.0	63.0				
2520 xx AA	3.5	2.7	52.0	55.0	58.0	63.5	68.6	73.3	77.8	82.0				
2642 xx AA	3.8	3.2	64.2	68.3	72.0	78.0	85.0	91.0	96.0	101				
2798 xx AA	4.3	3.6	79.8	84.4	89.0	98.0	105	112	119	126				
2996 xx AA	4.7	4.0	99.6	106	112	122	132	141	150	158				
3112 xx AA	5.0	4.2	112	119	125	137	148	158	168	177				
3120 xx AA	5.2	4.4	120	127	134	147	158	169	180	189				

CODE	ANGLE
HWE	26°
HWF	30°
HWL	40°

COMPLETE CODE

Codes including the several options available as follows.

Tip Code	Assembly
HWX 1234 XX AA	nozzle, no accessories
HWX 1234 XX BA	nozzle with flow stabilizer L=74.0
HWX 1234 XX DA	nozzle with filter & flow stabilizer L=110.5
HWX 1234 XX EA	nozzle with filter & flow stabilizer L=130.5

ALIGNMENT NOZZLE

Alignment nozzle HWZ 01Ax 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 since nozzles with different offset angles are available. 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 03A0 B1) and the handle (HWZ 04A0 B1) are sold and must be ordered separately.

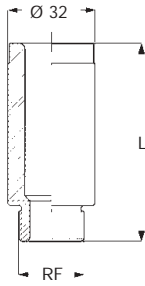


ROLLING MILL

ASSEMBLY PARTS / MINI, SHORT



ZWB



WELDING NIPPLES

Small size nozzles can be assembled on a 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.

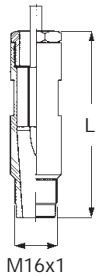
This makes it possible to obtain uniform impact distribution and better descaling results.

Material B2 AISI 304 Stainless Steel

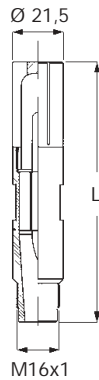
Tip Code	RF inch	L mm	W kg
ZWB 0032 B2	3/4	32	0,08
ZWB 0039 B2	3/4	39	0,10
ZWB 0080 B2	3/4	80	0,23



M16x1



M16x1



FLOW STABILIZER

The flow stabilizer is the critical component for a perfect descaling job, since it maximizes the impact force on the surface to be descaled, for a given condition.

The codes beside always include the multifin flow improver XHW AL00 B3.

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

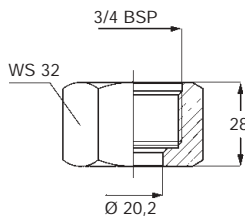
Tip Code	L mm	Weight kg	Notes
XHW AG 10 T1	74.0	0.08	without filter
XHW AG 20 T1	110.5	0.12	with filter
XHW AG 21 T1	130.5	0.15	with filter



XHW AL00 B3



VAW A075 B1



LOCKNUT

The locknut for ZWB series descaling nipples has been designed profiting from a long experience on the field.

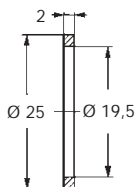
The sturdy design and the generous dimensions give the maximum protection to the nozzle and the nipple thread, so as to avoid such abrasion wear who often occur in the rolling mill.

One locknut size fits all small size ZWB series nipples, for any length.

Material B1 AISI 303 Stainless steel



VDA 20C1 T3



SEAL

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

Material T3 Copper