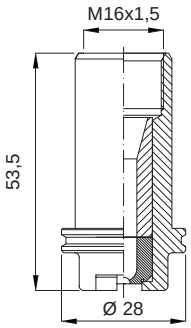
DESCALING TIPS / BROACH FIT, STANDARD, LONG

The water path leading to the nozzle orifice has been completely redesigned in order to keep turbulent losses as low as possible, all sharp cross section changes have been eliminated with the result of a significant increase in water velocity at the nozzle orifice.
The nozzle efficiency is further enhanced by a carefully designed flow stabilizer, which minimizes turbulence due to sharp flow direction change at the feed inlet from the main manifold.
Finally a filter can be mounted at the nipple inlet, to avoid nozzle orifice to be clogged / damaged by foreign particles.



Materials
- B1 AISI 303 Stainless steel
- C1 AISI 420 (hardened)
- F1 Tungsten carbide tip & 303 Stainless steel body

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

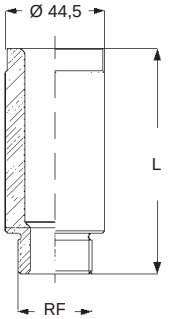
Tip Code	Assembly
HWX 1234 XX AK	bare nozzle
HWX 1234 XX BK	nozzle with flow stabilizer L = 76
HWX 1234 XX CK	nozzle with flow stabilizer L = 96
HWX 1234 XX DK	nozzle with filter & flow stabilizer L = 110
HWX 1234 XX EK	nozzle with filter & flow stabilizer L = 130
HWX 1234 XX GK	nozzle with filter & flow stabilizer L = 150

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

ASSEMBLY PARTS / STANDARD, LONG

ZWB

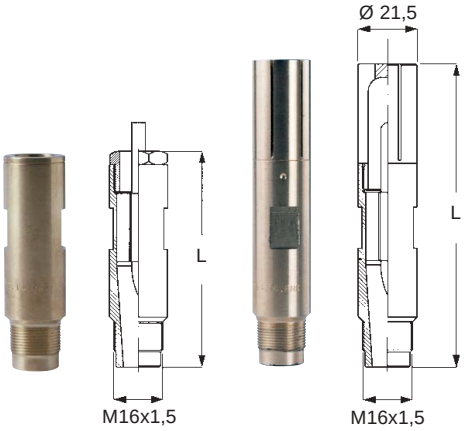


WELDING NIPPLES

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



FLOW STABILIZER

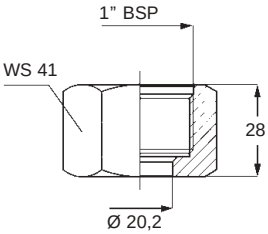
The flow stabilizer is the critical component for a perfect descaling job since it maximizes the impact force on the surface to be descaled, for any given condition.
The codes beside always include the multifin flow improver (XHW DL00 B3).

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

Tip Code	L mm	Weight kg	Notes
XHW DG 10 T1	76	0.08	without filter
XHW DG 11 T1	96	0.10	without filter
XHW DG 20 T1	110	0.11	with filter
XHW DG 21 T1	130	0.14	with filter
XHW DG 22 T1	150	0.16	with filter

XHW DL00 B3

VAW B100 B1

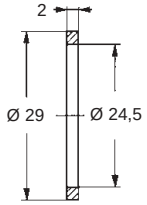


LOCKNUT

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, so as to avoid such abrasion wear who often occur in the rolling mill.
One locknut size fits all standard size ZWB series nipples, for any length.

Material B1 AISI 303 Stainless steel

VDA 24C1 T3



SEAL

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

Material T3 Copper