

# BÖHLER WELDING 3DPRINT SOLID WIRES

## Best quality wire alloys for perfect Wire Arc Additive Manufacturing

With the manufacturing of wires tailor-made to its specific purpose for 3D-printing, Böhler Welding is creating the basis for innovative Wire Arc Additive Manufacturing (WAAM). The metallurgical and application know-how of its materials specialists makes Böhler Welding a central element in this technological revolution.

Böhler Welding has developed a range of superior WAAM wires adding specific benefits to this revolutionary 3Dprinting production process.

The 3Dprint series of wires enables productive Wire-Arc Additive Manufacturing. Resisting or even benefitting from multiple heat treatments during processing and the perfect control of the melt pool make these wires especially suited for Wire Arc Additive Manufacturing.

Save and reproducible WAAM processes, less post print work like drop or spatter removal and the ability for post print heat treatments are typical user benefits of the Böhler Welding 3Dprint wire series.

The Böhler Welding 3Dprint wires are available on spools and in the ECOdrum bulk packaging for the most efficient production of bigger parts. Other diameters and weights are available on request.



Metallurgical benefits	Process benefits
» Made for low cooling rates and high heat input	» High process stability for Robotic MIG or other mechanised processes
» Accepts multiple hardening/tempering cycles by multiple layers	» Drum and spool weights can widely be adopted to the weight of parts
» Optimised for post print heat treatment	» Extended quality control to ensure consistent arc and feeding behavior
» Tailor-made metallurgy for complex materials	» Optimised surface technology for long arc cycles, Liners stay clean, contact tips last longer

Böhler Welding WAAM solid wire	Ø	spool type	weight	article no.	Material Type	
	[mm]					
3Dprint AM 35	1.00	BS300	18	40785	unalloyed, structural steel	S355 - 10Mn4 - 1.1108
	1.20	BS300	18	38901		
	1.20	ECOdrum	250	40786		
3Dprint AM 46	1.20	BS300	18	40302	unalloyed, structural steel	S460 - 8MnSi7 - 1.5113
	1.20	ECOdrum	250	40805		
3Dprint AM 50	1.00	BS300	18	40791	low-alloyed, structural steel	S500 - 10NiMnSi5-5
	1.20	BS300	18	38904		
	1.20	ECOdrum	250	40793		
3Dprint AM 62	1.20	BS300	18	38908	low-alloyed, high strength structural steel	S620 - 10MnNiMoSi6-4-4
	1.20	ECOdrum	250	40794		
3Dprint AM 70	1.20	BS300	18	38934	low-alloyed, high strength structural steel	S700 - 8MnNiMoCrSi7-6-5
	1.20	ECOdrum	250	40796		
3Dprint AM 80 HD	1.20	BS300	18	42487	low-alloyed, high strength structural steel	S800 - 10NiMnMoCr8-7-6
	1.20	ECOdrum	250	42468		
3Dprint AM P22	1.00	BS300	18	40798	low-alloyed, creep resistant steel	P22 - 10CrMo9-10 - CrMo2 - 1.7339
	1.20	BS300	18	40799		
	1.20	ECOdrum	250	40800		
3Dprint AM 304L	1.20	BS300	15	38755	stainless steel	AISI 304 - 1.4306 - X2CrNi19-11
	1.20	ECOdrum	250	40817		
3Dprint AM 316L	1.20	BS300	15	38514	stainless steel	AISI 316L - 1.4404 - X2CrNiMo17-12-2
	1.20	ECOdrum	250	40818		
3Dprint AM 2205	1.00	BS300	15	40827	duplex stainless steel	S31803 - S322205 - 1.4462 - X2CrNiMoN22-5-3
	1.00	ECOdrum	250	40830		
	1.20	BS300	15	40837		
	1.20	ECOdrum	250	40840		
3Dprint AM 2209	1.00	BS300	15	40845	duplex stainless steel	ER2209 - ~1.4462 - X2CrNiMoN22-9-3
	1.20	BS300	15	38768		
3Dprint AM 15-5 PH	1.00	BS300	15	40806	martensitic stainless steel	S15500 - AMS 5659 - AMS 5862 - 1.4545 - X5CrNiCu15-5
	1.20	BS300	15	38943		
	1.20	ECOdrum	250	40816		
3Dprint AM 17-4 PH	1.00	BS300	15	42136	martensitic stainless steel	AISI 630 - S17400 - X5CrNiCuNb17-4-4 - 1.4548
	1.20	BS300	15	38946		
	1.20	ECOdrum	250	42137		
3Dprint AM 625	1.20	BS300	15	42140	high-alloyed, nickel-base	Alloy 625 - N6625 - AMS5869 - NiCr- 22Mo9Nb - 2.4831
	1.20	ECOdrum	250	42141		
3Dprint AM 718	1.00	BS300	15	42436	high-alloyed, nickel-base	Alloy 718 - N7718 - NiCr19Fe19Nb5Mo3 - AMS5662 - 2.4668
	1.20	BS300	15	42133		
	1.20	ECOdrum	250	42132		
3Dprint AM 430	1.20	BS300	15	42135	high-alloyed, ferritic stainless steel	AISI 430 - S43000 - X6Cr17 - 1.4016
	1.20	ECOdrum	250	42134		
3Dprint AM 410 NiMo	1.20	BS300	15	42138	high-alloyed, ferritic martensitic stainless steel	AISI 410 - X3CrNi13-4 - 1.4351
	1.20	ECOdrum	250	42139		
3Dprint AM AL2219	1.20	BS300	7	38635	high strength aluminium	AlCu6MnZrTi - Al2219
3Dprint AM Cu6328	1.20	BASEdrum	200	42496	copper based	CuAl9Ni5 - C63280 - Cu6328 - 2.0923
	1.20	BS300	15	42478		
3Dprint AM Ti-5	1.00	S300	10	42368	titanium	Ti6402 - Titan Grade 5 - TiAl6V4B - R56400 - 3.7175
	1.20	S300	10	38618		