Exaton Ni72HP (GMAW)

Exaton Ni72HP is filler material for joining NiCrFe alloys; - UNS N06600, UNS N06601, UNS N06690, UNS N08810 and UNS N08330. - 9% Ni steels used at cryogenic temperatures - stainless steels to carbon steels - high service temperature NiCu alloys to carbon steels and - NiCu alloys to nickel alloys - dissimilar joining of stainless steels to nickel alloys Exaton Ni72HP can be used in air up to 1175°C (2145°F) and in sulphur dioxide atmospheres up to 800°C (1470°F). The alloy is used for overlay welding with MIG/MAG, plasma and hot wire TIG and mechanized TIG.

Specifications	
Classifications	SFA/AWS A5.14 : ERNiCr-3 EN ISO 18274 : S Ni 6082 (NiCr20Mn3Nb)
Approvals	VdTÜV : 00073 VdTÜV : 00515(GTAW)

Approvals are based on factory location. Please contact ESAB for more information.

Alloy Type	Alloyed nickel (Ni + 20 % Cr + 3 % Mn + 2.5 % Nb)
Shielding Gas	I1, I3 (EN ISO 14175)

Typical Weld Metal Analysis %									
C	**Mn**	**Si**	**S**	**P**	**Ni**	**Cr**	**Mo**	**Al**	**Cu**
<0.02	3.2	0.01	0.003	<0.003	73	20	0.01	0.09	0.01

Typical Weld Metal Analysis %					
N	**Nb**	**Ti**	**Co**	**Fe**	**Nb+Ta**
0.03	2.2	0.31	<0.02	1	2.5

Typical Wire Composition %									
C	**Mn**	**Si**	**S**	**P**	**Ni**	**Cr**	**Mo**	**Al**	**Cu**
<=0.03	3	0.1	<=0.01	<=0.01	73	20.0	0.05	0.4	<=0.05

Typical Wire Composition %					
N	**Nb**	**Ti**	**Co**	**Fe**	**Nb+Ta**
<=0.05	2.5	0.4	<=0.1	<=1	2.6

Welding_Parameters			
Wire Diameter	**Amps**	**Volts**	**Wire Feed Speed**
0.8 mm	40-120 A	15-19 V	4.0-8.0 mm/min
1.0 mm	60-220 A	15-28 V	4.0-12.0 mm/min
1.2 mm	150-260 A	24-29 V	3.0-10.0 mm/min
1.6 mm	230-350 A	25-30 V	3.0-5.0 mm/min