

DIFFUSALOY 6100 WZ

A specially developed semi-basic high speed tool steel electrode depositing a highly alloyed weld metal. The weld metal is air hardening and can retain its high hardness of 62 – 64 HRC upto temperatures as high as 500 - 660⁰ C. It has excellent weldability in flat, horizontal and vertical upward positions. The weld bead is smooth and has excellent bond with the base metal. For weld metal deposition on hardenable low alloy and high alloy steels, suitable preheating of the base metal is necessary. As welded hardness of the weld metal is 60 to 62 HRc, which can be further increased to 64 HRc by tempering it at 550⁰ C for 1 hour, once or twice. The increase in hardness may appear marginal, but the high temperature life is substantially improved by the double tempering treatment.

Application:

For repair and rebuilding of high speed tool steels, cutting tools , piercing and shaving tools , hot and cold blanking and trimming dies , hot and cold shear blades, stamping dies, Ingot lifting tongs , rolling mill guides etc.

Procedure:

- 1) Prepare the plate by grinding and remove rust or paint marks if any.
- 2) Use AC / DC+ power source.
- 3) If the base metal is hardenable steel, preheat it to 250 - 400⁰ C depending on Base metal composition. Keep interpass temperature > 300⁰ C .

<u>Technical Data</u>	:	DIFFUSALOY 6100 WZ		
Size (mm), Ø	:	3.15	4.00	5.00
Recommended Welding Current (Amps)	:	90 - 110	120 – 150	140 – 190
Hardness	:	60-64 HRC		

DIFFUSION ENGINEERS LIMITED

Regd. Office & Works I : T-5/6, M.I.D.C, Hingna Industrial Area, Nagpur-440 016, (T) 091-7104-232084, 234727 (F) 232085

Works II : N-78/79, MIDC, Hingna Industrial Area, Nagpur – 440 016. (T) 091-7104-236036

Works III : T-12, MIDC, Hingna Industrial Area, Nagpur – 440 016.(T) 091-7104-232984

Email : info@diffusionengineers.com Website : www.diffusionengineers.com

Branch Offices : Chennai, Faridabad, Jamshedpur, Pune, Raipur, Secunderabad, Vadodara.