For severe abrasion, the Tungsten Carbide Embedding hardfacing process with Postalloy PS98 Tool Steel Matrix Wire offers the ultimate in wear and abrasion protection and is economical to apply. It consists of a vibratory feeder and a standard semi-automatic MIG Gun, that delivers metered Tungsten Carbide particles to a molten weld pool at precisely the right moment prior to the puddle freezing. The result is a weld deposit filled with Tungsten Carbide surrounded in a 58 Rc tool steel matrix.

While chromium carbide has served industry adequately for many years, more recent production demands on parts and equipment have dictated a harder, more wear resistant solution. MIG Carbide Embedding with PS-98 offers 2 to 8 times better wear life than typical hardfacing alloys and can be deposited at 1/3 the cost of tungsten carbide hardfacing wires.

Typical equipment that can benefit from MIG Carbiding are mining and construction equipment, dredging equipment, mixing, blending, shredding and processing equipment, drill bit and equipment, agricultural parts.

Tungsten Carbide volume is closely controlled by a vibratory feeder. More vibration will yield more Tungsten Carbide. PS98 can be mounted for automatic or semi-automatic welding.

(A) Typical capture of Tungsten Carbide with special formulation PS 98. Even distribution of carbides throughout the deposit.

(B) Microhardness of Tungsten Carbide particle (70Rc) and PS 98 (58Rc) matrix. The hard matrix provides maximum wear properties to the final deposit.