

DORMER SOIL SAMPLERS

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PRODUCT INFO

Optional hardening upgrades for longer life of samplers' cutters.

We now have 3 options for upgrading the hardening of cutters on our samplers.

Our standard samplers are case hardened in our furnace using Hardite (molten salt bath), which introduces extra carbon into the surface of the steel making it harder. If case hardening, or any furnace type hardening, is **overdone** the steel becomes brittle and cracks easily. Case hardening should just create a skin of hard steel and leave the core normal and flexible. When the case hardened surface is worn away the inner steel will wear quickly, so monitor the wear and when it becomes noticeable have them re-case hardened. Many metal workshops can do this or an alternate repair/hardening but tell them the steel was casehardened because it makes some alternate processes more difficult.

- TC spray tungsten carbide powder applied molten by a special oxy torch (can be applied to curved surfaces but adds thickness to cutting edge so is only applied to outside edges) - adds \$52.03 + GST (2020 price).
- TC pieces (2 off) tungsten carbide pieces silver soldered to one side of cutting edges of spiral augers (good wear resistance but susceptible to being broken off if bumped hard from the side). Similar to masonry drill bit – adds \$90.56 + GST (2020 price)
- 3. Hard Face Weld (HFW) Grind away the steel at the cutters and replace with special hard face weld (same as used on repair of earth moving equipment) then sharpen the harder steel using a special grinder to form the cutter. This can be done to all augers and is better than the TC spray and is less hard wearing than TC pieces but much tougher and can be repaired/redone. We have changed from a CIG product to a Eutechtics product in late 2017 and this new welding material is 24 times more expensive than normal weld material to buy and twice the price of the former hardfacing weld, being \$985/roll adds \$86.81 + GST (2020 price)

NOTE: All 3 upgrades cannot be applied to any auger that has been previously case hardened (wont bond to the metal) unless the case hardening is ground away. Upgrades are best manufactured from the beginning, as required.

We normally keep a small number of "clean skin" auger heads/spirals for the various upgrades to be performed (allow 2-3 days) so it is not 2 weeks for new ones to be made.