

Mining Drones; An In-depth Look **T1 vs. Harvestors vs. T2!**



Written by Victor Valka

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UPDATES:

30.10.2006 - Correct scordite volume entered. Thanks go to Karodnotos, for spotting this.

30.10.2006 - Few minor tweaks.

30.10.2006 - Update regarding Halads Mining Guide.

Let's talk about drones!

Namely - mining drones and how they will help you get filthy rich faster*!

[Halada's guide](#) (now restored, big sticky at the top of the forums in case you missed it) covers them and mining as a whole, but I feel there are some bits missing and I couldn't find any other guide regarding mining drones.

I do acknowledge that this little research is inspired by and borrows some details from Halada's guide.

First - the drones and their attributes!

Let's take a quick look at our little slaves, err, helpers.

There are four types available:

Civilian Mining Drones - the most basic. They are pointless. T1 are better and require the same skills (Mining LVL2 and Mining Drone Operation LVL1). So that's all I'm going to say about that.

T1 Mining Drones - basic mining drones. Requires very basic skills (Mining LVL2 and Mining Drone Operation LVL1). Nice boost to yield/hour.

Speed: 400 m/s

Yield: 15m³

Volume: 5m³

Harvester Mining Drones - "named" T1 mining drone available only as loot, with double the yield of T1 but much slower and **much** more expensive - they go at about 7 million a piece. Crazy - as this guide will show! These require the same skills as T1 mining drones - Mining LVL2 and Mining Drone Operation LVL1.

Speed: 250 m/s

Yield: 30m³

Volume: 10m³

T2 Mining Drones - like the name suggests, Tech 2 mining drones. Fastest, with a yield better than T1 but a slightly lower than Harvesters. They require some more skills (Mining LVL4 and Mining Drone Operation LVL5) but I would consider it a bargain. At the time of writing they cost 400K - well worth it, IMO.

Speed: 500 m/s

Yield: 25m³

Volume: 5m³

Note: All drones have the same cycle time (the time it takes them to mine the ore) of 60 seconds.

Next - the skills!

To get the absolute max out of your little partners you will need the following skills. Feel free to down tune them if you feel inclined to. 😊

Drones LVL5 - you want to have the maximum amount of drones out and mining.

Drone Interfacing LVL5 - a bit of a long skill but it's +20% per level to drone yield **and** damage. How cool is that?

Mining Drone Operation LVL5 - +5% per level to mining drone yield. Required for T2 mining drones.

Drone Navigation LVL5 - LVL4 is enough, but hey, I said - the max! This skill helps with the drone travel time, since they have to travel to and from the 'roid to deliver their ore to your ship. **Keep this in mind when you park your barge!**

*results not guaranteed, not responsible for damage caused by disgruntled, rampaging mining drones.

Moving right along - it's number time!

With max skills, the drone yields are as follows:

T1: 37.5m³

T2: 62.5m³

Harvesters: 75m³

The actual yield/hour is a little tricky.

Firstly, the amount of ore you receive is (drone yield)/(volume of ore unit) and rounded down no matter what. Mining Jaspert with T2 would give you the following yield per drone:

$37.5/2=18.75$ round down and you get 18 units of Jaspert.

Secondly, drones have to travel. I told you to remember this! 😊

So the max velocity and the distance to the 'roid effects the yield/hour. You can eliminate most of the travel by moving close to the 'roid but there still is some. Drone Navigation skill helps here but it is more effective to stay as close as possible to the 'roid your drones are mining.

Okay, now the actual yields per hour. The formula I came up with is as follows.

It's untested since I don't have the max skills:

If someone can clean it up, please do. Math is no my forte.

$$\text{FLOOR}(3600/(((\text{distance to 'roid}/(\text{drone velocity}*1.25(\text{Drone Navigation LVL5}))*2(\text{to and from}))+60(\text{drone mining time}))*\text{FLOOR}(\text{yield}/\text{volume of ore}))$$

Lets see the actual numbers on all drones, assuming max skills, distance of 5000m and that we are mining the god damn scordite which has a volume of 0.15m³ per unit!

T1:

$$\text{FLOOR}(3600/(((5000/(400*1.25))*2)+60)*\text{FLOOR}(37.5/0.15))=11250 \text{ units per one, } 56250 \text{ units per 5 or } 8438\text{m}^3$$

Harvesters:

$$\text{FLOOR}(3600/(((5000/(250*1.25))*2)+60)*\text{FLOOR}(75/0.15))=19565 \text{ units per one, } 97825 \text{ units per 5 or } 14674\text{m}^3$$

T2:

$$\text{FLOOR}(3600/(((5000/(500*1.25))*2)+60)*\text{FLOOR}(62.5/0.15))=19705 \text{ units per one, } 98525 \text{ units per 5 or } 14779\text{m}^3$$

That's the math of it, at least. In practice, expect the yield to vary a little due to travel and some other icky factors - but not by much.

Last but not least - conclusions of mine!

1) Harvesters are not worth it unless you absolutely don't want to train Mining Drone Ops to LVL5. As the travel time increases their yield/hour decreases due to their lower speed. They do have a significant advantage when mining ores with a larger volume due to how yield is calculated but this difference is quickly negated if the range increases beyond 5000m. I'm sure someone can come up with a graph for it. *hint, hint* 😊

Their volume is their next problem. They have a volume of 10m³ whereas other mining drones have a volume of 5m³. This means that Retriever can't have 5 of them and Covetor, Hulk and Mackinaw are left without light drones to defend themselves

with against belt rats. A very serious drawback. I wouldn't buy them. Not for 6 million a pop, at least.

2) Use drones if you want to maximize your yields. The training time is not too great and the returns are fantastic - half a jetcan per hour on average. Plus these skills have a very good use in combat should you ever want to do that.

Well. That's that. I hope this information will be at least of some use to some wacky miner who just wants to bring up his/her up profits as much as possible.

This is my first guide so if you notice any errors at all **please** let me know by either posting here or by eve-mail and I will fix them post haste. 😊