

## Slam DPS.

### Intro:

Hi I'm Caesar, I have played WoW since the first US-beta, been the main tank through the vanilla wow instances, PvP'd to a gladiator title in season 1 (hopefully season 2 as well, although I haven't started working on it yet!) and now I'm going in hardcore to be one hell of a dps warrior. ;) *Note: I do NOT pvp as a slam warrior, although it's probably doable, I'm not doing that. This is not a pvp-slam guide.*

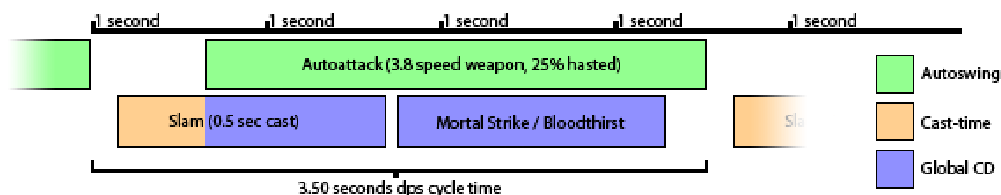
I enjoy theory crafting and then executing it, I know some just like to read the best strategies and the try to execute it. So here is all the work done for you! Hopefully some people have good feedback too and it can be improved further.

Having tanks that don't tank is probably the biggest waste in the raid, and as some bosses require 1 tanks while others require 4 have made dps warriors is a must-have in raids and are commonly used in all end-game raiding guilds. If you do want to play a dps warrior, be prepared for this role, you need to pick up and bring tanking gear too to be the most efficient raid utility. (a dps warrior have very good mitigation too, just a lot worse threat generation, so off tanking as a dps warrior goes just fine, as long as you have picked up the gear to do it).

That being said, there is no reason you shouldn't aim to be no 1 in dps, and with work, gear and knowledge you can compete for it.

### How slam works:

Slam has a cast time (non-interruptible) of 1.5 seconds, possible to talent to 0.5 seconds. When you start to cast it you stop the auto swing timer, and once you have finished the casting the auto swing is automatically restarted. **The auto attack swing is RESET and starts over from the beginning again!** Remember that slam still triggers the global cool down (1.5 seconds for warriors) so you cannot cast anything in 1.5 seconds even if you have talented slam. So why talent slam? Because the auto swing starts 1 second earlier! If you plan on casting one slam after another, there is little point in putting talent points in improved slam. The best way (as will be showed later in the cycles section) is to only cast one slam per auto swing attack. Here is a picture to better illustrate how it works (this one with some lag, and reaction time):



### Data:

For comparison, let's use the following numbers: Assume weapon dps is 131.5 (it was just easy to count on), and you roll at 3000 atp. All as unmitigated and non critical hits, but crit's and mitigation alter all damages equal. Normal hit's glancing blows have been calculated in to it's damage. **Note these numbers are only theoretical,**

and DPS numbers derived from these are only theoretical, they are good to compare to see which spec is the best, how weapons speed affect dps, and how they compare to each other. The derived DPS numbers however do not correspond do actual raid dps. I have calculated the different damages for different weapon speeds assuming the weapon speed is the only thing that changes. **Note that slam is not normalized!**

3.8 speed weapon

|               |      |
|---------------|------|
| Normal Hit    | 1235 |
| Slam          | 1454 |
| Mortal Strike | 1417 |
| Whirlwind     | 1207 |

3.7 speed weapon

|               |      |
|---------------|------|
| Normal Hit    | 1211 |
| Slam          | 1419 |
| Mortal Strike | 1404 |
| Whirlwind     | 1194 |

3.6 speed weapon

|               |      |
|---------------|------|
| Normal Hit    | 1169 |
| Slam          | 1385 |
| Mortal Strike | 1391 |
| Whirlwind     | 1181 |

3.5 speed weapon

|               |      |
|---------------|------|
| Normal Hit    | 1136 |
| Slam          | 1351 |
| Mortal Strike | 1378 |
| Whirlwind     | 1168 |

Slam triggers flurry, but do not consume flurry charges. So assuming you have good gear (30% + crit) you will virtually have flurry up constantly, thus I will assume it's always up in my calculations.

**Cycles:**

In the following examples no lag or reaction time is included, that is done under weapon speed section. In this part only calculations for 3.8 speed weapons will be done.

**Auto swinging only: 406 dps.**

Only rolling on auto-attack (flurried) will yield a dps of 1235 damage per attack / (3.8 \* (1/1.25)) = 406 dps

**Slamming only: 969 dps.**

Unrealistic since you will not have enough rage for it, but let's count on it anyways with a 3.8 speed weapon (and no lag). 1454/1.5 = 969 dps

**1 Auto attack, 1 slam: 760 dps.**

The total attack time will be flurried attack speed + 0.5 seconds so  $(3.8*(1/1.25) + 0.5)$ , and the damage is 940 + 1140 so  $(1235+1454)/(3.8*(1/1.25) +0.5) = 760$  dps.

**1 auto attack, 2 slams: 822 dps**

The total attack time will be flurried attack speed + 1.5 + 0.5 seconds so  $(3.8*(1/1.25) + 2.0)$ , and the damage is 1235+1454\*2 so  $(1235+1454*2)/(3.8*(1/1.25) +2.0) = 822$  dps.

**1 auto attack, 1 slam, 1 Whirl Wind: 1101 dps**

Assuming WW only hit's one target. The total attack time will be flurried attack speed + 0.5 seconds so  $(3.8*(1/1.25) + 0.5)$ , and the damage is 1235 + 1454 + 1207 so  $(1235 + 1454 + 1207)/(3.8*(1/1.25) +0.5) = 1101$  dps.

**1 auto attack, 1 slam, 1 Mortal Strike: 1160 dps**

The total attack time will be flurried attack speed + 0.5 seconds so  $(3.8*(1/1.25) + 0.5)$ , and the damage is 1235 + 1454 + 1417 so  $(1235 + 1454 + 1417)/(3.8*(1/1.25) +0.5) = 1160$  dps.

**Weapon Speed.**

Let's look at the 1 auto attack + 1 slam + 1 instant attack cycle above. As we can see there is some time in the end where we do pretty much nothing. In order to make the best cycle your hasted attack speed can never go below 2.5 seconds, if it does you will interrupt the cycle. But even 2.5 seconds is too little, you have to count in the lag and reaction time. After slam gcd has ended you have a ping roundtrip time before you can do your MC or WW. And after the auto attack has landed there will be a ping time + reaction time before your slam is registered at the server. With a ping of 100 ms, and a reaction time of total 0.25 sec (reacting to auto hit = 0.2 sec and hammering MS button after Slam = 0.05 sec) minimum swing time would be 2.85 seconds. Ie it's bad to have an auto swing faster than 2.85 seconds (flurried/hasted), thats a 3.6 weapon. If you start casting slam before your auto hit lands, and virtually remove all lag (read on mages /cancel casting type of macros addons to understand how this works), you can use a 3.5 speed weapon. Do not forget to count in your haste gear (which is a great way to reduce you cycle time if you use a 3.8 speed weapon for example).

Lets see how weapon speed affects the 1 attack, 1 slam 1 MS cycle. All weapons will be considered being flurried constantly. Included is also latency and reaction time ():

**3.8 speed weapon: 1055**

$$(1235 + 1454 + 1417) / (3.8*(1/1.25) + 0.5 + 0.35) = 1055$$

**3.7 speed weapon: 1059**

$$(1211 + 1419 + 1404) / (3.7*(1/1.25) + 0.5 + 0.35) = 1059$$

**3.6 speed weapon: 1059**

$$(1169 + 1385 + 1391) / (3.6*(1/1.25) + 0.5 + 0.35) = 1059$$

### **3.5 speed weapon: 1060\***

$$(1136 + 1351 + 1378) / (3.5 * (1/1.25) + 0.5 + 0.35) = 1060*$$

\*But since you would destroy the dps cycle, this DPS is lower!

**As we can see slow weapon = more damage is a myth.** While the hit's will be weaker you will also increase the amount's of slams and mortal strikes. However if you slack and have bad reaction time, high lag, poor fps etc, go with the safer option of a really slow weapon, it's easier.

### **The real DPS cycle**

So we can't do the MS cycle every cycle, because MS has a 6 sec cooldown. You can however use it every other. The cycle in between is ofc the WW attack. We can also draw the conclusion that reducing the MS cool down (although that talent also increases damage, it's still a waste since you can't take imp flurry then) is a waste, as is reducing the cooldown on WW. WW has a 12 second cooldown so that only usable to fill every other hole from the MS cycles, what should we do in between? The 1 autoattack + 1 slam or 1 autoattack + 2 slam? The 2 slam cycle is higher dps but takes 1.6 second (lag included) longer to complete, that one and a half second could be spent on the 900+ dps cycles. (comparing 1 auto attack + 2 slams + 1 auto attack + 1 slam + 1 MS vs. 1 auto attack + 2 slams + 1 auto attack + 1 slam + 1 MS shows that using only 1 slam is slightly better). **So never double slam, even if MS and WW are on cooldown, it just costs rage and lowers your dps.** Use the time to recast Battle Shout or something, **if you have excess rage use Heroic Strike/Cleave to up your dps.** Remember that the risk of rage starvation is high when using heroic strikes, and if you rage starve so you cannot cast MS. Use HS in situations where you are certain there is no or very little chance you will rage starve. Cleave can be used a little more freely if you dps two targets, but it costs a lot of rage in rage not gained from yellow attacks, so if you are short in rage: don't.

The best possible dps cycle is thus:

1. 1 Auto attack, 1 Slam, 1 Mortal Strike.
2. 1 Auto attack, 1 Slam, 1 Whirl Wind.
3. 1 Auto attack, 1 Slam, 1 Mortal Strike.
4. 1 Auto attack, 1 Slam.

*Repeat..*

### **Builds.**

#### **33/28/0**

This is a very nice starter spec, and having Blood Frenzy will up raid dps by a fair amount. Big back draw is that you only get 3/5 in flurry, and that hurt's your dps a lot. However the extra dps the Blood Frenzy gives is threat free (you evenly spread the increased raid dps, especially to classes with threat dumps which you lack) so it's a nice spec none the less. **If you are the only dps warrior in the raid and you use a lot of melee dps, this is probably the best spec.** As you will not have full flurry, you can also grab the 3.5 speed weapons with good confidence!

### 31/30/0

This is a nice all-round slam dps spec, if you have 2 slam warriors in the raid and the other warrior is 33/28/0 you should choose this, especially if you are geared in tier 4 (or equivalent) or lower.

### 20/41/0

Once you get your gear sorted and is in the 3k+ atp raidbuffered monster this spec will out-dps the others. The normal attacks and slam attacks will do extreme damage, and you really need to start watching your threat. If you have the gear, go for it. Just as a comparison to the above numbers (with 10% more atp, and Rampage up) the numbers would be:

3.8 speed weapon

|             |      |
|-------------|------|
| Normal Hit  | 1382 |
| Slam        | 1522 |
| Bloodthirst | 1609 |
| Whirlwind   | 1343 |

### **The corresponding Hit-Slam-Blood Thirst cycle dps would be: 1275.**

Note that this build scales a lot better with gear than the MS build, if you have worse gear you will do less damage than the MS build, and vice versa if you normally have 4k atp, the difference between the two builds will be even bigger! Although you will lose your weapon spec, but gain 3% free hit. No lag/reactiontime was included in this calculation, so compare it with the 1160 dps of the MS cycle.

### **Slam DPS in reality.**

Slam dps is a lot harder to play than fury warriors if you want to be #1 dps. It's no mindless spamming and you need to keep track on a lot of cool downs, especially if being fury 2 hand slam warrior (which has the highest potential for your own dps). If you are not prepared to give 110% don't try it, you will be disappointed, go dual wielding fury as it's a lot easier to play.

**Get an auto swing timer. It's a must have.**

**Shaman is a must have in your group. It's extremely vital you have a WF totem all the time. Yes even after the wf nerf. You will rage-starve otherwise.**

Slam dps is fairly easy to get gear for, while dual wielding is much more requiring. 2h fury slam scales extremely well with gear.

Slam dps have one big back draw; you can't run around. In very mobile fights, you can just forget about being top dps. Static fights is where you will shine. And how well can you dps and compete for top dps spot? After the WF nerf (wf only procs on normal white attacks) I could still pull over 1000 dps and that is with a mix of pvp gear, tier 4 and a tier 5 or two on Void Reaver.

Best Regards,

*Caesar*