🡻 🡻	**Mill 't Slot** **Guided Tour** *English*
🡻 🡻	***Don't want to go upstairs? Watch the clip (NL) of 't Slot here on Youtube.*** *https://youtu.be/K6D2jFy2gmI*
-0-	**Entrance**
♥	Welcome to the grainmill of Gouda **'t Slot** (the Castle).
	Usually the miller or guide is in the 3rd attic for a tour. We often don't hear the doorbell.
	You can use this explanation sheet to visit the following 2 attics on your own.
🡹	There are 6 attics; You can visit 5.
🡹	Upwards with housed treads; after the visit please walk down backwards.
🡹	Be careful, please hold the banister. You visit at your own risk.
-1-	**First Stone-floor**
1.1	At your right you find a model of our neighbors' mill.
1.2	 At your left is a grind-stone. Two on top of each other, grinding the grain. Please pay attention to the shape.
1.3	Behind them are two pairs of grind-stones that were driven by an engine at no wind.
-2-	**Second floor**
2.1	The winnowing-machine at the left is used to remove chaff from grain. With fan, shaker and sieves.
-3-	**Meal-floor** **= Welcome .**
♥	Meet here the miller or guide. Welcome. We speak English. Millers are members of the guild.
	We are millers may or may not *voluntairy / in training / guides.*
	First we go to the gallery.
-3-	**Braced gallery a**
!!!	 Please stay on this side of the barrier. The rotating cross is very dangerous.
3.1	This is the gallery of the mill, 30 feet high. Enjoy the view over Gouda.
3.2	Gallery-mill -1581 Built -1831 Burned 1832 Rebuilt -2005 Restoration
3.3	There are still a few millwrights and about 1.100 operational mills.
3.4	Gouda has a soft peat soil. The mill was built on the old foundation of a castle tower from the Lords of Ter Gouw. That's why it is rather narrow.

3.5	 From the house next to the mill towards the canal there is a tunnel.
3.6	This is a gallery-mill and catches more wind with its height.
3.7	Built with heavy oak beams.
3.8	Every city had a mill to make flour. Gouda had 20 mills. All on the SW or N side of the city. Mills were the factories of the past: you could crush everything by grinding, stomping, crushing (grain, tobacco, spices, building materials, dyes) and there were oil mills, where oil was beaten and sawmills, with which trunks were sawn into planks and beams.
3.9	There are also drainage mills that move water in order keep our feet dry.
3.10	The cap rotates on a roller-wreath with 48 iron rollers.
3.11	The cap is driven by the tail-pole-winding.
3.12	 With the capstan-wheel we put the sail-cross on the wind.
3.13	The winding-chain is for pulling. The anchor-chain ensures it does not turn back.
	Gallery b
3.14	We brake with the swinging catch-beam. It's a kind of drum-brake. See explanation under the cap.
3.15	The swinging catch keeps the brake in an off-position.
3.16	Braking = Stopping vs Releasing
3.17	Around the main wheel there is an iron hoop-shaped clamp and a chain of connected wooden strips.
3.18	We pull or release the rope connected to the fang-staff with a lot of leverage.
3.19	Leverage of the beam makes it relatively easy.
3.20	The weight of the swinging catch-beam tightens the wooden strips around the break-wheel.
3.21	The release lever with extra rope is for an additional lock when we leave the mill.
3.22	The brake does not function when the sail-cross is reversing. The miller must be alert for that.
	Gallery c
3.23	The cross has 2 metal rods and 4 sweeps. The sail-span is over 87 feet.
3.24	The cross contains rods, sail-bars and sails.
3.25	The speed is 60-100 sweeps per minute. The top moves sometimes 80 mph.

3.26 **3.27**	 The sails are attached to the sail-bars. Please pay attention to the shape.
3.28	Light breeze: full sail; moderate breeze: half sail; strong breeze: furled sail "bare legs"
3.29	Each day the miller climbs up to set the sails.
-3-	**Meal-floor**
3.30	This mill grinds grain into flour/meal.
3.31	Due to hygienic measures we do not make flour for consumption anymore.
3.32	A few days per year we make grist for the livestock.
3.33	Meal goes via the chutes into the meal-sack.
3.34	 There is a centrifugal regulator for finesses of the meal. It automatically adjusts the distance between the grindstones.
3.35	 The sacks descend with the drum and rope at the ceiling, called "Shoot down".
-4-	**Second Stone-floor**
4.1	The grindstone above rotates and is called the over-runner. It weighs about 2.650 lb new.
4.2	The understone is fixed on the floor. "Bilsel" / grooves forms the pattern of dress.
4.3	The case around the stones keeps the meal together.
4.4	The stone-spindle with lantern-wheel drives the over-runner.
4.5	The stone-crane with hoisting-screw is used for maintenance of the stones.
4.6	Each stone has a specific dress. "Billen" is the reshaping of the stones. Those grooves have a certain pattern: the more curved the faster the grinding, but also the coarser the grind.
4.7	 Cutting out slots goes with the dressing-pick; done at night without false light.
4.8	The hopper shakes the grain onto the stones. The grain goes through the funnel into the hopper. It slowly doses the grain through the crop hole in the over-runner.

	An eccentric on the stone-spindle does this with a wooden bar (the “stop”).
4.9	The paddle (a leather rag) sweeps the flour into the flour-chute.
4.10	As you can see the mousetraps replaced the miller’s cat.
-5-	**Hoisting-floor**
5.1	The sacks are lifted with the sack-hoist behind the upright shaft.
5.2	Hoisting down is done at the meal-floor.
5.3	 The rope is around the hoisting drum: in this case axis. It's attached to a drum that can roll over the disc that is attached to the upright shaft. The control mechanism is very similar to that of the catch beam (wooden pulley).
5.4	The funnel is for short term grain-storage.
5.5	When the mill is halted the clutch of the millstone can easily be operated.
-6-	**Top-gear-floor**
	No entrance **Danger**
6.1	 There is a strong wind shaft on top connected to the sail-cross. Daily lubricated with lard.
6.2	It has a neck-bearing that lays on a stone.
6.3	The tail-bearing is supported in the same way.
6.4	The break-wheel has cogs that are greased with bees wax.
6.5	Sometimes they use a wallower with cogs driving the cogs of the other wheel.
6.6	Cogs transfer the forces and have a special shape.
6.7	The mangle gear has cylindrical poles driven by the cogs of the other wheel.
6.8	
6.9	The upright shaft is the main shaft of a mill and is seldom exchanged.
6.10	The great spur-wheel drives the stone-wheel that drives the over-runner stone.
6.11	The total gear transmission ratio is 1:6.7 for grain-mills in general.
6.12	Nice explanation of the gear floor of a mill on YouTube. https://youtu.be/iv1611ugS5w
♥	**To conclude**
🡻	 Please descend the stairs backwards.
	We hope you enjoyed it.

🡻 🡻 -0-	The maintenance of the mill costs £ 13.000 per year. Thank you for coming and we appreciate any contribution. Downstairs is a donation box.
	Have a nice stay in Gouda.