Saalasti Crush H series
Affordable energy chips from stumps

Stumps are the largely untapped source for high quality, high energy content biomass for energy production. Stump harvesting comes with the collateral benefit of land preparation for future forest growth, but first and foremost stumps provide an affordable source for energy both in terms of low purchasing price and high dry solids content - as long as they are processed into energy chips using a heavy duty, stationary biomass processor. Introducing Saalasti Crush H series.

For most demanding biomass

The cornerstone of Saalasti Crush H series design is heavy and robust construction. The machines are designed and built to withstand continuous operation, while processing biomass with high fraction of inorganic impurities: up to 15 % of soil, sand, silt, stones, etc. Serious engineering turns into serious promise on service life: Saalasti Crush H series will go on producing energy chips for decades. This puts the economics of stump processing into whole new perspective: with a high capacity stationary crush the cost of MWh produced demonstrably sets at 20-55% lower than anything attainable with a mobile crush.

Saalasti Crush H has been proven to be even more versatile than originally anticipated: it is also very capable of crushing forest residues. Many Saalasti end customers take full advantage of their Saalasti Crush H by processing stumps in the winter - when the extra high energy content is at most demand - and use the crusher for processing residue bundles over the warmer seasons.

Operation

The heart of Saalasti Crush H is the solid steel rotor. Weighing full 15 tons, the rotor stores enough inertia to crush anything coming on the way of its solid crushing tools. A pre-crushing unit consisting of two rotors, rotating asynchronously, first squeezes stumps into desired shape for the rotor to chop to pieces, and these pieces are then reduced into desired particle size by multiple impacts between rotor tools and griddle at the machine exit.

As foreign objects may pose a problem in wood crushing, Saalasti Crush H has multiple levels of safety features to ensure continuous operation. The pre-crushing unit alone crushes small stones into harmless pebbles and sieves out small metal particles. Should anything make its way to main processing area, the crusher has a safety mechanism to protect the moving parts. Trouble free operation and long service life are paramount at Saalasti.

SAALASTI

Technical data

Service

Service access has been made easy for all Saalasti machinery. Serviceable parts are accessed through a hydraulically operated hatch and hydraulics also move the anvil and grate to and from service position. Service operations are performed using standard hand tools.

Saalasti Feeder

Large processing capacity requires large loading efficiency. Saalasti Feeder is a infeed conveyor tailored to match the power of Saalasti Crush H. It's designed to continuously withstand impact of stumps and bundles dropped from a height and it conveniently integrates to overall Saalasti control systems, with features like adapting feeding mode and speed to prevent the pre-crush from overloading, etc.

Saalasti Feeder is equipped with noise reduction tunnel and an optional metal detector. It is available in multiple lengths to match the loading capacity - up to 30 meters - to facilitate loading on multiple spots.

Top: Quartered stumps on Saalasti Feeder.
Bottom: Processed stumps in P100 particle size.
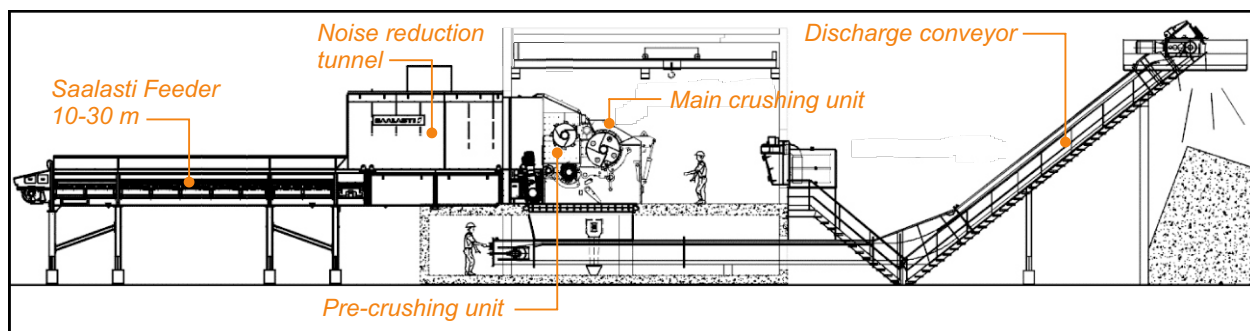
Saalasti Crush		1218H	1224H
Rotor diameter	mm	1200	1200
Rotor width	mm	1800	2400
Length, overall	mm	5788	5788
Width, overall	mm	6432**	5681
Height, overall	mm	3660	3660
Infeed opening width	mm	1840	2440
Infeed openin heigh	mm	2200	2200
Overall weight (without motor)	kg	50 000	60 000
Motor power, typical	kW/1500 rpm	1100	1300
Production capacity, stumps*	dry tons/h	30	60
Production capacity, forest residuals*	dry tons/h	25	40
Production capacity per volume*	m³/h (loose volume)	180 - 215	190 - 430

* Particle size range P63 - P100, ISO 17225-1:2014(E)
** Twin motor configuration

SAALASTI

AJN-20150903_Saalasti_Crush_H_Product_Sheet_1