



**BRANCH LOGGERS**  
**URBAN**



# EFFECTIVE USAGE OF WOOD WASTE

URBAN Branch loggers process wood (branches, laths and offcuts) which would usually be chipped up or left on site. The smaller logs produced can then be utilised as a valuable source of solid wood fuel.

## The advantages of small logs:

- possibility of burning in solid fuel boilers, hearths and log burners
- easy storage and handling in raschle bags or big bags
- faster drying



Small logs from 70 series of branch loggers

## THE PRINCIPLE

The working principle of branch loggers URBAN lies in **two counter rotating shafts with blades**. Each shaft has 3 fixed blades, made from high quality **tool steel**. It is possible to resharpen the blades repeatedly. After sharpening there is a pad to be put under the blades in order to keep the same gap between the blades (c. 0,1 mm). **One single sharpening of blades is capable of producing from 100 to 500 solid meters of small logs**, depending the level of contaminants (mud, nails, stones etc.). The rotating blades **draw in the wood material into the feed hopper unassisted**. A safety device prevents over reaching by the operator.



The gap between the blades is c. 0,1 mm. Which means the logger can process even very small branches.



Small logs from 110 series of branch loggers



# BRANCH LOGGERS BEHIND THE TRACTOR

## URBAN TR70



The **URBAN TR70** branch logger is driven by a PTO with an overload clutch which will slip and limit the torque when a large branch is fed into the hopper. Providing the tractor and the logger with protection from overloading. The inlet hopper consists of a fixed and a folding part. **The folding part of the inlet hopper** gives a narrower profile in the transport position. Once locked in the working position the hopper ensures optimised branch intake and operational safety utilising the provided chains. **The adjustable frame of the logger** allows connection to various tractor models. URBAN TR70 is protected by a patent nr. 34840.

Maximal branch diameter:	
Soft fresh wood (spruce, pine tree)	80 mm
Hard fresh wood (oak, hornbeam)	65 mm
Hard dry wood (oak, hornbeam)	50 mm
Log length (not adjustable)	6 - 13 cm
Top performance	6 m³/h
Logging device inlet dimensions	200 x 200 mm
Weight (as per model)	250 - 380 kg
3-point hitch category	1 and 2
PTO max. rotation speed	540 / min.
Power of the tractor (min.)	30 hp
Power of the tractor (recommended)	more than 50 hp

Models being produced:

- with a double bagging frame for raschle bags
- with a big bag frame
- with a 2,1 m side belt conveyor - driven by a hydraulic motor with rotation speed control
- with a 2,6 m side belt conveyor - driven by a hydraulic motor with rotation speed control
- with a 2,6 m back belt conveyor - driven by a hydraulic motor with rotation speed control

## URBAN TR75



**TR75** differs from **TR70** by featuring the superposed V-belt drive, which allows the branch logger to be connected to a tractor with a lower power. Maximum branch diameter can be achieved even with a small tractor with the power as low as 20 hp. **The V-belt drive serves as a shock absorber and also acts as an overload clutch. The large pulley wheel acts as a flywheel**, absorbing shocks and providing smoother running. The inlet hopper consists of a fixed and a folding part. The branch logger is secured with safety chains in its working height whilst in operation.

Maximal branch diameter:	
Soft fresh wood (spruce, pine tree)	80 mm
Hard fresh wood (oak, hornbeam)	65 mm
Hard dry wood (oak, hornbeam)	50 mm
Log length (not adjustable)	6 - 13 cm
Top performance	5 m³/h
Logging device inlet dimensions	200 x 200 mm
Weight (as per model)	380 - 475 kg
3-point hitch category	1 and 2
PTO max. rotation speed	540 / min.
Power of the tractor (min.)	15 hp
Power of the tractor (recommended)	more than 25 hp

Models being produced:

- with a double bagging frame for raschle bags
- with a big bag frame
- with a 2,1 m side belt conveyor - belt driven
- with a 2,6 m side belt conveyor - belt driven

## URBAN TR110



**TR110** is able to process wood material with a larger diameter allowing faster throughput. The tractor power is transferred by a PTO with an overload clutch to the oil filled gearbox, which drives the logging device. The inlet consists of a fixed and a folding part. The logger can be either secured with safety chains in the working position or can be placed on the ground on the two adjustable legs. An additional frame is available for a 22 kW electric motor.

Maximal branch diameter:	
Soft fresh wood (spruce, pine tree)	120 mm
Hard fresh wood (oak, hornbeam)	100 mm
Hard dry wood (oak, hornbeam)	80 mm
Log length (not adjustable)	7 - 22 cm
Top performance	10 m³/h
Logging device inlet dimensions	290 x 290 mm
Weight (as per model)	670 - 860 kg
3-point hitch category	2
PTO max. rotation speed	1000 / min.
Power of the tractor (min.)	50 hp
Power of the tractor (recommended)	more than 70 hp

Models being produced:

- with a double bagging frame for raschle bags
- with a big bag frame
- with a 2,6 m side belt conveyor - belt driven
- with a 2,6 m back belt conveyor - driven by a hydraulic motor with rotational speed control



The TR70 and TR110 can be equipped with a flywheel on a customer's request. **The flywheel absorbs shocks** transferred to the PTO and to the tractor gearbox.



Branch loggers attached behind the tractor can tow a trailer with a **regular tow hitch** or a **tow ball ISO 50**.



All branch loggers attached behind the tractor can be supplied with **castors** for manual handling.



# BRIGGS & STRATTON ENGINE DRIVEN BRANCH LOGGERS

## URBAN SM70



Maximal branch diameter:	
Soft fresh wood (spruce, pine tree)	80 mm
Hard fresh wood (oak, hornbeam)	65 mm
Hard dry wood (oak, hornbeam)	50 mm
Log length (not adjustable)	6 - 13 cm
Top performance	4 m³/h
Logging device inlet dimensions	200 x 200 mm
Weight (as per model)	310 - 430 kg
Engine power	7,5 kW (10 hp)
Fuel tank volume	4 l
Average gas consumption (Natural 95)	1 - 1,5 l/h
Blade rotation speed (max.)	200 / min.

Models being produced:

- with a single bagging frame for raschle bags
- with a double bagging frame for raschle bags
- with a big bag frame
- with a 1,7 m belt driven conveyor
- with a 2,1 m belt driven conveyor
- with a 2,6 m belt driven conveyor

SM70 is driven by a four stroke 10 hp **Briggs & Stratton VANGUARD** engine, with pull cord or optional electric start. The engine's output is transferred via V-belts to the **oil filled gearbox** which drives the blade rotors. This model features disc springs located on the torsion arm, which when compressed allow the belt to slip and stop the logger giving overload protection. The chassis has **4 wheels for manual handling**. (2 fixed and 2 swivelling with brakes).

## URBAN SMV70



The branch logger, engine and drive are the same as with the SM70 model, differing only in the chassis. The SMV70 features **an offroad chassis with independent pivoting axles**. Connects to a vehicle with a 50 mm dia. tow ball. The SMV70 is not intended for a highway use.

Maximal branch diameter:	
Soft fresh wood (spruce, pine tree)	80 mm
Hard fresh wood (oak, hornbeam)	65 mm
Hard dry wood (oak, hornbeam)	50 mm
Log length (not adjustable)	6 - 13 cm
Top performance	4 m³/h
Logging device inlet dimensions	200 x 200 mm
Weight (as per model)	370 - 470 kg
Engine power	7,5 kW (10 hp)
Fuel tank volume	4 l
Average gas consumption (Natural 95)	1 - 1,5 l/h
Blade rotation speed (max.)	200 / min.

Models being produced:

- with a double bagging frame for raschle bags
- with a 1,7 m belt driven conveyor
- with a 2,1 m belt driven conveyor
- with a 2,6 m belt driven conveyor



## URBAN SMH70



Maximal branch diameter:	
Soft fresh wood (spruce, pine tree)	80 mm
Hard fresh wood (oak, hornbeam)	65 mm
Hard dry wood (oak, hornbeam)	50 mm
Log length (not adjustable)	6 - 13 cm
Top performance	4 m³/h
Logging device inlet dimensions	200 x 200 mm
Weight (as per model)	420 - 500 kg
Engine power	7,5 kW (10 hp)
Fuel tank volume	4 l
Average gas consumption (Natural 95)	1 - 1,5 l/h
Blade rotation speed (max.)	200 / min.

Models being produced:

- with a double bagging frame for raschle bags
- with a 1,7 m belt driven conveyor
- with a 2,1 m belt driven conveyor

The branch logger and the drive are the same as with the SM70 a SMV70 models, differing only in the chassis. The SMH70 features a **road trailer with a lighting kit and number plate bracket**. Connects to a vehicle with a 50 mm dia. tow ball.



## URBAN SMH110



Model being produced:

- with a 2,6 m belt driven conveyor

### Maximal branch diameter:

Soft fresh wood (spruce, pine tree)	120 mm
Hard fresh wood (oak, hornbeam)	100 mm
Hard dry wood (oak, hornbeam)	80 mm
Log length (not adjustable)	7 - 22 cm
Top performance	10 m³/h
Logging device inlet dimensions	290 x 290 mm
Weight (incl. trailer)	1300 kg
Engine power	26,1 kW (35 hp)
Fuel tank volume	15 l
Average gas consumption (Natural 95)	3 - 4 l/h
Blade rotation speed (max.)	170 / min.

URBAN SMH110 is **mobile and highly efficient**. It is driven by a 35 hp **Briggs & Stratton VANGUARD** engine with electric start, an oil level and fuel indicators and an hour meter. The SMH110 is mounted on a **highway use braked single axle trailer with road lighting kit and number plate holder**. The branch logger is fixed to a **360° turntable** to allow the branch logger to be rotated in eight lockable positions in 45° increments. A belt slip protects the device from overloading.



All URBAN branch loggers are equipped with a safe and long feeder (longer than arm reach) with an added emergency stop frame. In the working position the hoppers are in horizontal position, which makes inserting of long branches easier.

On larger branch loggers the hopper is in two sections for ease of transport.



The double bagging frame has a lever operated diverter for switching between the two raschle bags, allowing the operator to change the first bag while the other is being filled. If branches are inserted continuously, the bag will be filled in approximately 20 seconds.



# ELECTRIC MOTOR DRIVEN BRANCH LOGGERS

## URBAN EM70



EM70 differs from SM70 only in motor type - it is driven by a three phase **5,5 kW SIEMENS electric motor**. The chassis **has wheels for manual handling** (2 fixed and 2 swivelling, with brakes).

### Maximal branch diameter:

Soft fresh wood (spruce, pine tree)	80 mm
Hard fresh wood (oak, hornbeam)	65 mm
Hard dry wood (oak, hornbeam)	50 mm
Log length (not adjustable)	6 - 13 cm
Top performance	4 m <sup>3</sup> /h
Logging device inlet dimensions	200 x 200 mm
Weight (as per model)	320 - 430 kg
Electric motor power	5,5 kW
Blade rotation speed	200 / min.

### Models being produced:

- with a single bagging frame for raschle bags
- with a double bagging frame for raschle bags
- with a big bag frame
- with a 1,7 m belt driven conveyor
- with a 2,1 m belt driven conveyor
- with a 2,6 m belt driven conveyor



## URBAN EM110



### Maximal branch diameter:

Soft fresh wood (spruce, pine tree)	120 mm
Hard fresh wood (oak, hornbeam)	100 mm
Hard dry wood (oak, hornbeam)	80 mm
Log length (not adjustable)	7 - 22 cm
Top performance	10 m <sup>3</sup> /h
Logging device inlet dimensions	290 x 290 mm
Weight (as per model)	930 - 1050 kg
Electric motor power	15 or 18,5 kW
Blade rotation speed	160 / min.

EM110 is driven by a **three phase 18,5 kW electric motor** (connects to a 63 A socket). Also available with a 15 kW electric motor at customer's request (32 A socket). The EM110 can handle a larger branch diameter than EM70. This model is **very ideal for processing waste material (boards, cut-offs)** and also smaller stems up to 12 cm diameter. A belt slip protects the device from overloading.

### Models being produced:

- with a double bagging frame for raschle bags
- with a big bag frame
- with a 2,6 m belt driven conveyor





# SMALL LOGS HANDLING POSSIBILITIES

## RASCHLE BAGS



- The recommended dimensions of a raschle bags are 57 x 104 cm.
- The mass of 1 bag with logs is from 15 to 30 kg.
- The volume of 1 bag is 0,08 m<sup>3</sup> (13 bags = 1 m<sup>3</sup>).

- + Easy handling
- + Minimised storage area by stacking bags
- + Faster drying due to improved air circulation
- + 50 FREE raschle bags are provided with units supplied with bagging frames

## BIG-BAGS



- The recommended dimensions of big bags are 90 x 90 x 100 cm.
- The mass of 1 big bag with wood logs is from 150 to 300 kg.
- The volume of 1 big bag is 0,8 m<sup>3</sup>.

- + Higher performance during logging
- + Minimises storage area by stacking bags (2 to 3 layers)
- + Faster log drying due to improved air circulation
- A suitable tine equipped handling machine is required for moving bags

## BELT CONVEYOR



- The belt conveyor is driven by a V-belt or a hydraulic motor.
- The advantage of the fluid motor propulsion is the possibility of regulation of the rotation speed and therefore varying the falling distance of wood logs on the trailer.
- Belt conveyors are available in 1,7 / 2,1 / 2,6 m lengths.
- The angle of the belt conveyor is winch adjustable.
- Belt conveyors are transported in upright position.

- + Belt conveyors provide highest possible logging performance
- + A bagging frame or a slide can be attached to the end of the belt conveyor
- + Big bags can be fitted in a dedicated stand and can be placed under the conveyor

## Belt Conveyors Accessories



The double bagging frame for raschle bags with a supporting leg can be mounted to any belt conveyor. Easily installed with 4 screws.



A slide with adjustable angle can be mounted to the ends of all belt conveyors, to allow processed wood fall further distances. Easily installed with 4 screws.



The dedicated big bag frame can be locked at two different heights. Either for logging with or without a pallet underneath the bag. The frame can be disassembled for easy transportation.

# ABOUT US



- **URBAN KOVO s.r.o.** is Czech producer of Branch Loggers.
- The Company has manufactured **more than 1000 Branch Loggers** since 2009.
- **URBAN KOVO s.r.o.** have an on site **CAD design facility** continually improving products.
- **All components are made on site**, assuring quality.
- **Servicing and Maintenance can be carried out at our facility**, for example sharpening and setting of blades.
- All Parts are readily available through your dealer.



## CONTACTS

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**DEMPO**GROUP

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