## Universal Cleaner U 12 / U 15





The **PETKUS Universal Cleaner** is a combined multi-purpose air screen cleaning machine of a new and modern machine concept, suitable for the pre-, intensive and final seed cleaning of cereals, corn, beans and fine seeds to the highest standard of quality.

The screen layers in the Universal Cleaner can be utilized according to requirements to meet the actual cleaning process either for scalping, grading, sorting or sifting.

### **Construction and description:**

- Feeding system
  - The Universal Cleaner is provided with inlet buffer bin and a feeding drum combined with a weight balanced intake flap. The weight rollers on both sides of the intake flap allowing the adjustment of the feed of the product.
- Suction system (Pre-aspiration and main aspiration channel)
  The pre-suction system, which removes up the dust and lightweight
  trash before screening, is equipped with a separate expansion
  chamber supplied with extraction auger and a fingerflap seal system
  by the outlet. The flowing ability of the product will be improved.
  The main-suction system is independent from the pre-suction
  system and incorporates the leak-air principle for easy adjustment
  of the air volume and velocity. The design of the main aspiration
  system is based on a double channel with an adjustable flap for
  controlling the product flow into the air stream.

The main aspiration system is completed with separate expansion chamber mounted with extraction auger supplied with a fingerflap seal-system by the outlet. The suction system is prepared for connection to a separate fan or a central aspiration system.

Screen system

Upper screen shoe (Scalper and pre-cleaning screen):
The upper screen shoe is supplied with 2 screen layers usable for remove of oversize rejects from the product.

# Flow diagram 1 - Machine inlet 2 - Pre-suction channel 3 - Sieve cleaning system 8 - Sieve layer 3 - lower screen shoe 7 - Sieve layer 4 - lower screen shoe 8 - Expansion chamber for pre- and main

### PETKUS seed flow control system:

4 - Sieve layer 1 - upper screen shoe

5 - Sieve layer 2 - upper screen shoe

The first upper screen can be equipped with a special PETKUS sieve cleaning system. The PETKUS universal sieve cleaning system of the first upper sieve is based on the combination of endless moving chains with blades and rubber balls. This system keeps the screen perforations clear of lodging particles, and controls the rate of movement of the product along the screen surface. The special effect of this system is a smaller overall-sieve surface area compared to conventional cleaners.

suction channel

9 - Main suction channel

### Lower screen shoe:

The lower screen shoe is equipped with 2 screen layers, which can be utilized as lower screens for separation of small particles. All screen segments are interchangeable and mounted in a double size screen frame of aluminium, and a frame for antifreezing rubber balls which are keeping the screen surface clean.

### Drive of the machine:

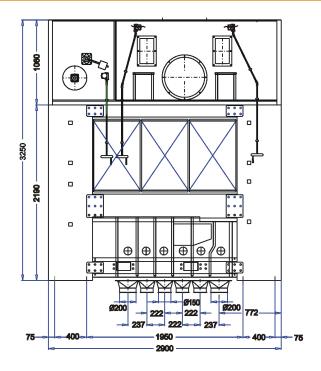
The drive unit includes the main eccentric system, which guarantees a perfect balance and a vibration free motion with motor console and V-belt drive.

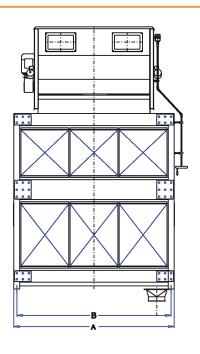


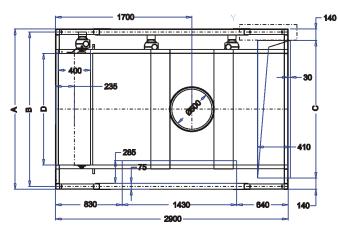
Sieve segment and frame for rubber balls

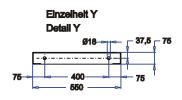
# Universal Cleaner U 12 / U 15











Technical data		U 12	U 15	Technical data		U 12	U 15
Capacity (Basis: Wheat)				No. of sieve layers			
Pr-cleaning	t/h	60	80	Upper screen shoe	pcs.	2	2
Seed cleaning	t/h	8	10	Lower screen shoe	pcs.	2	2
Industrial cleaning	t/h	30	40	No. of sieve segments			
Drives				Upper screen shoe	pcs.	2 x 8	2 x 10
Fan	kW	11,0-15,0	15,0-18,0	Lower screen shoe	pcs.	2 x 8	2 x 10
Screen shoe	kW	4,0	4,0	Total No. of sieve segments	pcs.	32	40
Machine inlet drum	kW	0,37	0,37	Dimensions:			
Discharge screw	kW	2 x 0,25	2 x 0,25	A	mm	1700	2000
Sieve cleaning upper screen	kW	0,37	0,37	В	mm	1625	1925
				С	mm	1090	1390
Air volume (Wheat)	m³/h	9.000	12.000	D	mm	1420	1720
				Revolution	Hz	5,0	5,0
Working width	mm	1.200	1.500	Load, horizontal (FH)	kN	±0,9	±1,2
				Load, vertical (FV)	kN	7,5±1,5	8,0±1,9
Screen surface	m <sup>2</sup>	6,72	8,40	Weight	kg	3000	3200

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