

**ABRASIVE TOOL ON FLEXIBLE BASE**



- FLAP BUTT – END WHEELS
- FLAP RADIAL WHEELS
- VELCRO DISCS
- FIBER DISCS
- ENDLESS BELTS
- ROLLS AND BOBBINS OF GRINDING COATED ABRASIVES



**MADE IN RUSSIA**  
JSC «Luga abrasive plant»



JSC "Luga abrasive plant" manufactures wide range of abrasive tools on flexible backing from coated abrasives.

## FLAP BUTT-END WHEELS (KLT)

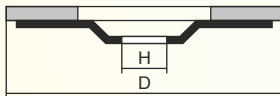
Flap butt-end wheel is intended for processing of hard-to-reach places, face grinding and flat grinding of details and constructions made of different kinds of steel, non-ferrous metals and wood.

**JSC "Luga abrasive plant" produces its own high duty backing pads (base for KLT) from special materials using a unique technology that has no analogues in the world.**

Special materials allow to improve glue adhesion and reliability of fixing the grinding flaps, consequently, to increase the strength of the whole structure of the KLT, which allows you to use it with large clamping forces.

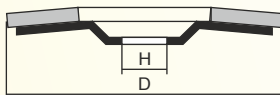
Therefore, KLT produced by JSC LAP with a grain size of P24-40 can be considered rotary files.

### Type KLT 1



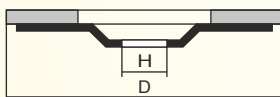
For flat grinding, processing of edges and welded joints of details. Contact of the wheels with the work surface is at an angle of 0-15°.

### Type KLT 2



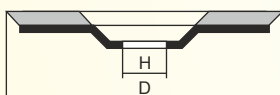
For processing of hard-to-reach places, face grinding and flat grinding. The conical shape of the tool when working, provides a better fit of the flaps to the metal surface. Contact of the wheels with the work surface is at an angle of 15-25°.

### Type KLT 3



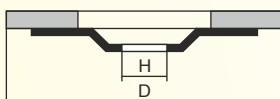
For flat grinding, processing of edges and welded joints of details and constructions made of different kinds of steel, non-ferrous metals, wood, plastic. The main difference between KLT3 and other types is the presence of doubled flaps (main and auxiliary), it can increase productivity significantly.

### Type KLT 4



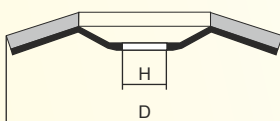
The new structure of placing of the flaps increases the flexibility of the wheel, which permits to process the contour surfaces of parts and structures made of different kinds of steel, non-ferrous metals and wood. The zone of interaction between the working part of the wheel and the product is larger than when using wheels KLT 1 or KLT 2, which allows quality machining faster than with a fiber disk.

### Type KLT 5



For multi-functional grinding of products made of metals and other materials (wood, plastic). Increased by 2 times the output of the flaps over the edge of backing pad simplifies work with bends, corners, complex surfaces, and also increases the cooling efficiency of the working part of the wheel. The increased angle of flaps' allows to use wheels, with the appropriate pressure force, for both rough and fine grinding.

### Type KLT 6

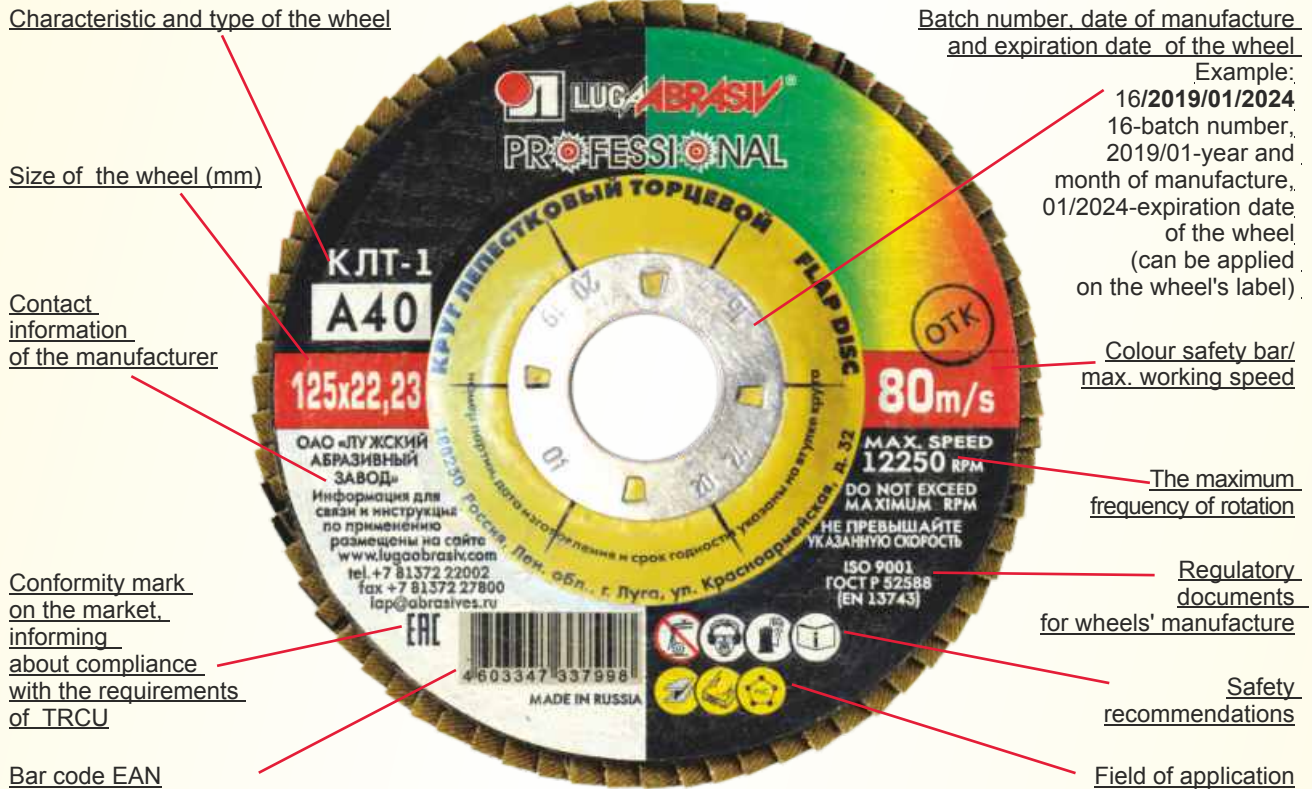


The increased tilt angle of the support plate allows to process the part with the whole surface of the flaps. There is always a split between the threaded part of the spindle and the part being processed, even at the full fit of the flaps' flat surface to the detail.

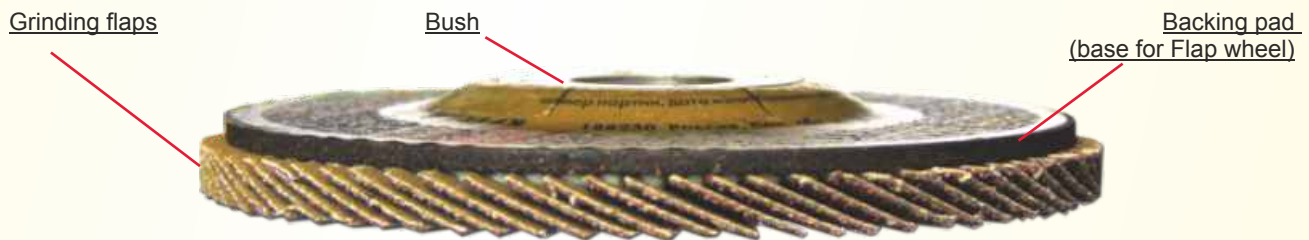
Due to the increase of the angle of the backup pad, the wear of the coating abrasives happens evenly over the entire working surface, which leads to a significant increase in productivity when grinding metals, wood, plastic.



# FLAP BUTT-END WHEELS FOR HAND GRINDING MACHINES



## WHEEL'S CONSTRUCTION



## FIELD OF WHEEL'S APPLICATION



metal



wood



plastic

### GRIT TABLE BY FEPA

P24, P30, P36, P40, P50, P60, P80, P100,  
P120, P150, P180, P220, P240, P280, P320,  
P360, P400, P500, P600, P800, P1000

### ABRASIVE MATERIAL

A - aluminium oxide  
ZK - zirconium oxide  
C - silicon carbide

# 6 KLT

## NEW SERIES OF FLAP GRINDING WHEELS

### ECONOMY

Optimal performance of wheels when used periodically in the home segment.

More favorable price compared to the wheels of the series Standart.

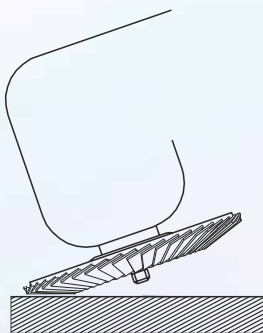
### STANDART

Optimal performance of wheels in semi-professional segment.

More favorable price compared to the wheels of the series Professional.

### PROFESSIONAL

High resistance and large removal of the processed material.



## NEW CONSTRUCTION INCREASED PRODUCTIVITY

*Due to the increase of the angle of the backup pad, it is well suited for processing of hard-to-reach places.*

The wear of the coating abrasives happens evenly over the entire working surface, which leads to a significant increase in productivity when grinding.

80m/s	Equipment	Type	D (mm)	H (mm)	Grit	Allowable rotation speed, RPM
Material A		KLT6	125	22,23	24; 36; 40; 50; 60; 80; 100; 120; 150	12250

Wheels can be used on angle grinders with number of rotations not exceeding indicated on the wheel value



## series «ECONOMY»

Optimal performance of wheels when used periodically in the home segment.

More favorable price compared to the wheels of the series Standart.



80m/s	Equipment	Type	D (mm)	H (mm)	Grit	Allowable rotation speed, RPM
Material A		KLT 2	115	22,23	24; 36; 40; 50; 60; 80; 100; 120; 150; 180	13300
			125			12250
			150			10200
			180			8500

## series «STANDART»

Optimal performance of wheels in semi-professional segment.

More favorable price compared to the wheels of the series Professional.



80m/s	Equipment	Type	D (mm)	H (mm)	Grit	Allowable rotation speed, RPM
Material A		KLT 1	115	22,23	24; 36; 40; 50; 60; 80; 100; 120; 150; 180	13300
			125			12250
			150			10200
			180			8500

## series «PROFESSIONAL»

Wheels are intended for universal processing of a wide range of materials: metals, wood, plastic.

### Advantages:

- high resistance;
- large removal of the processed material (high productivity at medium loads).



80m/s	Equipment	Type	D (mm)	H (mm)	Grit	Allowable rotation speed, RPM
Material A		KLT 1	100	22,23	24; 36; 40; 50; 60; 80; 100; 120; 150; 180; 220; 240; 320	15300
			102	15,9		15300
		KLT 1 KLT 2	115	22,23		13300
			125			12250
			150			10200
			180			8500
		KLT 1	200	7650		

Wheels can be used on angle grinders with number of rotations not exceeding indicated on the wheel value

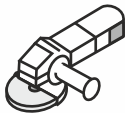
# FLAP BUTT-END WHEELS FOR HAND GRINDING MACHINES

## series «ZIRCON»



The wheels are intended for processing welded seams of all steel grades, grinding high-alloy and hard-to-machine steels, stripping casting, scale, trimming.

The use of zirconium grain allows to increase the service life of the tool several times and to perform processing with higher clamping forces, which provides a powerful material removal and reduces the processing time.

80m/s	Equipment	Type	D (mm)	H (mm)	Grit	Allowable rotation speed, RPM
Material ZK		KLT1 KLT2	115	22,23	24; 36; 40; 60; 80; 100; 120	13300
			125			12250
			150			10200
			180			8500
		KLT1	200			7650

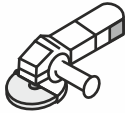
## series «ZIRCON standart»



Wheels are used for universal processing of all types of steels, including high-alloy and stainless, stripping welded seams, blunting sharp edges, deburring, and removing rust.

### Advantages:

- more favorable price compared to the wheels of the series ZIRCON while maintaining the high quality of processing with zirconium grinding material;
- the new design of the KLT allowed to increase productivity compared with the wheels of the series PROFESSIONAL.

80m/s	Equipment	Type	D (mm)	H (mm)	Grit	Allowable rotation speed, RPM
Material ZK		KLT1 KLT2	115	22,23	24; 36; 40; 60; 80; 100; 120;	13300
			125			12250
			150			10200
			180			8500

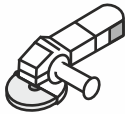
## series «CERAMIC»



The wheels are designed for processing high-alloy, stainless steel, titanium and nickel alloys. They can be used for preliminary and final grinding of parts, stripping welded seams, blunting of sharp edges, deburring.

### Advantages:

- service life increases compared with the wheels of the series ZIRCON;
- high performance;
- reduces the probability of burnings;
- eliminates the appearance of "rust" on the treated surface.

80m/s	Equipment	Type	D (mm)	H (mm)	Grit	Allowable rotation speed, RPM
Material CER		KLT1 KLT2	115	22,23	40; 60	13300
			125			12250
			150			10200
			180			8500

Wheels can be used on angle grinders with number of rotations not exceeding indicated on the wheel value

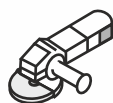


## series «Flap Disc»

### Construction of KLT3 allows:

- To increase the removal of the processed material per unit of time with the same grain size of the main and auxiliary flaps (A40 / 40). This is due to an increase in the area of contact of the auxiliary flap with the surface of the processed product.
- To improve the quality of the treated surface when working with the wheel, that has an auxiliary flap of finer grain (A40 / 60).
- To produce wheels in a more attractive price/quality ratio for the consumer.



80m/s	Equipment	Type	D (mm)	H (mm)	Grit	Allowable rotation speed, RPM
Material A		KLT3	115	22,23	40/40; 40/60; 60/60; 80/80; 100/100; 120/120; 150/150	13300
			125			12250
			150			10200
			180			8500


## series «Soft Disc»

### Special arrangement of the flaps' position of KLT4 increases the flexibility of the wheel.

This makes possible processing the contour surfaces of parts and structures made of various grades of steel, non-ferrous metals and wood.

The area of interaction between the working part of the wheel and the product is 40% larger than when using wheels KLT1 or KLT2, which allows to carry out high-quality processing of surface faster.



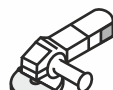
80m/s	Equipment	Type	D (mm)	H (mm)	Grit	Allowable rotation speed, RPM
Material A		KLT4	115	22,23	24; 36; 40; 50; 60; 80; 100; 120; 150; 180; 220	13300
			125			12250

## series «Elastic»

### Main advantages of KLT5:

- **Increased twice going of flaps over the edge of backing pad** allows to carry out processing in corners, bends, as well as processing of flat and contour surfaces. The efficiency of cooling the working part of the wheel is heightening, which significantly increases the service life of the tool.
- The increased number of flaps provides a more efficient and longer wheel's lifetime.
- **The increased angle of flaps' position** gives opportunity to use wheels in different operations:
  - for rough grinding** - at intense pressing on the wheel the flaps become compact and provide greater removal of the processed material;
  - for fine grinding** - at easy pressing on the wheel the flaps are springy. It helps to reduce removal of the processed material at wiping or leveling of the surface.



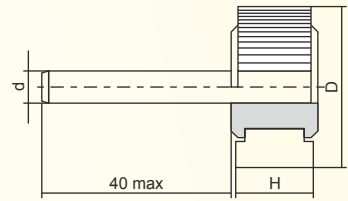
80m/s	Equipment	Type	D (mm)	H (mm)	Grit	Allowable rotation speed, RPM
Material A		KLT5	115	22,23	40; 60; 80; 100; 120; 150; 180	13300
			125			12250
			150			10200
			180			8500

Wheels can be used on angle grinders with number of rotations not exceeding indicated on the wheel value

### Flap Wheels with mandrel (KLO)



**KLO wheels** are used for processing of the complex details and constructions made of different types of steels, non-ferrous metals, plastic and wood.  
Used for draft, intermediate and final grinding.

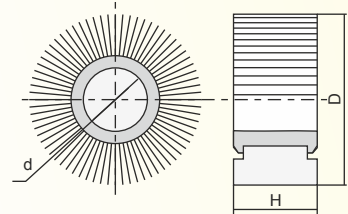


40m/s	Equipment	D (mm)	H (mm)	d (mm)	Grit	Allowable rotation speed, RPM
Material A, ZK		25	10;15;	6	40; 50; 60; 80; 100; 120; 150; 180; 220; 240; 320	30600
		30	20;25;30			25500
		40	10;15;			19100
		50	25;30;40			15300
		60	10;15; 20;25;30;40;50			12740
		80	20;25;30;40;50			9550

### Flap Wheels without mandrel (KL)



**KL wheels** are used for draft, intermediate and final grinding of various metals, plastics, wood, painted and varnished surfaces, putty.  
The grinding wheels adapt well to the profile of the workpiece to be machined and guarantee a uniform nature of the ground surface until the wheel is completely worn out.



40m/s	Equipment	D (mm)	H (mm)	d (mm)	Grit	Allowable rotation speed, RPM
Material A, ZK		60	10;15;20;25;30;40;50	8;12	24; 36; 40; 50; 60; 80; 100; 120; 150; 180; 220; 240; 320	12740
		80	30;40;50			9550
		90	25;30;50	12;22,23		8490
		100	50;60;70	8;12;22,23		7650
		120	25;30;40;50	12;22,23;32		6370
		130		32		5880
		150	50			5100 (40m/s)
			25;30	6400 (50m/s)		

### for stationary grinders

40m/s	Equipment	D (mm)	H (mm)	d (mm)	Grit	Allowable rotation speed, RPM
Material A, ZK		200	25; 30; 50	32	36; 40; 50; 60; 80; 100; 120; 150; 180; 220; 240; 320	3850
		350	50; 60; 75; 100; 120; 140	44,5;		2200
		400		127		1950





## VELCRO DISCS

For processing the articles of wood, plywood, wood-grain slab, metals. Discs are self-clinged with the supporting plate of conforming electric tool and are consolidated by easy pressing down, allowing for quick and easy disc changes. Sparsely pouring of grain coated abrasives reduce the soiling of the disc by the waste of processed material which increases the service life of the instrument and increases its productivity.



	Equipment	D (mm)	Performance	Grit
Material A		115 125 150		24; 36; 40; 50; 60; 80; 100; 120; 150; 180; 220; 240; 320
		150		
		115 125 150 225 300		

## FIBER DISCS For Hand Portable Grinders

For draft processing, derusting and deburring, processing of seams the products made of different types of steels, non-ferrous metals, cast iron, wood, rubber and plastic. It can be used for fine processing of metal.



80m/s	Equipment	Performance	D (mm)	H (mm)	Grit	Allowable rotation speed, RPM
Material A		Type 2	60	6	24; 36; 40; 50; 60; 80	25480
			70			21840
			100			15300
			115			13300
			125			12250
			150			10200
			180			8500
			225			6790
		Type 2Ab	130	11800		
			178	8600		
		Type 2 with holes	115	13300		
			125	12250		
			150	10200		
180	8500					

## GRINDING BELTS ENDLESS SHEETS BOBBINS

### ENDLESS BELTS (LB)

Endless grinding belt - these are narrow and wide endless belts on a cloth base. Endless belts are manufactured in a wide range of web sizes, grain sizes for most types of processing and materials.

An endless grinding belt is a strip of coated abrasive, the ends of which are joined end-to-end (LB) or overlapped (LB2).



Equipment	Belt width (mm)	Belt length (mm)	Characteristic
	from 6 to 40	from 303 to 610	A24-A320 ZK24-ZK120
	from 60 to 110	from 400 to 950	
	to 350	to 9000	
	to 350	to 4000	
	to 1600	to 4000	

### SHEETS

For the processing of metal sheets after priming, paints and varnishes, as well as plastics. They are used primarily in the car industry, as well as for processing metallographic pins. Coated abrasive with paper backing, waterproof WBB; Aqua.



Equipment	Belt width (mm)	Belt length (mm)	Grit
	230	280	100;120;150;180; 320;400;600;1000

### COATED ABRASIVES ROLLS

Waterproof coated abrasives on cloth base are designed for abrasive processing of various materials with and without the use of cutting fluid.




Characteristic	Roll size		Sphere of application
	Width (mm)	Length (m)	
A24, A30	775; 800	20	
A36-A150	775; 800	30	
A180-A220,5,4,M40	800	30	



## The bobbins of coated abrasives

The coated abrasives in bobbins are designed for rational use on vibrating grinders and hand grinding. Select the width of the grinding bobbin according to the pad size of your grinder or grinding bar.

Characteristic	Roll size		Sphere of application
	Width(mm)	Length (m)	
A24, A30	from 20 to 1650	20	
A36- A220,5,4,M40	from 20 to 1650	30	

\* The plant receives the orders of grinding belts, bobbins and rolls manufacturing with dimensions and characteristics not indicated in the given tables.



The products of JSC "Luga Abrasive Plant" comply with the requirements of the Technical Regulations of the Customs Union "On the safety of machinery and equipment" (TRSU 010/2011) and the Unified Sanitary and Epidemiological Requirements.

The plant is constantly awarded with state awards and diplomas for achieving high success in the engineering industry.

The company is a member of Federation of European Producers of Abrasives – FEPA.

Since November 2001, JSC "Luga Abrasive Plant" has developed, implemented and successfully operates a quality management system for compliance with the requirements of EN ISO 9001. The system is maintained in working order due to constant internal tests and an annual inspection audit. Every 3 years the QMS of JSC "Luga Abrasive Plant" is recertified for compliance with the requirements of EN ISO 9001.

QMS ISO EN 9001:2015 TÜV AUSTRIA HELLAS certificate No. 061610009862 received on November 20, 2017. It confirms the eligibility of the production of JSC "Luga Abrasive Plant" to enter the international market and expands the possibilities of concluding contracts. Abroad, it is the presence of a quality management system certificate that is a decisive factor in choosing a supplier and a necessary condition for concluding a contract. Compliance with ISO standards is the best guarantee that manufacturers can give their customers in terms of quality.



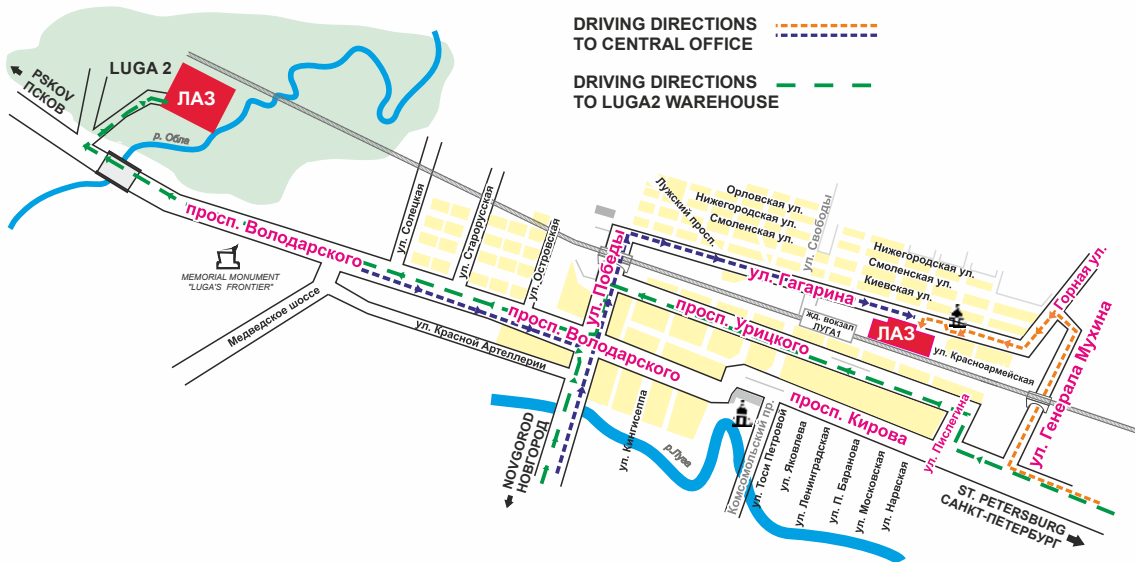


**DRIVING DIRECTIONS:**

LUGA ABRASIVE PLANT ■

DRIVING DIRECTIONS TO CENTRAL OFFICE - - - - -

DRIVING DIRECTIONS TO LUGA2 WAREHOUSE - - - - -



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