



ALKRAS

THE POWER OF SIMPLICITY

Advanced Molecular Laser Technology.

From 400watt to 3000W



COMMERCIAL PRODUCTS

- **Alkras LLC is privately owned company.**
- The company's founder is Russian scientist, Alexander V. Krasnov, developed breakthrough CO2 RF excited laser technology, in 1997.
- The technology has been improved upon from day one and patented. By this moment this technology to be considered the most compact and highly efficient.
- Through the years, Alexander V. Krasnov has developed several types of lasers for different applications in addition to the main technology which the company prides itself.
- Today, Alkras developed new Molecular Laser which bring the new turn of affordability of Laser Technology for the Worldwide Businesses.

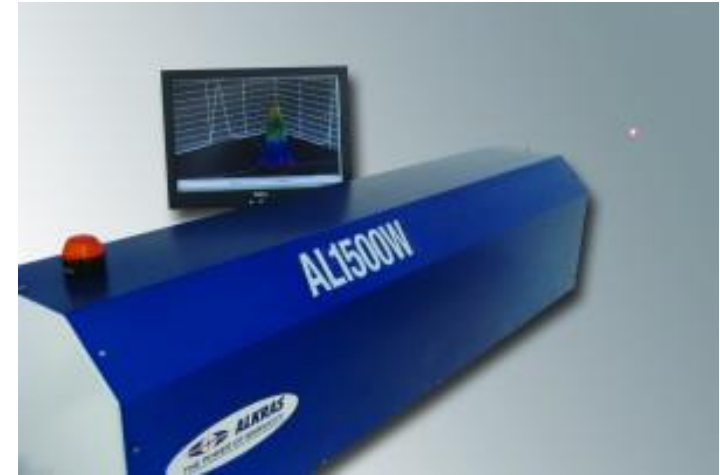
COMMERCIAL PRODUCTS

CO2 RF EXCITED Laser Technology

US 5,682,400/ US 6,198,762 B1/ US 6,636,545 B2

EUROPE: PCT/US2010/052879

RUSSIA: №2009138084



COMMERCIAL PRODUCTS

Laser Cutting System
was sold to SD, USA

Laser model: **AL1200W**

X-Y table: 48" x 96"

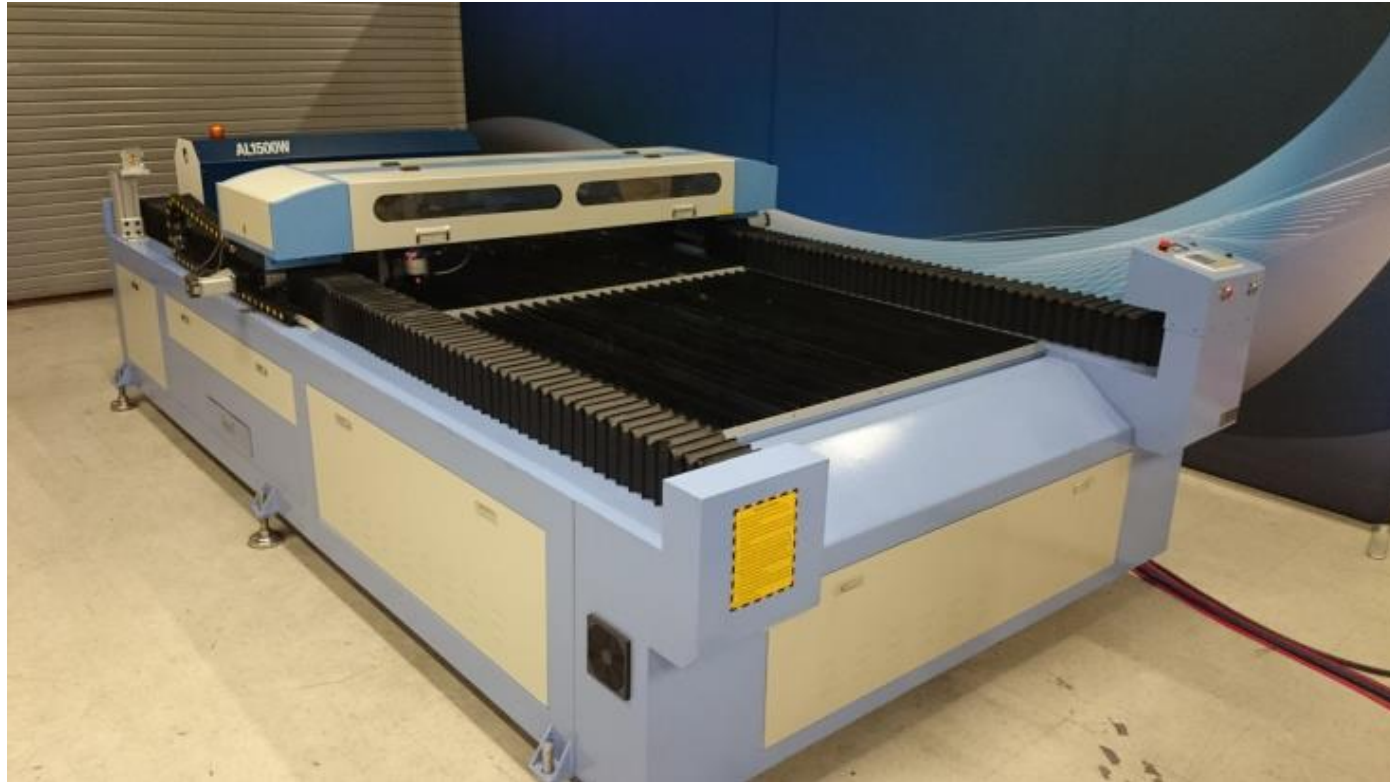
RF Power Supply

Chiller

Control system

Year Production: 2016

LS4X8-1200



COMMERCIAL PRODUCTS

Second Laser System was
sold to Alabama, USA

LS5X10-1500

Laser model: **AL1500W**

X-Y table: 60" x 120"

Tube Fixture up to 12"

Fume Extractor System

RF Power Supply

Chiller

Control system

Year Production: 2016

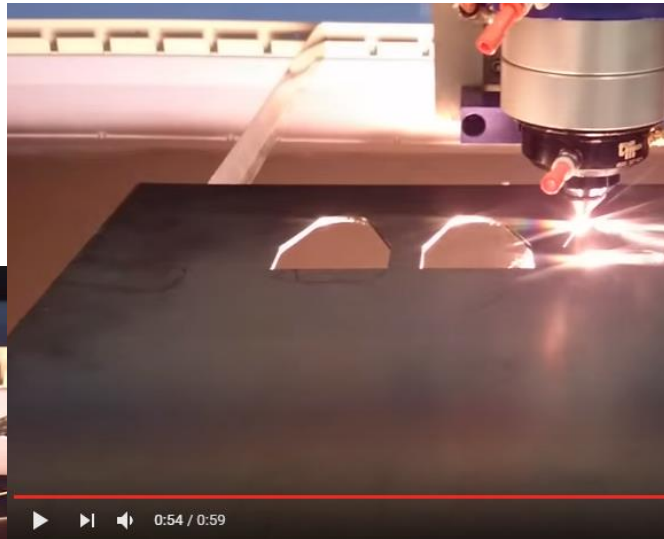


COMMERCIAL PRODUCTS

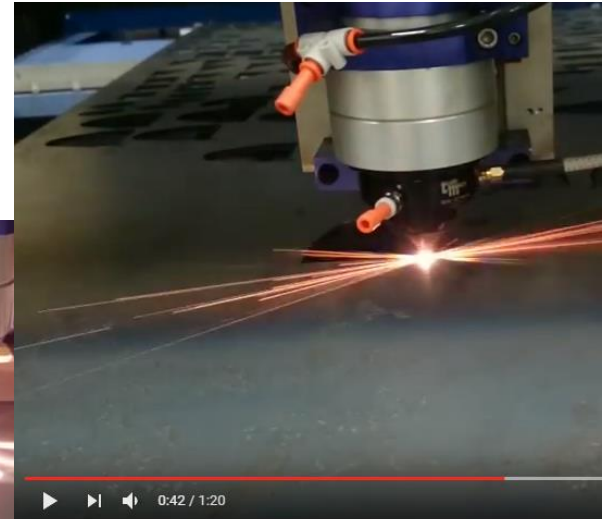
- <https://youtu.be/Eauzu3SCww4>
- https://youtu.be/W_Wpe2zyM3A
- <https://youtu.be/0EQ3cPlfwd4>



Alkras AL-1200W, stainless steel, 1,5 mm thickness, 8 m/min



Alkras AL-1200W, mild steel, 3,5 mm thickness, 3 m/min



Alkras AL-1200W, mild steel, 6 mm thickness, 2 m/min

Who owns Laser Technologies and Market today.

TRUMPF



Disk Lasers and Laser Systems \$2 Billion



COHERENT.

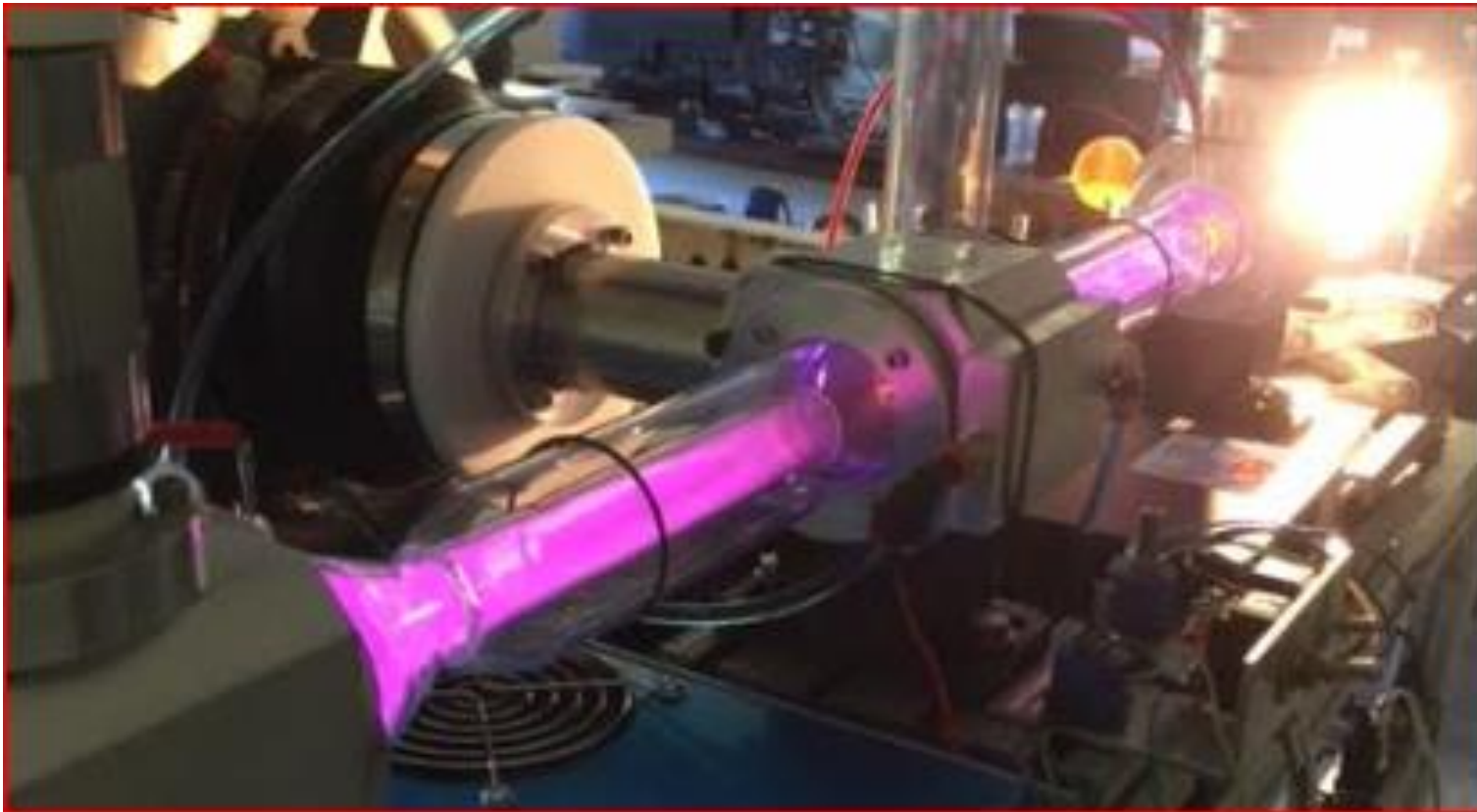
CO2, Fiber Lasers \$1Billion



Fiber Lasers and Laser Systems \$1.2 Billion

COMMERCIAL PRODUCTS

NEW ALKRAS MOLECULAR DC LASER TECHNOLOGY.



COMMERCIAL PRODUCTS

2kW lasers	Molecular	ALKRAS RF	Coherent CO2	Fiber
Efficiency %	20	12	9-10	25
Level of Back Reflection	Low	Low	Low	High (Danger)
Level of Eye Damage	Low	Low	Low	High (Danger)
Cost production \$ per watt	\$ 6	\$16	\$23	\$13
Repair Cost Estimation	Up to \$500	Up to \$5,000	Up to \$20,000	Up to \$35,000

Production / Price / Maintenance

Power of Simplicity



\$ Cost of Production
Price
Cost of Maintenance

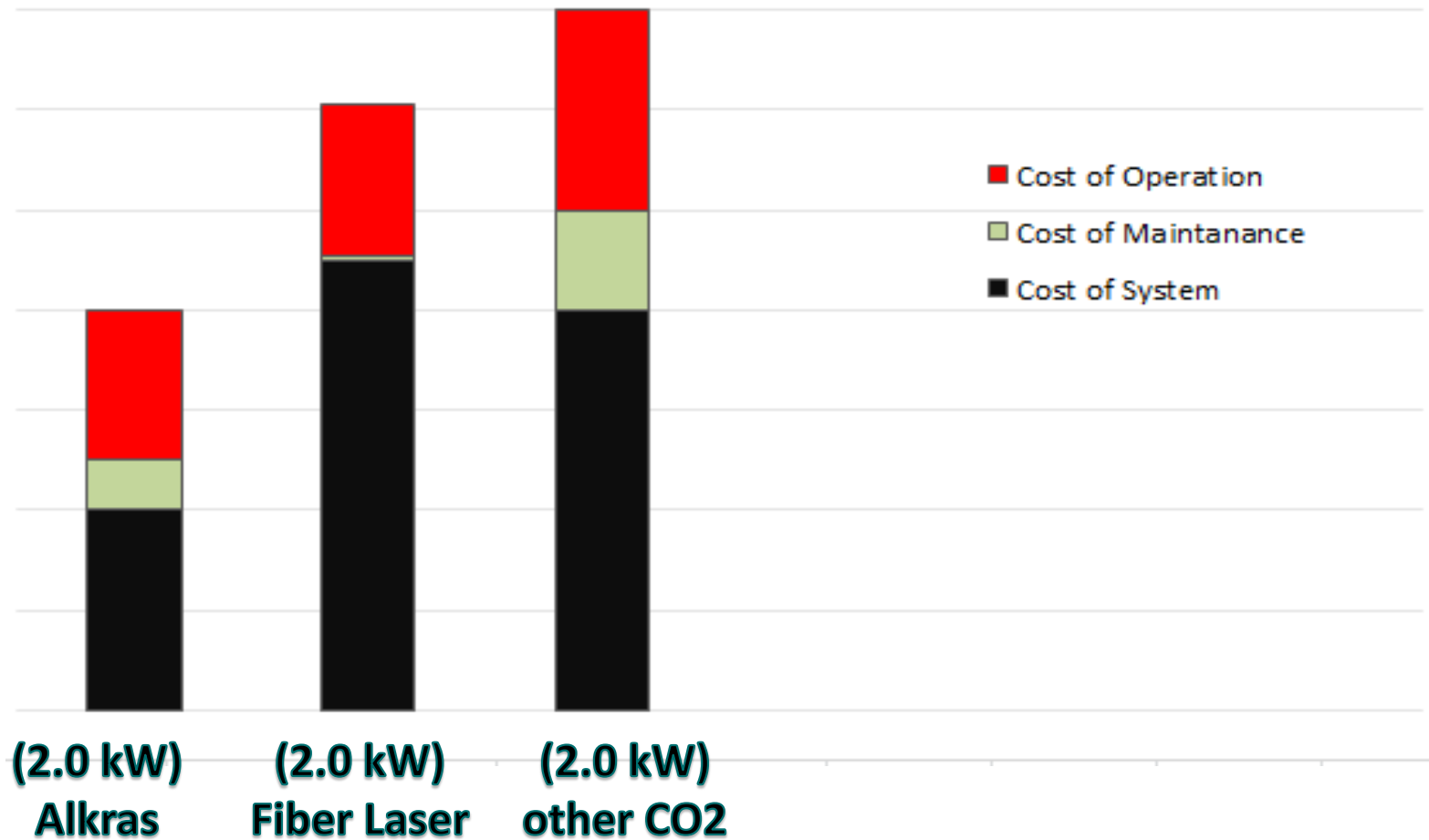
Super Complicated



Price
\$ Cost Production
&
Maintenance



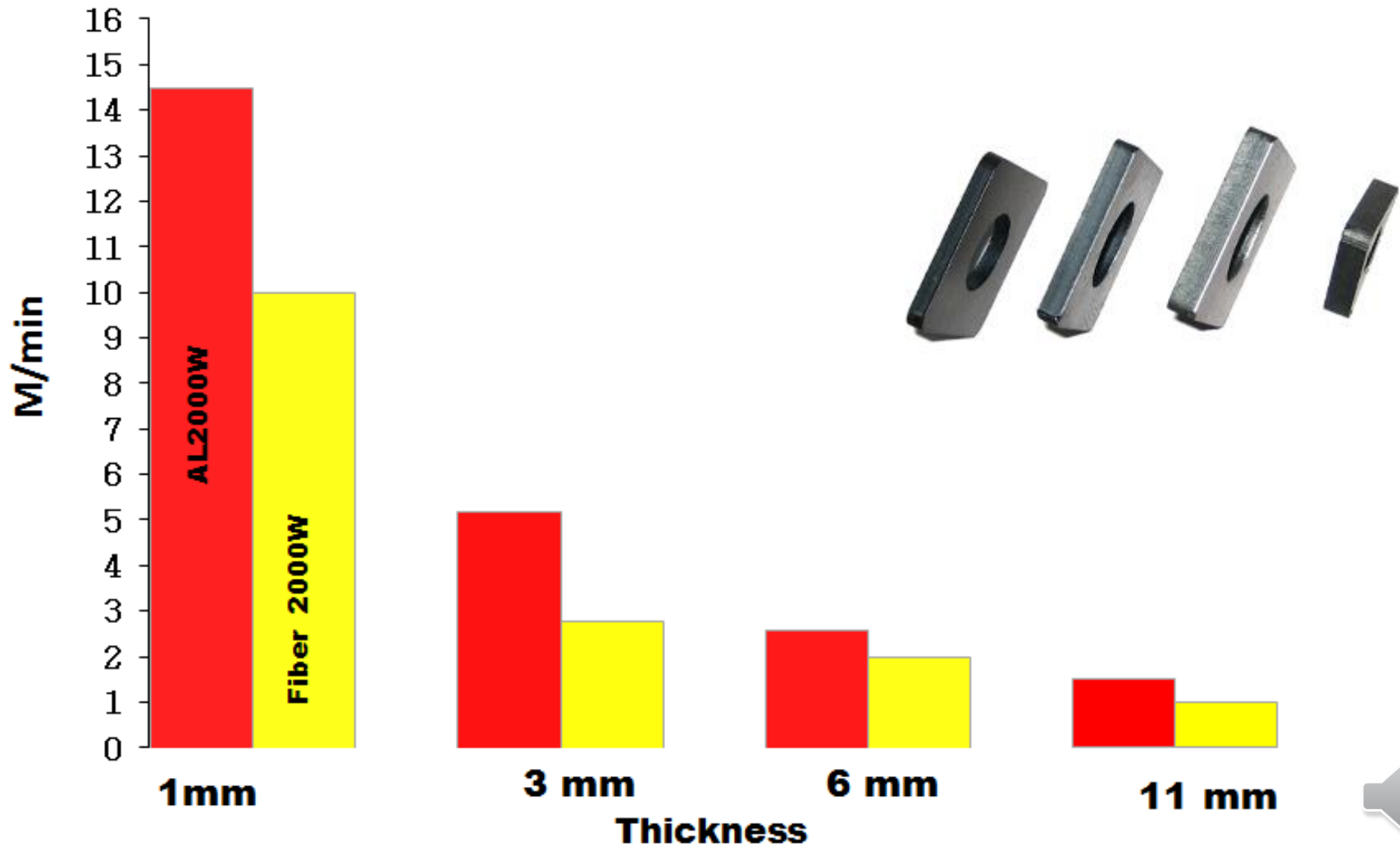
Total cost of Ownership outlook 5 years



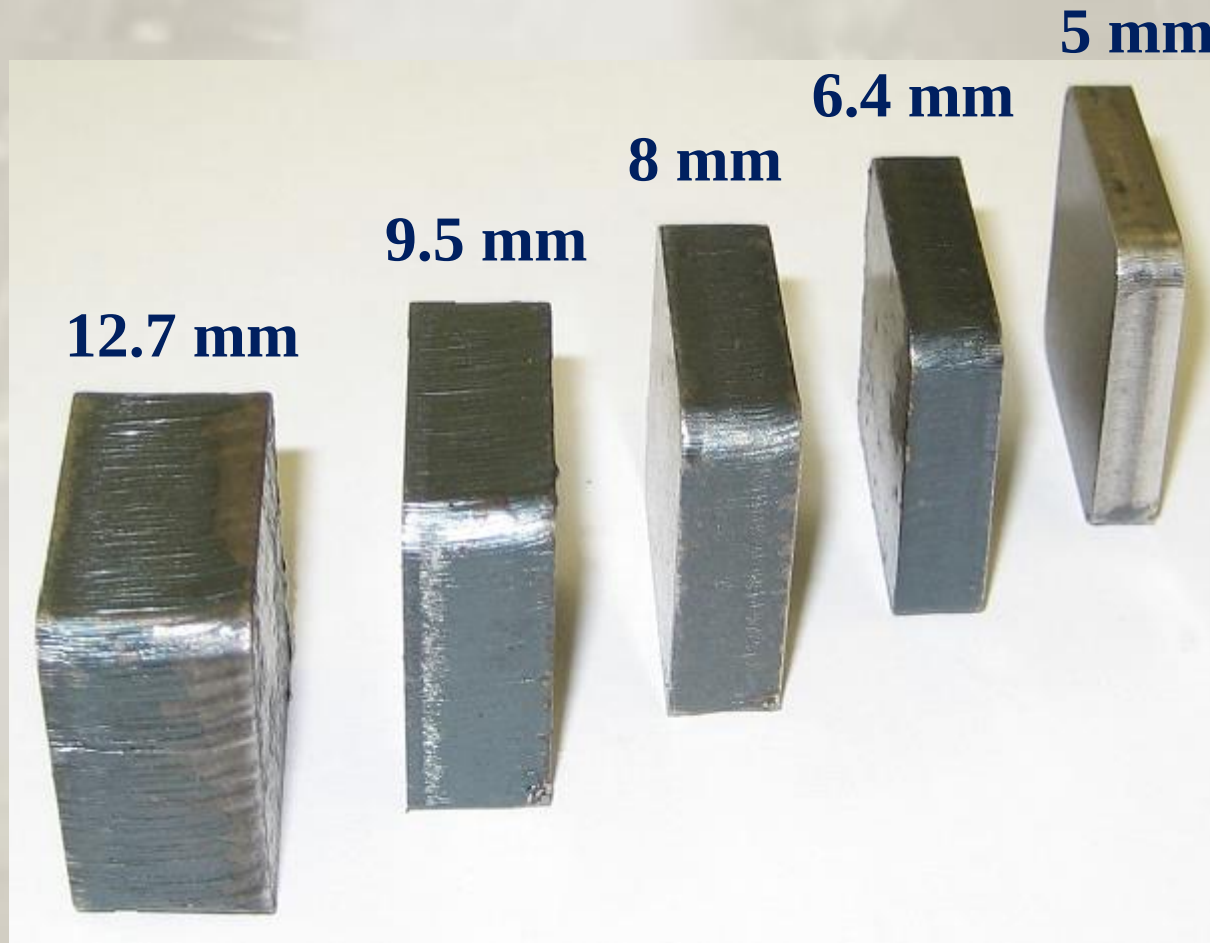
- The simplicity of Alkras technology is allowing to cut substantially the cost of production and to increase the margin of profit. The molecular laser technology is extremely low in cost to maintain.

20% **FASTER** Cutting Speed vs. Fiber Lasers

AL2000W & Fiber 2000W/ Carbon Steel - O₂ cutting



The samples were made with AL 1500W laser



High Speed Cutting have been achieved with “A” mode 

COMMERCIAL PRODUCTS

ADVANTAGES OF ALKRAS Laser Technologies.

- COST EFFICIENT to manufacture vs. any other Laser Technologies
- FASTER CUTTING of Mild Steel vs. Fiber lasers on 20-30%
- BETTER QUALITY edge cut of Stainless Steel vs. Fiber lasers
- EYE SAFER Wavelength vs. Fiber lasers
- EXCELLENT FOR NONMETALS material processing vs. Fiber lasers (only metals)
- LOW COST of MAINTENANCE

Profit and Losses for Molecular Lasers

2019

	Sold Units	Sales Price each	Revenue	Cost Of Production	Total of Cost	Profit
700watt	40	19,000	760,000	6,000	240,000	
1500watt	20	25,000	500,000	7,000	140,000	
3000watt	40	45,000	1,800,000	12,000	480,000	
	100		3,060,000		860,000	2,200,000

2020

700watt	70	19,000	\$1,330,000	6,000	\$420,000	
1500watt	40	25,000	\$1,000,000	7,000	\$280,000	
3000watt	60	45,000	\$2,700,000	12,000	\$720,000	
	170		\$5,030,000		\$1,420,000	\$3,610,000

2021

700watt	130	19,000	\$2,470,000	6,000	\$780,000	
1500watt	50	25,000	\$1,250,000	7,000	\$350,000	
3000watt	100	45,000	\$4,500,000	12,000	\$1,200,000	
	280		\$8,220,000		\$2,330,000	\$5,890,000

Total for 3 years

\$11,700,000