

Production Capabilities of ICL Group

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ICL Group Today

Key Indicators

- ICL KME CS was founded in 1991.
- New Computer Equipment Assembly Plant in Usady, Laishevo district, RT, was put into operation in 2013.
- Number of employees

more than 2,300

Volume of sales (2017)

9,5 bln rubles

Areas of Activity

- IT equipment manufacturing;
- IT outsourcing;
- Information security;
- Software development;
- ERP solutions implementation;

Companies of the Group are:

- ICL KME CS •
- ICL Techno (SEZ Innopolis)
- GDC Services (Kazan, Voronezh)
- ICL Services (Moscow)
- NPO VS (Kazan)
- ICL Engineering (Astrakhan)
- ICL ST (SEZ Innopolis)





ICL Techno

- ICL Techno is a Russian developer, manufacturer and supplier of computer equipment and solutions on its basis.
- ICL Techno is incorporated in ICL Group.
- Computer Equipment Assembly Plant in Usady, Laishevo district, RT, was put into operation in 2013.
- Since 2016, ICL Techno is an infrastructure resident of the Innopolis special economic zone (SEZ) located in Laishevo district, the Republic of Tatarstan.



Among TOP 3 Russia's largest IT companies in equipment manufacturing (according to RA Expert)







Computer Equipment Assembly Plant

ICL follows high production standards and quality assurance traditions of the first assembly workshops of Kazan Computer Factory producing more than 40% of the Soviet electronics delivered to 163 cities located in the Soviet Union, Czechoslovakia, Hungary, Bulgaria, India, and Mongolia.

- Design, development, manufacture, installation and technical support are ISO 9001-compliant
- Production capacity is up to 300,000 units per year
- Process-oriented training of products is up to 72 hours
- All required certificates for products are available
- Convenient location and public transport accessibility of the Plant:
 - 4 km from P239 federal highway
 - 11 km from Kazan International Airport
 - 200 meters from commuter rail stop
 - 20 minutes to Kazan city center



Computer Equipment Assembly Plant Features

Area of 4646 sq. m, 2 floors

1st floor – assembly floor, warehouse premises 2nd floor – office premises

- Concrete shop floor with anti dust coating
- Inflow exhaust ventilation
- Central lighting system
- Independent heating system
- Fire alarm system
- Telecommunications system, Internet, television
- Static discharge protection of equipment and facilities

Stack-conveyor production, 729,1 sq. m.

- Assembly management system
- Video surveillance system covering each workstation
- Automated remote test area
- Complex unit assembly and test area

Conveyor line:

- Belt conveyor: 20 m long, belt speed 15 m/min, automation rate 0,92
- Adjustable work surface: up to 90 mm high, tilt angle $-3^{\circ} \div 5^{\circ}$

Samples can be tested for:

- Hardware and software compatibility, jam resistance
- Industrial noise, electromagnetic interference and noise level
- Mechanical resistance, safety and reliability



In the area adjacent to cargo loading/unloading sides there is enough space for maneuvering and spotting as well as for layover

Cargo loading/unloading entrances:

- 4 loading entrances with automatic dock type gates and loading/unloading ramp (ramp height of 1200 mm)
- Dock leveller
 - cargo capacity up to 6 tons
 - operating platform misalignment from the ramp: 300 mm up and down

Warehouse equipment:

- Electric forklift (lifting height 8 m, cargo capacity up to 1 ton)
- Electric stacker (lifting height 3.5 m cargo capacity up to 1 ton)
- Pallet-packing machine
- Manual hydraulic elevator

Warehouse premises:

- Finished products storage area: 572.9 sq. m. and 152.7 sq. m.
- Stock storage area: 645.5 sq. m.
- Ceiling height: 9 m
- Floor: concrete
- Lighting: low energy light bulbs
- Lighting level:
 - in the storage area: 200 lx
 - in the cargo loading/unloading area: 300 lx
- Storage: pallet storage, shelf storage, three-tier shelf storage



Manufacturing

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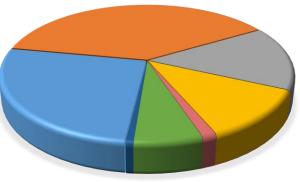
Since the date of putting the Computer Equipment Assembly Plant into operation, over 170,000 units of equipment have been produced.

Product output specification

- Laptops and mobile classes(46%)
- CPUs (27 %)

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- All-in-One PCs (11%)
- Thin Clients(9%)
- Tablets (5%)
- Servers (1%)
- Information Kiosks and payment stations (1%)



ICL – KME CS performs series assembly of the following equipment under its own brand:

- Laptops and All-in-one PCs;
- Personal computers and servers;
- Thin clients and tablets;
- Information kiosks and payment stations.



Personal Computers and All-in-One PCs







ICL PowerRAY

A high-speed and high-performance computer with Intel Core I7 processor. Intended for those who work with many multimedia applications that tend to be resource-intensive and require a more robust computer.



ICL SafeRAY

An All-in-One model. It combines the performance of ICL SafeRAY models and everything else required, such as a 21.5" or 23" monitor, stereo speakers and a webcam into one unit.

ICL BasicRAY

Basic model. An entry-level desktop computer ideal for document management, email and a variety of office applications.

ICL SafeRAY

A reliable high-performance computer for office work. Apart from basic office applications, it provides access to a diverse type of multimedia, and it is equipped with all interfaces and plugs to add on other devices.



Laptops and Tablets



RAYbook 15,6"

An office laptop with a 15.6" or 14" screen. Various configurations allow you to select the most optimal model.



RAYbook 13,3"

A stylish laptop with a 13.3" IPS Full HD or HD touch screen that can be transformed into a tablet.

Integrated processor has ultra-low heat dissipation and power consumption. Metal casing and slim design.



RAYpad 10,1"

A 10.1" tablet with a touch screen and a pluggable keyboard. It runs Windows operating system, and has all ports required.

Servers







TOWER-format teamRAY

Rack mount 1U-format teamRAY

Rack mount 2U-format teamRAY





microDataCenter (mDC)

ICL teamRAY microDataCenter (mDC) is a hardware and software suite, a micro data center that makes it possible to create a virtual IT infrastructure. It fits the definition of 'micro data center out of the box'.

Hardware Configuration:

- Cabinet 22U
- Server 1U (not less than 3 units)
- UPS (2 units)
- Switch (2 units)
- Surveillance camera
- Monitoring module
- Cabling systems
- Router (option)
- □ Wi-Fi equipment (option)
- □ KVM switch (option)
- □ Fire-extinguishing system (option)

Software:

- Basic operating system
- Distributed data storage system
- Virtualization management system



MicroDataCenter is designed to establish cloud infrastructure, virtual workstations, domain service, VoIP. It can be used as an application server and file storage.





- Solutions for education are based on home-made equipment for support of educational activities in all age categories, from nursery schools to universities.
- The solutions have been implemented and are actively used in the majority of regions of the Russian Federation

ICLab Mobile Classrooms

Solution includes:

- Teacher's laptop;
- Students' laptops / netbooks / tablets;
- Mobile trolley / case with a charging system and a built-in Wi-Fi hotspot;
- Software for the teacher, for teamwork, and also various applications for subjects being studied.
- Software for a language lab (option)

Solution Benefits :

- There is no need in a special classroom: ICLab can be easily moved into any room;
- ICLab can be integrated with any interactive media or laboratory equipment;
- Information support of any subject can be arranged;
- Possibility of connection to any external resources or remote digital educational resources.



Cross-functional Interactive System







Cross-functional Interactive System can be used as:

- Interactive whiteboard for demonstration of teaching material and interactive problem solving
- Interactive desk for teamwork in interactive environment
- **Tilted desk** for design work

Advantages of the solution:

- Power-driven fast repositioning of the desk surface is safe and not physically demanding
- Creation of a high quality image on a surface of up to 65 inches
- Possibility of teamwork at interactive desk involving up to 8 members
- Image handling with a stylus, hand or finger touch





Healthcare Solutions

ICLinux is a unique software suite, developed by ICL and certified by FSTEC of Russia that enables management of software solutions. It can be used for personal data processing at healthcare centers.

Solutions have been tested and approved and are now successfully used in medical and social institutions across Russia.



Medical Doctor's Secure Workspace

Solution Components:

- ThinRAY thin clients;
- Displays;
- Network equipment;
- Certified authentication tools;
- Server equipment based on Intel Xeon;
- ICLinux secure software suite certified by FSTEC of Russia for no undocumented features by inspection level 4;
- Channel encryption tool certified by FSTEC of Russia.



ICLinux Software Suite

- Installed encryption modules: VipNet Client, MagPro, SecretNet;
- Installed authentication modules: e-Token Pro Java, ruToken, Shipka;
- Supported protocols:

- Rdesktop v. 1.7.0
- FreeRDP v. 1.0.1
- Citrix ICA Client v. 10.6
- OpenSSH 4
- CUPS 1.4.8
- Firefox 13 (CSS and JavaScript)



Remote Health Monitoring System

Solution Components:

- Mobile automated workstation based on RayPad;
- Medical equipment for functional diagnostics:
 - glucometer;
 - blood pressure meter;
 - urine analyzer;
 - electronic spirograph;
 - ECG recorder;
- Automation System.

This solution is for:

- Rural health posts;
- Ambulance stations;
- Primary care physicians;
- Private medical centers;
- Home use;
- Schools;
- Pre-school facilities.





Information Terminal

Information Terminal can be used as:



- Information kiosk
- Payment station

Information Terminal includes:

- ergonomic temper-proof enclosure with a key lock;
- computer;
- 17 or 19-inch display with touch screen;
- barcode scanner (optional);
- card reader (optional);
- receipt printer (optional);
- UPS (optional);
- self-testing feature (optional);
- modem with external antenna, wi-fi (optional);
- speaker system (optional);
- Webcam (optional).

Retail Solutions

PayRAY payment stations

- Sheet metal enclosure with treated surface equipped with a safety lock
- **Computer**
- □ 15-inch colour LCD display with touch screen
- □ Thermal receipt printer
- Coin acceptor and coin dispenser (4 hoppers)
- Bill stacker (4 storage cassettes)
- Bill acceptor
- Switchboard (EFT)
- Barcode scanner
- Ethernet switch





Key Customers

Regional and federal government, state and municipal agencies

Commercial organizations, international companies, system integrators



Ministry of Education of the Republic of Tatarstan



Ministry of Justice

of the Republic of Tatarstan



Ministry of Healthcare









Ministry of Defence



Police

Ministry of Culture of the Republic of Tatarstan





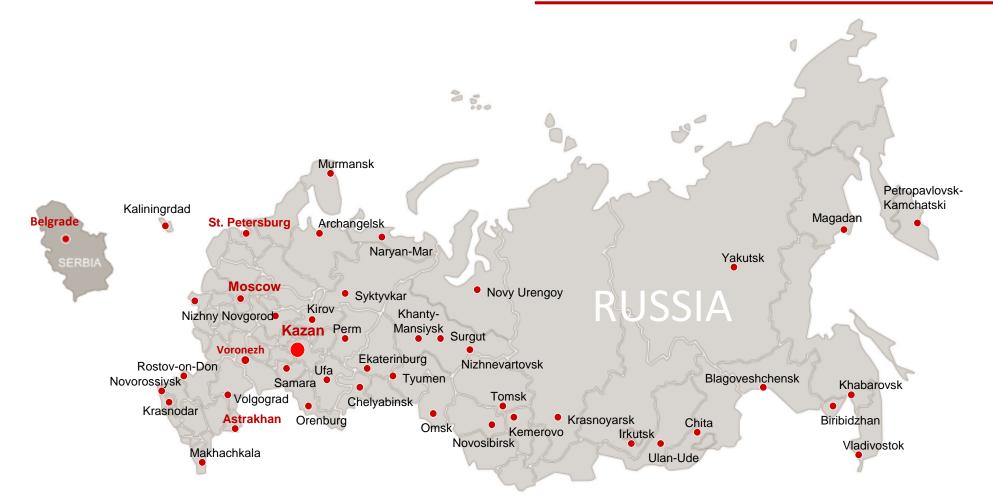








Maintenance



- Extensive network of service centers across Russia
- Over 20 authorizations by leading global manufacturers



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