



Joint stock company «Research and design institute of urea and organic synthesis products» (JSC «NIIK»)

# Why partner with NIIK?





## NIIK remains a leader in a national engineering sector

- More than 60 years of experience in mineral fertilizers market
- More than 150 production units already built
- More than 500 inventions
- Company' s annual turnover RUB 6,5 bil (2015)







# **BUSINESS GEOGRAPHY**

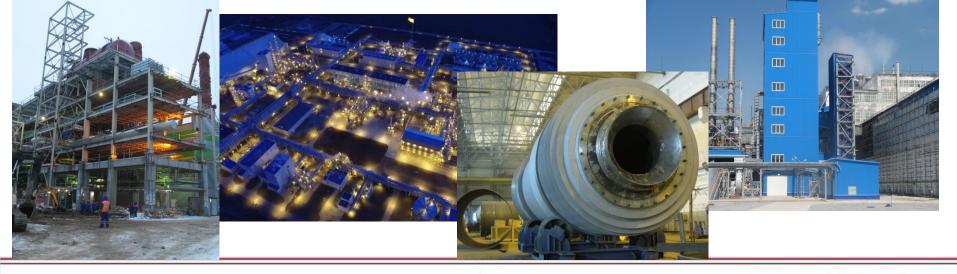
### Our partners:

- Mitsubishi Heavy Industries,
- Toyo Engineering Corporation,
- ➢ Linde AG,
- Saipem S.p.A,
- Stamicarbon BV,
- Casale SA,
- > De Dietrich Process Systems GmbH,
- > Chemoproject Nitrogen AS,
- HaldorTopsoe A/S,
- Maire Tecnimont SpA,
- AIR LIQUIDE Global E&C Solutions

### Our customers :

- EuroChem,
- UralChem,
- PhosAgro
- Ammonii,
- Acron,
- Kuibyshev Azot,
- TogliattiAzot,
- OSTCHEM group,
- Grodno Azot,
- KazAzot,
- Gasprom Neftehim Salavat,
- ShchekinoAzot,
- Metafrax etc.







# International cooperation

NIIK is a member of international fertilizer associations-International Fertilizer Industry Association (IFA), Arab Fertilizer Association (AFA), Fertilizer Association of India (FAI).



The Fertiliser Association of India











# We offer our clients the full range of services



- > Technology development
- Project engineering
- Packaged delivery of equipment
- DCS, simulators
- Industrial safety assessment and

diagnostic

- Test center
- Project management
- Capital construction

NIIK includes departments covering engineering, technological and project management fields.

<u>Technology and process department –</u> is responsible for developing ideas and technologies, know-hows, equipment design etc

- <u>Design and engineering department –</u> is responsible for project management and design documentation development
- Procurement and turn- key projects- is responsible for procurement of materials and equipment





# Our patented technologies

- > UREA TECHNOLOGIES
- > MELAMINE TECHNOLOGIES
- > NEW TYPES OF FERTILIZERS
- > ADVANCED REPAIR METHODOLOGIES
- ECO FRIENDLY TECHNOLOGIES, BENEFITING THE EARTH











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# AUTHORIZATIONS AND APPROVALS REQUIRED FOR DESIGNING, CONSTRUCTION AND EXPERT EXAMINATION OF INDUSTRIAL SAFETY

NIIK is a member of:

Self-regulatory non-profit organization «Neftegazohimproekt»

Self-regulatory non-profit organization «Nizhny Novgorod builders Association»

Self-regulatory non-profit organization «Expertprombezopasnost»







# **Russian Leader Of Quality**

**2010** – NIIK has become a winner of the Second Annual National Competition in the field of quality management.

**2012** – General Director of NIIK Mr Oleg Kostin was awarded the title of Russian Leader of Quality

NIIK gained chartered status from Chartered Quality Institute, a grade of CQI membership is held by General Director Mr Oleg Kostin.





### Human resources

Total number of employees~650 persons Average age of the staff– 42 years Average work experience of the staff– 7 years

personnel qualification

> qualification required for members of self-regulatory organizations

> necessary trainings to gain additional experience

> technical knowledge and skills training







Licensed up-to-date soft wear for design, engineering and scientific research



Office system - more than 500 licenses

CAD system – more than 170 licenses

AVEVA complex for 3D design – more than 30 workstations

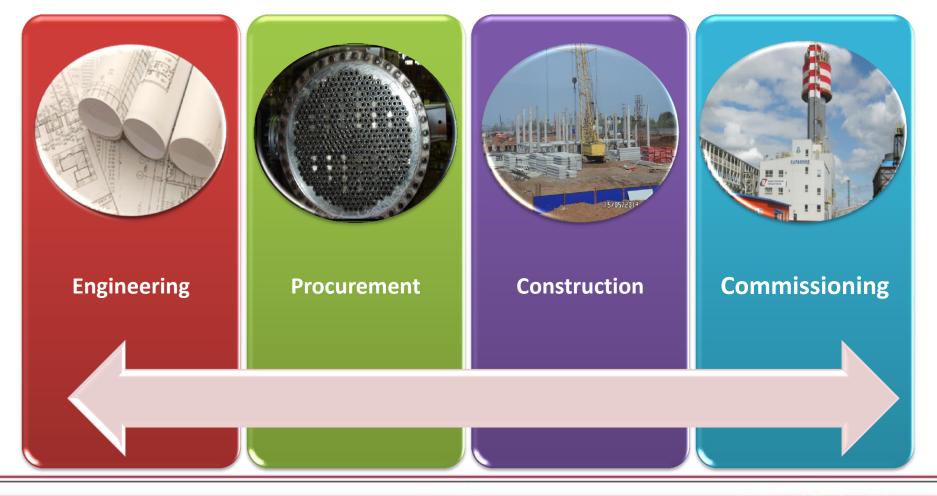
Calculation programmes – more than 80 licenses

Every work station is equipped with modern tools meeting all necessary requirements for engineering and research working environment.





### **Project management on EPC basis**





### NIIK'S EXPERIENCE IN ADAPTATION OF FOREIGN LICENSOR'S TECHNOLOGIES



JSC «Cherepovetsky Azot» (Cherepovets, Russia) Ammonia unit, capacity 2200 t/d in cooperation with Mitsubishi Heavy Industries (Japan)

#### LLC Baltic Urea Plant (Leningrad region, Russia) Ammonia unit with capacity 3000 TPD, urea unit with capacity 3535 TPD in

cooperation with Saipem SpA (Italy)

KuibyshevAzot (Togliatti, Russia) Ammonia unit, capacity 1340 TPD in cooperation with Linde AG (Germany)

Cherepovetsky Azot (Cherepovets, Russia) Urea unit, capacity 1500 TPD in cooperation with «Chemoproject Nitrogen AS» (Czezh Repiblic)

### NevAzot (EuroChem) (Nevinnomyssk, Russia)

Melamine unit, capacity 50 000 TPY in cooperation with «Lurgi» (Germany)

JSC «Ammony» (Mendeleevsk, Tatarstan, Russia) Chemical complex Methanol/Ammonia/Urea in cooperation with Mitsubishi Heavy Industries (Japan)

TogliattiAzot (Togliatti, Russia) Urea unit, 2200 TPD in cooperation with Casale SA

JSC «Eurochem» (Novomoskovsk, Russia) Revamp of urea unit in cooperation with Casale SA

JSC «Azot» (Cherkassy, Ukraine) in cooperation with Casale SA

#### Salavatnefteorgsintez (Salavat, Russia)

Urea granulation unit, capacity 1400 MTPD in cooperation with Toyo Engineering Corporation (Japan)

JSC «Schekinoazot» (Schekino, Russia) Hydrogen unit in cooperation with Haldor Topsoe A/S (Denmark)

CJSK «Korund-Cyan» (Dzerzhinsk, Russia) Sodium cyanide unit in cooperation with EPC (Germany)

