RUSSIAN TITANIUM MARKET

October 2013
International Titanium Association
TITANIUM 2013
Las Vegas, Nevada
RUSSIAN MARKET DEMAND IN 2012

- ENGINE BUILDING: 32%
- AIRCRAFT BUILDING: 32%
- SHIPBUILDING: 19%
- POWER ENGINEERING: 4%
- NON-FERROUS METALLS, EQUIPMENT, CHEMICAL INDUSTRY: 9%
- OTHERS: 5%
OAK (UNITED AIRCRAFT CORPORATION)

• RAMP-UP OF SU-35 AND SU-34 SERIAL PRODUCTION
• DEVELOPMENT AND START-UP INTO SERIAL PRODUCTION OF T-50 - AIRCRAFT OF THE 5TH GENERATION
• RAMP-UP OF SERIAL PRODUCTION OF REGIONAL AIRCRAFTS - AN-148, SSJ-100
• DEVELOPMENT AND START-UP INTO SERIAL PRODUCTION OF CARGO AIRCRAFT - IL-476
• DEVELOPMENT OF NEW SINGLE-AISLE SHORT-HAUL AIRCRAFT - MS-21

ODK (UNITED ENGINE CORPORATION)

• RAMP-UP OF SAM-146 ENGINE SERIAL PRODUCTION
• DEVELOPMENT OF THE ADVANCED ENGINE FAMILY WITH THE THRUST OF 9-18 T FOR CIVIL AVIATION – PD-14, FOR MS-21 AIRCRAFT
• DEVELOPMENT OF THE ADVANCED ENGINE FAMILY FOR MILITARY AVIATION (117-S)
• DEVELOPMENT OF INHOUSE ENGINES FOR HELICOPTERS AT KMPO, JSC KLIMOV AND JSC MMP NAMED AFTER V.V. CHERNYSHEV

RUSSIAN HELICOPTERS

• KA-62 ARMED HELICOPTER PRODUCED BY ARSENIEV AVIATION COMPANY (AAK) PROGRESS,
• KA-32 MULTIPURPOSE HELICOPTER PRODUCED BY KUMAPP (KUMERTAU FACILITY)
• MI-38 PASSENGER AIRCRAFT PRODUCED BY KVZ CAPABLE TO TRANSFER UP TO 30 PASSENGERS
• MI-28N ATTACK HELICOPTER, “NIGHT HUNTER”, PRODUCED BY ROSTVERTOL
• MI-117 TRANSPORT HELICOPTER PRODUCED BY KVZ
• DEVELOPMENT OF KA-92 AND MI-X1 HELICOPTER PROJECTS
AEROSPACE MARKET DEMAND IS EXPECTED TO INCREASE MORE THAN 2.5 TIMES, UP TO 9500 TON BY 2018, FROM 3750 TON IN 2010
SHIPBUILDING: CONSTRUCTION OF SHIPS OF DIFFERENT TYPES, SUBMARINES AND OIL PLATFORMS

NUCLEAR POWER INDUSTRY: MODERNIZATION OF THE EXISTING NUCLEAR POWER PLANTS, COMPLETION OF CONSTRUCTION AND NEW PROJECTS

CHEMICAL INDUSTRY: PRODUCTION OF SULPHATES, TEREPTHALIC ACID, CHLORINE AND CHLORINE COMPOUNDS, CHEMICAL FERTILIZERS

NONFERROUS INDUSTRY: INCREASING DEMAND FOR Cu, Au, Ni, Co WHICH REQUIRE TITANIUM FOR PRODUCTION

OIL-AND-GAS INDUSTRY: FITTINGS, FLANGES, PIPING, HIGH-PRESSURE VESSELS, HEAT EXCHANGERS, STOP VALVES, LIQUEFIED NATURAL GAS
UNITED SHIPBUILDING CORPORATION (OSK) PROJECTS

CIVIL SHIPBUILDING – CONSTRUCTION OF OIL PLATFORMS, OFFSHORE ENGINEERING EQUIPMENT, SPECIALIZED ICE SHIPS FOR ARCTIC REGION EXPLORATION, SHIPS FOR INLAND WATERWAYS.

MILITARY SHIPBUILDING – CONSTRUCTION OF SUBMARINES, DEVELOPMENT OF MINI-SUBMARINES, CONSTRUCTION OF MISSILE-LAUNCHING SHIPS ND GUARD-SHIPS, FRIGATES FOR RUSSIAN NAVAL FORCES