

OFB-RUSSIA DEFENCE COOPERATION

Russia has been extending technical assistance in all spheres of activities for indigenised production of main battle tanks and infantry combat vehicles



SC Bajpai, IOFS
DGOF and Chairman, OFB

SC Bajpai took over charge of DGOF and Chairman, Ordnance Factory Board (OFB) on February 1, 2017. He joined Indian Ordnance Factories' organisation in 1979. He possesses an MTech in mechanical engineering from IIT Kanpur and also holds a post graduate diploma in management from MDI, Gurgaon. Bajpai went to Cranfield University, United Kingdom for a Masters Degree in advance manufacturing technology and also made a sojourn to Russia for training in tank overhauling. He is a distinguished fellow of the National Defence College.



BMP-II Sarath Vehicle

India-Russia bilateral relations have always been warm and symbiotic. In a nutshell, there exists a strong defence cooperation between the two countries based on a long cherished friendship and mutual understanding over decades.

Over the years, cooperation in the military technical sphere has evolved from a purely buyer-seller relationship to joint research, design development and production of state-of-the-art military platforms.

Since the inception of Russian designed armour vehicles and battle tanks in the Indian Army, Heavy Vehicles Factory (HVF) Avadi, a unit of OFB, has been manufacturing the main battle tanks and its variants for the Indian Army. For more

than three decades, the Russian side has been extending technical assistance in all spheres of activities for indigenised production of the tanks.

Under licence agreement for manufacture of T-72 tank, the first 'Ajeya' (T-72 tank) was rolled out on in January 1988. Since then, 'Ajeya' tanks have been produced successfully and inducted in the Indian Army. The overhauling facility of T-72 tanks was also established at HVF during 1995-96. The first overhauled T-72 tank was delivered in 1996.

In 2001, the Indian side was accorded a licence agreement for manufacture of state-of-the-art third-generation T-90 tank of Russian origin. T-90 tank involves many new technologies in terms of

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mobility, protection, fighting capabilities, safety and communication. The tank is equipped with 125 mm smoothbore gun, 12.7 mm anti-aircraft machine gun and 7.62 mm co-axial machine gun, supported with high accuracy, sighting systems and automatic loader ensuring high rate of fire power and has the capability to fire guided missiles in addition to conventional ammunition using the same main gun.

The integrated fire control systems consist of gunner's sight, guided weapon system and ballistic computer facilitates accurate firing. Added features like built-in explosive reactive armour and nuclear-biological-chemical (NBC) protection will save the crew and equipment from chemical, biological and radioactive attacks. Thermal imagers facilitate night fighting capability and radio communication sets cater to upgraded communication. The fire control systems and sighting systems of T-72 and T-90 tanks based on Russian transfer of technology (ToT) are being manufactured at Opto-Electronics Factory, Dehradun.

Consequently, OFB rolled out the first T-90 Bhisma tank assembled with Russian imported aggregates (SKD) in January 2004 and rolled out the first indigenous T-90 tank in August 2009 with Russian technical assistance. Russian side has extended necessary cooperation to indigenise the tank production. All the technological issues are mutually sorted out through sub-group on land systems of India-Russia



T-90 Bhisma tank

inter governmental commission meeting held twice a year for smooth transfer of technology and indigenisation of the production process.

By virtue of knowledge and experience, OFB is today ready to accept any challenge put forward in accordance with the need of the Indian Army. To achieve reliability of the product, stringent quality parameters are adhered to so as to establish perfection during the production of various components required for assembly of the tanks.

It is pertinent to mention that OFB's unit at Medak received complete ToT from the erstwhile USSR including all the technological documents, specifications, etc and also total support was extended by Russian teams for establishing the production of BMP vehicles indigenously in India.

In the domain of ammunition, 125 mm HE & HEAT – both fired from T-72 and T-90 tanks, are being manufactured by OFB with Russian collaboration. 130 mm FVC and RVC ammunition, fired from artillery gun 130 Fd M-46, is also a product of OFB-Russia cooperation.

OFB: COMPLETE COMBAT SOLUTION PROVIDER FOR INDIA'S ARMED FORCES

Indian Ordnance Factories have made their presence felt for over 200 years in the history of India's defence sector. In synergy with 'Make in India' concept, the Ordnance Factory Board (OFB), functioning under the aegis of the Department of Defence Production, MoD has a long term perspective plan so as to remain the vanguard of India's defence production.

Being the 'Fourth Pillar of India's Defence', OFB is persistently essaying its role through the trajectory of time and quality. However, in the present period of globalisation, the Ordnance Factories have a bigger challenge to encounter. The active involvement of the private sector in defence production creates an ambience of competitive engagement. Nevertheless, with the government's laudable policy of 'Make in India' unleashed, this competitive atmosphere will be beneficial to further improve the framework of Ordnance Factories.