

Testing Facilities at Advanced Weapons and Equipment India Limited (AWEIL) Units

	Nomenclature	Location
Mechanical Test	Micro Vickers Hardness Test of ferrous & non-ferrous metals	GSF Cossipore
	Vickers Hardness Test of ferrous & non-ferrous metals	OFC, FGK & SAF Kanpur
		GSF Cossipore & OF Trichy
	Rockwell Hardness Test of ferrous & non-ferrous metals	OFC, FGK & SAF Kanpur, GCF Jabalpur
		GSF Cossipore, OFPKR Korwa & OF Trichy
	Brinell Hardness Test of ferrous & non-ferrous metals	OFC, FGK & SAF Kanpur, GCF Jabalpur
		GSF Cossipore, OFPKR Korwa , RFI Ichapur & OF Trichy
	Tensile Test of ferrous & non-ferrous metals	OFC & SAF Kanpur, GCF Jabalpur
		GSF Cossipore, OFPKR Korwa , RFI Ichapur & OF Trichy
	Tensile Test (small diameter wires or thin sheet samples) of ferrous & non-ferrous metals	GSF Cossipore
	Spring load test of helical spring	OFC Kanpur,
		GSF Cossipore, OFPKR Korwa & OF Trichy
	Izod impact test of ferrous alloys	OFC & FGK Kanpur, GCF Jabalpur,
		GSF Cossipore, OFPKR Korwa & OF Trichy
	Charpy U notch impact test at room temperature of ferrous alloys	GSF Cossipore
	U Notch Charpy at ambient to -50°C	OFC & FGK Kanpur
	V Notch Charpy @ambient to -40°C	OFC & FGK Kanpur
	Charpy V notch impact test at room temperature of ferrous alloys	GSF Cossipore
	Fracture toughness KIC(FTT)	FGK Kanpur
	Torsional (Spring)	OFC Kanpur,
GSF Cossipore, OFPKR Korwa & OF Trichy		
Magnetic Crack Detction	OFPKR Korwa	
Surface Roughness Test	SAF Kanpur	
Mechanical-Textile Materials	OFC Kanpur	

Chemical Test	Chemical analysis of Aluminium and its alloys by Optical Emission Spectrometer	OFC Kanpur, GSF Cossipore & RFI Ichapur
	Chemical analysis of Copper and its alloys by Optical Emission Spectrometer	OFC Kanpur & GSF Cossipore
	Chemical analysis of Stainless Steel by Optical Emission Spectrometer	OFC Kanpur, GCF Jabalpur GSF Cossipore, RFI Ichapur
	Chemical analysis of Tool Steel by Optical Emission Spectrometer	GSF Cossipore
	Chemical Wet Anallasys	OFC& SAF Kanpur, GCF Jabalpur
	Coating	OFC Kanpur
	Paint Test	OFC, FGK & SAF Kanpur, GCF Jabalpur
		GSF Cossipore, OFPKR Korwa , RFI Ichapur & OF Trichy
	Total oxide, Sulphate, Hexa valent, tri-valent, iron content in Electro Plating Solution	SAF Kanpur
	pH, Normality, Iron content in Phosphating Solution	SAF Kanpur
	pH ,Electrical Conductivity, TDS, Chloride in DM Water	SAF Kanpur
	Resistance testing of Personel Protective Equipment (PPE Kits) materials by Synthetic Blood Penetration	SAF Kanpur
	Resistance testing of medical Face Masks by Synthetic Blood penetration	SAF Kanpur
	Metallography	Average grain size of copper alloys
Peripheral Grain Growth in Aluminium alloys		GSF Cossipore
Grain Size		OFC & FGK Kanpur
Case Depth		OFC, FGK Kanpur & OF Trichy
Microstructure		OFC & FGK Kanpur
NMIR(Non Metallic Inclusion Rating)		OFC, SAF & FGK Kanpur
Paint Test		OFC, FGK & SAF Kanpur, GCF Jabalpur
		GSF Cossipore, OFPKR Korwa , RFI Ichapur & OF Trichy
NMIR & Macro Etch Test		SAF Kanpur

Non Destructive Testing	Ultrasonic Test (UT)	OFC & FGK Kanpur and GCF Jabalpur
	Magnetic Particle Testing	OFC & FGK Kanpur and GCF Jabalpur
	Radiography Test (RT)	OFC Kanpur & GCF Jabalpur