



SKILL SECTORS



MANUFACTURING TECHNOLOGY



CONSTRUCTION TECHNOLOGY



INDUSTRIAL AUTOMATION



AUTOMOTIVE TECHNOLOGY



ENERGY MANAGEMENT

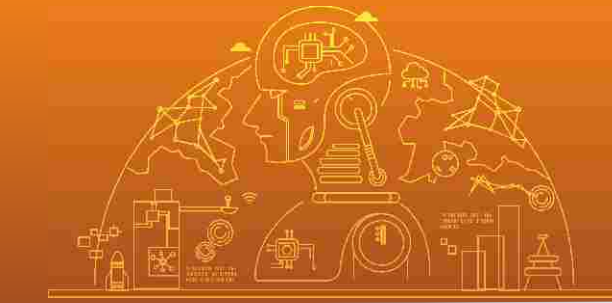


WELDING TECHNOLOGY



INFORMATION TECHNOLOGY

Government of Karnataka considers skill development to be an important aspect of nation building exercise and has established Society for **Karnataka German Multi Skill Development Centre (KGMSDC)** to kick start state-of-the-art **Karnataka German Technical Training Institutes (KGTTIs)** at Bengaluru, Kalaburagi, Belagavi, Mangaluru and Hubballi with the technical support of **Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) - International Services, Germany**. With the existing training centres and the promise of many more to come, KGTTIs are sure to enhance employability and increase the quality of work all across the nation. KGTTIs, with its world-class vocational training infrastructure has set a benchmark in skill development. The focus is to offer skill-specific training that will help students find excellent job opportunities in the global workplace and encourage entrepreneurship amongst the youth.



KARNATAKA GERMAN MULTI SKILL DEVELOPMENT CENTRE

CoE Building, Kaushalya Bhavan Campus, Bannerughatta Road,
Dairy Circle, Bengaluru - 560 029
Tel: 080 - 26649797 | js@kgmsdc.com

KGTTI BENGALURU

Behind Kennametal, NH 4
Tumkur Road, Manjunatha Nagar, Bagalkunte, Nagasandra
Bengaluru - 560 073 | Tel: 080 - 26642526
director.bengaluru@kgtti.com

KGTTI KALABURAGI

Near Chandrashekhara Patil Stadium, Behind BEO Office,
Rajapur Road, Kalaburagi - 585 103
Tel: 08472 - 252111 | director.kalburgi@kgtti.com

KGTTI BELAGAVI

Government ITI (W) Building, Udyambag, Belagavi - 590 008
Tel: 0831 - 2441216 | director.belagavi@kgtti.com

KGTTI MANGALURU

2nd Floor, Government ITI(W), Airport Road,
Konchady Post, Mangaluru - 575 008
Tel: 0824 - 2211477 | director.mangalore@kgtti.com

KGTTI HUBBALLI

Government ITI Campus, CoE Building, Vidyanagar,
Hubballi - 580 021 | Tel: 0836 - 4257003
director.hubballi@kgtti.com

KGTTI EXTENSION CENTER - GOWRIBIDANUR

Warehouse Building, B H Road,
Gowribidanur - 561208

PROJECT PROMOTED BY



समसेवा जगसे
GOVERNMENT
OF INDIA



GOVERNMENT
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TECHNICAL
PARTNER

KGMSDC.COM

KGTTI.COM

EXCELLENCE THROUGH SKILLS

ADVANCED WELDING



**KARNATAKA GERMAN
TECHNICAL TRAINING
INSTITUTE**

Promoted by society for Karnataka German Multi Skill Development
Centre (KGMSDC)
(A Government of Karnataka undertaking)



The welding programs at Karnataka German Technical Training Institute (KGTI) are designed to meet the expanding needs of industries that utilize welding.

The institute is equipped with excellent infrastructure along with the state-of-the-art welding simulator to expose students to various courses in welding technologies. KGTI adopts industry ready technologies with a view to bridge the gap between the academics and the industry.

Welding is a widely used skill, offering careers in fabrication and construction industries as well as self-employment in small scale enterprises.

Shielded Metal Arc Welding (SMAW)

Also known as Manual Metal Arc Welding (MMAW). SMAW is one of the world's most popular welding process which is considered as the mother of all welding processes. It uses a consumable flux covered electrode to weld metals such as carbon steels, HSLA steels, cast iron, stainless steel and their alloys. SMAW is predominantly used in construction maintenance and in fabrications.

INDUSTRY PARTNER:



Gas Tungsten Arc Welding (GTAW) or TIG

GTAW or Tungsten Inert Gas Welding (TIG) is an arc welding process that normally uses a non-consumable tungsten electrode, with the help of a shielded gas (ARGON, HELIUM, NITROGEN) and a filler metal. The process can be used to weld metals such as Aluminum, Magnesium, Copper, Stainless Steel, Nickel, Inconel, Carbon Steels, jethethe and their Alloys. It provides the operator with greater control over the weld to achieve stronger, higher quality welds.

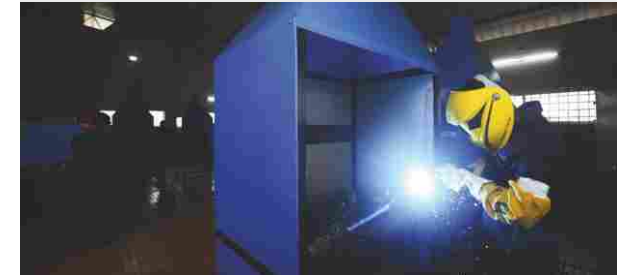
Gas Metal Arc Welding (GMAW) or MIG / MAG

GMAW or Metal Inert Gas Welding (MIG) or Metal Active Gas Welding (MAG) uses bare electrode as a consumable with an envelope of shielding gas (CARBON DIOXIDE, ARGON, HELIUM). The process is suitable for welding both thin and thick gauge materials. The process is suitable to weld metals like carbon and alloy steels, Aluminum alloys, Stainless Steel, Copper and Nickel alloys etc. GMAW is the fastest welding process which is employed in robotic, automatic and semi-automatic welding processes for having stronger and quality welds. It is extensively used in manufacturing of pressure vessels, automobiles and ship building Industries.



JOB OPPORTUNITIES

Welding is considered an essential skill that is necessary in many industries worldwide. Welding is essential in industrial processes, construction, ship- and boat-building, auto manufacturing and repair, agricultural equipment, industrial maintenance and repair, oil and gas pipelines and a host of other industries.



COURSES OFFERED

SHIELDED METAL ARC WELDING (SMAW)

GAS TUNGSTEN ARC WELDING (GTAW)

GAS METAL ARC WELDING (GMAW)

OXY ACETYLENE CUTTING (OAC)

PLASMA ARC WELDING (PAC)

PIPE WELDING (6G)

COURSE FEATURES

Welding and cutting processes.

Safety.

Oxyfuel gas welding positions: flat, horizontal, vertical, and overhead positions.

Shielded metal arc welding positions: flat, horizontal, vertical and overhead positions.

Gas metal arc welding positions: flat, horizontal, vertical and overhead positions.

Gas tungsten arc welding positions: flat horizontal, vertical and overhead positions.

Welding symbols.

Inspecting and testing of welds.