

GITACE

ADHESIVES TECHNOLOGY

Get involved tight, with GITACE

GITACE Hot Melt Adhesive Technologies;
A Combination of
Knowledge
Quality
State of the art processes

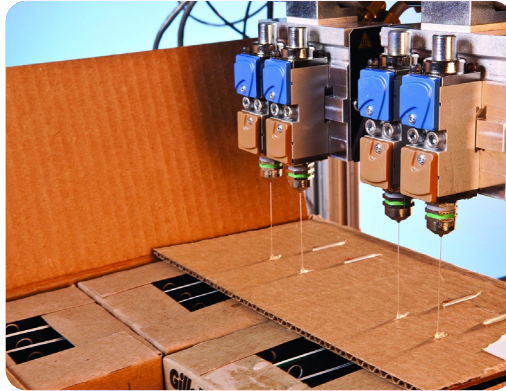


TIGHTMELT

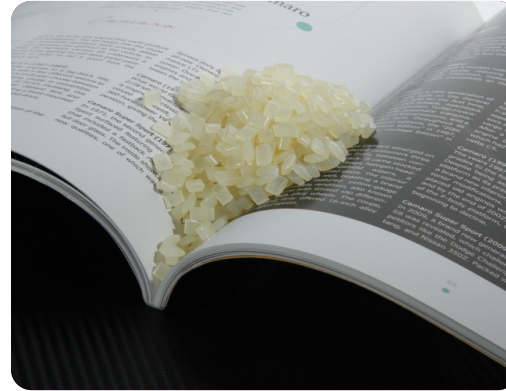
www.gitace.com
info@gitace.com



GITACE ADHESIVE APPLICATIONS



Packaging



Bookbinding



PSA Labels



O.P.P. Labeling



Hygiene



Automotive



Glue Sticks



Mattress



WoodWorking



Medicals

Get Involved
Tight,
with **GITACE**

BRIEF INTRODUCTION

GITACE is the leading manufacturer of HOT MELT ADHESIVES in Middle East and in some product categories we have gained great reputation through the world. Our business can be defined as selling **Quality** and this is the most sticking thing between us and our **Customers** and what keeps such relation is our **Knowledge-based** vision.

To keep our quality strategy and achieve breakthroughs, **GITACE** was powered by experienced intelligent chemists and engineers beside advanced laboratorial facilities and market oriented Research and Development plans.

In one word, we will open global window to our products and smart solutions with Our **Quality strategy, Knowledge Based Innovations** and **Customer Oriented** sales activities.

Bonding through adhesive is the most efficient adhesion method and therefore **Almas Fanavaran Giti Co.** as a young motivated company is making outmost effort to find the best and smartest ways to do such things under the brand name of **GITACE**. Our **Tight** bonding solutions brightly show our **ACE** class in Hot Melt's international market. **GITACE** covers a wide range of solutions in different industries that including EVA, SBC, APAO, MPO based hot melt adhesives under the grade name of TightMelt.

TIGHTMELT



01 Operation and Machining



Customized Set and Open times according to application and machineries. Decreased operation temperature and high-quality materials minimizes maintenance costs.

The wide range of open times or bonding times results in flexibility for operation and operators. The adhesives were engineered for efficient and wide usage application.



Flexibility 02

03 Bonding for a diverse range of substrates



The products were characterized to be workable for bonding different substrates with different surface energies. Such as corrugated and plain papers or PP, PE, OPP, UV laminated substrates.

Products show high cohesion and adhesion when are applied in molten phase (hot tack) and when have been completed solid. According to application, our products show suitable peel strength and heat resistance.



Strength and durability 04

05 Safety and Appearance



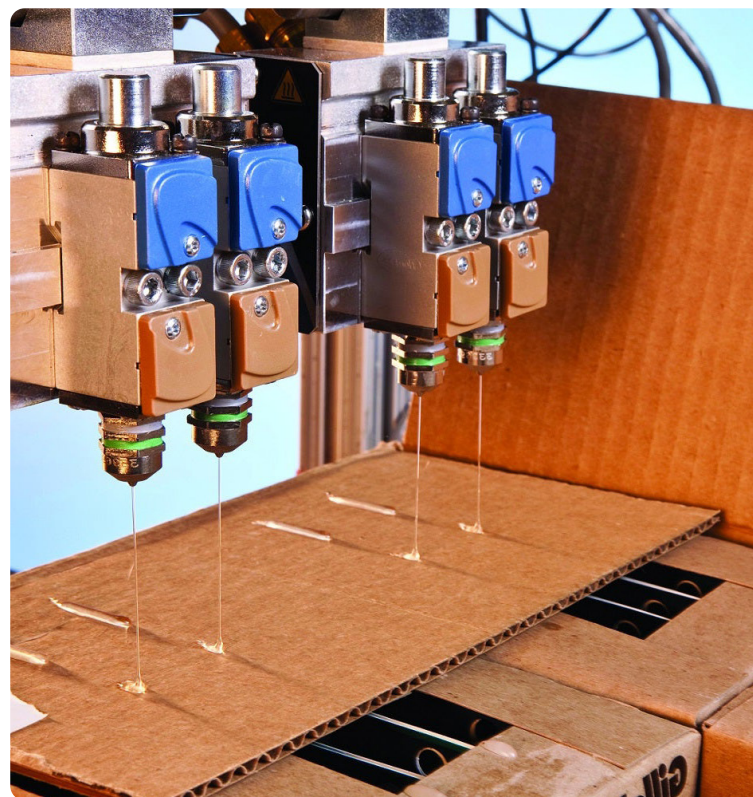
Unlike other alternative water/solvent based glues that are hazardous and with risk of inflammation and wasting, in the other hand ,Hot Melt Adhesives are safe and easy to apply exactly where an adhesive is needed. Also in comparison with mechanical fasteners and sealing tapes, Hot Melt Adhesive's bonds are virtually invisible between the mating surfaces.



Products Description

Hot melt adhesive technology has been the number one choice among high-volume, high-speed paperboard and fiberboard packagers for decades. Since the adhesive fluid is comprised of thermoplastic material, an immediate bond is formed following application. No other adhesive technology matches the speed and application flexibility of hot melt adhesive in the packaging industry.

GITACE provides a complete products offering for the packaging industry, including EVA, APAO, MPO based hot melt adhesives. Our hot melt adhesives span a wide range of polymer technologies and are critical enablers to a broad range of manufacturing applications.



Key Characteristics

- » Reduce consumption
- » Increase production line speeds
- » High adhesion to different surfaces
- » High thermal stability
- » Cleaning at runtime
- » No odor and smoke when using
- » Resistant to stress
- » Ability to withstand temperature changes

Field of Application	Main Requirements	Suitable GITACE HMA Grades
Automatic Cardboard packaging	Fast setting, High speed	TightMelt-1000 TightMelt-1300 TightMelt-1650
Small case and carton (Food and Tissue)	Medium open time	TightMelt-1200
Straw Attachment	Fast setting	TightMelt-1600 TightMelt-1650
Metalized PE,PP film coated surfaces	Difficult to Bond Substrates	TightMelt -1850
Heat resistance	Durability in high temperature	TightMelt-1820
Cap Fixing	Perfect Bond to PE and PP	TightMelt-1870
Deep Freeze	Cold Resistance	TightMelt-1880
Soap Wrapping, Heat Seal	Excellent thermal reactivation, Fast setting time	TightMelt-1750

Item	Softening Point (°C)	Viscosity @ 180°C	Color	Features & Benefits
TightMelt-1000	103-106	1000-1200	Yellowish	SHORT OPEN TIME FAST SETTING
TightMelt-1200	102-105	1100-1200	White	Medium open time Medium setting odorless
TightMelt-1300	107-110	900-1100	White	Strong bonding Fast setting
TightMelt-1600	104-108	1000-1200	White	Medium open time
TightMelt-1650	108-110	1000-1200	White	Fast setting High speed machinery
TightMelt-1820	108-110	1200-1300	White	Perfect Thermal stability
TightMelt-1850	100-105	700-1000	White	Perfect bond to PP/PE/OPP Laminated surfaces
TightMelt-1870	110-115	6000-7000	White	Ideal for PE, PP and OPP substrates
TightMelt-1880	110-115	2000-3000	White	Freezer grade
TightMelt-1750	100-105	400-700	White	Easy coating and no-block-ing while rolling



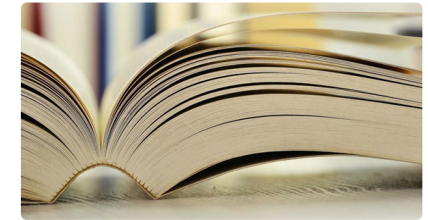
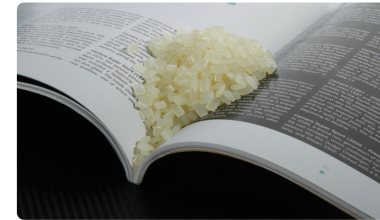
Products Description

GITACE's bookbinding hot melt adhesives can be used in every type of bindery operation such as back/spine/side gluing hard cover books, glossy paper, paperback, magazines, catalogs, telephone directories and more. Our hot melt adhesives can be used for equipment of various binding speed, high and low speed machines and for machines with different clamps number.



Key Characteristics

- » High permeability in paper and glossy surfaces
- » Perfect book opening
- » High heat resistance
- » Minimal machine cleaning at runtime
- » Low odor and no smoke when using
- » Good cutting performance
- » High Tensile strength
- » Reduce consumption
- » No Fragility of adhesive on the back.



Application	Main Requirements	Suitable GITACE HMA Grades
Spine/Back Adhesive	Good flexibility & tensile	TightMelt-2100 TightMelt-2200
Side Adhesive	Suitable bond	TightMelt-2300 TightMelt-2350
Art Papers	Suitable for difficult to bond substrates	TightMelt-2500 TightMelt-2600

Item	Softening Point (°C)	Viscosity @ 180°C	Color	Features & Benefits
TightMelt-2100	75-85	5000-6000	Yellowish	General purpose, medium set time
TightMelt-2200	75-85	4000-5000	Yellowish	General purpose, Eco-nomical grade, High speed machinery
TightMelt-2300	75-85	4000-5000	Yellowish	Excellent adhesion, Good flexibility, Fast setting
TightMelt-2350	80-85	4000-5000	Light Yellow	High hot tack, Excellent bond to difficult substrate, Clean machining
TightMelt-2500	90-100	2000-3000	White Transparence	Excellent page pulls and flexes, Perfect bond strength
TightMelt-2600	90-100	3000-5000	White	Excellent page pulls and flexes,



Products Description

GITACE advanced PSA adhesives are the best choices to attach different labels on the different containers in various atmosphere conditions.

Our Pressure sensitive hot melt adhesives have been customized for paper, pp, metalized labels, to show suitable tackiness, good die-cutting and desirable lamination performance. With regard to customer needs our products can be differentiated by sustainability in cold and heat condition, strong and weak tack, permanent or peelable adhesion.



Key Characteristics

- » Suitable for different labels (paper and plastics) and different substrates (PE, PP, PET, Glass, Metal)
- » No peeling off
- » Excellent die-cutting
- » No odor and smoke during using
- » Advanced formulated for different substrates
- » Suitable for different temperature ranges (-30 to 80 °)
- » Reduction of consumption



Application	Machinery	Label	Suitable GITACE HMA Grades
General Condition	Roller/Slot	Paper/Art Paper, Metalized, Plastic	TightMelt-3200, TightMelt-3280, TightMelt-3260
Deep Freeze	Roller/Slot	Paper/Art Paper, Metalized, Plastic	TightMelt-3250
Isolation	PE, EVA and PU foam	Foam	TightMelt-3220
Removable Label	Roller/Slot	Paper/Art Paper, Metalized, Plastic	TightMelt-3270
Heat Resistance	Roller/Slot	Metalized, Plastic	TightMelt-3290
Protection/ Removable films	Roller/Slot	LDPEs, TPOs, TPEs	TightMelt-3230

Item	Softening Point (°C)	Viscosity @ 180°C	Color	Features & Benefits
TightMelt-3200	90-100	7000-9000	Yellowish	General purpose, Medium T-Peel
TightMelt-3250	85-95	4500-6000	Yellowish	Cold condition (-30 °C)
TightMelt-3260	90-100	4500-6000	Yellowish	Excellent die-cutting and tackiness
TightMelt-3280	95-100	4500-6000	Yellowish	High T-Peel
TightMelt-3290	100-110	4500-6000	Yellowish	Hot filling, High SAFT
TightMelt-3230	75-85	3000-4000	Yellowish	Low tackiness
TightMelt-3220	95-100	4500-6000	Yellowish	High SAFT
TightMelt-3270	90-100	5000-7000	Yellowish	Removable label, High cohesive

O.P.P. LABELING FOR END OF LINE PACKAGING

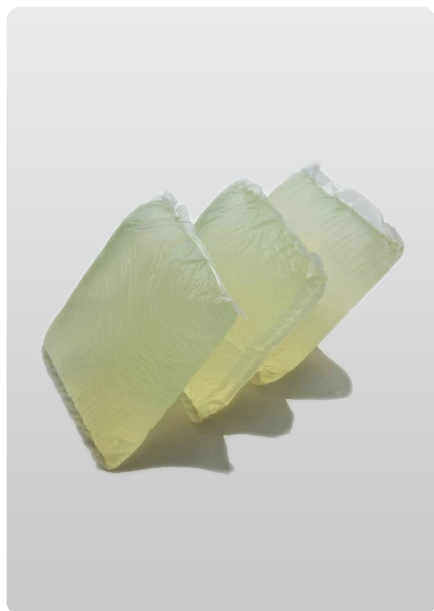
Get Involved Tight, with *GITACE*



Products Description

GITACE has developed different polyolefin/rubber based Pressure-sensitive adhesives for labelling in the beverage industry that are suitable for hot, cold, and shrinkable plastic bottles.

Our O.P.P. labeling adhesives give high tack and adhesion strength also provide good performance for high capacity machines. (up to 38,000 bottles per hour).



Key Characteristics

- » Flexibility to the beverage container.
- » No odor and smoke during using
- » Advanced formulated for Fast and Slow machines
- » Suitable different temperature ranges (-20 to 90 °)
- » Desirable operation



Application	Machin Capacity	Suitable GITACE HMA Grades
Medium Speed Machinery	6,000-18000 bottles/h	TightMelt-3150
High Speed Machinery	Up to 38000 bottles/h	TightMelt-3180,3100

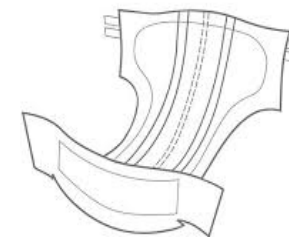
Item	Softening Point (°C)	Viscosity @ 180°C	Color	Features & Benefits
TightMelt-3100	70-80	300-500	Water white	Order less, High Speed Machinery, cold resistance
TightMelt-3150	70-75	500-700	Yellowish	General purpose, Good tackiness, Clean machining
TightMelt-3180	65-75	400-500	Yellowish	Good Lamination, Suitable for different atmosphere conditions, High Speed Machinery



Products Description

Disposable hygiene producers, all use PSA Hot Melt adhesive in their products' construction and application processes, that is subject to baby and women skins, therefore adhesive play a key role in the performance and quality of the end products.

GITACE Hygiene Hot Melt Adhesives includes products that have been designed for the use of permanently bonding non-woven materials, bond elastic strands to non-woven materials, and self-adhesive positioning strip such as those found in the sanitary napkin or baby diaper.



Key Characteristics

- » Compatible with human skin
- » No odor and smoke while using
- » High adhesion to a wide variety of materials
- » Raw materials Natural and Health
- » Advanced formulated for Fast and Slow machines
- » Reduction of consumption



Application	Performance	Suitable GITACE HMA Grades
Diaper	Core fixation	TightMelt-3830
Woman Napkin	Construction	TightMelt-3800
Diaper	Construction	TightMelt-3850
Woman Napkin	Positioning and fixing	TightMelt-3500
Diaper	Elasticity	TightMelt-3600

Item	Softening Point (°C)	Viscosity @ 180°C	Color	Features & Benefits
TightMelt-3500	80-85	1300-1700	Transpar-ent	Low tackiness, No transfer to the garment, Clean machin-ing
TightMelt-3600	90-95	1500-2000	Transpar-ent	Good elasticity
TightMelt-3800	80-85	1300-2000	Transpar-ent	High speed machinery, Good spray pattern
TightMelt-3830	85-90	1300-1800	Transpar-ent	Core fixation, Fast set time
TightMelt-3850	85-90	1500-2000	Transpar-ent	Perfect Bond, Good spray pattern



Products Description

Low volatile organic compound (VOC) and free of solvents GITACE hot melt adhesives are modern products for use in furniture manufacturing as well as carpet fixation and lamination in automotive applications.

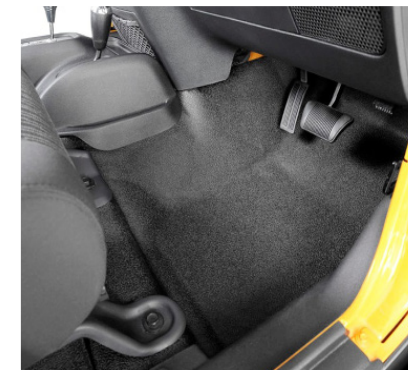
Beside Automotive interior adhesives GITACE developed advanced formulated, high-performance automotive hot melt adhesive products and solutions for the car lamps and fog lights. Advanced formulation and knowledge, technical expertise, fast response to customer are why leading manufacturers choose us. Our Automotive hot melt adhesives are based on polymers such as SBS/SIS rubber, APAO and EVA.

- » Car Lamps
- » Car Carpeting
- » Car Air Filter



Key Characteristics

- » High Ageing resistance
- » Low odor
- » Free of emissions
- » Free of solvents
- » High adhesion to a wide variety of materials
- » No nozzle clogging
- » High softening point according to vehicle standards



Application	Performance	Suitable GITACE HMA Grades
Car Lamps	Head/Rear lamps Sealant	TightMelt-4100
Air Filter	Combustion Air Filtering	TightMelt-4420
Cooler Filter	Cooler Air Filtering	TightMelt-4400
Car Carpeting	Interior carpeting	TightMelt-4300

Item	Softening Point (°C)	Viscosity @ 180°C	Color	Features & Benefits
TightMelt-4100	125-135	23000-30000	Gray/Black	Great heat resistance, Excellent operability
TightMelt-4300	90-100	5000-6000	White	High tensile strength, Long open time, Suitable for a variety of operation
TightMelt-4400	120-125	3000-4000	White	Great bonding strength on wide range of materials
TightMelt-4420	133-137	6000-7000	Yellowish	High Softening point, Heat resistance over 120°C, Excellent operability
TightMelt-4430	120-125	5000-6000	White	Heat resistance over 120°C, Excellent operability

GLUE STICK

Get Involved Tight, with *GITACE*



Products Description

Gitace is the largest Hot Melt Glue Sticks manufacturer in Middle East. We provide reliable and consistent Hot Melt Glue Sticks product quality. Our hot melt glue sticks are characterized with strong adhesion, smooth operation and different colors.

Our high-quality EVA and Polyolefin Hot Melt Glue Sticks products had been applied to various industries.



Key Characteristics

- » High Ageing resistance
- » No odor and smoke while using
- » High adhesion to a wide variety of materials
- » Advanced formulated for different applications.
- » Reduce consumption
- » Transparent



Application	Performance	Suitable GITACE HMA Grades
Assembly/ Packaging	Decorations/ Toys/ Hand-crafts/	TightMelt-6100-7/12
Industrial Assembly/ Packaging	Industrial	TightMelt-6200-7/12
Woodworking	assembly of wooden boxes, cases, furniture	TightMelt-6300-7/12

Item	Softening Point (°C)	Viscosity @ 180°C	Color	Features & Benefits
TightMelt 6100-7/12	83-88	18000	Transparent	Perfect for assembly, packaging and wood-working Diameter: 7 and 12mm
TightMelt 6200-7/12	83-88	18000	Yellow Transparent	Perfect for assembly, Long Open Time Diameter: 7 and 12mm
TightMelt 6300-7/12	85-89	10000-12000	Yellow	Super power adhesion, Medium Open Time Diameter: 7 and 12mm

MATTRESS

Get Involved Tight, with GITACE



Products Description

They can be used for the following mattress assembly applications:

Polyolefin hot melts (applied in bead) are the suitable adhesives for innerspring mattresses, and pressure sensitive hot melt adhesives (applied by roller) are used especially for the assembly of foam to pocket spring, where they provide excellent advantages compared to the solvent based adhesive.

The fast build-up of strength of hot melt adhesive provides customer with high speed machinery and consequently increased efficacy.



Key Characteristics

- » Environmentally friendly
- » Low VOC
- » Fast setting
- » High strength

Application	Performance	Suitable GITACE HMA Grades
Pocket spring	High strength, High flexibility	TightMelt-5100
Foam to pocket spring	High flexibility, Long open time	TightMelt-5300
Foam to textile	High Flexibility	TightMelt-5500

Item	Softening Point (°C)	Viscosity @ 180°C	Color	Features & Benefits
TightMelt-5100	105-110	2000-3500	Yellowish	High strength, Fast setting time
TightMelt-5300	90-95	3000-4000	Yellowish	High flexibility, Long open time
TightMelt-5500	80-90	3000-5000	Yellowish	PSA, Strong bonding formation



Products Description

Edgebanding hot melt adhesives based on EVA are used to adhere the edge tape (PVC, PP, ABS, wood, etc.) to wooden panels or MDF. These adhesives have a medium or high viscosity depending on the application. They can be used manually or by machines. The Edgebanding adhesives are suitable for straight lines (High speed) and curved edges (Low speed) machines.

Edgebanding adhesive that are applied to woodworking and furniture industries can be filled or unfilled. However, filled EVA based adhesives are more economical but unfilled adhesive have a thinner glue line and give a stronger bond.

Gitace presents all grades of edgebanding adhesive with high quality.



Key Characteristics

- » Used with PVC, wood and high pressure laminate
- » High heat resistance
- » Good moisture resistance
- » Compatibility with different types of edgebanding machines
- » High adhesion
- » Easy working



Application	Performance	Suitable GITACE HMA Grades
Edging Banding: veneer, melamine, polyester, HPL, PVC, ABS, PP	Perfect Bond, High speed, High Performance	TightMelt-7100
Edging Banding: veneer, melamine, polyester, HPL, PVC, ABS, PP	High speed, Good Strength	TightMelt-7000 TightMelt-7200
Profile Wrapping	High speed, Perfect Bond	TightMelt-7400
Edging Banding: veneer, melamine, polyester, HPL, PVC, ABS, PP	Low speed, App. Temp:150-180	TightMelt-7300

Item	Softening Point (°C)	Viscosity @ 180°C	Color	Features & Benefits
TightMelt-7000	90±3	70000-80000	Beiget	Field, Perfect adhesion
TightMelt-7100	90±5	40000-50000	Yellow	Unfilled, Very strong adhesion
TightMelt-7200	85±5	70000-80000	Beige	Filled, strong adhesion
TightMelt-7300	85±5	10000-15000	Beige	Filled, Low viscosity, strong adhesion
TightMelt-7400	85±5	7000-9000	Yellow	UnFilled, Low viscosity, strong adhesion



Products Description

GITACE Pressure-sensitive hot melt adhesives have exclusively covered many fields of adhesives in the medical industry. These adhesives have good adhesion strength, are safe and free of volatiles. The absence of allergens allows the adhesive to come into contact with the skin, and the high adhesion due to the optimal adhesive formulation prevents the adhesive residue from remaining on the surface or skin.



Key Characteristics

- » Compatible with human skin
- » High adhesion to a wide variety of materials
- » Raw materials Natural and Health
- » Advanced formulated for Fast and Slow machines
- » Suitable for human body temperature



Application	Performance	Suitable GITACE HMA Grades
Disposable mattress	Construction	TightMelt-3800
Double Side Wound-plaster	Durable Bond	TightMelt-3700
Aperture's PE Tape	Perfect Bond	TightMelt-3760
Tissue Tape/Bandages	Durable Tackiness in Moisture	TightMelt-3750 TightMelt-3755
Sports Bandage	Good Elasticity	TightMelt-3780

Item	Softening Point (°C)	Viscosity @ 180°C	Color	Features & Benefits
TightMelt-3800	80-85	1300-2000	Semi-Transparent	High speed machinery
TightMelt-3700	85-90	3000-4000	Yellow	Clean to remove
TightMelt-3750	92-98	5000-6000	Yellow	Compatible with skin conditions
TightMelt-3755	85-95	3000-5000	Transparent	No odor
TightMelt-3760	85-90	3000-4800	Transparent	No residual
TightMelt-3780	90-95	4000-5000	Transparent	Good elasticity



GITACE

ADHESIVES TECHNOLOGY

Get involved tight, with GITACE

TIGHTMELT





One Call Many Services



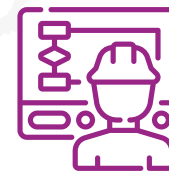
Sales



Technical



Logistic



Operational

GITACE LOCAL SALES OFFICE : Unit-302, Alvand Tower, Marzdaran Blvd., Tehran, Iran. | **Tel:** +98 21 44207972 & + 98 21 91091103

GITACE OVERSEAS SALES OFFICE: Unit-401, Alvand Tower, Marzdaran Blvd., Tehran, Iran. | **Tel:** +98 21 44261849

UAE OFFICE : 3003 Fortune Tower Cluster C | Dubai | UAE | **Tel:** +971 457 27 280 | **Mobile:** +971 56 438 84 23

RUSSIA OFFICE : Unit 17, Lesnaya St., Krasnogorsk, Moscow, Russia | **Tel:** + 7(915) 325-35-95

GITACE Technology & Innovation Center: Unit-47, Hemmat Innovation Building, Pardis St., Tehran, Iran.

QAZVIN R&D OFFICE: Unit-103, Dr. Salehi Building, Qazvin Science & Technology Park, Qazvin, Iran

GITACE FACTORY No.1: Obeid Zakani Blvd., Caspian Industrial Estate, Qazvin, Iran

GITACE FACTORY No.2. No. 6, Andishmandan St., Grand Isfahan Industrial Estate, Isfahan, Iran

GITACE FACTORY No.3: Sanaat St., Caspian Industrial Estate, Qazvin, Iran

Website: www.gitace.com / **Email:** info@gitace.com