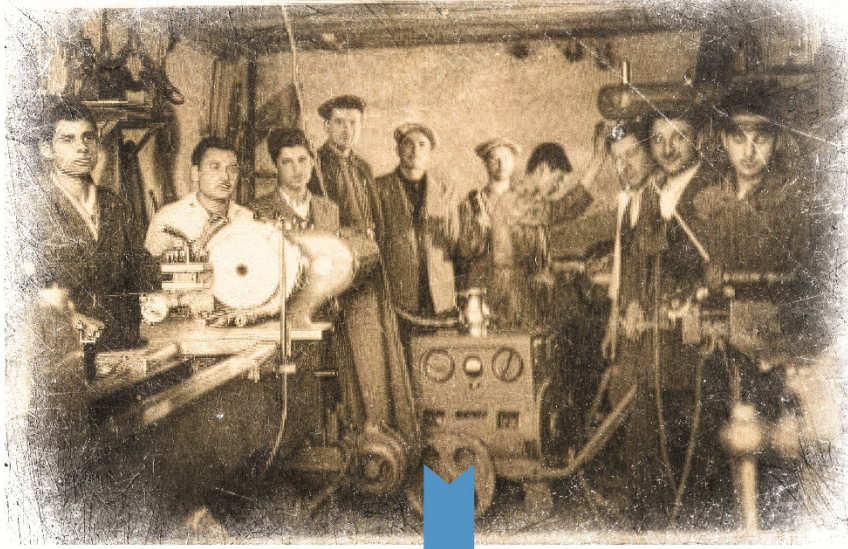




GAZİANTEP MAKİNA İMALAT SAN. TİC. A.Ş.

MI-U HEAT-SET LINES PRODUCT CATALOGUE 2026



**1949**

**MİTAŞ Machine Inc.** was founded in 1949 through the initiatives of İhsan UNCU.

By providing services in many branches of the manufacturing sector, like defense industry, automotive industry, textile industry, etc. It has increased experience and knowledge.

**MİTAŞ Machine Inc.**, by giving continuous importance to research and development , has evolved into a modern, technologically advanced business suited to our times.

Now We are proud to serve the textile machinery manufacturing sector with our high technology workshop and expert staff.

**2026**

## MI-U SERIES HEAT-SET LINES

Heat-Set Solutions For Synthetic Yarns



Saturated steam heat-setting is a vital textile process that uses pressurized steam to permanently set the shape, elasticity, and dimensional stability of synthetic fibers like nylon and polyester

When the steam condenses on the cooler textile, it releases its latent heat of vaporization, providing extremely uniform, bulk heating throughout the fabric or yarn package

The heat temporarily exceeds the fiber's glass transition temperature, relieving internal stress so the fiber settles into its new, relaxed molecular structure.



MI-U Series Heat-set lines have a modular structure. This structure allows for the creation of the best possible machine configuration to meet customer needs.

### MI-C CREEL

It features an ergonomic design for easy and quick coil changes. The housing is robust enough to support coils weighing up to 8kg.

- Up to 72 ends
- Active and rezerve tubes adaptors
- Singel or dobbel line configuration
- Yarn detection sensors for each end
- Yarn tension device for each end



### MI-L LAYING UNIT

It is designed to lay continus, cut and micro filaments. The tension-regulating Godets enables high-speed production without loss of quality.

- Pre-feeding Godet for tension control
- Easy maintance and cleaning desing
- Up to 650 m/min laying speed
- 



### MI-F TEXTURIZING UNIT

The texturizing unit is a specially designed forming method that gives the yarns a crimp and wave shape. Wavelength and intensity can be easily set from the user touch screen.

The transition between straight yarn and texturized yarn production is very practical and can be done in a short time.



### MI-PS PRE-STEAMER

It is a general machine unit. Here, it moistens the yarn before the heat-set process, relieving stress on the yarn. It also serves to protect the product from shock that may occur due to high heat in the next step.

- Inverter controled circulation fans
- Controled steam feding
- Easy cleaning and maintance



### MI-U HEAT-SET TUNNEL

It is a steaming tunnel that performs the Heat-set process of the product in a pressurized environment. Thanks to the pressurized environment, the entire product undergoes homogeneous heat treatment.

Tunnel lengths vary depending on product types and production objectives.

- Saturated Steam heat-Set Tunnel
- Tunnel lenght up to 15m
- Stainless steal belt (w 300mm)

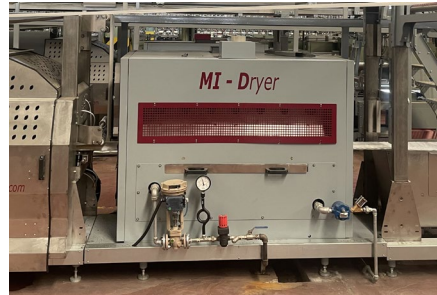


Tunnel closure cylinders are our special design.

The unit, which operates smoothly with the pneumatic system, is a long-lasting and low-maintenance system.

### MI-D DRYER

It is an optional unit that can be added to the machine configuration according to customer needs. In the heat-set process with saturated steam, the product naturally contains a certain amount of moisture. This dryer brings the product to the desired dryness.



### MI-CF COOLING FAN

After heat treatment, products need to be cooled to maintain their new form.

To achieve this in the best and most efficient way, these machines use high-efficiency radial fans.



### MI-A ACCUMULATOR

The accumulator is a crucial machine component for production. It is possible to obtain the highest production efficiency from the machine thanks to the accumulator. It also ensures minimal downtime in the tunnel section, guaranteeing a homogeneous production output.



- To obtain different machine sizes, the accumulator can be placed along the line, alongside the line, or on top of the heat-set chamber.
- Storage Length up to 15 meters, depending on production requirements.

### MI-W TAKE-UP WINDER

MITAS winders are specifically designed to wind heat-treated yarns into bobbins.

Because it can wind bobbins with the desired stiffness, it works flawlessly on all types of weaving and tufting looms.

Thanks to its fully automatic doffing feature, it enables high production with a low number of operators.



- winding 10-inch standard or conical bobbins.
- Up to 96 ends per section
- Left or right side configuration
- Fully automatic doffing
- Electrical yarn cutting
- Adjustable Winding stiffness setting
- Pre-feeding godets
- Yarn detectors for each end

## INSTALLED POWER

	Electric	Steam	Pressured air	Chilled water
MI-L Laying Unit	2 kva			
MI-F Texturizing unit	4 kva	1-8 kg/h		
MI-PS Pre-Steamer	7.5 kva	30 kg/h		
MI-U Heat-Set Tunnel	25 kva	100 kg/h	100 Nm <sup>3</sup> /h	2.7 Nm <sup>3</sup> /h
MI-D Dryer	3 kva	70 kg/h		
MI-CF Cooling Fan	0.5 kva			
MI-A Accumulator	5.5 kva			
MI-W Take-Up Winder	34 kva		8 Nm <sup>3</sup> /h	

Note; The values given in this table are the **installed power**. The power consumption of the machine varies depending on the product being manufactured and the actual parameters of the machine.

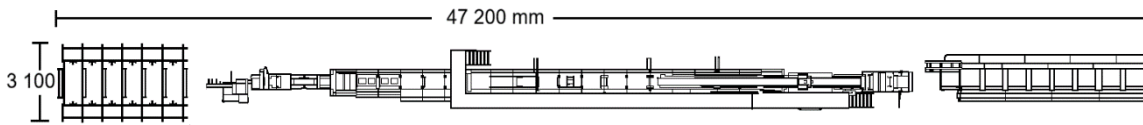
## PRODUCTION

	MI-U48	MI-U60	MI-U72
1200 Dtex single ply	135 kg/h	168 kg/h	202 kg/h
1800 Dtex single ply	220 kg/h	255 kg/h	305 kg/h
2000 Dtex single ply	244 kg/h	305 kg/h	366 kg/h
2400 Dtex single ply	260 kg/h	330 kg/h	398 kg/h
2x1200 Dtex two ply	254 kg/h	324 kg/h	390 kg/h
2x1400 Dtex two ply	270 kg/h	334 kg/h	405 kg/h
2x1750 Dtex two ply	293 kg/h	366 kg/h	440 kg/h

Note; The values in this table are calculated values. Calculations are based on 98% efficiency and standart operating conditions. In this calculation, the yarn is standard BCF yarn and has a minimum DPF of 5. Depending on different operating conditions and yarn quality, these values may be higher or lower.

**DIMENSIONS;**

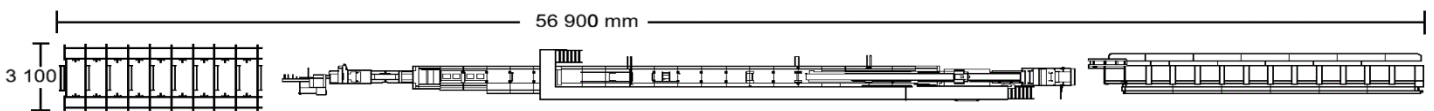
**MI-U48**



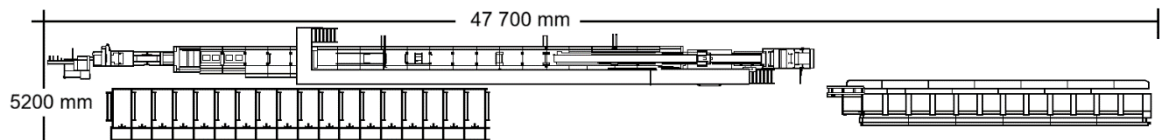
**MI-U60**



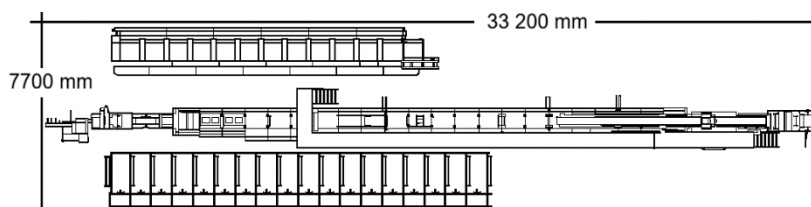
**MI-U72**



**MI-U72 L**



**MI-U72 LL**



MI-U Series Heat-set lines have a modular structure, making it possible to create various configurations. MİTAŞ Machine Inc. can produce different solutions according to customer needs and layout possibilities.