



## Contribution of VET Centers in the Combat Against the Coronavirus

In these extraordinary times that we have gone through due to coronavirus pandemic, VET Centers in Turkey produce the products needed in the fight against pandemic and offer them to the service of healthcare professionals and the society.

VET centers that show great effort in this process of struggle, has been working with all power to send medical equipment to every corner of the country. Vocational high schools enthral Turkey with producing many materials such as masks, disposable aprons, cleaning materials, overalls, face shields, etc. Fast and easy delivery of products such as masks, visors, disposable gowns that are difficult to supply was appreciated by all segments of the society. In addition, R&D studies have been speeded up to increase the variety of products produced in vocational education. Teachers and students across the country work with great devotion in these difficult days and are increasing their production capacities and product variety day by day. 109 VET centers and 150 Science and Art centers contributed to the production in countrywide. In the works that continued without interruption, 467 teachers and 2.121 students took part. 385 masters also shared their experiences with the students.

### Products Started to Be Produced in Vocational High Schools During Pandemic:

- SURFACE DISINFECTANT  
Vocational High Schools started disinfectant production in 81 provinces in order to disinfect 54.000 schools in all provinces before "virus clock" began to work. Demand for disinfectant material increased with the epidemic entered our country's borders. The teachers and students in vocational high schools fulfill all disinfectant demands of related institutions with big sacrifices by increasing their production capacities. So far, 6.123.340 liters of surface disinfectant has been produced in 88 schools and the figures are increasing.
- HAND DISINFECTANT and COLOGNE  
Especially regarding the difficulties to obtain disinfectants and colognes in the market, vocational high schools started to manufacture hand disinfectant and cologne, after having the necessary permits and a rapid R&D study. To date,



130.240 liters of hand disinfectants in 55 schools and 4.120 liters of cologne in 19 schools have been produced.

- MASK

As pandemic increased its effect in Turkey and all over the world, mask production started to gain huge importance. Nowadays, one of the most needed products in the world is the mask. In order not to experience any problems in mask supply, vocational training showed a quick reflex and started to produce masks from the first days of the epidemic. The masks, which were produced primarily for the needs of healthcare workers, were offered to the service of public institutions and all segments of the society. To date, 11.988.000 masks have been produced in 109 schools and the production continues at full speed.

- DISPOSABLE APRON / OVERALLS

In this period, the demand for single-use products increased due to the importance of hygiene. With the investments related to this context, products such as disposable aprons and overalls are started to be produced especially for healthcare professionals. Production continues intensely in almost all provinces. On the other hand, the production of materials such as disposable forks and knives started in a VET school in Istanbul, which was chosen as pilot. Vocational high schools have produced 65.774 disposable overalls / aprons and 35.000 disposable forks / knives so far and productions continue at full speed.

- DISINFECTATION ROBOT

The robot that Ankara Yenimahalle Şehit Mehmet Şengül Vocational and Technical Anatolian High School has developed disinfects with the help of UV lights. With the robot developed within the scope of combating the new type of coronavirus, many closed areas including intensive care units, service rooms, elevator cabins, corridors, and hospital environments will be able to be self-disinfected with ultraviolet rays. The robot, which is a completely original and new design, is named "UV Sterilizer". TEKEV (Technical Education Foundation) that appreciates the superior efforts, presented a "Pride Certificate" to the school on behalf of all those who contributed.

- FACE SHIELD VISOR

In order to contribute to the solution of the problems encountered in the production of face shield visors, which are especially important for healthcare workers, R&D studies have been completed and the production of face shield visors has started at schools. Face shields are produced both with an automatic



production line and 3D printers. Furthermore, as a result of R&D studies, the production of 3-D printers was started in order to increase the visor production. In vocational high schools, 765.140 face shields were produced in 43 schools and delivered to healthcare workers.

- RESPIRATOR

Vocational high schools have worked extensively for the production of respiratory equipment, which has an important place in Covid-19 treatment. Two pilot provinces, Hatay and Istanbul, which were selected for the production of respiratory equipment, started production in a short span of time. The first respirator was manufactured in Hatay Şehit Serkan Talan Vocational and Technical Anatolian High School Biomedical Device Technologies field. Another good news from İstanbul followed Hatay's respirator. Remote-controlled breathing apparatus for ambulance and field hospitals were produced at Kartal Şehit Teacher Hüseyin Ağırman Vocational and Technical Anatolian High School.

- ULTRASONIC SURGERY MASK MACHINE

As a result of the R&D studies carried out to increase the surgical mask production capacity, which takes the most important place in the fight against the pandemic, the production of an automatic three-layer wire ultrasonic surgical mask machine was completed in Istanbul Küçükköy Vocational and Technical Anatolian High School. The machine can produce 100.000 surgical masks daily.

- MASK MACHINE FOR N95 MASK

N95 masks are an indispensable need especially for healthcare professionals. N95 masks production process is a mountain to climb. Furthermore, the process to provide the machine of this mask is also very difficult. On the other hand, R&D studies started immediately in VET centers and as a result of these studies, N95 mask machine was produced in a very short time at Tekirdağ Çerkezköy Turkish Textile Foundation Vocational and Technical Anatolian High School.

- OTHER PRODUCTS

In addition to these products automatic surgical mask machine, ultraviolet-C (UVC) air sterilization device, ozone air disinfection device, contactless infrared thermometer, S video laryngoscope device and isolated sampling unit were produced in various VET centers in various provinces.



## Distribution of the products

All products produced by vocational high schools are primarily given to health institutions and healthcare workers under the coordination of the governorships. Also necessary material support is provided to all public institutions, primarily the police and military units. On the other hand, the project named “Vocational High Schools Meet Families” that has been carrying out successfully for a long time, was revised during the pandemic and some of the products produced in vocational high schools were distributed to the elders and people in need of nursing.