



# PHARMACEUTICALS

Sterile and aseptic process equipment for  
pharma and biotech

[www.vespro.com.tr](http://www.vespro.com.tr)

**VESPRO**  
Professional Vessel Engineering

# Professionally engineered and reliable process equipment for confident production

Vespro serves pharmaceutical and biotech facilities in liquid preparation and powder processing applications with sterile and aseptic process equipment for reliable production. Engineered and fabricated in high standards, our equipment provide managers and operators the confidence for handle microbial and particulate contamination.

We work by designing and fabricating customized process equipment as single components or integrated set of equipment within an overall system design. As such, Vespro delivers value not only to pharmaceutical plants but also to technology providers by enhancing benefits for end-users.



---

## HIGHLIGHTS

---

### **Fermentation Vessel**

Full automatic 200 L  
fermentation process vessel  
for biotech application.

# Value proposition: confident production management

Our experience covers the design, fabrication, and installation of products and systems for aseptic and sterile process requirements such as integration of magnetic agitators and elimination of inter-batch cross-contamination. We also provide automation and validation services to provide complete end-user solutions.

## HIGHLIGHTS

### Solution Preparation Vessel

200 L skid-mounted mobile suspension vessel with magnetic agitator designed and fabricated with filter system, piping and automation.



### Know-how + Processes:

- Drying
- Cooling
- Fermentation
- Heat exchange / condensation
- Media preparation
- Milling / grinding
- Purification / filtration
- Separation

### Industry 4.0

Our products are equipped with automation infrastructure, integrated with sensors to provide fully automatic production solutions and ready for an Industry 4.0 ecosystem.

You can collect superior data and improve monitoring in order to take better decisions related to production and control.

## Products + Systems

- Bioreactors
- CIP/SIP systems
- Clean water storage tanks
- Fermenters
- Fluidized bed/spray dryers
- High shear mixers
- Heat exchangers: double tube, tube/shell
- Media preparation & storage vessels
- Milling/grinding machines
- Purification & filtration systems
- Vacuum dryer: tray, double, cone, V-type

## HIGHLIGHTS



### Reactor System

15 L reactor with filtration system, designed and fabricated for S2G BioChem. Includes in-house made agitator and delivered/installed with electrical and instrumentation works.

## Services: how we enhance value

- Assembly & installation
- Automation & software development
- Piping installation
- Qualification & validation

# How we deliver our value proposition

Confident production management requires reliable process equipment. Here's how we do it.



## In-house Engineering + Design Resources

+20 years engineering and design experience. We're active in the design of clients' equipment to ensure technical & mechanical competency in the end-product. Use of advanced computer technology and applications to design, develop, and test virtual models before approval for fabrication.



## Extensive Material Know-how

Vespro has extensive experience in dealing with special metals and alloys, as well as the required welding and working methods associated.

- Austenitic & super-austenitic stainless steel grades
- Duplex & super-duplex steels
- Alloy31, Monel, Inconel, alloys P11, P22, P91



## Skilled Team + Automation

Over 30 professional welders and skilled technicians preside at our workshops. The 10,000 m<sup>2</sup> facility employs latest available welding, drilling, polishing, and cutting machines with heavy focus on automation such as automated welding and plasma cutting technology to enhance quality and minimize human-error risks.

# References



## TPN System (turnkey)

Turnkey delivery of TPN system holding vessels, reactors, and piping work along with ampoule and bottle line system. Delivered with automation, and installed at client site. The system had to be integrated with an existing homogenizer.

YEAR	CUSTOMER	SCOPE
2016	Polifarma	WFI storage tanks
2016	Recordati	Pharmaceutical syrup production unit (turnkey delivery)
2016	Biyoteknik Kimya	2500 litre syrup production tank manufacturing
2016	Recordati	3 m <sup>3</sup> syrup holding tank
2016	Polifarma	Production and filtration tank
2016	Sartonet	10" filter case set

YEAR	CUSTOMER	SCOPE
2016	Neutec	Hammerhead crusher for powder process
2016	Türkilaç	Liquid production and water tank
2016	Bionorm	150 litre rotacone vacuum dryer + condensing system, TCU, tray dryer.
2016	Tübitak	200 litre fermentation process vessel
2017	Buhler Ag	Five various tanks
2017	Sartonet	10" condensation + 20" liquid filter case sets



### Extraction System for Nutraceuticals

300 L extraction system consisting of vessels, piping, filtration, and complete installation and commissioning. Nutraceutical application for Naturin, Turkey.



### Hammer Mill

6 kW 4500 rpm rotor speed with sieve type 0.25-0.80 mm. Designed as per end-user application needs.

# References

YEAR	CUSTOMER	SCOPE
2017	Türktipsan	Turnkey TPN system equipment vessels & reactors with ampoule/bottle line system
2017	Türkilaç	Production tank platform manufacture and montage
2017	Çetinkaya İlaç	Two 5000 litre serum agitator and preparation tanks
2017	Berko İlaç	Syrup production and storage tanks (3000, 2000, and 500 litre)
2017	Polifarma	Four 9 m <sup>3</sup> serum production tanks with platform and piping system
2017	Koçak Farma	10 m <sup>3</sup> / 6 m <sup>3</sup> / 2 m <sup>3</sup> process vessel tanks



## Rotacone Dryer

150 litre rotacone vacuum dryer and condensing system, TCU, tray dryer unit. Design and installation for Bionorm.





## Syrup Production Unit

Design, fabrication, installation, validation of 2500 L and 3000 L capacity tanks and three other holding tanks and reactors with filtration system for Recordati Ilac, Turkey.

YEAR	CUSTOMER	SCOPE
2017	Türkilaç	30 m <sup>3</sup> and 50 m <sup>3</sup> preparation tanks with magnetic agitation for serum preparation
2017	Vem ilaç	200 L reactor with magnetic agitation
2018	Onko Koçsel	Three 3 m <sup>3</sup> liquid production tanks and piping works
2018	Bilim ilaç	Hammer mill
2018	Polifarma	Process vessels for liquid production: 1 m <sup>3</sup> , 3 m <sup>3</sup> , and 9 m <sup>3</sup>
2018	Berko ilaç	Process vessels for liquid production: 300 L, 2.4 m <sup>3</sup> , and 3 m <sup>3</sup>
2018	Neutec ilaç	Process vessels for liquid production: 300 L, 2.4 m <sup>3</sup> , and 3 m <sup>3</sup>
2018	Nobel ilaç	Liquid process vessels of 750 L and piping works
2018	İbarhim Etem	Reactor vessels with magnetic agitators: 50 L, 100 L, and 150 L

**VESPRO**  
Professional Vessel Engineering

# THE RELIABLE FABRICATION PARTNER FOR PROCESS EQUIPMENT AND MORE



## Turkey (HQ)

3. Organize Sanayi Bölgesi  
Söğütlü – Sakarya

+90 264 502 1001  
info@vespro.com.tr

## Germany

An St. Albertus Magnus 24 A  
D-45136 Essen

+49 20 126 1150