

UNIMECH

HT Dyeing &
Processing Machines



Our Standards
Are High And We Strictly
Adhere To Them



ABOUT US

1994 was the year "UNIMECH ENGINEERS PVT LTD" was incorporated by our founder chairman, Mr. M.P. Singh. With a strong vision of becoming one of the most innovative and dynamic companies and backed with years of experience in various engineering industries, he embarked on the journey of building the most durable, technologically advanced dyeing and processing machines for various textile industries.

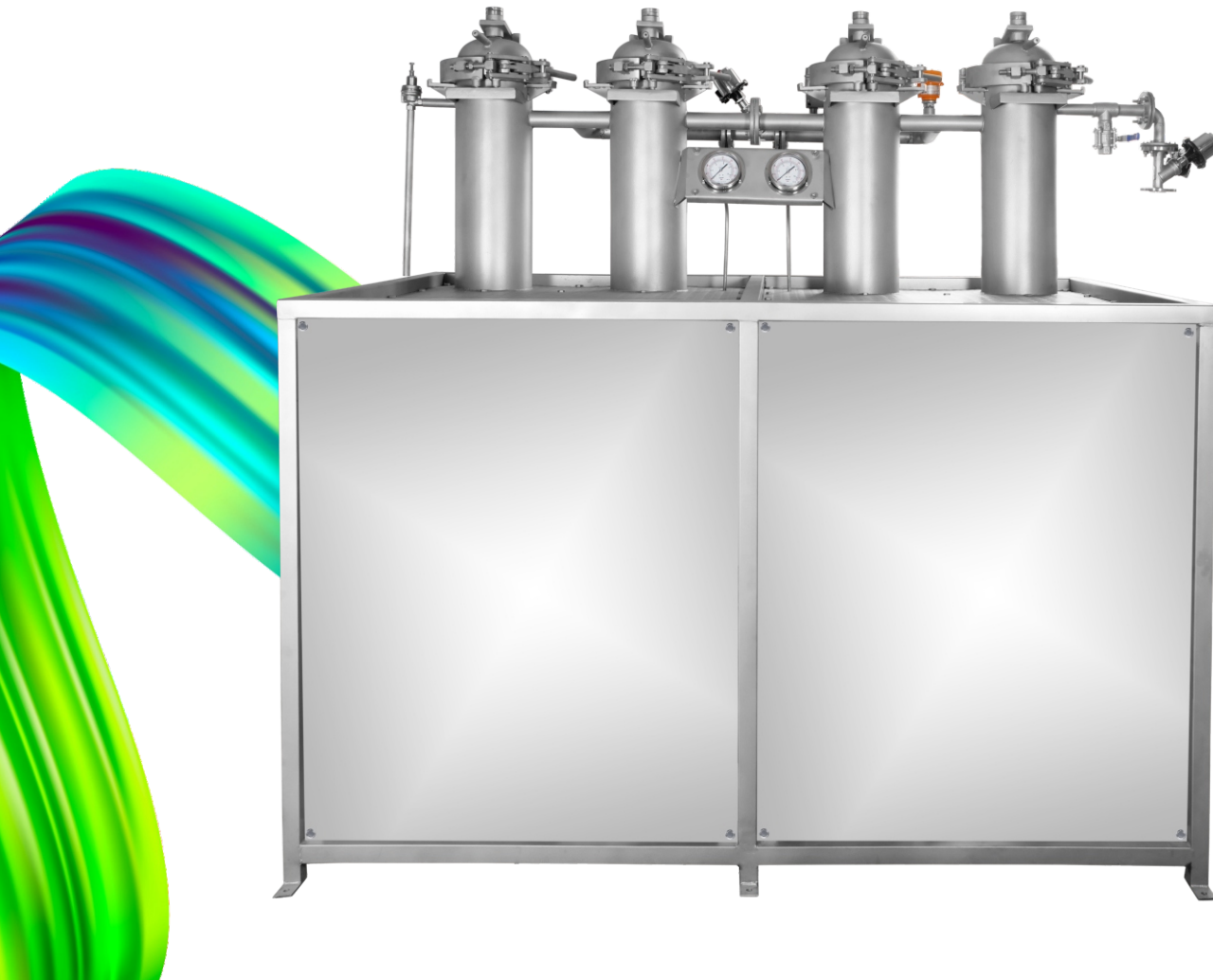
In this process, we have stood by our core values of ensuring good standards, ethics and services and being extremely customer-centric by maintaining trust with the existing and growing customers.

Since the last 3 decades, we Unimech Engineers Pvt Ltd are one of the leading manufacturers and suppliers of HTHP Dyeing and Processing Machines. Our products for Polyester / Cotton / Nylon Yarns and Zipper Tape, like Cone Dyeing Machine, Sample Cone dyeing machine, Yarn Hanks Dyeing Machine, Zipper Tape Dyeing Machines, etc are extensively used in the textile dyeing world. Our range of machines are manufacture don the principles of being cost-effective, power efficient and eco-friendly.

Our TEAM lead by our technical director, Mr. Gagandeep Singh, has talented and qualified professionals who aim to deliver a quality range of machines to our customers. These professionals are passionate about their work and are committed towards our goals. It is the dedication and hard work of our team members that we have been able achieve success in the industry.

HT/HP Vertical Tubular Dyeing Machine

Unimech is the pioneers in coming up with the unique idea of "Vertical Tubular Dyeing Machines". These dyeing machines are specially made sampling and production of lots from 10 to 100Kgs per batch. The machines are run without full-flooding to deliver low liquor ratio compared to other tubular machines. Suitable for dyeing Polyester / Cotton Yarn Packages, Zipper Tapes, Laces, etc.



Key Features:

- Ultra Low M:L Ratio of 1:3
- All Dyeing Liquor contact parts made out of SS316Ti/ SS316L
- Flexible loading by the use of Dummies
- High Efficiency, Direct Drive Turbo Pump with AC Inverter
- Control Panel with Dyeing Programmer / PLC – HMI (Optional)
- Human-Machine Safety Interlocks
- Steam/Thermic Fluid Heat Exchanger Coil. Gradients upto 5°C/min
- Electrically Heated with Suitable Industrial Heating Elements
- Colour Addition Tank with Dosing Pump
- Sample Pot (Optional)
- High Temperature Drain (Optional)

Technical Parameters:

- Design pressure:0.5Mpa
- Maximum working pressure:0.4Mpa
- Design temperature :140°C
- Maximum working temperature :135°C
- Heating rate: 30°C~130°C About 45 minutes(Saturated vapor pressure:0.7Mpa)
- Cooling rate:130°C~80°C about 25 minutes(Cooling water pressure:0.3Mpa)Cooling water temperature:15°C~25°C

HT/HP Vertical Dyeing Machine

Unimech "Vertical Dyeing Machines" are versatile machines that have been extensively used over the years for various dyeing applications. These dyeing machines are offered in a wide range of capacity from 10 to 500Kgs per batch. Two vessels can be coupled to increase the batch size upto 1000Kgs. The machines are designed to deliver low liquor ratio of 1:6 to 1:8. Suitable for dyeing Polyester, Cotton, Viscose, Nylon, Acrylic, Silk, Wool, etc in various forms of Cones, Hanks, Tapes, Zippers, Loose Fiber, etc.



Key Features:

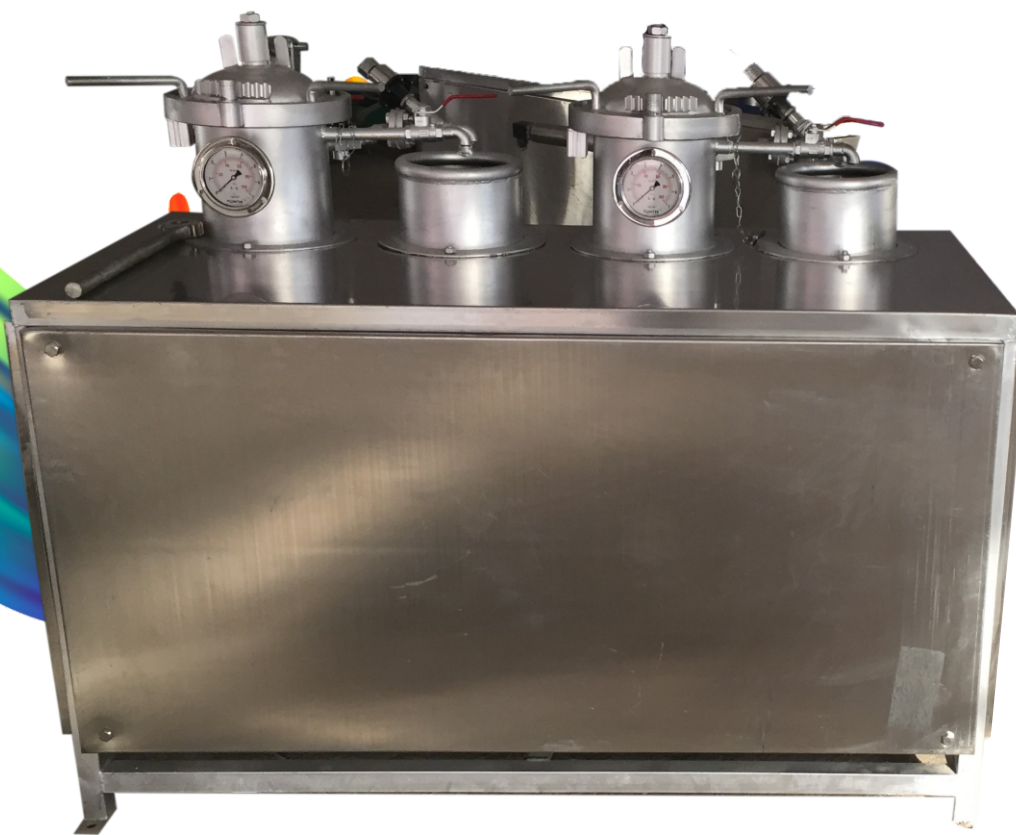
- All Dyeing Liquor contact parts made out of SS316Ti/ SS316L
- Flexible loading using Variable Spindles or Dummies
- High Efficiency, Direct Drive Turbo Pump with AC Inverter
- Control Panel with Dyeing Programmer / PLC – HMI (Optional)
- Human-Machine Safety Interlocks
- Internal Steam/Thermic Fluid Heating Coil. Gradients upto 5°C/min
- Electrically Heated with Suitable Industrial Heating Elements
- Pneumatically Operated Top Lid
- Colour Addition Tank with Dosing Pump
- Sample Pot
- Multiple Fill / Multiple Drain / High Temperature Drain (Optional)
- Stock Tank with Mixer and Transfer Pump (Optional)

Technical Parameters:

- Design pressure:0.5Mpa
- Maximum working pressure:0.4Mpa
- Design temperature :140°C
- Maximum working temperature :135°C
- Heating rate: 30°C~130°C about 45 minutes(Saturated vapor pressure:0.7Mpa)
- Cooling rate:130°C~80°C about 25 minutes(Cooling water pressure:0.3Mpa)Cooling water temperature:15°C~25°C

HT/HP Multi-pot Dyeing Machine / Pilot Dyeing Machine

Unimech offers "HT/HP Multi-Pot Dyeing Machines" for Sampling, R&D Labs and production of small lots from 300gms to 10Kgs per batch. As the name suggests, the machine is multi vessel option built on a single platform. The number of vessels may vary from 2 to 8, and each vessel comes with its individual turbo pump and controller. Multiple coupling options are available to dye same or different colours depending upon customer's requirements. Suitable for dyeing Polyester, Cotton, Viscose, Nylon, Acrylic, Silk, Wool, etc in various forms of Cones, Hanks, Tapes, Zippers, Loose Fiber, etc.



Key Features:

- Low M:L Ratio of 1:4 to 1:6
- All Dyeing Liquor contact parts made out of SS316Ti/ SS316L
- Flexible loading by Coupling of Vessels or using Dummy.
- High Efficiency, Direct Drive Turbo Pump with AC Inverter
- Control Panel with Dyeing Programmer / PLC – HMI (Optional)
- Human-Machine Safety Interlocks
- Colour Addition Tank with Dosing Pump
- Electrically Heated with Suitable Industrial Heating Elements
- Steam/Thermic Fluid Heat Exchanger Coil. (Optional)
- High Temperature Drain (Optional)

Technical Parameters:

- Design pressure:0.5Mpa
- Maximum working pressure:0.4Mpa
- Design temperature :140°C
- Maximum working temperature :135°C
- Heating rate: 30°C~130°C about 45 minutes(Saturated vapor pressure:0.7Mpa)
- Cooling rate:130°C~80°C about 25 minutes(Cooling water pressure:0.3Mpa)Cooling water temperature:15°C~25°C

Hydro Extractor Machine

Unimech "Hydro Extractor Machines" are used to extract excess water from yarn cones, loose hanks, zipper tapes, etc. The outer drum with opening lid and inner basket are made of Stainless Steel 304. The direct drive high speed hydro extractors are dynamically balanced to reduce vibration and noise. The machine is available in 5Kgs to 300Kgs per batch.

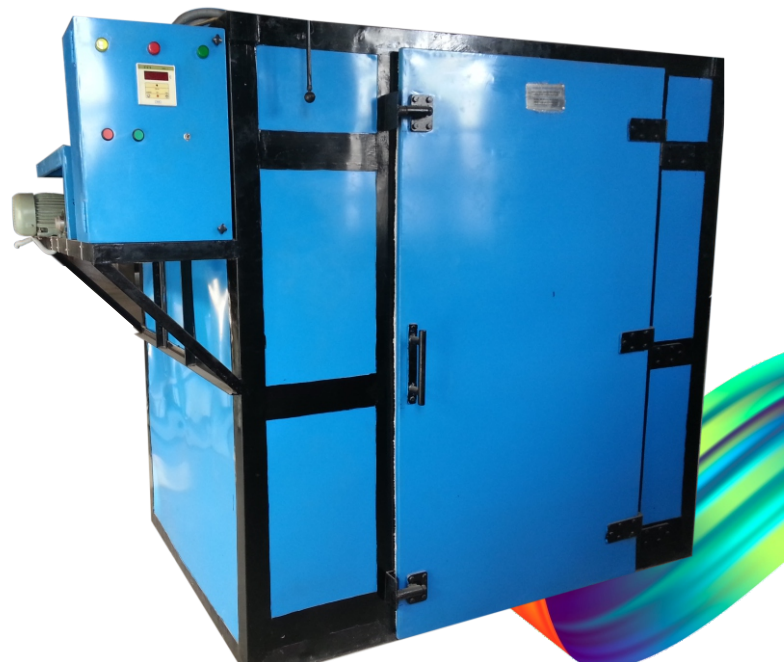


Key Features:

- Ergonomic design for ease of loading / unloading
- High Efficiency with AC Inverter
- Control Panel with Digital Timer
- Pneumatically Operated Top Lid (Optional)
- Three leg suspension design is also available for large batch sizes.

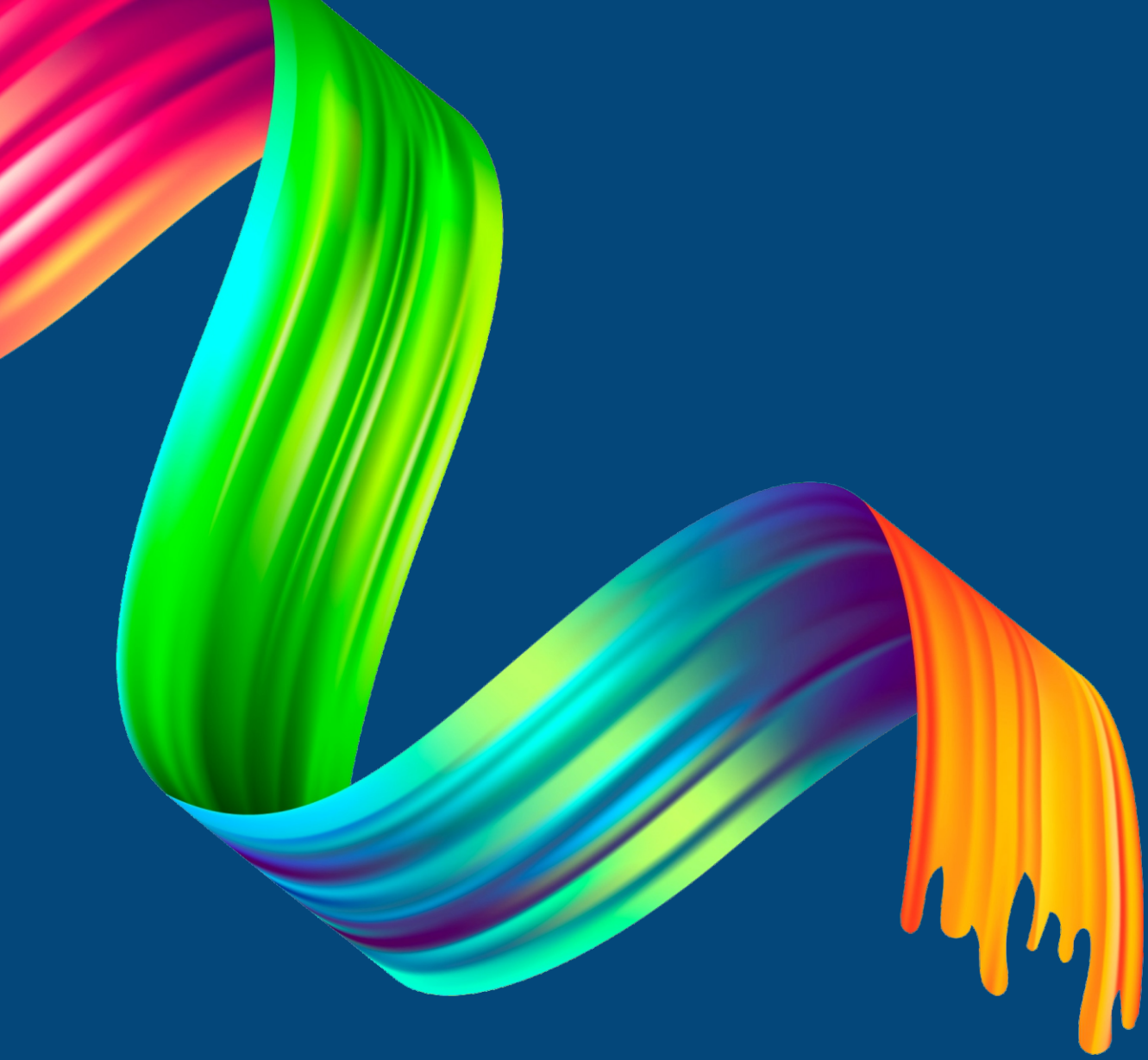
Hot Air Dryer Machine

Unimech "Hot Air Dryer Machines" are designed to dry out moisture from various types of yarns like polyester, cotton, viscose, acrylic, silk, wool, etc. The machine can be constructed to accommodate yarn cones, hanks, loose fibre, zipper tapes, etc. The exterior is made out of glass wool insulated MS Sectional Frame with Powder Coating finish. All internal parts are made out of Stainless Steel Grade 304. Carrier Trolleys are made for ease of loading / unloading. The machine is available in 50Kgs to 500Kgs per batch.



Key Features:

- Heating can be done by electric air heaters, thermic fluid or steam.
- Fin type heat exchanger.
- Forced Air Re-circulation blowers to maintain uniform temperature.
- High Efficiency with AC Inverter Drive
- Control Panel with Digital Temperature Programmer
- Adjustable Manual Air Damper



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