

MachTech Machtech Plast



Hot Air Dryer(Insulated)

Technical Specification

- Stainless Steel Internal Construction
- No Aluminium Casting body ensures durability, rigidity and long life without any breakdown
- Hot Air Dryer Insulated with 19mm Thick Glass wool
- Large Access Window with clamp ease in maintenance & cleaning(Above – 100Ltr.)
- Large viewing Window Provision on window to cross checks the material level inside the Hot Air Dryer (Above 100Ltr.).
- Power Connection: 415VAC / 50Hz / 3Phase
- Micro Controller PID Controller for accurate temperature
- control above 100Ltr.
- "RTD Temperature Sensor" for temperature sensing
- Designed for zero maintenance cost, lowest human efforts, low power consumption, energy conservation and best performance



Model	Capacity (Ltr.)	Heater (kw)	Blower (Watt)	Height (mm)	Width (mm)	Depth (mm)	Voltage	Connected Load (KW)
MTDI - 10	10	2.1	115	665	500	250	230V, 1Ø	2.21
MTDI - 30	30	2.1	115	805	650	330	230V, 1Ø	2.21
MTDI - 60	60	2.7	115	985	600	400	230V, 1Ø	2.81
MTDI - 100	100	3.9	76	1140	680	480	415V, 3Ø	4.0
MTDI - 150	150	6.0	112	1250	800	600	415V, 3Ø	6.1
MTDI - 200	200	6.0	112	1425	800	600	415V, 3Ø	6.1
MTDI - 300	300	10.0	196	1690	900	650	415V, 3Ø	10.2
MTDI - 400	400	10.0	196	1760	1000	750	415V, 3Ø	10.2
MTDI - 500	500	12.0	196	1800	1200	750	415V, 3Ø	12.2
MTDI - 600	600	18.0	196	1900	1200	900	415V, 3Ø	18.2
MTDI - 800	800	18.0	1750	2200	1200	900	415V, 3Ø	19.7
MTDI - 1200	1200	24.0	2200	2550	1300	1080	415V, 3Ø	26.2
MTDI - 1500	1500	24.0	3700	2800	1300	1080	415V, 3Ø	27.7
MTDI - 2400	2400	36.0	5500	2100	1650	1450	415V, 3Ø	41.5
MTDI - 3000	3000	48.0	7500	2500	1650	1450	415V, 3Ø	55.5

Granulator

Technical Specification

- Machtech Plast Granulator allows easy access to the heart;
 Cutting Chamber, Screen & Grinding Bin for rapid cleaning & maintenance; reducing machine downtime considerably.
- JAW & PADDLE Blade Design can crush any hard or soft material with ease.
- Granulator can be fed manually, by conveyor belt or by Robotic Sprue Picker.
- Blades are made up of special material; high chromium & heat treated.
- Blades are adjustable & can be re-sharpened.
- Thermally Treated Blades for Longer Life.
- Overload Protection of Motor
- The separation design of the crushing chamber & material bin allows the Screen Mesh to discharge & clean easily.
- A Dust Separating System (Centrifugal Blower) can remove fine dust from regrind material.
- The internal surface of the equipment made of stainless steel to avoid contaminate the raw material.
- High-capacity Stainless Steel regrind collection bin designed for vacuum evacuation.
- Finish even mixing in short time, low energy consumption, High efficiency
 Universal Castor Wheel and Brake, easy for adjusting and moving.



Model	GRS - 9" 5HP	GRS - 12" 7.5HP	GRS - 16" 10HP	GRS - 20" 15HP	GRS - 24" 20HP	GRS - 32" 30HP
Motor Power (HP)	5	7.5	10	15	20	30
Cutting Chamber (mm)	230 x 200	310 x 200	410 x 240	510 x 300	610 x 330	815 x 470
Fixed Blade (No's)	2	2	2	2	4	4
Rotating Blade (No's)	6	9	12	15	18	24
Mesh Size (mm)	8	8	8	10	10	10
Rotary Speed (RPM)			2.	50		
Approx Output (Kg/Hr.)	70 - 100	100 - 125	150 - 175	175 - 230	225 - 250	300 - 400
Dimensions (Lx W x H)	800x650x1200	1000x750x1200	1250x850x1290	1435x1100x1550	1635x1250x1750	1600x1560x2120
Overall Weight (Kgs.)	300	450	500	900	1000	2000

Hopper Loader

Technical Specification

- Material Line positioned on fixed part of Loader Container & Vacuum Line positioned on Top part allows easy access inside the Vacuum Loader during Maintenance.
- Vacuum & Material line size can be change at the Flange of an appropriate required size
- Manual Filter Cleaning (Optional Auto Cleaning)
- Antistatic Flexible tube 10 Mtr. Length for vacuum & material line
- Vertical Feed Tube for Suction
- Can be used for a throughput of 100 Kg/Hr.
- Loader Container Volume 7 Ltr.
- Supply Voltage 415/3Ø / 50 Hz
- SS Wire Mesh Filter of 22 Mesh can be serviced easily with no tools.
- Stainless steel canister is designed for easy cleanout.
- Considering food safety all material contact surfaces are non-ferrous.
- Critical discharge components are safeguard inside the Loader container for additional safety.
- Eliminate material bridging by bigger discharge area.
- Stand Alone Blower with Control Cabinet can be placed nearby machine Ease In operation
- Programmable Logic Controller with all safety features & ease to operate
- Enable/Disable switch allows instant ON/OFF of Vacuum Loader.
- Visual Indication Lamp for material demand & loading of material

Model	VL 10	VL 20	VL 30	VL 85		
Receiver Volume (ltr.)	10	20	30	85		
Receiver Diameter (mm)	200	310	- 310	650		
Vacuum/Material Line Size (mm)	38	50 - 6	50 - 60 - 75 75			
Vacuum Blower (kw)	0.9 / 1.5	2.2 - 4.0	4.0 - 5.5	5.5 - 7.5		
Throughput (kg/hr.)	150 - 200	300 - 400	500 - 600	800 - 1000		
Optional	Automatic Filter Cleaning, Ratio Valve, Bulk Dumpin Line Cleaning Valve, Intermediate Hopper					
Supply Voltage	3 Ø 415 V	3 Ø 415 V	3 Ø 415 V	3 Ø 415 V		





Model	Tw	/in	Tr	Trio		lruple
Receiver Volume (Ltr.)	VLR 1	l0 x 2	VLR 10 x 3		VLR 1	L0 x 4
Vacuum Blower (KW)	1.5	2.2	2.2 4.0		2.2	4.0
Throughput (Kg/Hr.)	75 x 2	75 x 2	60 x 3	60 x 3	50 x 4	50 x 4

Air Chiller

Technical Specification

- MTAC 2A & MTAC 2W Model Compact Chillers are designed to perform for Industrial Cooling Requirement - continuous cooling demand / fluctuating demand to be operated round a clock 24/7 & throughout the year.
- Air Chillers have range of 2000 m /hr to 1000 m /hr; with Air Control Temperature of 5 C to 20 C.
- Chiller has been designed with "V Shaped Twin Condenser" and can work up to "47 C of Ambient Temperature".
- The designing of chiller has based on "Global Warming" and continuous change in ambient condition.
- The Smart PLC shows the status of Compressor, Hot Gas By Pass Valve, Leaving Air Temp., Entering Air Temp., Set & Actual Value of Temperature and Alarm History.
- All wetted surfaces are SS, Copper or other than non-ferrous material.
- Proven Component supplier like compressor from Danfoss, Switchgear from Siemens / Schneider, Hot Gas Bypass Valve from Siemens / Parker.
- Tool free Access Panes and precisely organized internal component layout provides easy access and service. Simply remove the panes to access to the complete chiller.
- Trending screen of Leaving Air Temperature V/s. Set Temperature & Air Inlet Temperature.
- Bar Graph for Hot Gas By Pass Valve to identify the operation position of HGBP Valve

Model	MTAC 2A 20	MTAC 2A 30	MTAC 2A 40	MTAC 2A 45	MTAC 2A 55	MTAC 2A 80	MTAC 2W 20	MTAC 2W 30	MTAC 2W 40	MTAC 2W 45	MTAC 2W 55	MTAC 2W 70
Cooling Capacity in TR (KW)	9.4 (33.2)	12.2 (43.0)	18.8 (66.4)	22.4 (78.7)	24.4 (86.0)	28.5 (100)	10.5 (37.0)	15.67 (55.1)	21.3(75.0)	97 (27.5)	32.7(115)	43.0(150)
Design Air Flow Rate m ³ / hr	2000	3000	4000	5000	5500	7000	2500	3800	5000	6500	7500	10500
Compressor Qty / KW	1 / 8.90	1 / 11.6	2 / 8.90	2 / 10.82	2 / 11.6	2 / 13.65	1 / 6.56	1/10.2	1/14.15	2 / 9.0	1/21.5	2/14.15
Control Range (°C)						+5 to	+20					
Refrigerant Options		R22, R134a, R407C, R410a										
Max. Air Flow Rate (m³/hr)	2000	3000	4000	5000	5500	7000	2000	3800	5000	6500	7500	10500
Min. Air Flow Rate (m³/hr)	800	1200	1600	2200	2400	2800	1020	1500	2000	200	3000	4100
Pressure Drop of Air through Evaporator (Pa)	150	150	170	250	250	350	110	150	165	165	250	350
Fan Quantity / KW	2 / 1.2	2 / 1.56	4 / 3.12	4 / 3.12	4 / 3.2	4 / 3.2			Water Coole	d Condenser		
Cooling Tower Water Flow Rate (LPM)			Air Cooled	C			200	250	300	300	350	500
Cooling Tower Water Pressure (Bar)			Air Coolea	Condenser					2.5	-3.5		
Air Connection IN/OUT (mm)	200	200	200	270	270	270	200	200	200	200	250	300
Air Temperature IN/OUT		40/15										
Relative Humidity	40											
Connected Load (KW)	10.1	13.16	20.92	24.76	26.4	30.5	7.75	11.1	13.12	18.0	20.4	29.0



Air Cooled Water Chiller

Technical Specification

- 1°C shift from the operating set point can means a 0.5% change on your electricity bill. The variable speed compressor control's temperature in the range of +/- 0.3°C. It exactly matches your cooling requirements.
- Variable Speed Chillers have cooling capacity of 7TR to 30 TR; with Control Temperature of 8 C to 30 C.
- Chiller has been designed with "V Shaped Twin Condenser"
 O and can work up to "52 C of Ambient Temperature".
- The Inverter series Scroll compressor can cycle from 25 to 100 RPS to effectively avoid energy waste. In part-load operation, it consumes 90% less energy than a fixed-speed compressor.
- Variable Speed Compressor comes with R410a Eco-Friendly refrigerant.
- All Chilled water contact surfaces are made of non ferrous materials to protect against corrosion.
- Inbuilt process water by-pass with valves.
- Fin & Tube Type Condenser having internally grooved copper tube which gives higher surface area.
- LP/HP Refrigerant gauges are provided for easiness in health check up & during maintenance.
- Non Return Valve (NRV) & Solenoid (Optional).
- Refrigeration Units (Without Tank & Pump) (Optional)
- Remote Control Panel, Ethernet & Modbus
- Communication, Water Flow Meter (Optional).

Model	MTA 2A 7 HT - VFD	MTA 2A 10 HT - VFD	MTA 2A 12 HT - VFD	MTA 2A 15 HT - VFD	MTA 2A 17 HT - VFD	MTA 2A 24 HT - VFD	MTA 2A 30 HT - VFD
Cooling Capacity in TR	7.2	9.4	12.2	14.2	19.1	24.4	29.5
Compressor KW	8.5	9.9	13.17	14.71	19.36	23.87	28.15
Refrigerant		•	R-4	10a (Eco Frien	dly)		
Process Pump (KW)	1.1	1.5	1.5	2.0	2.2	2.2	3.0
Process Pump Flow (LPM)	230	230	230	230	230	230	380
Max. Pressure (Bar)	4.8	4.8	4.8	4.8	4.8	4.8	4.8
Water Tank (Ltr.)	100	150	150	200	200	200	300
Fan Quantity / KW	2 / 1.2	2 / 1.2	2 / 1.56	4 / 2.4	4 / 3.12	4 / 3.2	4 / 3.2
Process Connection (In/Out) BSP	1 ½ "	1 ½ "	1 ½ "	1 ½ "	1 ½ "	1 ½ "	2 "
Length	1900	1900	2100	2100	2300	2750	2750
Width	1125	1125	1475	1475	1475	1705	1705
Height	1750	1750	1950	1950	2100	2200	2200
Weight (Kgs.)	700	700	700	900	1000	1100	1500
Connected Load (KW)	10.80	12.60	16.23	19.11	24.68	29.27	34.35



AIR / WATER COOLED SCREW CHILLER

Technical Specification

 MTAW series chillers offers greater performance and state-of-the-art technology in a sturdy industrial chiller.

MTAW series Chillers are Engineered with Excellence for year round, 24x7 operation under Demanding Industrial applications. Combining a Compact design, sturdy construction and a new PLC based Control. MTAW Chillers will provide maximum cooling for your application.

The PLC shows the status of pump, compressor, Leaving Water
 Temperature, Entering Water Temperature, Set & Actual Value of

■ Temperature and Alarm History.

All Chilled Water Contact surfaces are non-ferrous for protection against corrosion. All wetted surfaces are Stainless Steel, Copper or other non-ferrous material from Established Global Component Supplier like Compressors from Bitzer / Frascold, Pump is from Grundfoss / CRI, flow Switch is from Jhonson Control make.

 Gracefully systematized internal component Layout provides easy access and service. Simply removable panels allow to easy access to the entire cabinet of the chiller.





Model	MTAW 40 SA-PT	MTAW 50 SA-PT	MTAW 65 SA-PT	MTAW 80 SA-PT	MTAW 100 SA-PT	MTAW 40 SW-PT	MTAW 50 SW-PT	MTAW 65 SW-PT	MTAW 80 SW-PT	MTAW 100 SW-PT
Type of Chiller		Air Cooled Water Cooled								
Cooling Capacity in TR	39.8	49.0	65.0	77.0	97.0	38.0	48.0	59.0	81.0	101.0
Compressor KW	43.3	56.3	70.0	78.6	100.9	30.8	38.2	41.8	57.3	80.8
Refrigerant		•	•	F	R - 22 (Freon) (C	ptional - R134	a)	•	,	
Process Pump (KW)	4.0	4.0	5.5	5.5	7.5	4.0	4.0	5.5	5.5	7.5
Process Pump Flow (LPM)	480	480	600	700	880	480	480	600	750	880
Max. Pressure (Bar)	5.6	5.6	4.5	4.5	4.5	5.6	5.6	4.5	4.5	4.5
Water Tank (Ltr.)	500	500	750	850	850	500	500	750	850	850
Total Fan Quantity KW / Nos.	4.8 / 6	6.4 / 8	6.4 / 8	8.0 / 10	9.6 / 12			Water Cooled		
Cooling Tower TR / Connection		•			•	55 / 2.5"	75 / 3"	90 / 3"	125 / 3"	125 / 3"
Cooling Tower Flow (LPM)			Air Cooled			600-700	900-1000	900-1000	1300-1500	1500-1800
Process Connection (In/Out) BSP	2 "	2 "	2 1/2"	3 "	4 "	2 "	2 "	2 ½"	3 "	4 "
Length	3350	3900	3900	1200	1200	3000	3000	3000	3000	3150
Width	1705	2000	2000	775	775	1900	1900	1900	1900	1950
Height	2200	2350	2600	1300	1300	1850	1850	1850	1850	1850
Weight (Kgs.)	2200	2600	2800	3000	4000	2000	2000	2200	2200	2200
Connected Load (KW)	62.1	76.7	91.9	102.1	128.0	44.8	52.2	57.3	72.8	98.3

Gravimatric Blendor

Technical Specification

- Blends accuracy of 0.5 percentage can be achieved.
- Instantly monitor your material use.
- Save up to 100 recipes.
- Detachable weighting bin and mixing chamber for easy clean out.
- S.S. construction of weighing bin.
- Multi-level password protection to prevent data manipulation.
- Twin load cell for high accuracy.
- Online Diagnostics on screen for target set point and actual point.
- Graphical display for easy understanding and operation.
- High accuracy for dosing lower percentage.
- Open able material compartment for easy clean out.
- High Precision Dosing
- Regrind Control
- Dispense Value
- Intregrated Value
- Solution: IMM, BM, Sheet Extrusion, Firm Centrusion, Conplater Material Data.



Model	GB - 45/4	GB - 100/4	GB - 250/4	GB - 250/6	GB - 500/4	GB - 500/6	GB - 900/4	GB - 900/6
Batch Size (grams)	450	1000	2500	2500	5000	5000	9000	9000
Max Output (kg/hr.)	79	181	431	340	680	522	1588	1270
Major Bin (Liter)	6	17	45	76	76	76	125	125
Minor Bin (Liter)	6	8	45	40	76	38	125	62
No. of Component	4	4	4	6	4	6	4	6
No. & Size of Major Bin	2 - 40mm	2 - 60mm	2 - 60mm	2 - 60mm	2 - 100mm	2 - 100mm	2 - 100mm	2 - 100mm
No. & Size of Minor Bin	2 - 20mm	2 - 20mm	2 - 30mm	4 - 30mm	2 - 30mm	4 - 30mm	2 - 60mm	4 - 60mm
Electrical Supply				415 V, 5	0Hz, 3Ø			
Height (mm)	800	1200	1500	1700	1700	1700	1700	2000
Width (mm)	700	800	1000	1100	1100	1100	1300	1400
Depth (mm)	700	900	1100	1100	1100	1100	1300	1400
Weight (kg)	100	120	200	200	200	220	300	300

Power Pack



Technical Specification

- 55 kW (73.8 hp) hydraulic power with a pressure of up to 250 bar and a flow rate of 120 Ltr. per minute.
- Equipped with a variable displacement piston pump, ensuring high efficiency and adaptability to diverse applications.
- Large-capacity reservoir holding 300Ltr. of hydraulic oil, allowing extended operational periods without frequent refills.
- Operates within a pressure range of 20 to 250 bar, catering to various hydraulic systems' pressure requirements.
- Utilizes an advanced electric control system integrated with PLC for precise regulation and monitoring of hydraulic functions.
- Includes pressure relief valves, temperature sensors, and emergency stop mechanisms to ensure safe operation and prevent system overloads.
- Utilizes an efficient air-cooling system, maintaining optimal operating temperatures and ensuring consistent performance.
- Low noise emissions at 75 dB during operation, ensuring a quieter working environment and compliance with noise regulations.
- Operates within a temperature range of -10°C to 50°C, IP55-rated for dust and water resistance, and complies with EU environmental directives for energy efficiency and waste reduction.

Temperature Regulating Controller

Technical Specification

- Modular design can be used for both medium i.e. Oil & Water.
- PID temperature controller ensures the precise temperature controlling within the band of ± 10C.
- User friendly PID Temperature control with Bright White Color LCD Display
- Clear indication of Set & Actual value.
- Draining Facility is provided for cleaning tank.
- Level monitoring is used for dry running protection of pump.
- Water line is made in Non-Ferrous material
- Re-feeding Valve for Automatic Water/Oil Refilling.
- Stainless Steel Low Watt Density Heater
- High Pressure High Flow Process Pump
- For restricting impurities Italian Y Type Brass Strainer are provided at Inlet of Cooling Water



Model	TCU 1.5HP - 9KW	TCU 2HP - 12KW	TCU 3HP - 18KW	TCU 5HP - 24KW	TCU 7.5HP - 48KW					
Heating Medium		Water								
Maximum Temperature		1	.20 Degree Celciu	S						
Heating KW	9	12	18	24	24/48					
Pump Flow Rate (LPM)	100	180	230	380	480					
Pump Pressure (Bar)	4.8 Bar									
Pump Load (KW)	1.1	1.5	2.2	4	5.5					
Cooling Type			Direct Injection							
Controlling Voltage		4	15 V, 50 Hz, 3Phas	se						
Process Connection - In/Out	1½"	1½" 1½" 1½" 1½"								
Cooling Connection - In/Out	1/2"	1/2"	1/2"	½"	1/2"					
Connected Load	10.1	13.5	20.2	28	29.5/53.5					

SURGE BIN



Technical Specification

- First time in India Surge Bin with Ribbon Blender
- Concept Serves multiple purposes like homogeneous mixing of more than one material, material storage / day bin
 and most importantly low bulk density material like flakes conveying without any manual efforts.
- Consulted from SS304 & Mild Steel.
- Bin directly mounted on Spring allows linear downward material flow.
- Prepared with 45 c & 60 c Conical shape for even material downward flow.
- Equipped with "FRL Filter & Regulator Unit for compressed air supply.
- Large Access Window with clamp ease in maintenance & cleaning.
- Large viewing Window Provision on window to cross check the material level inside the Bin.
- Large access from top cover 50% opening area Horizontal Ribbon Blender works with Three Phase Gear Motor minimal RPM ensures homogeneous mixing of multiple components.
- Designed in such a way that no powder will migrate to ribbon blender mountings, which ensures no jamming or choking.
- Easy for maintenance type of orientation for each rotating & moving parts provides ease in maintenance.
- Power Connection: 415VAC / 50Hz.
- Material Distribution Box at material outlet can be 1 up to 6 outlets.
- Optional Pneumatic Vibrator for Flakes material.
- Optional Vibrator Motor for low bulk density material.
- Top Cover prepared from SS304.
- Sliding Arrangement provided with ball bearings for ease in cover open / close.
- Low maintenance and easy handling.

ABOUT US

MACHTECH PLAST AUXILIARY LLP



Machtech Plast is an emerging manufacturer of a wide range of auxiliary equipment to ensure complete solutions to the plastic processing industry. The company firmly believes in leadership through Excellence Machtech Plast is a brain child of a few professionals having adequate experience and expertise in the field of manufacture of auxiliary equipment.

In the dynamic landscape of plastic manufacturing. Specializing in crafting high-performance equipment, our product lineup includes Air Chillers, Water Chillers, Hopper Loaders, Hot Air Dryer, Granulator, Volumetric dozer, Vertical Colour Mixer, Power pack, and Temperature Regulating Control systems.

Committed to excellence, we take pride in seamless machine deliveries and unwavering customer satisfaction. Our founder's quarter-century expertise infuses precision into every aspect of our manufacturing process, ensuring top-notch quality. At MachTech Plast, we don't just produce machines; we deliver reliability and innovation.

Our catalog reflects a dedication to advancing plastic manufacturing through cutting-edge technology and a relentless pursuit of perfection. Experience the epitome of plastic auxiliary machinery with us. Machtech Plast stands as a beacon of innovation and reliability.



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