

In response to your request, we are pleased to submit our Drawing #07155.3 and the following proposal. The part will run through the wash, dry and Rhino lining booth on the overhead conveyor, while we have offered an optional the roller conveyor an second booth for your foam application. Per our discussion, we plan on installing the Rhino lining booth first during delivery.

The above noted drawing shows the layout for a conveyORIZED finishing system to process your various parts. The maximum ware package size will be 4'h x 2'w x 10'l. For design purposes, we have used a maximum load of 3,000 lbs per hr. This will result in a line loading of approximately 12 lbs per ft.

By previous determination, you have found a conveyor speed of 3 FPM to be sufficient to satisfy your production requirements. We have, therefore, based the layout, as well as all process times for the equipment, on this assumption.

The equipment will occupy an area, approximately 114'l x 44'w. It is presumed that a floor to structure clearance of 15' will be available.

The equipment has been laid out to provide for metal prep and dry off of the ware package, as described above. The work opening through all the equipment will be 5'h x 2'6"w, with an additional 2'6" for conveyor and work hanger.

## WASHER

The washer is proposed to be a straight line unit of three stage construction to process your products. The unit will be 55'l x 6'2"w x 11'5"h overall.

The washer will include the following process times:

Stage #1	- Cleaner	100 Sec	150 deg
Stage #2	- Rinse	60 Sec	ambient
Stage #3	- Seal/Rinse	60 Sec	ambient

Tanks for non-corrosive service will be fabricated from 1/4" steel plate by welding. Floors of tanks will be sloped to drains. Each tank will be sized according to the length and width of the spray stage served with a sump extension at one side to accommodate pumps, dual stainless steel pump screens, CPVC drain, overflow and chemical servicing. The washer unit will be mounted on a 4"h front and 6"h rear tube base for construction of the

unit and to provide rails to move the equipment onto the field site. Tank capacities for all stages will be based on the volume of approximately 3 times the GPM sprayed for each stage

Where chemicals to be used are corrosive, tanks will be of type 304 or 316, 3/16" stainless steel as an option. Please notify GAT as to the need for such materials based on your chemical composition.

Solution tanks requiring water level control will be provided with automatic Gems float switch and solenoid water valves. Overflowing rinse tanks will be furnished with a manual valve to control overflow rate. Make-up water for all chemical tanks, except the final tank, will be taken automatically from the following rinse tank in its entirety, and will be on a demand basis controlled through a Gems float switch and solenoid valve. The make-up water supply will be furnished under pump pressure to ensure sufficient capacity and rates of flow. All stages will have a manual fill valve supplied by a 1-1/2" SCH 80 PVC manifold along the front base tube, below all tanks, with the exception of the last stage which will be provided with an automatic valve. Low water safety switches will be furnished for all heated stages to protect the heat exchanger unit.

Each tank will be furnished with a **12 ga, 304 stainless steel full portal width** catwalk over the top of the tank, which will serve as a personnel walkway for maintenance, work guard, as well as an efficient manner in containing steam vapor from escaping.

The spray systems will be furnished with cast iron pumps in the following capacities for each stage. Stainless steel fitted pumps are available as an option. **Standardized modular pump installation will allow stocking of common size pumps for better availability. Where two pumps are necessary to meet capacity, a common size is used in parallel. This allows continued operation with reduced rate, if a pump fails.**

Stage #1	200 GPM	60'Hd	5.0 HP	553 Net Gallons
Stage #2	200 GPM	60'Hd	5.0 HP	357 Net Gallons
Stage #3	200 GPM	60'Hd	5.0 HP	357 Net Gallons

Spray system will consist of recirculating centrifugal pump, connecting piping, spray manifolds, valve, pressure gauge and spray nozzles. Pumps will be Gusher all iron, vertical extended shaft, sump mounted, centrifugal type for all cleaning, iron phosphate or chromic acid applications. Those applications requiring the use of corrosion resisting pumps will employ stainless steel or other special material, as may be required. Typical corrosive applications are zinc phosphate, acid etch solutions, or D/I applications.

All standard piping will be of extra heavy SCH 80 CPVC construction.

Nozzles will be 1/4" fan jet pattern of glass reinforced polypropylene construction, omni-directional, snap-on type with capacity of 2.83 GPM at 40 psi. Other types and sizes will be supplied, where required. Nozzle spacing will be 12" horizontally and vertically with alternate and opposed rows staggered for complete coverage of the work. The spray nozzle pattern will be a side by side/over and under arrangement to provide the appropriate spray envelope for the ware package as described. Nozzles may be supplied on top and bottom for belt conveyors or unusual applications. Horizontal nozzle spacing will be increased for process speeds greater than 10 FPM.

Pump pressure will be variable up to 25 psi, except where special applications may require higher pressures.

CPVC is highly resistant to chemical degradation in all applications; however, it can show brittleness with prolonged exposure to high concentrations of organic compounds found in some types of cutting or forming lubricants. The manufacturer recommends these solutions be dumped on a regular basis, otherwise periodic maintenance on or replacement of the CPVC piping may be required.

The washer will be furnished with our POLYPRO EXTENDED LIFE HOUSING (patented), constructed of ½” polypropylene material with all stainless steel interior trim. POLYPROPYLENE PROVIDES A SUBSTANTIAL ENERGY SAVINGS OVER OLD MILD STEEL OR STAINLESS STEEL HOUSINGS. Joints at 4’ centers will be screwed and sealed with a 3/16” x 3” stainless steel bar securing a neoprene gasket to provide leak proof construction. Bolted/Neoprene gasketed housing provides effective solution to the frequent problem of stainless steel housing fractures at or near welded seams, due to expansion. Construction allows easy removal and replacement of sections of housing with minimum personnel and equipment necessary. THE ABOVE FEATURE INCLUDES A TEN YEAR WARRANTY AGAINST CORROSION AND OXIDATION.

Drainboards will be from 1/8” h.r.s. and together with solution tanks will form the bottom of the spray booth. Sides of booth will be sealed to tanks and drainboards with internal lap to provide rigid unit construction and ease of field assembly or modification. There will be interstage baffles at the entrance and exit of each spray zone. Inset, internal drained stainless steel access doors will be furnished in each drain area with the exception of the entrance and exit vestibule.

Taking into account part length, portal height, and line speed, the drainboards will be 12’1 each with 9’ sloped back toward the preceding stage.

Each end of the washer housing will be equipped with a centrifugal vent fan to minimize vapor escaping from the work opening. The fans will be a forward curved, dual inlet blower, complete with all necessary shaft, bearings, sheaves, belts, motor, and intake ductbox. **Centrifugal vent fan housings are superior to tubeaxial fans in that the bearings are outside the moist air stream as well as being capable of higher static pressure.** Each fan will be capable of maintaining a face velocity of 150 FPM across the work opening.

All heated tanks will be equipped with GAT submerged high U gas fired extended surface heat exchangers, mounted in the solution tank, of sufficient capacity and arrangement to provide the necessary BTU input for the above noted temperatures. **The unique design of the exchangers utilizes high surface to displacement ratio, reducing tank size, increasing the vertical to horizontal surface relationship and inherently providing a lower exhaust gas temperature, the best measure of burner and heat exchanger efficiency. Larger heat exchanger sizing promotes better efficiency and longer operating life at design temperature.** Burner capacity supplied will be consistent with solution temperature, spray volume and work weight per hr. The heat exchangers will be constructed of #10 ga h.r.s. and welded for water tight service. Gas fired systems will be heated with AH or TAH modulating burners with automatic electrically ignited pilots with ECLIPSE flame safety. Burners will be provided with DUNGS dual automatic safety valves. Temperature control will be a HONEYWELL UDC indicating modulating controller. The heating system will be protected with air flow and gas pressure switches, as required by FM Regulations Volume 6-9 and NFPA 86.

Each heated tank will be exhausted by a common 18 ga. galvanized, insulated exhaust duct, which will run along the back of the washer. The exhaust duct will be connected to a single forward curved, single inlet centrifugal fan, complete with all necessary shaft, bearings, sheaves, belts, intake duct, and control shutters.

The washer unit will be furnished completely assembled up to the top of the tank, piped and wired, to a single point connection for each utility. The spray housing, framework, and spray pipe assemblies will be furnished knocked down for installation on the field site.

One completely wired NEMA 12 control panel will be furnished with the washer unit to be mounted on the unit at a location to be determined by the customer. All switches will be provided with 19,000 hour life LED illumination. The control panel will be furnished with all necessary main disconnects, motor starters, push buttons, fuse cutouts, safety controls, indicating lights and switches.

All other items of construction not covered above will be accordance with the Standard Specifications attached.

#### OPTIONS

- .1 Heat exchangers will be fabricated from #12 ga 304 stainless steel.
- .2 All drainboards will be fabricated from #12 ga 304 stainless steel.
- .3 All tanks will be fabricated of 7 ga 304 stainless steel.
- .4 All straight conveyor rail through the washer will be provided in 304 stainless steel construction.
- .5 Any solution spray pump can be upgraded to 316 S.S. fitted construction.
- .6 One full portal height blow-off knife with 4' drainboard extension will be provided. The unit will come with all required manifold hose, "V" emitter tube, paddle wheel blower of sufficient size and HP capable of 21,000 FPM air velocity, mounting hardware and motor starter mounted in the washer control panel. The unit will be mounted on a 30' receding slope in order to "wipe" the part of moisture, as well as minimize part movement.

#### **WASHER PERFORMANCE CHART**

STAGE	NOZZLE	GPM	PUMP HP	STAGE HP	STAGE BTU	BURNER SIZE
ONE	60	200	5.0	5.0	920,909	1.2 MBTU
TWO	30	200	5.0	5.0	0	
THREE	30	200	5.0	5.0	0	
			CFM	QTY	HP	TOTAL HP
VENT FAN			2125	2	1.0	2.0
EXHAUST			614	1	2.0	2.0
TOTAL HP REQUIRED						19.3

#### **OPERATING COST**

BASED ON RATES IN ST. LOUIS, MO  
(\$6.50/MBTU &.07/KWH)

Hourly Operating Cost                      \$ 4.63

Given the low coefficient of heat transmission through polypropylene as compared to steel, G.A.T.'s patented polypro washer will run on a minimum of 25% less gas than the equivalent steel housed washer. The gas decrease in this case would amount to a savings of **\$ 3,143.00/year** (\$6.50 per MBTU at 2100 hrs/year operation).

#### DRY OFF OVEN

One, two pass floor mounted oven will be furnished to be 36'l x 7'w x 12'3"h. The oven will provide 12 minutes of exposure time at a maximum temperature of 350 deg F. The oven will be designed for a floor mounted installation to be mounted directly onto a concrete floor.

GAT will insure that the part, hung with the “Z” brackets in a flange down position, and positioned in the dry off oven for 6 minutes or longer @ 325 deg F or hotter, will emerge dry. If the parts are hung or manufactured in a manner that creates pooling or water holding areas, GAT cannot insure a dry part.

Panels are constructed from #18 ga galvanized material, reinforced internally, with insulating characteristics as required for the appropriate temperatures.

The oven shell will be 6”thk steel encased 4# density batt mineral wool insulated panels provided in 4’ widths, as **opposed to typical 27” widths. 4’wide panels present 45% fewer seams, thereby increasing efficiency.** Panels will be sheathed inside and out with #18 ga galvanized steel, as opposed to lighter gauges, reinforced with stiffening ribs spaced on 12” centers, providing a structural component. Abutting edges of panels will be arranged to fit in tongue-and-groove fashion providing a tight seal but allowing adjustment for thermal expansion. Seams are fully insulated with the same batt insulation. All panels utilize an isolated spreader clip and stiffener channel construction in lieu of a standard roll formed design in order to greatly reduce the amount of through steel to increase efficiency as well as to provide added strength. Construction of the panel will be entirely spot welded, presenting smooth surface inside and out.

Pre-formed and punched #18 ga galvanized steel trim will be provided for inside and outside corners for the oven, providing the same insulating value as the oven panels.

All miscellaneous insulation and fasteners are provided.

All necessary roof supports, columns and structures of 4” square tube will be furnished to support the oven roof load, conveyor and conveyor work load.

One forward curved, single inlet centrifugal vent fan, complete with shaft, bearings, sheaves, belts, motor, intake ductbox, and control shutter will be furnished. The fan will be designed to ventilate the oven atmosphere at the rates required, in accordance with FM Regulations Volume 6-9 and NFPA 86.

Ovens are designed utilizing high volumes of air for minimal stratification and rapid heat transfer to product. They will provide air volumes based on one CFM per 10 BTU heat requirements, or a nominal turnover rate of three times the oven volume.

The oven heating system will be a direct fired recirculating gas heater to be mounted on the end of the oven. The recirculating blower will be a #1-1/4 forward curved, dual inlet centrifugal blower, complete with sheaves, belts, and motor. The blower will deliver heated air to a floor mounted #18 ga galvanized shell and 12 ga internal frame distribution duct system, utilizing floor-to-ceiling disbursement, **taking advantage of natural convection to enhance circulation and reduce vertical stratification. Ceiling mounted duct design requires excessively high slot velocity, thereby creating wiping of the surface in powder applications as well as excessive HP requirements.** The air will be emitted to the oven atmosphere through adjustable louvers along the top of the dry off section and side of the cure section as appropriate. The air will be returned to the heater through a return opening in the oven adjacent to the heater.

Gas fired systems will be heated with AH, CAH or TAH modulating burners with automatic electrically ignited pilots with ECLIPSE flame safety, the same burner type as used in GAT washers, thus simplifying maintenance time and spare parts requirements. Burners will be provided with DUNGS dual automatic safety valves. Temperature control will be a HONEYWELL UDC indicating modulating controller. The heating system will be protected with air flow and gas pressure switches, as required by FM Regulations Volume 6-9 and NFPA 86.

**An automatic shut down/cool off package will be included on each heater assembly.** This feature protects the fan and shaft and eliminates the requirement for personnel to be present for shut down after the required cool off period.

Conveyor openings will either be through the bottom of the oven requiring no seals, or in the sides in which case G.A.T. high velocity air seals will be provided to minimize the heated air in the oven escaping to the surrounding atmosphere, and to insure the optimum efficient operation of the oven. Where air seals are used, they will be furnished with a complete surrounding air duct providing air pressure against the work opening. The seals will provide a velocity dam at the work openings to minimize thermal leakage and to maintain uniformity of temperature to the oven.

Where utilized, air seals will be furnished in two completely assembled duct sections, ready for mounting to the oven in the field. Each air seal will be equipped with a 7/8 DFC SWSI fan assembly, complete with motor. The air seals will utilize room air and will not induce an additional fresh air load on the surrounding area.

One insulated floor deck system will be furnished to consist of all required formed "B" deck, channel floor stringers, and insulation to completely cover the floor of the oven for floor mounted applications. Standard 4" insulated panel is utilized in elevated applications. The floor will be installed by Tek screw fasteners.

The oven will be shipped knocked down for assembly on the field site. The heater will be furnished completely assembled, piped and wired, to a pull box mounted on the side of the unit.

A separate NEMA 12 completely wired control panel will be furnished to be mounted at a location to be determined by the customer. The control panel will include all necessary main disconnects, motor starters, push buttons, fuse cutouts, safety equipment, indicating lights and switches.

All other items of construction will be in accordance with the Standard Specifications attached.

#### **OVEN PERFORMANCE CHART**

		BURNER SIZE	TYPE	QTY	TOTAL HP
CURE	655,200 BTU	0.8 MBTU	0.33 HP	1	0.33
CURE RECIRC FAN(S)	8,000 CFM		10.00 HP	1	10.00
CURE EXHAUST FAN	750 CFM/FAN		1.00 HP/FAN	1	1.00
AIR SEALS	2,400 CFM/SEAL		2.00 HP/SEAL	2	4.00
TOTAL REQUIRED HP =					15.33

#### **OPERATING COST**

BASED ON RATES IN ST. LOUIS, MO  
(\$6.50/MBTU & \$.07/KWH)

Hourly Operating Cost	\$ 3.66
-----------------------	---------

## RHINO LINING AND FOAM BOOTHS

### **(1) Rohner # CIOF-WP-24-12-8**, Custom Rohner open face booth

Exhaust- dry filter wall plenum located at rear of booth

Intake- Passive air pulled in through 18' w x 8' tall opening in face and conveyor part openings

**Working Dim:** 24'-0" W x 9'-10" H x 12'-6" D

**Overall Dim:** 26'-0" W x 11'-0" H x 15'-2" D

**Part openings:** (2) 2'-6"W x 5'H on each side with 2'-6" key (conveyor to be run interior booth)

#### Specifications:

- Booth constructed using 18ga. galvanized sheet steel cold formed and pre-punched for nut and bolt assembly.
- Booth rigidly reinforced with 14-12 ga. galvanized sheet steel columns and 5" fire curtain on across booth opening.
- (6) Enclosed Class 1 Div II fluorescent light fixtures, inside access fixture, 115V-277V/1/60, located in ceiling panels.
- Exhaust plenum- (70) 20" X 20" exhaust filters grids complete with one set of standard paint collector pads.
- Intake plenum- (70) 20" x 20" intake filter grids complete with one set of tacky intake filters.
- (1) 36" dia. spark resistant tube axial exhaust fan with 5hp TEFC 460V/3/60 motor rated for 18,135 CFM each @ .5" S.P.
- (1) 3/4" air solenoid valve
- (1) Manometer
- (1) 460V/3/60 Industrial UL listed control panel, complete with exhaust fan motor starter & over loads, lighting contactor, and air solenoid & fire system interlock.
- All assembly hardware
- All assembly hardware
- 3D exploded view assembly drawings and construction detail sheets.

(1) Standard 36" exhaust duct package to include: (6) 4' section of straight duct, (1) 2' section straight duct with cleanout access door, (1) conical roof jack with storm collar, and (1) damper cap.

## AIR MAKE-UP UNIT

### **MAU SRMI-227**, Vertical Outdoor Direct Gas Fired Makeup Air Unit

CFM: 40,000 CFM

HP/V: 30HP 460V/3/60

BTU/Temp rise: 3.2Million BTU, 70/NA Deg. F temp rise spray/bake

Controls: Heat ON/OFF with illuminated ON indicators, Maxitrol temperature selector.  
Summer/Winter selectable burner switch with illuminated indicator. (1) dry contact equipment interlock.

#### **Standard Features:**

- **CABINET CONSTRUCTION-** Bolted construction of aluminized steel of 18 - 14 gauge cabinet. Access panels are provided to allow easy access to motors, drives and filters. Outside surface is primed with zinc-chromate and finished with a coat of gray enamel.

- FANS- Centrifugal forward curved, double width, double inlet, class 1 fan(s) with solid turned ground shaft and self-aligning, 200,000 hour lubricate acceptable ball bearings. All blower wheels are statically and dynamically balanced.
- BLOWER HOUSING- bearings and adjustable motor base are mounted on a reinforced frame to insure rigidity and quiet operation. Adjustable drives are standard through 10 HP, fixed drives with 15 HP and larger motors. V-belt drives are sized for 135% of motor horsepower.
- BLOWER SECTION- interior is insulated with 1"-2# density Foil Face insulation as standard on all units.
- MOTOR- Energy Efficient (E.E.), T-frame, open drip-proof, 1800 RPM pre-lubricated ball bearing type for all standard voltages.
- BURNER- Direct gas-fired line burner with spark ignited intermittent pilot for natural gas at inlet pressure from 6 oz. through 1 PSIG with up to 22:1 turndown ratio.
- GAS CONTROLS- Main gas hand shut-off valve, main and pilot gas regulators, pilot solenoid, electrical safety shut-off valve, electronic modulating gas valve, electronic flame safeguard system, high temperature controller, airflow switches, ignition transformer, motor starter with overloads. All components enclosed in a NEMA 1 control enclosure.
- FILTER BOX- Filter section – with “V” or “Z” frames for mounting 2 inch cleanable or pleated filters (30% eff. disposable as standard). A clogged filter switch with indicating light is available as an optional item. Filter section can also be insulated.
- VERTICAL STAND – Welded structural angle support stand pre-punched for nut and bolt blower housing attachment. Stand is fitted with bird screen inlet and finished with a coat of gray enamel.
- BACK DRAFT DAMPER- unit is equipped with discharge of intake motorized damper to control building draft when not in operation.
- DISCHARGE LOUVERS- Vertical/Horizontal adjustable blade discharge louvers for direct or remote duct connection matching discharge duct dimensions.

(1) M.A.U. 90" x 36" discharge duct package to include: (1) 4' section of straight duct

#### OVERHEAD CONVEYOR

We will furnish one X-348, 3" I-Beam conveyor system to conform to the layout, as shown on the drawing. The equipment to be furnished will include:

300'	-	3" I-Beam track
300'	-	X-348 chain w/trolleys on 24" c/c's
6	-	90 deg x 36" roller bank turns
4	-	30 deg x 6' vertical bends
1	-	180 deg x 6' dia traction wheel turn
1	-	drive unit



1	-	air takeup unit
1	-	automatic oiler
1	-	A/C variable frequency drive controller
150	-	swivel/90 deg rotators

The drive unit will be furnished complete with all necessary mechanical components and will be equipped with a A/C variable speed controller with a range of 2-6 FPM. The drive sprocket will be equipped with a shear pin device (friction clutch on enclosed track systems) for protection of the speed reducer unit.

All turns in the oven will be of the wheel type and will utilize graphalloy bushed bearings, suitable for operations at the elevated temperatures.

The conveyor will be supported throughout all equipment by a structural support system, prefabricated as a part of each individual piece of equipment. The conveyor system, exterior to all equipment, will be supported by U or cantilever type floor mounted supports, as may be appropriate for the location and design of the system. The supports will be furnished on appropriate centers for the type of conveyor and work loads imposed on the conveyor system. The conveyor supports will be fabricated from 4" sq structural tubing mounted on 1/4" footplates, punched for four 3/8 anchor bolts. The horizontal crossmembers will also be 4" sq structural tubing, as required by the conveyor loading. The crossmembers will be welded to the top of the columns and gusseted with a No. 10 ga h.r.s., 18" x 18" gusset, at the adjacent corner between the beam and column. The supports will be furnished completely fabricated as individual units up to maximum sizes permissible for shipping. All necessary random angle will be furnished for proper lateral and sway bracing at corners.

The components will be furnished for installation on the conveyor on the field site.

A slider bed will be furnished to tell on line when parts needing foam spray are present and off line when no foam spray is needed.

#### STACK PACKAGE

The stack package to be furnished will be comprised of all materials necessary for all ventilation stacks on the equipment. The stack package will include all necessary roof jack units of appropriate size, all required roof flange units of appropriate size and slope for a given roof pitch, all required spiral wound 20 ga duct-work, all required Boston discharge weather housings and necessary support material. All stacks for the washer vestibule vents will be SCH 40 PVC material.

The stack package is calculated and priced on the basis of a 24' roof height and straight runs. Elbows required to clear structural steel or other unanticipated interferences will be at extra cost. No duct work is included as may be necessary for deflagration venting for powder coating equipment to be installed in the equipment.

#### INSTALLATION

We will furnish all necessary labor and materials to complete the mechanical installation of the equipment, as outlined above. All labor will be non-union unless otherwise noted.

Should any of the installation be performed exterior to the building, the following conditions will apply. Work will not be performed outside during snow, rain or when the temperature is lower than 25 deg F. For each day that such conditions exist and work cannot be performed, it will add one day to the installation schedule.

The services to be included will be to receive the equipment at the customer's plant site, move the equipment onto the field site, and fully erect all items of equipment, as outlined above. Included will be furnishing conveyor guards and conveyor guard supports, where necessary, and erecting all ventilation stacks.

All piping will be completed on the equipment to a point terminating at the main gas regulator and water connection at each point of use on each individual piece of equipment, unless otherwise specified. The conveyor support structure furnished will be attached to the customer's building steel by welding, unless otherwise specified.

As Installation Option .1, we will furnish all necessary material and labor to complete the field wiring. The work to be performed will be the necessary wiring from the main control panel, location of which may not exceed a distance greater than 10' from each individual piece of equipment, to the various fan units and terminal boxes on the equipment. All wiring will be performed in accordance with National Electric Codes, utilizing NEMA 1 construction, or hazardous location construction, as may be required. It will be the customer's responsibility to furnish the necessary power source in the amounts required to the main disconnect in the control panels furnished with each piece of equipment.

The customer will be responsible for any drains required and, or piping to same beyond the "overflow/drain assemblies" on any tank, as may be needed. All roof penetrations and resealing of the roof jacks for stacks furnished by GAT will be the customer's responsibility, as well as any additions or modifications to the sprinkler system. The customer will furnish the proper utilities in the amounts required to the main connection points on each piece of equipment.

It is presumed that a clear jobsite will be presented for the beginning of installation of the equipment, and that no alterations, modifications, or other work on the building premises is to be included.

#### RHINO LINE PROCESS

ITEM	#1-	THREE STAGE WASHER
"	#2-	DRY OFF OVEN
"	#3-	RHINO LINE BOOTH & AIR MAKEUP UNIT
"	#4-	OVERHEAD CONVEYOR SYSTEM
"	#5-	STACK PACKAGE

#### OPTIONS

ITEM	#1.1 –	304 STAINLESS STEEL HEAT EXCHANGERS
"	#1.2-	304 STAINLESS STEEL DRAINBOARDS
"	#1.3-	304 STAINLESS STEEL TANKS
"	#1.4-	304 STAINLESS STEEL CONVEYOR RAIL
"	#1.5-	316 S.S. LIQUID FITTED PUMPS
"	#1.6-	BLOW OFF KNIFE

- “ #4.1- PART POSITIONING TABLE
- “ #6- MECHANICAL INSTALLATION
- “ #6.1- FIELD ELECTRIC

#### FOAM IN PLACE PROCESS

- ITEM #7- FOAM BOOTH
- “ #8- ROLLER CONVEYOR

#### OPTIONS

- ITEM #9- MECHANICAL INSTALLATION-BOOTH
- “ #9.1- FIELD ELECTRIC - BOOTH
- “ #9.1- ELECTRO/ MECH. INST OF ROLLER CONV

A general arrangement drawing will be furnished for your approval approximately two (2) to three (3) weeks after receipt of your order and down payment. The equipment will be shipped 12-14 weeks after the return of the approved drawings.

#### TERMS

Written proposals are submitted for acceptance within 30 days from date of issuance.

Acceptance of this proposal by the Buyer, when the Buyer has issued an appropriate Purchase Order along with receipt of down payment, incorporating the entire GAT proposal by reference, constitutes a binding contract between GAT and the Buyer wherein all terms and conditions of sale quoted in the proposal shall supersede and preclude any and all terms and conditions of purchase, as set forth by the Buyer. Exceptions to these conditions must be acknowledged in writing by GAT. Any and all surcharges required for special seismic engineering analysis or equipment modification will be the customer's financial responsibility.

Terms of payment require 20% of the total order amount be remitted with the Purchase Order, an additional 20% remitted with return of approvals, and the remaining 50% remitted upon notification of GAT readiness to ship. 10% will be due and payable upon completion of installation, or in the case of noninstalled equipment, 30 days from shipment. The Buyer herewith agrees to pay GAT 1-1/2% per month service charge on any and all past due amounts. If any collection proceedings are necessary, the Buyer agrees to pay any and all reasonable legal fees and court costs, not in excess of those provided for by law. IN THE EVENT THAT ANY REQUIRED PAYMENT SHOULD FALL PAST DUE, THE ENTIRE AMOUNT OF THE CONTRACT SHALL BECOME DUE AND PAYABLE IN FULL IMMEDIATELY.

The above quoted conditions apply to any past due amounts for installation.

Pricing quoted for installation is based on such work being accomplished during a normal 8 hour work day, and during a normal 5 day work week, excepting holidays. Any exception to these conditions required by the Buyer shall be charged at 1.5 times the price quoted for installation.

Acceptance of the equipment and, therefore, determination of the final payment due, will be defined as follows. Acceptance will be effective upon the equipment being thoroughly checked out by our service personnel, ready for operations use, and having proved one full production shift operation of the equipment without fault or shutdown during the operation.

Equipment, on which manufacture or delivery is delayed, due to any cause not directly within GAT's control, may be placed in storage, either at GAT's plant or elsewhere, for the Buyer's account and risk. GAT's charges, therefore, and expenses in connection therewith shall be paid promptly upon presentation of invoices; but, if GAT is unable to furnish, obtain, or continue such storage, the Buyer will upon request provide or arrange for suitable storage facilities, and assume all costs and risks in connection therewith.

Upon cancellation of an order in acceptance by GAT the Buyer shall pay all engineering, labor and material costs, as used or committed by GAT, plus 15% of the full purchase price. In no event shall this amount exceed the full purchase price.

The customer will be responsible for furnishing all necessary federal, state and local permits, as well as inspection fees as may apply and be required. No federal, state or local taxes are included in the base price of the equipment and are to be paid by the customer.

All specifications are subject to change based upon final engineering as may be determined consistent with proper design, performance and implementation.

#### WARRANTY

Manufacturer warrants only that goods are free from defect of material and workmanship under normal use and service for a period of one (1) year after the date of delivery, provided that Buyer gives manufacturer written notice of any such defect within the warranty period. Normal wear and deterioration are excluded. Manufacturer does not warrant equipment which has been subject to improper installation, by someone other than Manufacturer, misuse, accident, overloading, improper maintenance, service adjustments, alterations, modifications, or replacements. There are no warranties and the warranty described in this paragraph shall be IN LIEU OF ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Failure of Buyer to make timely payments of any amounts due shall relieve Manufacturer of any obligations under any warranty.

All replacement parts sold subsequent to the warranty period will be warranted for a period of 90 Days. Otherwise, subject to all other terms of the warranty.

The warranty, as contained within this document, or any other document covering this proposal, is subject to the following provision. Should chemicals be used in the washing equipment proposed be of the granular type, the warranty will not extend to the recirculating pumps or seals on the pumps. Any chemical process which will utilize a PH of less than 4.5, will not be warranted for carbon steel tanks.

Buyer also agrees to indemnify and hold harmless GAT for any and all claims, demands, damages, actions, causes of actions or suits of any kind or nature whatsoever, and particularly on account of any injuries to both person and property due to the buyer's or the buyer's employee's use or misuse of any chemicals or chemical solutions in GAT's equipment.

Buyer's sole and exclusive remedy against Manufacturer shall be for the repair or replacement of defective parts without charge by Manufacturer, at Manufacturer's option, of any parts found by Manufacturer to be defective. The part or parts must be returned to manufacturer's factory, transportation charges prepaid, accompanied by a claim in writing. Buyer agrees that no other remedy (including, but not limited to, incidental or consequential damages for lost profits, lost sales, injury to persons or property, or any other incidental or consequential loss) shall be available to Buyer.

In the event that service by GAT personnel is necessary to carry out any service work covered under the warranty, the work shall be accomplished between the hours of 8:00 a.m. and 4:30 p.m. on a normal work day basis. Should it be required that warranty work be performed at any other time than the above stated, it will be performed only by prior agreement with the customer bearing the additional expense incurred for the performance of such work at times other than the normal work day.

We trust that you will find the above in keeping with your requirements and favorable. We look forward to the earliest opportunity to discuss our proposal with you further.