



EXTRUDER SPECIFICATIONS

Basic Customer/Order Information

SER#S: 1561, 1564, 1567,
1570, 1573, 1576

Customer Name: Commscope Sales Order No: 10288
Today's Date: 12/22/99 Customer P.O. No.: L128695
Customer Order Date: 12/22/99 Quote No: 12139A-SM
Customer Requested Ship Date: 3/8/00 AK Promised Ship Date: 3/8/00
Completed By: S. Maxson Signature: _____
Rep. Company: _____ Rep. Salesman: _____

Basic Extruder Information

(Choices in italics may be "added cost" options)

AK To Supply: ☒ Extruder; ☒ Screw; ☐ Panel;
☒ Motor; ☐ Drive;
Power Supply: 460 Volts, 3 Phase, 60 Hertz
Control Voltage: _____ Volts ☐ AC;
☐ DC:
Extruder size: 1.25 Inch: 24:1 L/D:
Centerline Height: 52.5 Inches
Feed Type: ☒ Smooth: ☐ Grooved: ☐ Tangential:
Heat/Cool Zones: 3 No. Barrel Zones: ☐ Water Cooled
☒ Air Cooled:
Max. Processing Temp. (°F): ☒ 650°F; ☐ 900°F; ☐ Other
Panel : ☐ Base Mounted: ☒ Remote Mounted:
Controls: ☐ Discrete Controls Only:
☐ Discrete Controls with Serial Communications:
☐ Discrete Controls with AKcess:
Machine Hand: ☒ R – L: or ☒ L – R: (Operators view of resin flow thru extruder)

Paint Color:

DESCRIPTION	STANDARD COLOR	OTHER (SPECIFY)
Base	Beige	Gliden Blue 790 "Sky Blue" or equiv.
Panel	Beige	N/A
Barrel Guard	Brown	Gliden Blue 790 "Sky Blue" or equiv.
Diamond Plate	Brown	Gliden Blue 790 "Sky Blue" or equiv.
Instrument Face	Brown	N/A
Blowers	Vendor Standard	
Clamp	Black	
Guards	Orange	
OCS	-----	
(Other)	-----	Gliden Blue 790 "Sky Blue" or equiv.



Detailed Extruder Information

BASE

Mounting :

- ☒ Standard Mounting Pads
☐ Wheels: ☐ Steel Flat Swivel:
☐ Phenolic Swivel:
☐ V-wheel w/Track:

Gross Adjustment:

- ☒ $\pm \frac{1}{4}$ Inch (std.)
☐ Other: \pm _____ Inches

Panel Location:

- ☐ Left (LDS); ☐ Right (LDS); ☐ Other: _____

Motor Location:

- ☐ Left (LDS); ☐ Right (LDS); ☒ Under Barrel; ☐ Other: see notes

Lifting/Rigging:

- ☒ Standard (Lifting holes in frame)
☐ Other: _____ : SEE NOTES

GEARBOX

Manufacturer:

Koellman _____ Model: Unex 1.0 Ratio: 17::1

Orientation:

- ☐ LH; ☐ RH; ☒ Vertical:

Arrangement:

- ☐ Z-flow; ☐ U-flow

Screw Shank:

- ☒ AK Two Key: ☐ Taper: ☐ Other: _____

Gearbox HP:

10 HP @ 100 rpm with 1.5 S.F.:

Thrust Bearing:

50K B-10 @ 5K psi:

Oil Cooling:

- ☒ None;
☐ Cooling Coil;
☐ Pump and heat exchanger: ☐ Mechanical Pump:
☐ Electric Pump:

DRIVE

Motor Speed:

1750 RPM Base:

_____ RPM Extended

Screw Speed:

125 RPM at Base Motor Speed:

_____ RPM at Extended Speed

Drive Type

- ☒ Belt Drive: Belts: ☐ Standard Belts;
☒ Other: timing
Motor Base: ☐ Standard Slide Base
☐ Vertical Pivot Base
☐ Other: vertical adjustment
☐ Direct Drive: Coupling: ☐ Std. Coupling;
☐ Other: _____

HOPPER

Hopper Style:

- ☒ Round (Standard):
☐ Rectangular:
☐ Special: _____

Hopper Material:

- ☒ Stainless Steel (Standard):
☐ Special Mat'l: _____

Hopper Transition:

- ☒ Slide Gate and Dump Shoot (Standard):
☐ Three Position Rotary (Open, Close, Dump)
☐ Special: _____

Hopper Magnet:

- ☒ None:
☐ Insert Type:
☐ Bunting Type:

Hopper Specials:

(check all that apply)

- ☐ Cover:
☐ Blank:
☐ Grid:
☐ Loader Mating: _____



Detailed Extruder Information Continued

FEEDSECTION

Feed Type: ☒ Smooth Feed: ☐ Standard Replaceable Liner (Nitrided 4140 Std.)
☐ *Other:* _____
☐ Grooved Feed: ☐ Kuhne GmbH Design.
☐ AK Design.
☐ Tangential Feed: **(DESCRIBE IN NOTES)**

Bushing: ☒ Std. Teflon Impregnated Bronze Bushing:
☐ *Other:* _____

Seal: ☒ None;
☐ Powder;
☐ Vacuum;
☐ *Other:* _____

BARREL

Barrel Vendor: ☐ Bimex: ☐ Xaloy: ☒ Either:
☐ *Other:* _____

Barrel Type: ☒ 102 (or equivalent): ☐ 800 (or equivalent): ☐ 306 (or equivalent):
☐ 309 (or equivalent): ☐ *Other:* _____

Barrel Style: ☒ Non-vented
☐ Vented

Vent Location: ☐ Left Side (LDS) **PREFERRED:**
☐ Top:
☐ Vent Stack
☐ Vent Plug:
☐ Vacuum System: Pump HP: _____
Seal Type: ☐ Water Ring:
☐ Oil Seal:
Brand: _____
Model: _____

Barrel Flange: ☒ Clamp Type: ☐ Trap: _____
☒ Single Bolt: ☐ Right Side Hinge (LDS):
☐ Left Side Hinge (LDS):
☐ Dual Bolt: _____
☒ Heated Clamp: Voltage: 230/1/60
Controlled By: _____

☐ Bolt Flange: ☐ Standard
☐ *Other:* _____
☐ Threaded ☐ AK Standard
☐ For Screen Changer: Make: _____

Pressure Taps ☒ Diagnostic Pressure Port:
☒ Pressure Tap at B.P. (12:00): ☐ *Other:* _____

Barrel Exit Seating: ☒ Standard Seat:
☐ Special Seat: _____
☐ Breaker Plate: ☒ Stainless Steel (Std.):
☐ 4140:
☐ Streamlined for RPVC:
☐ Supply Standard Screens:
☐ Seal Ring: ☐ Stainless Steel:
☐ 4140:

Rupture Disk ☒ Standard (9,000 psi):
☐ Special: _____



Detailed Extruder Information Continued

COOLING SYSTEM

Heat/Cool:

System Type:

3 Zones:

☒ Air-cooled

Heaters:

☒ Finned Cast Alum.:

☐ Finned Cast Bronze:

☐ High Temp. Ceramic:

☒ Standard Blowers:

☐ Special: _____

Blowers:

Ducting:

☒ Ducted Downward: ☐ Left
☐ Right

☐ Water-cooled

Heaters:

Manifolds:

☐ Special: _____

Cast Aluminum With Tubes

☐ Standard

☐ Other: _____

Thermocouples:

☒ Std. Type J grounded T/Cs:

☐ Other: _____

MISCELLANEOUS

Pressure

Gauge/Transducer:

Quantity: 1

Vendor: ISI _____ Model: Press/temp _____

Melt T/C:

Quantity: _____

Type: _____ ☐ Ship Loose:

☐ Mounted in Barrel:

Screw Cooling Assembly: ☐ Yes:

Length: _____

Screw Pusher: ☐ Yes:

Type: _____

Die Support Hinge: ☐ Yes:

☐ Mount on Right Side (LDS):

☐ Left Side (LDS):

Plug Plate/Box Location: ☐ Panel:

☐ Exit Barrel Support:

☐ Center Support:

☒ Other: _____

J-Box Location:

☐ Exit Barrel Support:

☐ Center Barrel Support:

☒ Other: _____

Sketch Plan View of Extruder Here (show details of motor, belt, sheaves, coupling, wheels, cooling system and panel)

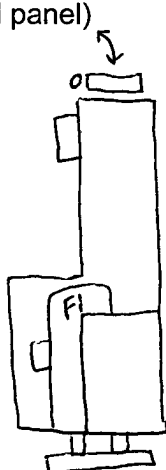
52.5" c/l

SER#'S

1561

1564

1567

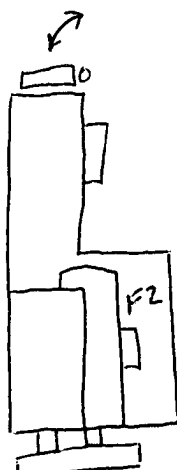


SER#'S

1570

1573

1576





Detailed Extruder Information Continued

SPARE PARTS

☐ Spare parts included with order:

List Mechanical Spare Parts Here:

Item	Quantity	Description
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		

Notes:

Serial #'s 1561, 1564 & 1567 are L-R

Serial #'s 1570, 1573 & 1576 are R-L. Both extruders have a 52.5" C/L

L-R Extruder: Clamp hinged on left (LDS); plug box on left

R-L Extruder: Clamp hinged on right side (LDS); plug box on right

Mounting pads to be located so that extruders may be located as close as possible.

Transducer holes to be plugged. Ship press/temp transducers loose.

Plug/junction boxes to be located as high as possible to eye-level.

Reliance motors to have filter, thermostat and stub shaft for customer to mount tach

Wiring diagrams shall be emailed to Michael Wall of Commscope (mwall@commscope.com)



SCREW ENGINEERING SHEET

Screw Diameter: 1.25 Screw L/D: 24:1
Extruder Brand: AK Motor HP: 5 Max RPM: 1750
Duplicate Part Number: _____

Tip Angle: ☒ Std. (15 deg.): ☐ Special Deg.: _____
Tip Length: ☒ Std.: ☐ Special: _____
Core Hole Depth: ☐ Std. (Fd + 2D): ☐ Special: _____
Material: ☐ 4140: ☐ 4340: ☐ 416 S/S:
☐ Other: 316 S/S
Surface: ☒ Polished ☐ Chrome ☐ Other: _____
Flight Hardening: ☐ Flame ☒ Colmonoy 56 ☐ Colmonoy 83
☐ Other: _____

APPLICATION INFORMATION

Process: Coating
Resin(s): Adhesive
Durometer / M.I.: _____
PSI at Screw Tip: _____
Output Required: _____
Melt Temp. Desired: _____

COMMENTS

Metering screw w/o mixing section



Detailed Drive and Panel Information

DRIVE AND MOTOR

Drive:

Vendor: _____ Model: _____ HP _____
Power Supply: _____ Volts, _____ Phase, _____ Hertz
Mounting: ☐ Temperature Control Panel
☐ Separate Enclosure
☐ AC ☐ Open Loop Speed Regulation 2%
☐ Closed Loop ☐ Std. Encoder 0.01%
☐ Special _____ %
☐ DC ☐ Open Loop Speed Regulation 2%
☐ Closed Loop ☐ AC Tach 1%
☐ DC Tach 1%
☐ Std. Encoder 0.01%
☐ Special _____ %

Motor:

Vendor: Reliance 5 HP:
Speed: 1750 RPM Base
_____ RPM Extended Speed (Max.):
Frame Number: _____ **PROVIDE DRAWING**
Frame Type: ☐ Drip Proof
☐ Totally Enclosed
Cooling: ☐ Non-ventilated
☐ Fan Cooled
☒ Blower Cooled
J-Box Location: ☐ F-1 (left side facing shaft)
☐ F-2 (right side facing shaft)

Power Isolation:

☐ Line Choke
☐ Drive Isolation Transformer _____ KVA
_____ Primary Voltage
_____ Secondary Voltage

BASIC PANEL INFO

Power Requirements: _____ Volts, _____ Phase, _____ Hertz; _____ Wire.
Machine Transformer: ☐ Isolation; ☐ Step-up; ☐ Step-down.
_____ Primary Volts; _____ Secondary Volts; _____ KVA.
Ambient Temperature: _____ °F Max; _____ °F Min.
Controls: ☐ Discrete Only; ☐ Discrete + Serial; ☐ Access.

CABINET TYPE

Mounting: ☒ Extruder Base; ☐ Free Standing.
Access: ☐ Front Access; ☐ Rear Access:
Style: ☐ Overhung "L": ☐ Flat panel: ☐ Slope Front:
☐ Swing Arm OCS: ☐ Crosshead Style Panel (Describe and sketch):



Detailed Drive and Panel Information Continued

PANEL DETAILS

Barrel Cooling: ☐ Air: ☐ Water:
Drive Load Meter: ☐ Digital: ☐ Analog: ☐ UniOP:
☐ Other: _____
Screw RPM Meter: ☐ Digital: ☐ Analog: ☐ UniOP:
☐ Other: _____
Screw Speed Control: ☐ Ten turn pot: ☐ UniOP: ☐ Other: _____
Temp. Control Zones: ☐ Feed, ☐ Barrel ☐ Clamp
☐ Die (Downstream)
Temperature Controllers: Quantity: _____ Brand: _____ Model: _____
Notes: _____
Feed Section: ☐ Temperature Control ☐ Solenoid valve:
☐ Modulating valve:

Die Zones:

Die Zone Name
Die Wattage
Voltage & Phase
Receptacle/Plug

Clamp	Die 1	Die 2	Die 3
2kW	2kW	2kW	2kW
230/1/60	230/1/60	230/1/60	230/1/60
<input checked="" type="checkbox"/> Receptacle <input checked="" type="checkbox"/> Plug Type:Hubbell	<input checked="" type="checkbox"/> Receptacle <input checked="" type="checkbox"/> Plug Type:Hubbell	<input checked="" type="checkbox"/> Receptacle <input checked="" type="checkbox"/> Plug Type:Hubbell	<input checked="" type="checkbox"/> Receptacle <input checked="" type="checkbox"/> Plug Type:Hubbell

Die Zone Name
Die Wattage
Voltage & Phase
Receptacle/Plug

/	/	/	/
<input type="checkbox"/> Receptacle <input type="checkbox"/> Plug Type:	<input type="checkbox"/> Receptacle <input type="checkbox"/> Plug Type:	<input type="checkbox"/> Receptacle <input type="checkbox"/> Plug Type:	<input type="checkbox"/> Receptacle <input type="checkbox"/> Plug Type:

Note: Standard receptacles and plugs are Hubbell 30A HBL2620SW and HBL2621SW, respectively.

☐ Heater Ammeter: ☐ Through Temperature Controller
☐ Separate ☐ Analog Scale: 0-_____ Barrel Zones
Scale: 0-_____ Clamp Zone(s)
Scale: 0-_____ Die Zones

☐ Digital
☐ Digital w/Alarm Output

Contactors: ☐ Solid State ☐ Mercury ☐ Other _____
Circuit Protection: Barrel Zone: ☐ Circuit Breakers ☐ Fuses:
Clamp Zone: ☐ Circuit Breakers ☐ Fuses:
Die Zone: ☐ Circuit Breakers ☐ Fuses:
Barrel Blowers: ☐ Circuit Breakers ☐ Fuses:

Die Transformer: _____ Estimated KVA (1 KVA per kW): _____ Phase

☐ Cold Start Interlock:
☐ Cool-Off-Auto Switch:

Pressure Indicator: ☐ Dynisco uPR700: ☐ Dynisco 1290: ☐ Other: _____
☐ One Alarm: ☐ Two Alarms: ☐ Wired for High Pressure Shutdown:

Melt Temp. Indicator: ☐ Barber Colman 7HI: ☐ Other: _____
☐ Drive Hourmeter: Type: _____



Detailed Drive and Panel Information Continued

Motor Starter:

- ☐ None:
- ☐ Water Pump: HP:
Voltage:
- ☐ Oil Pump: HP:
Voltage:
- ☐ Vacuum Pump: HP:
Voltage:
- ☐ Other:

SPARE PARTS

☐ Spare parts included with order:

List Electrical Spare Parts Here:

Item	Quantity	Description
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		

Notes: Plug/junction boxes to be located as high as possible to eye-level.

L-R Extruder: F1 motor conduit box: plug/junction box on left

R-L Extruder: F2 motor conduit box: plug/junction box on right

Reliance motor to have stub shaft for customer to mount tach.