

to one-half inch from the top of the crucible casting. It is also important, in cases where metal pots are fed by hand, that one pig at a time be put in the crucible at regular intervals. Replenishing the metal supply with a number of pigs simultaneously causes a sudden chilling of the type metal and may result in imperfect slugs.

It is preferable to use pigs of metal in the crucible rather than slugs. The metal should be melted in a furnace in as large quantities as possible, skimmed, toned and cast into pigs. Information regarding metal furnaces and their use will be sent by Intertype on request.

The type metal should be maintained at the correct temperature in the crucible. The ideal range is from 525 to 540 degrees. Overheating the metal causes rapid deterioration of its most valuable elements and decreases the quality of the slug.

Matrices and Spacebands should be handled as little as possible. Some operators' hands perspire freely and cause dirt and gum to accumulate on these parts as well as on the keyboard keybuttons. The keybuttons can be cleaned with ordinary household ammonia. Matrices are cleaned most easily with a piece of felt or a matrix eraser.

Opening Channel Entrance. If the distributor stops, open the channel entrance slowly until it is about one-half inch away from the magazine, then open the entrance quickly. This will prevent matrices from sliding flatwise into the magazine. After the cause of the distributor stop has been corrected, close the entrance *gently*.

Miscellaneous Factors. Oil or graphite should never be used in the magazines or on the escapements. Keep all parts of the magazine absolutely clean.

If the machine is stopped by the vise automatic, mold slide safety or other part, push the starting and stopping lever in and remedy the obstructing condition.

The back distributor screws should not be raised while there are matrices on the distributor bar. The matrices should be run off before raising the screws because it is difficult to retime the screws and to engage their threads with the lugs of the matrices at the same time.

If an overset line is sent in to the casting mechanism and causes the first-elevator slide to stall, lift the elevator and remove enough matrices to permit the slide to seat. Forcing the line between the vise jaws damages the side walls of the matrices.

Whenever it is necessary to stop the machine in an intermediate position, *always make sure that the pot crucible mouthpiece is away from the mold*. The heat of the mouthpiece will warp the mold if the parts are left in contact for an extended period.

The spaceband lever pawl latch should be locked in front of the pawl before lowering the second-elevator lever by hand after a distributor stop. If the transfer levers are not locked, they will spring together with an impact as soon as the elevator is lowered.

Never use the ejector lever to pound a slug out of the mold. The cams should be backed and the ejector pawl should be released to permit the machine to move

to normal position without ejecting the slug. The slug can then be removed from the mold by lifting off the mold cap. The extra time spent in this operation will be more than repaid in preventing damage to expensive parts.

Ordering Supplies

Always use standard Intertype order blanks which will be supplied free on request. Send your orders to Branch Office in whose territory you are located.

Order by part letter, number and name, and give serial number of the machine. State if the parts are for 30-em or 42-em machines.

Write Orders Legibly. Give firm name and address in full. Postal authorities and express companies insist that all packages intended for large cities have a street address.

Give Shipping Directions. Freight, express, parcels post or air mail. If freight, state preferred route of shipment. We insure all packages valued at \$1.00 or more when sent by parcels post unless advised to the contrary.

Electric Pots. On orders for heating units or other supplies, specify serial number of pot and voltage used.

Motors. For supply parts give make, voltage and serial number. If they are for alternating current motors specify voltage, cycle and phase. When ordering motor pinions state make of motor, number of teeth and whether helical or straight cut.

Mold Liners. Give the length of line to be cast in ems. If for example you wish to order a 6 point left-hand liner to cast 13 ems, specify U-328 left-hand liner for 6 point 13 ems. The stub liner is the right hand one and is described as follows: U-327 6 point right-hand liner. Liners for adjustable triangular shelf molds fit all standard Intertype molds, either solid or recessed. This cuts your liner costs. Left-hand liners carry part number U-3157. The part number for right-hand liners is U-327. *Unless you specify differently, liners will be supplied for 30-em molds.*

Small Orders. While it is costly to ship orders for supplies amounting to less than one dollar, we fully appreciate there are times when it is imperative that a small part be obtained in a hurry and you cannot afford to spend the time to check over all your requirements. In such cases we stand ready to supply your every need, no matter how small.

May We Suggest? When you make out your next order, see if you have enough liners, star wheels, knife wiper flags or escapement springs. Have you a spare motor pinion? Do you need extra belts? For the keyboard we suggest an extra set of keyboard cam rubber rolls, a pair of cam stop strips, one or two keyboard cams, and several keyboard reeds. These and many other inexpensive parts may not often be needed, but like the spare tire on your automobile, when they are needed much time and annoyance is saved if you have them on hand.

Damage to Goods in Transit. Our responsibility ends when freight or express shipments are accepted from us by the transportation company. We will co-operate with you in helping to collect proper claims, but payment of our invoices should be made when due and claims for loss or damage, if any, collected from the transportation company.

If Goods Are Delivered to You in Imperfect Condition. Have damage or shortage indicated by express or freight agent on both the freight bill and receipt. This must be done before shipment is accepted by you in order to insure collection of claim.

If Goods Are Unpacked Before Injuries Are Noticed. Notify the transportation company immediately so that their agent may examine shipment and make notation on your freight or express bill of concealed damage.

How to Order Intertype Matrices

In order that we may fill orders promptly and correctly without having to write for more information, please observe the following instructions carefully. Submission of correct information will save both yourself and Intertype Corporation annoyance and possible loss of time.

Send Order to Our Nearest Branch Office. This will save time and permit us to fill your order without unnecessary delay.

Use Order Blanks. All orders should be entered on the printed matrix order blanks provided for that purpose. Special order blanks for use in ordering English, German, Russian and Hebrew faces as well as accents, special characters and borders will be supplied on request, free of charge.

Street Address. Postal authorities and express companies require street addresses especially in the larger cities.

Size, Face and Number. State clearly the point size, name of face and font number desired. This information is very essential because one face is often combined with a number of different faces. For example, note some of the divergent combinations in the case of Century Expanded:

10 Point Century Expanded with Antique No. 1, Font No. 790.

10 Point Century Expanded with Century Bold, Font No. 757.

10 Point Century Expanded with Cheltonian Bold, Font No. 784.

10 Point Century Expanded with Italic and Small Caps, Font No. 756.

When ordering sorts, if you do not know the point size, number or name of face you are using, send a lower case "f" matrix with your order. Sample matrices will be returned with shipment.

Leaders. Always state the kind of leaders and spaces desired. Leaders can be furnished as follows: **ROUND DOT:** two dots (. .) to em; four dots (....) to em; six dots (.....) to em. **HYPHEN:** two strokes (- -) to em; four strokes (....) to em; six strokes (.....) to em. In the absence of specific instructions, round dot leaders will be furnished two dots (. .) to em.

Universal Leaders. Special leader matrices known as Universal Leaders in which the dots or strokes are uniform for all point sizes can be supplied for all fonts.

Universal Lining Dashes or hair line dashes of uniform thickness of face are made to align with the leaders of any point size or face. When ordering, specify the face and font number with which you wish to use these dashes. These universal lining dashes are supplied in pica, half-pica or quarter-pica thicknesses. Please specify which are desired. These dashes can also be supplied to align with

the leaders (having spaces in other position) or duplicate character (dashes in both the leader position and space position). Specify whether one-letter or two-letter dashes are wanted.

Figures. When ordering old style faces, specify whether the old style figures (1234567890), modernized old style figures (1234567890) or modern figures (1234567890) are desired. If no specific directions are furnished, old style figures will be supplied. When ordering figures of any kind, state whether they are to run in the magazine or pi.

Fractions. Em-set fractions ($\frac{1}{8}$ $\frac{1}{4}$ $\frac{3}{8}$ $\frac{1}{2}$ $\frac{5}{8}$ $\frac{3}{4}$ $\frac{7}{8}$) are supplied with all fonts unless en-set fractions ($\frac{1}{8}$ $\frac{1}{8}$ $\frac{1}{8}$ $\frac{1}{8}$ $\frac{1}{8}$ $\frac{1}{8}$ $\frac{1}{8}$) are specified. Unless otherwise specified, all fractions will be furnished to run pi. Upon request and without extra charge, they will be cut to run in the regular magazine according to regular keyboard layout No. 2 or in special channels. Following is the standard arrangement for the regular fractions: $\frac{1}{8}$ in ffi channel, $\frac{1}{4}$ in ffl channel, $\frac{3}{8}$ in ? channel, $\frac{1}{2}$ in * channel, $\frac{5}{8}$ in Z channel, $\frac{3}{4}$ in lb channel and $\frac{7}{8}$ in & channel.

Fractions, figures and points are usually made on a 4-2-1 ratio, that is, fractions are made on the em body, figures on one-half the em body and thin spaces on one-quarter of the em body. However, when the figure size of face is less than .0553", the points and thin spaces are usually made on a size equal to three to the em body.

Headletter Matrices can be used on any Intertype and on all other line composing machines equipped with a universal knife block. They can be furnished to run as sorts or in the magazine channels according to various keyboard layouts. When ordering, be sure to specify how the matrices are to run; if in the magazine, state the keyboard layout to be used.

Mixer Machines. Specify the mixer notch number if matrices are to run in mixer machines. If matrices are to run in other than Intertype machines, specify the model of machine and type of magazine. Intertype wide tooth matrices run in mixers of other manufacture, but a sample matrix should be submitted for bridge combination cutting.

Font Schemes. Standard font schemes and keyboard layouts are shown in The Book of Intertype Faces and should be consulted for detailed information as to the number of matrices included in the various fonts and the manner in which they run.

Hair Spaces. Brass hair spaces can be furnished in the following thicknesses: .007", .010", .012", .014", .016", .017", .018", .019", .020", .021", .022", .023". Steel hair spaces are made in sizes .0035", .007", .014" and .022". Unlike thin spaces, hair spaces do not carry combination teeth and must be inserted in the line by hand.

Special Characters. Consult the special character section in The Book of Intertype Faces for a list of characters which can be furnished from stock. Some special characters which we have not yet manufactured will be made on request and furnished at regular prices; others will be made only at special prices. If the matrices ordered are of an extremely special design which will only suit a particular composition, arrangements can be made whereby only a special charge is made for the first matrix and if the customer so desires, the balance of the lot.

which will be small, can be purchased at the regular matrix price. This will insure the customer a sufficient supply for future needs as no stock will be kept of characters for which there is not a general market.

Be sure to have on hand a pad of special matrix blanks and order by number and point size. Customers requiring special matrices should write for quotations, submitting a clear sketch or sample of what is wanted. When ordering special characters, specify whether they are to run as sorts or in the magazine; if in the magazine, state the channel in which each character is to run.

Other Languages. We can supply matrices, including all necessary accents, for the following languages:

Albanian (Baskimi)	Dutch	Hungarian	Polish	Slovak
Anglo-Saxon	Esperanto	Icelandic	Portuguese	Spanish
Bohemian	Estonian	Italian	Russian	Swedish
Bulgarian	Finnish	Korean	Ruthenian	Turkish
Croatian	French	Lettish	Roumanian	Welsh
Danish	German	Lithuanian	Servian	Yiddish
	Hebrew	Norwegian	Slavic	

Accent matrices for any other language will be made on request.

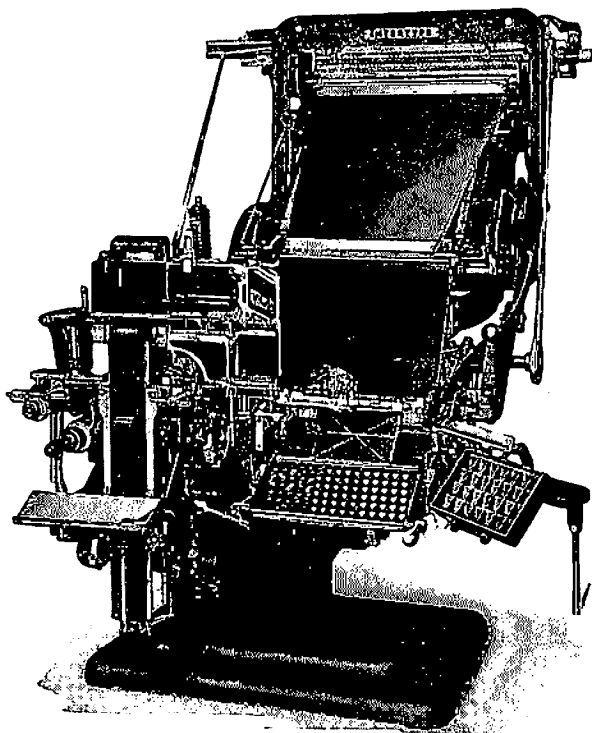
When ordering matrices for other languages, specify the channel in which each accent is to run. Specimens of all language matrix faces which we have manufactured up to the time of issue of *The Book of Intertype Faces* are shown in the language section.

Kind of Magazine. Be sure to specify the kind of magazine for which matrices are desired: 90 or 72-channel main and number of channels for side units. If magazines are other than Intertype manufacture, please so state. It is also very essential to state the kind of keyboard layout with which the matrices are to be used.

Magazine Capacity. The channel entrance partitions of Intertype machines are variably spaced. This permits the free use of larger faces. For instance, an 18-point cap "W" of normal width will run in an Intertype magazine, but will not run in the magazines of other makes. For the latter, we can furnish a slightly condensed matrix which will run. This is also true of the lower case "m" and "w" in 24-point normal faces when cut to run in the cap side of the magazine. Spaces, leaders and dashes up to .221" will run in the regular channels of an Intertype magazine, but figure spaces, leaders and dashes must be substituted in magazines of other makes when the em size exceeds .210".

How to Ship. Please specify whether your order is to be shipped by parcels post, express, freight or otherwise. Unless we are advised to the contrary, we will insure all packages worth \$1.00 or more when sent by parcel post.

Telephone or Telegraph Orders. Always confirm the telephone or telegraph orders. When telephoning, describe alphabet characters in following manner: A for Andrew; B for Benjamin; C for Charles, etc.



Model C4 Intertype

WITH CHAIN SHIFT

Single-distributor machine equipped with four 90-channel main magazines. See table on page 357 for complete list of Intertype models and various combinations of equipment.