



SIZE	T	E	A	S	H	D	F	I MIN.	B	CUT. DIA.	T.P.I.
28	1.083 <sup>+0.013</sup> <sub>-.012</sub>	0.978 <sup>+0.013</sup> <sub>-.012</sub>	1.100 <sup>+0.013</sup> <sub>-.012</sub>	0.101 <sup>+0.008</sup> <sub>-.007</sub>	0.399 <sup>+0.008</sup> <sub>-.007</sub>	0.570 <sup>+0.008</sup> <sub>-.007</sub>	0.951 <sup>+0.013</sup> <sub>-.012</sub>	0.658	2° 32'	0.750	7
38	1.463 <sup>+0.013</sup> <sub>-.012</sub>	1.358 <sup>+0.013</sup> <sub>-.012</sub>	1.481 <sup>+0.013</sup> <sub>-.012</sub>	0.109 <sup>+0.008</sup> <sub>-.007</sub>	0.467 <sup>+0.008</sup> <sub>-.007</sub>	0.656 <sup>+0.008</sup> <sub>-.007</sub>	1.332 <sup>+0.013</sup> <sub>-.012</sub>	0.987	1° 50'	0.750	7

- THIS IS A TOP AND SIDE SEAL FINISH. SEALING SURFACE IS MARKED WITH A HEAVY LINE AND SHOULD BE SMOOTH AND FREE OF ANY IRREGULARITIES THAT WILL CONTRIBUTE TO A LOSS OF PRESSURE OR INTERFERE WITH ROTATION OF CLOSURE. ANY UNDERMATCH SHOULD NOT BE GREATER THAN .010 ON A SIDE WITH NO OVER MATCH ALLOWED. THE PARTING LINE MUST NOT BE LESS THAN .031 FROM TOP OF FINISH. THE SURFACE DIMENSIONED 'F' MAY HAVE A 0° TO 5° DOWNWARD AND OUTWARD TAPER.
- 'H' DIMENSION REPRESENTS DISTANCE FROM TOP OF SEALING SURFACE DOWN TO HORIZONTAL LINE TANGENT TO BOTTOM SWING OF THE .031 MAXIMUM RADIUS.
- PROPER CLOSURE APPLICATION REQUIRES:
  - A MINIMUM OF 390° (28mm) AND 540° (38mm) OF FULL WIDTH AND DEPTH OF THREAD EXCEPT WHERE DEPRESSED AT MOLD SEAMS. BEYOND THIS, THREAD TO RUN IN TO BEAD.
  - WALL OR 'E' DIAMETER BEYOND MINIMUM FULL TURNS OF THREAD SHOULD BE INCREASED GRADUALLY TO FULL 'T' DIAMETER IN 90° TURN.
- REQUIREMENTS FOR GOOD CLOSURE APPLICATION AND REMOVAL:
  - .020 MAXIMUM OUT OF PARALLEL SEALING SURFACE WITH BOTTOM OF BOTTLE. THIS IS FOR COCKED NECKS AND SLANTED FINISHES.
  - .094 MAXIMUM OUT OF PERPENDICULAR WITH BASE OF BOTTLE.
  - OFFSET OR VERTICAL MISMATCH OF THREAD NOT TO EXCEED .004 AT MOLD SEAM.
  - IT IS PERMISSIBLE TO RELIEVE THREAD AND THE 'A' DIAMETER OF THE BEAD AT THE MOLD SEAM NOT TO EXCEED .008 ON DIAMETER IN AN ARC OF 30 DEGREES. THE 'T' AND 'A' DIMENSIONS ARE NOT MEASURED IN THE DEPRESSED AREAS.
  - A .046 MINIMUM THREAD PROJECTION SHALL BE MAINTAINED OVER THE FULL LENGTH OF THREAD EXCLUDING RANDOM DEPRESSIONS SUBJECT TO NORMAL MANUFACTURING VARIATIONS. DEGREE OF ROLLED THREAD IN CLOSURE APPLICATION DETERMINES ACTUAL SEAL SECURITY, AND BOTTLE USE OF A TESTER FOR PROPER APPLICATION IS RECOMMENDED IN ASSURING THE TOTAL PACKAGE CONCEPT.
- 'F' SPECIFICATION SHOULD BE GAGED AT A POINT .039 DOWN FROM TOP OF FINISH. AN UNDER MINIMUM 'F' DIAMETER WILL CONTRIBUTE TO LEAKERS.
- A. MINIMUM 'I' DIMENSION IS FOR FILLING TUBE CLEARANCE AND EXTENDS THROUGH ENTIRE LENGTH OF FINISH AND NECK.  
B. THE INNER LIP CONTOUR INDICATED BY THE DASH LINE IS SUBJECT TO NORMAL MANUFACTURING VARIATIONS.  
C. FOR ADDED DURABILITY OF RETURNABLE BOTTLES, A MINIMUM THICKNESS OF .125 MAY BE DESIRABLE.
- TANGENT  $B = \frac{\text{PITCH}}{\pi (\text{MEAN BETWEEN MEAN 'T' AND MEAN 'E'})}$
- PROPER APPLICATION AND FUNCTION OF CLOSURE REQUIRES THAT VARIATIONS IN THE 'E' DIAMETER SHOULD FOLLOW THOSE OF 'T' DIAMETER SUBJECT TO NORMAL MANUFACTURING CONDITIONS, INCLUDING THE THREAD PROFILE ILLUSTRATED.
- IT IS THE RESPONSIBILITY OF THE GLASS CONTAINER PURCHASER TO CONSULT WITH ITS CLOSURE AND CONTAINER SUPPLIERS TO DETERMINE THE APPROPRIATE PRESSURE LIMITS FOR THE COMBINATION OF THE CONTAINER, ITS FINISH AND THE CLOSURE CHOSEN, WHEN THE CONTAINER WILL BE SUBJECTED TO PRESSURE OR USED FOR CONTENTS UNDER PRESSURE.
- CERTAIN CAPPING MACHINE EQUIPMENT REQUIRES GUIDE BELL CLEARANCE AS SHOWN.

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