

# ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

## ISO RECOMMENDATION R 572

SHUTTLES FOR PIRN CHANGING AUTOMATIC LOOMS

1st EDITION

April 1967

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## BRIEF HISTORY

The ISO Recommendation R 572, *Shuttles for Pirn Changing Automatic Looms*, was drawn up by Technical Committee ISO/TC 72, *Textile Machinery and Accessories*, the Secretariat of which is held by the Association Suisse de Normalisation (SNV).

Work on this question by the Technical Committee began in 1950 and led, in 1963, to the adoption of a Draft ISO Recommendation.

In September 1964, this Draft ISO Recommendation (No. 709) was circulated to all the ISO Member Bodies for enquiry. It was approved, subject to a few modifications of an editorial nature, by the following Member Bodies:

|                |                |                |
|----------------|----------------|----------------|
| Chile          | Korea, Rep. of | Turkey         |
| Czechoslovakia | Netherlands    | U.A.R.         |
| France         | Poland         | United Kingdom |
| Germany        | Spain          |                |
| Greece         | Switzerland    |                |

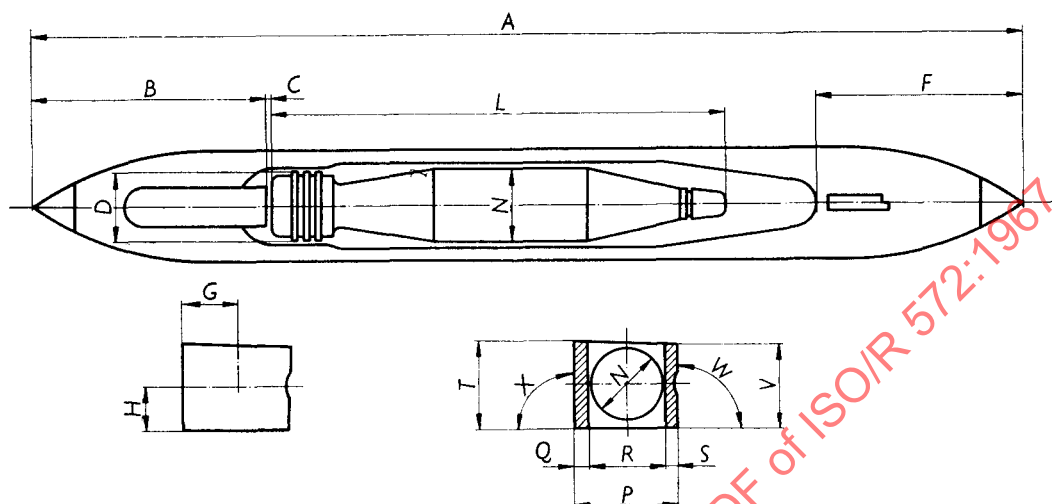
Two Member Bodies opposed the approval of the Draft:

India  
U.S.S.R.

The Draft ISO Recommendation was then submitted by correspondence to the ISO Council, which decided, in April 1967, to accept it as an ISO RECOMMENDATION.

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## SHUTTLES FOR PIRN CHANGING AUTOMATIC LOOMS



- A Overall length of shuttle  
 B Distance from tip of shuttle at jaw end to end of guide or cover  
 C Clearance between guide or cover and pirn base as maximum and minimum  
 D Diameter of ISO pirn over rings  
 F Distance from tip of shuttle at eye end to nearest point of cut out at base of shuttle  
 G Distance from back wall of shuttle to centre of tip  
 H Distance from base of shuttle to centre of tip  
 L Length of ISO pirn  
 N Maximum diameter of full pirn (according to pirn type and shuttle type)  
 P Width of shuttle at base  
 Q Thickness of back wall of shuttle  
 R Width between back and front walls of shuttle  
 S Thickness of front wall of shuttle  
 T Height of shuttle at back wall  
 V Height of shuttle at front wall  
 W Angle of front wall with base  
 X Angle of back wall with base

## 1. BASIC DIMENSIONS FOR SHUTTLES WITH 90° ANGLE OF WALL

## 1.1 Metric system

| millimetres         |                                                                                                 |                      | inches              |                                                                                                                                                       |                      |
|---------------------|-------------------------------------------------------------------------------------------------|----------------------|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
| <i>A</i>            | 385<br>410<br>425<br>450<br>475                                                                 | for ISO pin <i>L</i> | <i>A</i>            | 15.157<br>16.142<br>16.732<br>17.716<br>18.701                                                                                                        | for ISO pin <i>L</i> |
|                     |                                                                                                 | 172                  |                     |                                                                                                                                                       | 6.772                |
|                     |                                                                                                 | 190                  |                     |                                                                                                                                                       | 7.480                |
|                     |                                                                                                 | 200                  |                     |                                                                                                                                                       | 7.874                |
|                     |                                                                                                 | 220                  |                     |                                                                                                                                                       | 8.661                |
|                     |                                                                                                 | 240                  |                     |                                                                                                                                                       | 9.449                |
| <i>B</i>            | 95                                                                                              |                      | <i>B</i>            | 3.740                                                                                                                                                 |                      |
| <i>F</i> min.       | 85                                                                                              |                      | <i>F</i> min.       | 3.346                                                                                                                                                 |                      |
| <i>P</i> × <i>T</i> | 42 × 29<br>46 × 29<br>46 × 32<br>50 × 32<br>46 × 35<br>50 × 35<br>52 × 39<br>55 × 42<br>60 × 46 | for ISO pin <i>D</i> | <i>P</i> × <i>T</i> | 1.653 × 1.141<br>1.811 × 1.141<br>1.811 × 1.259<br>1.968 × 1.259<br>1.811 × 1.378<br>1.968 × 1.378<br>2.047 × 1.535<br>2.165 × 1.653<br>2.362 × 1.811 | for ISO pin <i>D</i> |
|                     |                                                                                                 | 24.20 to 24.95       |                     |                                                                                                                                                       | 0.954 to 0.983       |
|                     |                                                                                                 | 27.00 to 27.68       |                     |                                                                                                                                                       | 1.063 to 1.090       |
|                     |                                                                                                 | 30.10 to 30.85       |                     |                                                                                                                                                       | 1.185 to 1.215       |
|                     |                                                                                                 | 33.53 to 34.20       |                     |                                                                                                                                                       | 1.320 to 1.346       |
|                     |                                                                                                 |                      |                     |                                                                                                                                                       |                      |
|                     |                                                                                                 |                      |                     |                                                                                                                                                       |                      |
|                     |                                                                                                 |                      |                     |                                                                                                                                                       |                      |
|                     |                                                                                                 |                      |                     |                                                                                                                                                       |                      |
|                     |                                                                                                 |                      |                     |                                                                                                                                                       |                      |
|                     |                                                                                                 |                      |                     |                                                                                                                                                       |                      |
|                     |                                                                                                 |                      |                     |                                                                                                                                                       |                      |

## 1.1.1 Co-ordinated dimensions

| millimetres   |             |          |          |            | inches        |             |          |          |                        |
|---------------|-------------|----------|----------|------------|---------------|-------------|----------|----------|------------------------|
| <i>P</i>      |             | <i>T</i> | <i>A</i> | × <i>L</i> | <i>P</i>      |             | <i>T</i> | <i>A</i> | <i>D</i> × <i>L</i>    |
| Narrow series | Wide series |          |          |            | Narrow series | Wide series |          |          |                        |
| 42            | 46          | 29       | 385      | 24 × 172   | 1.653         | 1.811       | 1.141    | 15.157   | 0.954 to 0.983 × 6.772 |
| 46            | 50          | 32       | 385      | 27 × 172   | 1.811         | 1.968       | 1.259    | 15.157   | 1.063 to 1.090 × 6.772 |
| 46            | 50          | 32       | 410      | 27 × 190   | 1.811         | 1.968       | 1.259    | 16.142   | 1.063 to 1.090 × 7.480 |
| 46            | 50          | 35       | 425      | 30 × 200   | 1.811         | 1.968       | 1.378    | 16.732   | 1.185 to 1.215 × 7.874 |
| 46            | 50          | 35       | 450      | 30 × 220   | 1.811         | 1.968       | 1.378    | 17.716   | 1.185 to 1.215 × 8.661 |
| 52            | —           | 39       | 450      | 34 × 220   | 2.047         | —           | 1.535    | 17.716   | 8.661                  |
| —             | 55          | 42       | 450      | 34 × 220   | —             | 2.165       | 1.653    | 17.716   | 1.320 to 1.346 × 8.661 |
| —             | 55          | 42       | 475      | 34 × 240   | —             | 2.165       | 1.653    | 18.701   | 9.449                  |
| 60            | —           | 46       | 475      | 34 × 240   | 2.362         | —           | 1.811    | 18.701   | 9.449                  |

W = 90°

X = 90°