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Thread rolling flat dies

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Thread rolling flat dies

1 Scope This Japanese Industrial Standard specifies the thread rolling flat dies⁽¹⁾ (hereafter referred to as “dies”) to be used for thread rolling of the external screw threads given in the following.

Note (1) The dies comprise a set of two pieces of moving die and stationary die.

Type of screw threads	Designation of screw threads	Applicable standard
Metric coarse screw threads	M2 to M24	JIS B 0205
Metric fine screw threads	M4×0.5 to M24×1	JIS B 0207

Remarks: The standards cited in this Standard are given in the following:

- JIS B 0101 *Screw threads and fasteners – Vocabulary*
- JIS B 0123 *Designation of screw threads*
- JIS B 0176 *Threading tools – Vocabulary*
- JIS B 0205 *Metric coarse screw threads*
- JIS B 0207 *Metric fine screw threads*
- JIS B 0271 *Three wires for screw thread measuring*
- JIS B 0601 *Surface roughness – Definitions and designation*
- JIS B 0659 *Roughness comparison specimens*
- JIS B 3102 *Gauge blanks for screw thread limit gauges*
- JIS B 7153 *Measuring microscopes*
- JIS B 7184 *Measuring projectors*
- JIS B 7502 *Micrometer callipers*
- JIS B 7503 *Dial gauges*
- JIS B 7507 *Vernier, dial and digital callipers*
- JIS B 7513 *Precision surface plates*
- JIS B 7519 *Microindicators*
- JIS B 7524 *Feeler gauges*
- JIS B 7526 *Squares*
- JIS B 7726 *Rockwell and Rockwell superficial hardness testing machines*
- JIS G 4404 *Alloy tool steels*
- JIS Z 2245 *Method of Rockwell and Rockwell superficial hardness test*

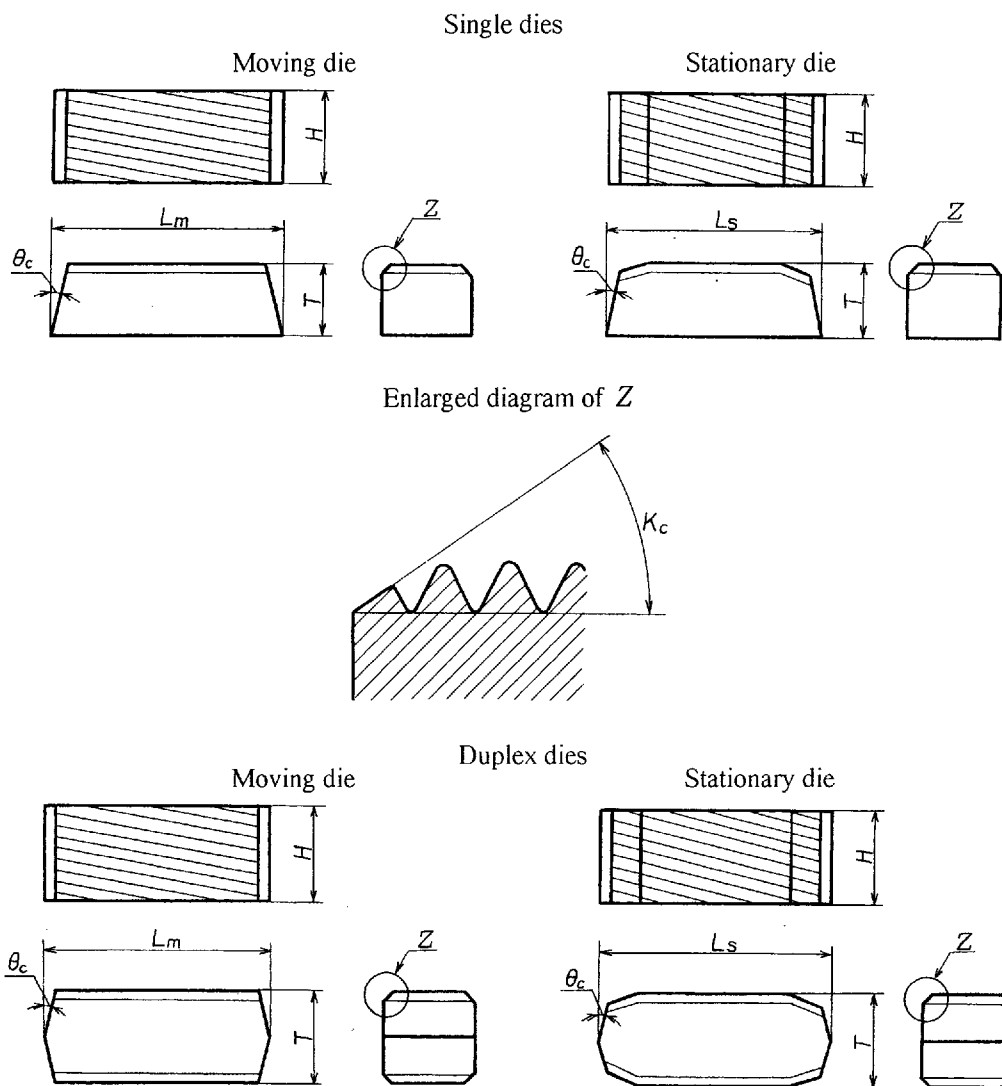
2 Definitions The definitions of main terms to be used in this Standard shall be in accordance with JIS B 0176 and JIS B 0101.

3 Types The dies shall be classified into two types of thread rolling single dies and thread rolling duplex dies according to the shapes.

4 Shapes and dimensions

4.1 Shapes and dimensions The shapes and dimensions of dies shall be in accordance with Table 1.

Table 1 Shapes and dimensions of dies



Remarks 1 The clamping angle θ_c shall generally be $0^\circ \pm 30'$ or $5^\circ -1^\circ$.

2 The chamfer angle K_c of thread part shall generally be 30° .

The shape of the crest after chamfering process shall be as agreed between the parties concerned with delivery.

3 The sizes and shapes of lead-in and run-off respectively shall be as agreed between the parties concerned with delivery.

4 The lead angle shall generally be the lead angle at the basic pitch diameter of screw threads to be thread rolled.