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**JB**

**PROFESSIONAL STANDARD OF THE PEOPLE'S  
REPUBLIC OF CHINA**

**中华人民共和国机械行业标准**

JB/T 5000.10-2007

Replace JB/T 5000.10-1998

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**Heavy mechanical general technical conditions  
—Part 10: Assembly**

**重型机械通用技术条件  
第 10 部分：装配**

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## Foreword

JB/T 5000 《Heavy mechanical general techniques and standards》 divided into 15 parts:

- \_\_\_Part one : Product Inspection
- \_\_\_Part two: Oxygen cutting workpiece
- \_\_\_Part three: Weldment
- \_\_\_Part four: Iron casting
- \_\_\_Part five: Cast nonferrous metal
- \_\_\_Part six: Cast steel
- \_\_\_Part seven: Cast Steel repair welding
- \_\_\_Part eight: Forging
- \_\_\_Part nine: Cutting work piece
- \_\_\_Part ten: Assembly
- \_\_\_Part eleven: Tubing
- \_\_\_Part twelve: Painting
- \_\_\_Part thirteen: Packing
- \_\_\_Part fourteen: Cast steel nondestructive examination
- \_\_\_Part fifteen: Forging steel nondestructive examination

This part is JB/T 5000's part ten.

This part is instead of JB/T 5000.10-1998 《Heavy mechanical general techniques and standards assembly》

This part compare to the JB/T 5000.10-1998, the main technology changes are as follow:

\_\_\_Added “holes for Transmission medium should use Lighting Act or Venting method to check whether through”(item 3.7)

\_\_\_Added “the areas can not be reached after assembly must coat with primer and surface paint” (item 3.8)

\_\_\_ Complement and improve the content for unmentioned Geometric Tolerance of assemble parts

\_\_\_ added the tightening torque of steel bolt A2-70 and added “M80x6~M160x6” these seven large size for the bolt diameter, enlarge the apply scope for bolt diameter in Appendix A, Figure A1.

\_\_\_According to the national standards to modify the perpendicularity and gradient 's tolerance zone symbol.And revised the expression of the technical terms and the definition.

\_\_\_Simplified the dimension method

This part's appendix A~E are informative annexes.

This part is offered by the China Machinery Industry Association.

This part is centralized management by the engineering industry metallurgical equipment technical committee for standardization.

This part's draft out unit: Shanghai Heavy Machine Co.,Ltd

This part's draftsman: Ye Zhiqiang, Zhou zhen, Jian Ping, Chen Yanbing

This part's previous edition:

—B/T 5000.10—1998

# Heavy machinery general technical conditions

## -part 10: assembly

### 1 scope

This part JB/T 5000 provides the general requirement, Geometric Tolerance, connection method of heavy machinery assembly and typical components assembly, general assembly and vehicle test and such Technical requirements.

This part is Applicable to the assembly of Heavy machinery

In addition to product design, technical papers and the ordering technical conditions, all others should be in accordance with the provisions of this part.

### 2 Normative References

Through the quoted by JB/T 5000, Following documents' items are become to the items of this parts. Any quoted documents if it is dated, the following modify notification (not including the errata contents) or modify edition are not apply to this part. But, the agreement which is according to this part can use this parts' latest edition. If it's not dated, its latest edition can apply to this part.

GB/T 9239.1-2006 Mechanical vibration - Balance quality requirements for rotors in a constant (rigid) state - Part 1: Specification and verification of balance tolerances (ISO 1940-1: 2003 IDT)

GB/T 986-1988 The basic form and dimension of the submerged-arc welding's groove weld

JB/T 5000.3 Heavy mechanical general techniques and standards-Part 3: And standards welding

JB/T 5000.9 Heavy mechanical general techniques and standards-Part 9: Cutting

JB/T 5000.11-2007 Heavy mechanical general techniques and standards-Part 11:Attached piping

JB/T 6996 Common technical condition of heavy machinery hydraulic system

JB/T 7929 Cleanliness for gear drive units

### 3 General requirement of assemble

3.1 parts and components (include purchased parts and cooperated parts) used for assembly, only if with the qualified certification of the quality control department, otherwise can not be used for assembly.

3.2 parts before assembly, must be cleaned up, and without any burrs, flash Edge, oxide, rust, cutting scrap, oil, coloring agent, anti-rust oil or rust.

3.3 parts and components before assembly, must check the main fitting dimension, especially check on the interference fit dimension and relative accuracy.

3.4 Machining processes during assembly should be according to the specification in JB/T5000.9, welding processes should be according to the specification in JB/T5000.3.

3.5 Parts before assembly, the sharp angle and edge should be truncated unless specially required.

3.6 Any impacts, scratch or rust on parts are not allowed during assembly.

3.7 Holes for Transmission medium should use Lighting Act or Venting method to check whether through.

3.8 The areas can not be reached after assembly must coat with primer and surface paint. The parts or the components can not be used for assembly until the painting is dry.

3.9 Foundation parts like machinery seat and body, should adjust horizon (or vertical). For simple

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