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› Okamoto PSG-63DX, ACC63, and ACC12.24DX Surface Grinding Machine Instruction Manual

## Okamoto PSG-63DX, ACC-63DX, ACC-12.24DX

# Okamoto PSG-63DX, ACC63, and ACC12.24DX Surface Grinding Machine Instruction Manual

Models Covered: PSG-63DX, ACC-63DX, ACC-12.24DX

## INTRODUCTION

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This manual provides comprehensive instructions and parts information for the Okamoto PSG-63DX, ACC63, and ACC12.24DX Surface Grinding Machines. It is divided into three main parts: Operation, Troubleshooting, and Parts Lists, to assist users in the proper setup, operation, and maintenance of the machinery.

**PART I  
OPERATION MANUAL**

**PART II  
TROUBLE-SHOOTING**

**PART III  
PART-LIST**

**SERIAL NUMBER:** \_\_\_\_\_



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Image: Overview of the manual's main sections, including Operation, Troubleshooting, and Parts List.

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This section details the general specifications of the Okamoto PSG-63DX, ACC63, and ACC12.24DX Surface Grinding Machines.

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## SIZE OF THE MACHINE

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Understanding the physical dimensions and space requirements is crucial for proper installation and operation. This section provides details on the machine's size.

### **(b) Size**

#### **1) Front view**

(b) Size

1) Front view

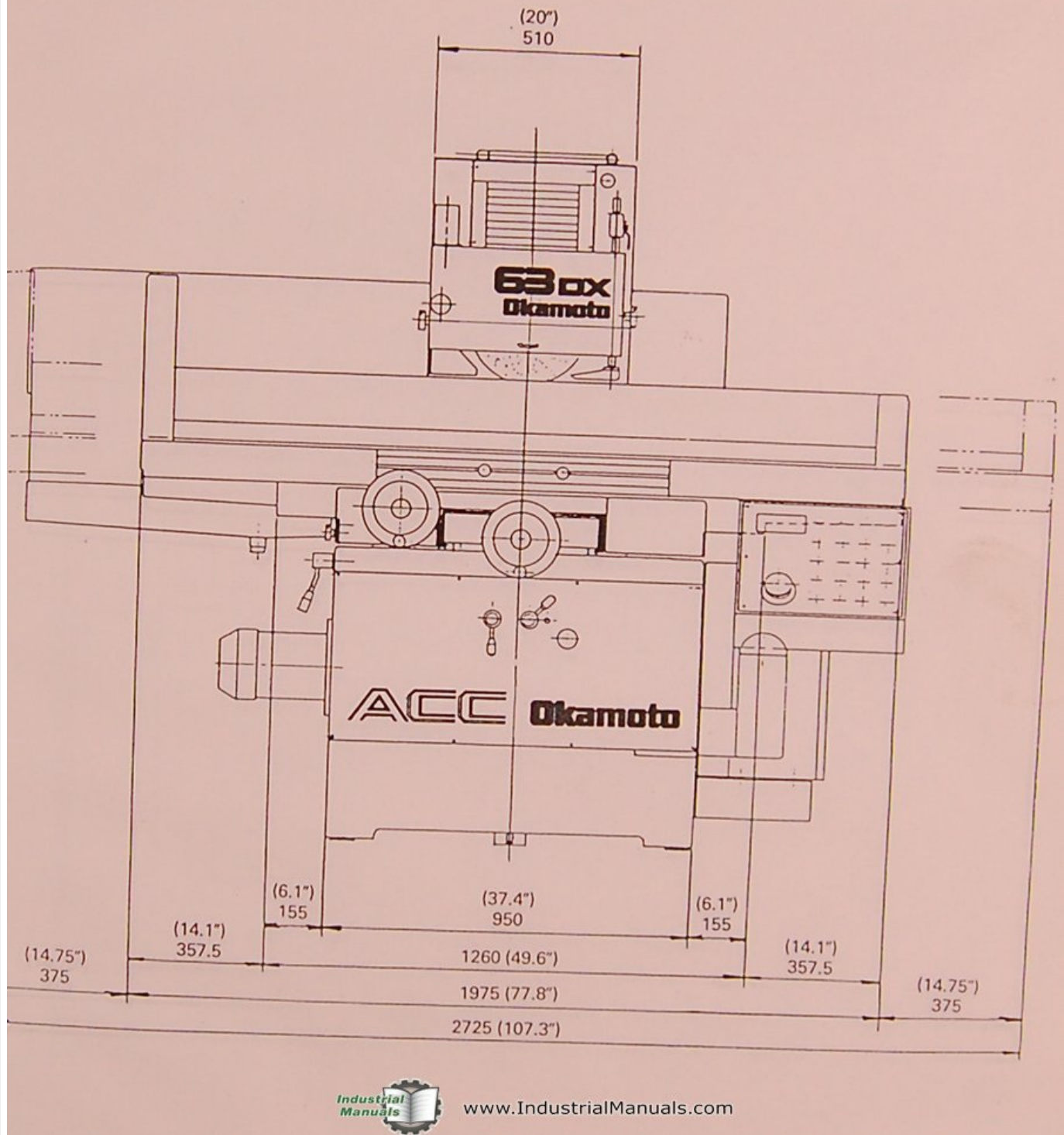


Image: Detailed front view diagram of the Okamoto surface grinding machine, illustrating key dimensions for installation and planning.

The diagram above illustrates the front view dimensions of the machine, including overall width, height, and depth, specified in both inches and millimeters. These measurements are essential for determining the required floor space and ensuring adequate clearance for operation and maintenance.

## PRINCIPAL PARTS OF THE MACHINE

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Familiarization with the main components of the surface grinding machine is vital for effective operation and maintenance. This section outlines the primary parts.

- Front view components
- Rear view components

Detailed diagrams and descriptions of these parts are provided within the full manual to aid in identification and understanding their functions.

## INSTALLATION AND SETUP

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Proper installation is critical for the safe and efficient operation of the grinding machine. Follow these steps carefully.

1. Lifting of the machine
2. Shipping clamps removal
3. Cleaning of the machine
4. Levelling of the machine
5. Connection to power supply

Refer to the detailed instructions in the manual for specific procedures and safety precautions for each step.

## LUBRICATION

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Regular and correct lubrication is essential for maintaining machine performance and extending its lifespan. This section covers lubrication procedures.

- Filling of hydraulic and lubrication oil
- Lubrication of the spindle bearing and cross feed ballscrew
- Lubrication system of slideways
- Schematic diagram of lubrication system

Consult the lubrication schedule and diagrams in the manual for specific oil types and application points.

## OPERATING INSTRUCTIONS

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This section provides detailed guidance on operating the Okamoto surface grinding machine safely and effectively.

- a. Functions of switches on the operation control panel
- b. Table longitudinal movement
- c. Saddle cross movement
- d. Mounting of the grinding wheel
- e. Balancing of the grinding wheel
- f. Dressing operation of the grinding wheel
- g. Checking before grinding operation
- h. Trial running of the machine
- i. Traverse automatic grinding I (stop grinding)

- j. Traverse automatic grinding II (cross-cut grinding)
- k. Plunge automatic grinding
- l. Grinding faults and their corrections

Always ensure all safety protocols are followed during operation. Refer to the manual for detailed step-by-step procedures for each operation.

## MAINTENANCE

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Regular maintenance is crucial for the longevity and optimal performance of your Okamoto grinding machine. This section outlines key maintenance procedures.

- Hydraulic circuit diagram
- Hydraulic pressure adjustment
- Adjustment of lubrication oil to slideways
- Adjustment of table reversing motion

Adhere to the recommended maintenance schedule provided in the full manual to prevent breakdowns and ensure consistent machine accuracy.

## TROUBLESHOOTING

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This section provides guidance on identifying and resolving common issues that may arise during the operation of the surface grinding machine.

The manual includes a dedicated section (Part II) for troubleshooting, detailing potential problems, their causes, and recommended solutions. Always consult this section when encountering operational difficulties.

## PARTS LISTS

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For repair and replacement, detailed parts lists are provided to ensure correct component identification.

Part III of this manual contains comprehensive parts lists, including diagrams and part numbers, to facilitate ordering and replacement of components for the PSG-63DX, ACC63, and ACC12.24DX models.

## REFERENCE DRAWINGS

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This section contains various technical drawings and diagrams essential for understanding the machine's construction and operation.

- Diamond tool diagrams
- Wheel flange diagrams
- Washer diagrams
- Adjustable balancing weight diagrams
- Balancing arbor diagrams

These drawings are crucial for assembly, disassembly, and precise adjustments.

## WARRANTY AND SUPPORT

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Information regarding product warranty and customer support is not available within the provided manual content. Please refer to your purchase documentation or contact Okamoto directly for details on warranty coverage and technical assistance.

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