

**BAND SAW AND CIRCULAR SAW: CURRENT UTILIZATION IN
WOOD WORKING INDUSTRY**

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CHAPTER I

INTRODUCTION

1.1 History of Saws

A saw is a tool for cutting solid materials. Most saws take the form of a thin metal strip with teeth on one edge or a thin metal disk with teeth on the sides pointing outwards. The teeth are usually bent to alternate sides so that the groove cut by the saw is wider than the thickness of the saw. This prevents binding between the cut surfaces and the sides of the saw. The thin-strip saws are used in a variety of arrangements for both hand and machine operation, while circular, and disk, saws are invariably machine powered.

The saw was one of the first great innovations of the Metal Age. It was developed with smelted copper, from which a blade could be cast. Many of the early copper saws have the general appearance of large meat-carving knives. Egyptian illustrations from about 1500 BC onward show the saw being used to rip boards, the timber being lashed to a vertical post set into the ground.

Though there is no evidence of the type of saw used, Egyptians were able to saw hard stone. The blade, was probably toothless, and rode on an abrasive material such as moistened quartz sand. The 7 1/2-foot granite coffer still in the Great Pyramid carries saw marks.

During the Bronze Age, saws became much more widespread in woodworking. It was in this time that the modern form of the saw began to come into play. Some of the saws used resembled hacksaw blades of today. Iron saws started to be produces in the