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Chainsaws—Guide to Safe Working Practices

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Department of Forestry, Queensland

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PREFACE

This standard was prepared by the Association's Committee on Chainsaw Safety at the request of the Safety Standards Board in an endeavour to reduce the incidence of injuries sustained by operators of chainsaws during timber-cutting operations.

It provides guidelines and recommendations for the safe use of chainsaws, identifies hazards, describes methods for particular operations, e.g. the felling of trees and cross-cutting of logs, and it contains basic principles for instructing and training of chainsaw operators.

The standard also includes fire prevention measures, a maintenance program for chainsaws, and basic details for sharpening a saw chain.

This standard does not cover the safety requirements applicable to chainsaws. Specific requirements for electrically and petrol-driven chainsaws are given in AS 2726, Chainsaws—Safety Requirements.

A safety program should be introduced where persons are exposed to hazards. The aim of a safety program should be to protect persons through the control of hazards. Such a program should include the following:

(a) Critical examination of working conditions to identify hazards.

(b) Recommended methods for eliminating and/or controlling of hazards, where hazards cannot be minimized or eliminated by other means.

(c) Provision for personal safety devices and protective clothing.

(d) Assessment of hazards and risks of hazards and the determination of hazard areas.

(e) Sources of information relating to specifications.

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SECTION 1. SCOPE AND GENERAL

1.1 SCOPE. This standard sets out recommendations and elementary guidance on the safe use and care of chainsaws. It includes recommendations for the training and supervision of chainsaw operators and the use of adequate and protective clothing, and identifies some of the more common hazards and dangers experienced in the use of chainsaws.

1.2 PURPOSE. The purpose of this standard is to provide assistance and guidance to actions, related to the use of chainsaws, which should be taken by employers, employees, professionals and amateurs, and to define desirable practices applicable to—

(a) guarding and safe use of chainsaws; and

(b) conditions prevailing in areas where chainsaws are used.

1.3 REFERENCED DOCUMENTS. The following standards are referred to in this standard:

AS 1269	Hearing Conservation
AS 1270	Hearing Protection Devices
AS 1319	Safety Signs for the Occupational Environment
AS 1337	Eye Protectors for Industrial Applications
AS 1470	Code of General Principles for Safe Working in Industry
AS 1534	Portable Plastics Fuel Containers
AS 1801	Industrial Safety Helmets
AS 2161	Industrial Safety Gloves and Mittens (Excluding Electrical and Medical Gloves)
AS 2210	Safety Footwear
AS 2726	Chainsaws—Safety Requirements

1.4 DEFINITIONS. For the purpose of this standard, the relevant definitions in AS 2726 and the following definitions apply:

1.4.1 Assistant—a person assisting the operator of a chainsaw.

1.4.2 Employee—a person engaged in activities for any employer for which he receives direct payment.

1.4.3 Employer—a person, agent, firm, corporation, government department, Commission, Board or other authority employing any person.

1.4.4 Hazards.

1.4.4.1 *Hang-up*—a tree which has fallen or has been felled into another tree and which is prevented from falling to the ground by the support tree.

1.4.4.2 *Kick-back*—an uncontrolled sudden upward or backward motion of the guide bar which may occur when the saw chain at the nose or the top area of the guide bar contacts a solid object, or when the wood closes in and pinches the saw chain in the cut.

1.4.4.3 *Pull-in*—a sudden forward motion of the chainsaw when the saw chain on the bottom of the guide bar meets an obstruction or is pinched in the wood.

1.4.4.4 *Push-back*—a sudden backwards motion of the chainsaw when the saw chain on top of the guide bar meets an obstruction or is pinched in the wood.

1.4.4.5 *Widow-maker*—a limb of a tree which is likely to be dislodged at any time.

1.4.5 Operations.

1.4.5.1 *Boring*—the process of entering the wood with the chainsaw using the nose of the guide bar to make a hole.

1.4.5.2 *Cross-cutting*—cutting wood fibre across the grain.

1.4.5.3 *Delimbing*—cutting off branches of a felled or standing tree.

1.4.5.4 *Felling*—the process of cutting down a tree.

1.4.5.5 *Ripping*—cutting wood fibre along the grain.

1.4.6 Regulatory Authority—a Minister of the Crown, a government department or other public authority having power to issue regulations, orders or other instructions having the force of law in respect of any subject covered by this standard.

1.4.7 Saw chain and parts.

1.4.7.1 *Saw chain*—chain serving as cutting tool and consisting of drive links, cutter links and side links, and held together by rivets.

1.4.7.2 *Cutter link*—working part of the saw chain.

1.4.7.3 *Depth gauge*—part of the saw chain which controls the thickness of the woodchips removed.

1.4.7.4 *Drive link*—centre link of a saw chain.

1.4.7.5 *Low kick-back saw chain*—a saw chain designed to reduce kick-back.

1.4.7.6 *Rivets*—parts which hold the chain links together.

1.4.7.7 *Side link*—support link on the sides of the chain and fitted on opposite sides of cutter links.

1.4.8 Saw chain guides—plates or guides, fitted on each side of the guide bar where the chain enters the groove to assist in guiding the chain between the sprocket and the guide bar.

1.4.9 Small radius guide bar—a guide bar incorporating a small nose radius.

1.4.10 Oiler control—a manually or automatically operated system for oiling the guide bar and saw chain.

1.4.11 Sprocket—a chain drive wheel with teeth which drives the saw chain.

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