

WORLD SKILLS STANDARD SPECIFICATION

Skill 47
Bakery





THE WORLDSKILLS STANDARDS SPECIFICATION (WSSS)

GENERAL NOTES ON THE WSSS

The WSSS specifies the knowledge, understanding and specific skills that underpin international best practice in technical and vocational performance. It should reflect a shared global understanding of what the associated work role(s) or occupation(s) represent for industry and business (www.worldskills.org/WSSS).

The skill competition is intended to reflect international best practice as described by the WSSS, and to the extent that it is able to. The Standards Specification is therefore a guide to the required training and preparation for the skill competition.

In the skill competition the assessment of knowledge and understanding will take place through the assessment of performance. There will not be separate tests of knowledge and understanding.

The Standards Specification is divided into distinct sections with headings and reference numbers added.

Each section is assigned a percentage of the total marks to indicate its relative importance within the Standards Specification. The sum of all the percentage marks is 100.

The Marking Scheme and Test Project will assess only those skills that are set out in the Standards Specification. They will reflect the Standards Specification as comprehensively as possible within the constraints of the skill competition.

The Marking Scheme and Test Project will follow the allocation of marks within the Standards Specification to the extent practically possible. A variation of five percent is allowed, provided that this does not distort the weightings assigned by the Standards Specification.

WORLDSKILLS STANDARDS SPECIFICATION

SECTION		RELATIVE IMPORTANCE (%)
1	Work organization and management	5
	<p>The individual needs to know and understand:</p> <ul style="list-style-type: none">• Principles of business• The stages from buying raw material producing it to valuable product and selling them to costumers• The importance of minimizing waste and maximizing sustainability• The factors bearing on ingredients used in bakery including seasons, availability, costs, storage, and use• The range of tools and equipment used in bakery• Legislation and good practice relating to the purchase, storage, preparation, cooking, baking, and service of food products	



	<p>The individual shall be able to:</p> <ul style="list-style-type: none">• Prepare and correctly use tools and equipment• Prioritize and plan work effectively to work within a given time• Show respect for raw materials• Use ingredients cost-effectively and minimize waste• Prepare products within prescribed costs• Pre-order goods and materials accurately for planned work• Work efficiently and cleanly, paying attention to the workplace and the people in it• Demonstrate good work flow skills• Demonstrate inspiration, flair, and innovation in design and work techniques• Work within given themes• Produce large quantities of bakery products to a consistent standard• Be consistent with size and weight of products in order to maintain customer satisfaction and profit margins• React professionally and effectively to unexpected situations• Work to deadlines• Have all the costumers' orders ready at the right time	
2	Food hygiene and health, safety, and environment	5
	<p>The individual needs to know and understand:</p> <ul style="list-style-type: none">• Legislation and good practice relating to the purchase, storage, preparation, cooking, and service of food• Quality indicators for fresh and preserved foods• The causes of deterioration of food• The range of tools and equipment used in bakery• Legislation and safe working practices in a bakery kitchen and for using commercial equipment	
	<p>The individual shall be able to:</p> <ul style="list-style-type: none">• Work following all personal hygiene standards and safety regulations for food storage, preparation, cooking and service (HACCP)• Comply with all Health and Food Safety regulations and best practices• Store all commodities safely according to HACCAP• Ensure all work areas are cleaned based on the highest standards• Apply the business internal HACCP concept to the last detail• Work safely and uphold accident prevention regulations• Use all tools and equipment safely and within manufacturer's instructions• Promote health, safety, and environment and food hygiene within the working environment	



3	Communication and interpersonal skills	5
	<p>The individual needs to know and understand:</p> <ul style="list-style-type: none">• How bakery products should be displayed for sale• The importance of displays and notices as sales and communication tools• Legal restrictions on the presentation of promotional materials• The importance of appearance when on public view and dealing with customers• The importance of effective communications across teams, colleagues, contractors, and other professionals• The need to communicate effectively with customers	
	<p>The individual shall be able to:</p> <ul style="list-style-type: none">• Have a professional dialogue with customers• Work out the right product with the customer to his wishes for his special order• Work effectively with colleagues and other professionals• Be an effective team member• Display products in order to maximize sales• Always pay attention to own cleanliness and appearance• Communicate effectively with colleagues, teams, and customers• Provide advice and guidance on specialist matters to managers, colleagues, and customers• Propose solutions and discuss with goal orientated attitude, arrive at common solutions• Plan and implement promotions• Follow detailed written and verbal instructions• Develop recipes in a way that every other baker can read it and achieve good quality products	
4	The use of raw material and bakery recipe creating	20
	<p>The individual needs to know and understand:</p> <ul style="list-style-type: none">• The importance of recipes for the quality control• The range and characteristics of bakery products, which are known around the world• Colour applications, taste combinations, and texture coordination• Basic principles involved in accurately combining ingredients in order to produce products• How to create appearance, texture, and taste from the bakery product by using different ingredients and working techniques• How to process different cereals and pseudo cereals• The impact of various flours and ingredients on the finished product• The manipulation of raw materials through production techniques• The influence of different working techniques to produce bakery products• Colour applications, taste combinations, and texture coordination• The range and uses of doughs and pastes used to producing bakery products• What raw materials and how can they be worked in to a filling• Why fillings which are baked need to be stable at high temperature• The effect of using seasonal fruits and vegetables for fillings• The importance of appearance, texture, and taste	



	<p>The individual shall be able to:</p> <ul style="list-style-type: none">• Use the knowledge of the impact of various milling products and flours on bakery products• Use own understanding of the impact of dry and liquid raw materials to make different doughs• Apply knowledge of the characteristics of raw materials in bakery products• Use appropriate ingredients and flavourings effectively• Devise products demonstrating innovation and flair• Formulate recipes to make filled sweet and savoury products• Create recipes to produce bakery products using laminated pastes and doughs including Danish pastries, croissants, pain au chocolate, and puff pastry products• Create recipes to produce a range of breads, rolls, savoury products, sweet, and enriched products• Design products in bulk to a consistent size, shape, appearance, flavour, and standard• Use appropriate flavourings effectively• Design display pieces based on clients' briefs• Create designs that take account of the purpose of the pieces and the environment where they will be displayed• Create display pieces to meet specifications	
5	Dough preparation and fermenting process	15
	<p>The individual needs to know and understand:</p> <ul style="list-style-type: none">• Methods to produce doughs for different bakery products, such as short dough, yeast dough, laminated dough, sweet, and savoury dough• The influence of the raw materials on the dough• How to produce and enriched dough enhancing with such ingredients as sugar, eggs, butter, fat, or oil and milk• The importance of the dough temperature• The difference in preparation of dough with different cereals and different milling products• The importance of developing gluten structure in wheat doughs• How the different doughs have to be handled and stored• The sciences of fermentation such as types of fermentation, substances involved in the fermentation process and acidification• When to use an all-in dough method for the bakery product• The benefits of making a pre-ferment dough leavening method, with starters like polish, biga, and many more• The help of refrigeration technology systems to control the fermentation to the next day for long-term leavening method• The purpose of pre-absorption or starch gelatinization methods known as soaker, boiled dough, or mash• The sourdough leavening method with and without baker's yeast• The range of tools and equipment used in bakery• Methods of making laminated pastes and doughs• The preparing of dead dough for decoration or display pieces	



	<p>The individual shall be able to:</p> <ul style="list-style-type: none">• Combine dry and liquid ingredients to make a dough• Knead the dough in order to develop the gluten to give it stretch and strength• Mix doughs out of different cereals or pseudo cereals with their characteristics• Make doughs with baker's yeast, sourdough, other leavening methods, or without any leavening agents• Prove the dough to develop its aeration and structure• Regulate the fermentation process• Use different fermentation processes with preferment, refrigeration technology and many more• Ferment the dough to the perfect taste and texture• Knock back the dough in order to create a uniform texture	
6	Shaping and decorating of dough	25
	<p>The individual needs to know and understand:</p> <ul style="list-style-type: none">• The importance of shaping and decorating dough before baking• The commonly used shapes for certain products, which are known around the world• The range of tools and equipment used in bakery for shaping and decorating• The different techniques for shaping like braiding, moulding in different shapes, baking in tins, and many more• The influence of the shape or the shaping on the end product• Methods of working with laminated pastes and doughs• How to apply fillings on to the dough and making a shape out of it so it can be baked together• The range of large and small bakery products• The importance of being creative for special events, to create party bread, or decorative bread loafs• Finesse and artistic appreciation• The importance of the finale proof in its different methods like on couches, on loading devices, in bannetons, or on trays• The different methods of finishing before baking. This can be reshaping, cutting, scoring, piercing, sprinkling, brushing, spreading, dusting, and so on	



	<p>The individual shall be able to:</p> <ul style="list-style-type: none"> • Shape common bakery products out of dough • Recognize when the dough has fermented enough and is ready to scale and shape • Handle and scale doughs appropriated after fermenting • Shape bread products consistently and to pre-determined shapes • Produce small and big bakery products • Be creative to shape dough after customer order • Shape a large quantity of the same product identical • Produce products in bulk ensuring that the quality, size, and finish remains consistent • Make filled products which are filled and decorated before baking • Apply different techniques for shaping • Decide how long the product needs to have a finale proof before baking • Finish the decoration before the dough will be baked with different techniques • Use different doughs and pastes to shape and prepare sweet and savoury bakery products like pies, quiches, donut's, pizzas, and many more • Use various techniques to produce display pieces or decorative breads 	
7	Baking and handling after baking	25
	<p>The individual needs to know and understand:</p> <ul style="list-style-type: none"> • The range of tools and equipment used in bakery for baking • The physical changes that take place within bakery products during the baking process • The heat transfer in different oven systems • How long a product has to bake until it is baked • The differences of baking wheat, rye or enriched dough to bread • How to bake other bakery items such as pies or items with filling • What is best to bake laminated dough products • The technique of baking interruption method (par-baked bread) • What is a good colour and how taste can be influenced with the baking process • How bread products should be stored right after they come out of the oven • The storage of all the different bakery products when they come out of the oven • The importance of finalizing products 	



	<p>The individual shall be able to:</p> <ul style="list-style-type: none">• Bake filled and unfilled products to the perfection• Work with different oven systems or deep-fryer• Control the oven conditions: temperature, humidity, supply of top and bottom heat, damper control• Regulate the baking process so all product turns out in the right shape, colour, and crust• Achieve the right amount of oven spring with leavened products• Interrupt the baking process to produce par-baked breads• Finish the baking process with par-baked breads• Store the bakery product correctly after baking• Finish the decoration with different techniques• Caramelize pastries• Glaze bakery products• Fill and decorate products after baking• Display products for sale	
	Total	100