

OCCUPATIONAL STANDARD

1. Title and code of the occupational standard

GLASSBLOWER

Klasius-P

Glass and porcelain production (5434)

2. Title and code of the occupation

3. Difficulty level

(IV) Demanding work

4. Vocational competences

Candidates will be able to:

- accept and review technical documentation and plan work accordingly
- make a needed ball of glass without defects within a specified time frame, observing aesthetic norms and safety at work standards
- gather, process and blow glass with due attention to product weight and quality and safety at work rules
- shape simple blown products in accordance with product quality criteria
- produce more complex products in accordance with product quality criteria
- ensure the quality of their work and products while observing the principles of rational use of energy, time and material
- work in such a way as not to endanger themselves or others in their working environment or pollute the environment, and adjust their activity to the tasks at hand
- communicate with different stakeholders in the work process

5. Description of the occupational standard

Field of work	Key activities	Skills and knowledge
Analysis, planning and organisation of work	accept and review technical documentation and plan work accordingly	<ul style="list-style-type: none"> • study technical documentation (workshop and assembly drawings) • demonstrate understanding of work instructions and work process monitoring • plan work according to a timetable and by phases of work and demonstrate mastery of the work sequence • study and anticipate safety at work measures

		<ul style="list-style-type: none"> observe work standards and norms
Preparation of work/workplace	prepare themselves, materials and tools and organise their workplace	<ul style="list-style-type: none"> prepare the tools and materials they are going to need in their work prepare protective equipment for protection against burns prepare metal moulds prepare wooden moulds according to the template by charring check the mould before and after preparation and during work with respect to the template continuously check the conformity of the mould with the template
Operations	make a ball of glass gathering the needed volume of glass mass without defects in the furnace within a specified time frame, observing aesthetic norms and safety at work standards	<ul style="list-style-type: none"> take a gather of the needed glass mass volume and pick it to the blowpipe shape a gather of the needed glass mass volume for the glass ball by rolling or with a block by rotating the blowpipe shape glass mass for blank blowing blow the blank visually assess the thickness and shape of the glass blank gather the needed volume of molten glass over the blank for the product being made press a glass ball into molten glass and pick up the glass mass when rotating the blowpipe perform the gathered glass using blocks according to the final product blowing the product into a glassmaking mould demonstrate knowledge of the chemical and physical properties of individual types of glass and production methods for individual types of glass demonstrate knowledge of types of glass and glass products demonstrate knowledge of procedures for melting glass demonstrate familiarity with the principles of glass viscosity changes at different temperatures
	gather and blow	<ul style="list-style-type: none"> form a clay head on a punty according to the

	<p>molten glass with due attention to product weight and quality and safety at work rules</p>	<p>size of the product</p> <ul style="list-style-type: none"> • gather crystal glass on a punty in such a way that the same quantity of molten glass is always covered onto the clay head • transfer molten glass into a pre-mould and cut off with shears • press opal glass into a pre-mould and cut off with shears • uses a semi-automatic glass and opal glass blowing and pressing machine • check the weight and quality of products
	<p>shape simple blown products in accordance with product quality criteria</p>	<ul style="list-style-type: none"> • produce workshop and assembly drawings • draw models • make sketches with all the parameters required for technical documentation, either manually or on a computer • pick up molten glass to the blowpipe by rotating the blowpipe • shape molten glass using a block according to the final product • cut a jack line for a product and blow the preliminary shape of the product • roll the jack line on the marver • blow a product in the mould into its final shape, matching the intensity and speed of blowing to the product being made • assess the distribution of the glass mass according to the permitted tolerances • assess the quality of a product visually by lifting the blowpipe • demonstrate mastery of the annealing process and the handling of a product by rotating on a punty and rolling on the marvering table • determine the correct temperature regime of the annealer • demonstrate knowledge of criteria for assessing the overall quality and aesthetics of a product and the quality of own work • demonstrate knowledge of the technological procedure of glass annealing •

	produce more complex products in accordance with product quality criteria	<ul style="list-style-type: none"> • read workshop drawings and prepare relevant documentation • demonstrate mastery of the procedure for blowing a larger quantity of glass mass • score the ball of glass mass used to make a larger product in order to prevent cracking during annealing • consistently gather the same amount of molten glass onto the blowpipe for a particular product • demonstrate knowledge of criteria for assessing the overall quality and aesthetics of a product and the quality of own work • demonstrate knowledge of the effect of temperature, viscosity and surface tension on glassworking • demonstrate familiarity with design trends • demonstrate knowledge of the behaviour of various colours of glass during heating and annealing
Commercial tasks	advise during purchasing and sales, advise customers	<ul style="list-style-type: none"> • participate in ordering the necessary raw materials and materials • make arrangements with customers regarding orders • demonstrate knowledge of the elements necessary for calculating the price of the product • demonstrate knowledge of techniques for the marketing of services • demonstrate knowledge of purchasing and sales techniques
Administrative tasks	keep records of work, raw materials processing and work processes	<ul style="list-style-type: none"> • produce documentation for the operational preparation, monitoring and analysis of individual work assignments • use computer tools when working with documentation
Quality assurance	ensure the quality of work and products	<ul style="list-style-type: none"> • determine the appropriate procedure for achieving the best quality • control quality and other parameters of product manufacture • control the results of own work and the work of a group

		<ul style="list-style-type: none"> ensure economical use of materials and equipment use machines and equipment efficiently and in accordance with the manufacturer's instructions demonstrate familiarity with quality standards
Maintenance and repairs	take responsibility for the maintenance of tools and equipment	<ul style="list-style-type: none"> participate in the preparation of a regular maintenance plan to tools and equipment demonstrate knowledge of the maintenance requirements of machinery and equipment
Communication	communicate with different stakeholders in the work process	<ul style="list-style-type: none"> apply the basics of communication and technical terminology communicate with superiors, co-workers and others work in various teams in the working environment use modern means of communication demonstrate a mastery of technical terminology in one foreign language
protect health and the environment	work in such a way as not to endanger themselves or others in their working environment or pollute the environment	<ul style="list-style-type: none"> use protective devices and equipment in accordance with regulations on health and safety at work, environmental protection and fire safety observe instructions and standards for safe work collect waste materials separately, sort them and dispose of them appropriately demonstrate knowledge of potential injuries resulting from inappropriate use of equipment

6. Working group for the preparation of the occupational standard

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